The case for the development of an online intervention designed to support midwives in work-related psychological distress

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Award date:
2016

Awarding institution:
Coventry University

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By

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PhD

September 2016

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A thesis submitted in partial fulfilment of the University's requirements for the Degree of Doctor of Philosophy

Certificate of Ethical Approval

Applicant:

Sally Pezaro

Project Title:

A Delphi Study to achieve consensus in the Development of an Online Intervention Designed to Effectively Support Midwives in Work-Related Psychological Distress.

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:

15 July 2015

Project Reference Number:

P35069

Certificate of Ethical Approval

Student:

Sally Pezaro

Project Title:

Literature reviewing

This is to certify that the above named student has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Low Risk

Date of approval:

24 March 2015

Project Reference Number:

P32836

Abstract:

Midwives experience both occupational and organisational episodes of work-related psychological distress. As the wellbeing of health professionals is linked with the safety and quality of care, these episodes of distress should be met with adequate support. Midwives can be reluctant to speak openly about episodes of work-related distress. Additionally, they may not be able, or prefer not to access face-to-face support. As such, an online intervention may be one option that midwives turn to when seeking support, as it can provide confidential and flexible access to support.

This research makes a case for the development of an online intervention, designed to effectively support midwives in work-related psychological distress. Firstly, a narrative literature review integrates contemporary research to build an overview of the nature, prevalence, and origin, of work-related psychological distress in midwifery populations. A critical literature review then explores some of the ethical considerations in relation to providing midwives with anonymous and confidential online support. This review concludes that the provision of anonymity and confidentiality online would ensure the greatest benefit overall to the greatest number of people using and working within maternity services.

A systematic mixed-methods literature review then concludes that there are currently very few targeted interventions designed to support midwives in work-related distress, none of which are currently delivered online. Moreover, this review identifies insufficient high-quality research to comprehensively understand which particular interventions or techniques could deliver effective support to midwives in work-related psychological distress. Lastly, a multi-stakeholder Delphi study is presented to establish consensus in relation to the content development, design and delivery of an online intervention to support midwives and/or student midwives in work-related psychological distress. In this case, an expert panel prioritised confidentiality and anonymity, along with 24-hour mobile access, effective moderation, an online discussion forum, and additional legal, educational, and therapeutic components. Consensus also supported the inclusion of a simple user assessment to identify people at risk of either causing harm to others or experiencing harm themselves, in order to direct them to appropriate support.

The impact of any future intervention of this type will be optimised by utilising the findings from this Delphi study throughout the intervention development process. Furthermore, as the ethical, practical and evidence based arguments for the development of an online intervention designed to support midwives in work-related psychological distress have now been formed, it

will be important to build and rigorously test this intervention in response to the identified gaps in research. This thesis demonstrates that there is a case for the development of an online intervention designed to support midwives in work-related psychological distress. Future research will require feasibility studies, pilot studies and adequately powered randomised controlled trials in order to secure the evidence base for any new online support for this professional population.

Keywords:

Midwifery; Psychological Distress; Burnout, Professional; Job satisfaction; Online Interventions.

Submission code: D008PRDC – PhD

Acknowledgements

This PhD has been funded by a full-time scholarship, awarded by the Centre for Technology Enabled Health Research at Coventry University. The researcher would like to sincerely thank all of those who participated in any part of this research, and the supervisory team for their invaluable support and guidance throughout.

Declarations

I declare that the content of this thesis is entirely my own work and has not been submitted as part of any degree at another university.

Supervisory Team

Dr. Wendy Clyne, Professor Andrew Turner and Dr. Emily A. Fulton. Academic advisors to this research include Dr. Elizabeth Bailey and Dr. Clare Gerada.

Ethical Approval

Ethical approval has been awarded for this research by CU ETHICS at Coventry University.

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Abbreviations

CI: Confidence Interval

CONSORT-EHEALTH: Consolidated Standards of Reporting Trials of Electronic and Mobile HEalth Applications and onLine TeleHealth

COR: Conservation of Resources

CBT: Cognitive Behavioural Therapy

DASS: Depression Anxiety and Stress Scale

DCS: Demand Control Support

ERI: Effort Reward Imbalance

EMDR: Eye Movement Desensitization and Reprocessing

GRADE: Grading of Recommendations, Assessment, Development and Evaluations

GHQ-12: General Health Questionnaire

GMC: General Medical Council

HSE: Health and Safety Executive

IES: Impact of Event Scale

ICM: International Confederation of Midwives

JDC: Job Demand Control

MRC: Medical research council

NMC: Nursing and Midwifery Council

NHS: National Health Service

PTSD: Post Traumatic Stress Disorder

PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-analyses

PANAS: Positive and Negative Affect Schedule

ProQol: Professional Quality of Life scale

RCM: Royal College of Midwives

RCT: Randomised Controlled Trial

SOC: Sense of Coherence – Orientation to Life scale

SORT: Strength of Recommendation Taxonomy

TOP: Termination of pregnancy

TIDieR: Template for Intervention Description and Replication (TIDieR)

UK: United Kingdom

Chapter One: Introduction, background and context

This thesis sets out a case for the development of an online intervention designed to support midwives in work-related psychological distress. In order to do this, it includes a critical literature review, a systematic mixed-methods review and a Delphi Study. These studies explore the ethical considerations in relation to providing online support to midwives, the outcomes and experiences associated with the use of support interventions to support midwives, and the preferences of midwives and other stakeholders in relation to the content development, design and delivery of the proposed intervention online. It is important to explore the development of support interventions for professional health care groups such as this, as the lack of attention to the support and wellbeing of the health professional has been identified as a missing response in healthcare management (Austin, Smythe and Jull 2014, Fenwick et al. 2012, Mander 2001, Sawbridge and Hewison 2013, Seys et al. 2013a, Ullström et al. 2014).

Previous reviews of interventions to support the psychological wellbeing of health care professionals at work have yet to identify high quality studies of interventions to support midwives (Guillaumie, Boiral and Champagne 2016, Murray, Murray and Donnelly 2016, Regehr et al. 2014, Romppanen and Häggman-Laitila 2016, Ruotsalainen et al. 2015). It is therefore unclear whether existing interventions may or may not be effective in supporting this professional group. This primary chapter explores the relevant theories, concepts, contexts and rationales associated with the development of an online intervention to support midwives and student midwives in work-related psychological distress. This chapter also provides an introduction and background to this research, and leads towards the research questions to be answered in this thesis. This chapter has been published, in part, elsewhere (Pezaro et al. 2015).

Why focus on midwives and student midwives?

For the purpose of this research, the midwife is defined in line with the International Confederation of Midwives (ICM) statement that “a midwife is a person who has successfully completed a midwifery education programme that is duly recognised in the country where it is located and that is based on the ICM Essential Competencies

for Basic Midwifery Practice and the framework of the ICM Global Standards for Midwifery Education; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife'; and who demonstrates competency in the practice of midwifery" (ICM International Confederation of Midwives 2011).

This thesis also includes student midwives within the term midwife. Student midwives are included due to the fact that they perform midwifery work, and experience similar episodes of work-related psychological distress (Coldridge and Davies 2017, Davies and Coldridge 2015a). Although student midwives practise within a different role, and may experience different manifestations of work-related psychological distress, they can also be considered to form a part of the midwifery workforce. Throughout this thesis, student midwives are included when the term 'midwife' or 'midwives' is used, unless stated otherwise.

Some evidence demonstrates that midwifery plays a 'vital' role in rapid and sustained reductions in maternal and newborn mortality (World Health Organization 2016). Further to this, a detailed analysis reports that reducing midwife stress is 'key' to improving birth safety (RCOG 2017). In their professional role, midwives can provide the majority (87%) of essential maternal and newborn care (UNFPA 2014). However, in the largest global survey of 2470 midwives from Europe, the Americas, Africa, Asia and the Pacific (93 countries), only between 41% and 48% of midwives said that they felt fulfilled, happy and energetic at work (World Health Organization 2016). Additionally, within this survey, 15% felt unsupported in the workplace, 45% felt exhausted, and around 6%-10% felt traumatised, lonely, scared or angry in the workplace (World Health Organization 2016).

Although midwives work within a multidisciplinary team, midwifery is different from nursing, with different historical and legislative beginnings (Donnison 1977, Towler and Bramall 1986). Midwives care for childbearing women and newborn babies, who are not commonly considered to be 'unwell' or in need of medical help, if pregnancy and

childbearing are considered to be normal physiological processes. This is in contrast to nurses and physicians, who generally receive 'patients' rather than 'women', whom they anticipate may be unwell from the outset. Some midwives describe high dependency (high risk) care as being 'nursing work' which falls outside of their scope of practice (Eadie and Sheridan 2017). If midwives are generally more familiar with supporting normal physiological childbearing, rather than nursing or medical intervention, then they may also have a different experience of medical, traumatic or clinically critical events. Consequently, this professional group may require bespoke workplace support.

A stress response that can occur as a result of knowing, or helping, a traumatised or suffering person known as secondary traumatic stress is reported to be at high to severe levels in midwifery populations (Beck, LoGiudice and Gable 2015). In Poland, burnout, emotional exhaustion and depersonalisation levels have also been found to be higher in midwives than in general nurses and hospice nurse populations, yet the latter two populations can sometimes receive a higher level of support in the workplace (Kalicińska, Chylińska and Wilczek-Różyczka 2012).

One situational analysis has identified how doctors, dentists, nurses, physiotherapists, surgeons, pharmacists, dieticians, psychiatrists and optometrists in the United Kingdom (UK) have already been provided with targeted support (Strobl et al. 2014). Such support is delivered by a variety of trade unions, societies and associations rather than by employers, and includes the provision of psychotherapy, counselling, education, legal and financial advice, general emotional and signposting support. Here, support is both peer and non-peer based, and can be accessed via telephone, the internet, published guidance or via face-to face support. This same situational analysis identifies that there is a paucity of structured and evidence-based support designed to address the psychological well-being of midwives and student midwives specifically (Strobl et al. 2014). This presents a unique opportunity to explore new research in this area.

In relation to gender, female midwives can demonstrate a different understanding of risk and safety in relation to their own childbearing experiences due to their existing

professional knowledge in this area (Church 2014). For instance, some midwives who have personal experience of pregnancy loss may display a greater understanding of the impact of pregnancy loss when supporting others in a professional capacity (Bewley, Hunter and Deery 2008).

Yet this expert knowledge can also result in increased anxieties during a midwife's own transition into motherhood. For example, due to personal expectations, knowledge of the benefits of breastfeeding and the social meaning assigned to it, some midwives who encounter difficulties breastfeeding can find this experience emotionally difficult to reconcile with (Battersby, Hunter and Deery 2009). Additionally, whilst midwives of childbearing age can find their existing professional knowledge and position useful when trying to assert agency whilst bearing their own children, some caregivers can dismiss midwives' assessment of their own personal situations and this can generate further anxieties for midwives (Church 2014). Overall, whilst a midwife's professional knowledge may be used to gain both personal and professional benefits, this knowledge may also result in negative experiences such as increased anxiety. While this evidence suggests how midwives may differ from other healthcare professions, the next section of this chapter summarises the role and status of midwives around the world in relation to the unique position of the midwife in order to give a situational context to this work.

The role and status of midwives around the world: A situational context

The ICM has broadly defined the role of the midwife to be one in which "The midwife is recognised as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births on the midwife's own responsibility and to provide care for the newborn and the infant" (ICM International Confederation of Midwives 2011).

Around the world, the midwifery workforce has been grouped into eight broad categories, made up of 381 different cadres, specified by a variety of countries. These groups are namely midwives, nurse-midwives, nurses, auxiliaries (midwives and nurses), associate clinicians, physician generalists and obstetricians/gynaecologists

(UNFPA 2014). However, there are also non-professional groups, such as traditional birth attendants and community health workers, who also deliver midwifery care in the community (mainly supervised). These groups can vary in their distribution across many rural and urban settings around the world. There is also great diversity as to which group may be responsible for carrying out which tasks within the scope of midwifery practice in accordance with the International Standard Classification of Occupations (World Health Organization 2010). As such, it is challenging to define the scope and role and status of the midwife in all contexts and countries. This challenge is echoed within the findings of a recent global consultation, where many midwives reported that it was not always clear what 'midwifery' was, and that they were not always given a job description or documentation on the competencies that are expected within the role of a midwife (World Health Organization 2016).

In any case, some issues in the midwifery workforce are considered to be a barrier to successfully carrying out the midwifery role in full (World Health Organization 2016). In these cases, midwives report that they experience professional barriers such as a lack of status and "subordination by the medical profession", and social barriers such as gender discrimination, disrespect, a weak professional identity and weak regulatory support. Additionally, midwifery faces economic barriers such as inadequate resourcing and poor rates of pay. These social, professional and economic barriers are interlinked and interdependent, and as these three areas overburden midwifery staff, their experience of distress can accumulate, and result in burnout (PGCEA 2011, World Health Organization 2016).

Issues relating to power, agency and the status of the midwifery role are universal, regardless of whether midwives care for women and newborns in high, middle or low-income countries (World Health Organization 2016). Yet overall, the roles and responsibilities of the midwife appear fragmented and undefined in parts of the world, and midwives are facing professional, economic and social barriers which may hinder their ability to carry out the role of the midwife to the best of their ability. Ultimately, should these barriers affect the midwifery workforce, then burnout and distress may also become apparent. Whilst in the largest global survey of midwives there are initiatives listed to help overcome these social, professional and economic barriers in

midwifery practice, there is no mention of working towards adequate support provision for midwives and student midwives practising under these conditions (World Health Organization 2016). As such, it will be important to understand the nature and origins of work-related psychological distress in relation to this population.

Exploring the literature in relation to the nature of work-related psychological distress in midwifery populations

In order to further understand the nature and origins of work-related psychological distress in midwifery populations, the wider literature was explored. This was also done in order to identify any further gaps in research, and to further develop and refine the most appropriate research questions to be answered within this thesis. The research question associated with this exploration of the literature is:

What are the nature and origins of work-related psychological distress in midwifery populations?

Search Strategy

As this chapter aims to provide a conceptual and theoretical understanding of midwives in work-related psychological distress, a wide range of literature in relation to this topic was sought. As such, this search strategy was designed to capture literature in relation to the nature of work-related psychological distress and any other themes surrounding this subject matter.

AMED - The Allied and Complementary Medicine Database, CINAHL with Full Text, MEDLINE and PsycINFO were searched simultaneously, using a combination of terms used in tandem with the defining cohort of 'midwives or midwife' within the TI (Title) search field. Searches included 'midwives or midwife' and 'psychological distress', and 'bullying in nursing workplace 'and 'bullying in the workplace' and 'bullying in nursing' and 'traumatic stress', and 'vicarious trauma', and 'compassion fatigue and burnout', and 'secondary trauma', and 'depression and anxiety', and 'PTSD or post-traumatic stress disorder', and 'workplace stress' and 'resilience' and 'Emotion Work' and 'secondary traumatic stress'. This resulted in 14 separate searches, which generated 264 results. 98 duplicates were then removed, leaving 166 papers to review.

Papers had to be written in the English language and focus upon work-related psychological distress in relation to the aetiologies, experiences, symptomology and epidemiology of midwives in psychological distress, rather than in relation to the women they cared for or any other professional group. Papers were limited to those published after the year 2000 in order to generate a more contemporary overview of current understanding. Papers selected for inclusion were limited to cohort studies, systematic reviews, meta-analyses, and randomised controlled trials (RCT's) in order to unite best evidence (Sackett et al. 2000).

76 papers were excluded as they related to issues affecting childbearing women rather than midwifery populations. Subsequently, 25 articles were removed, as they were editorial or discursive in nature. A further 36 articles were excluded, as they did not relate to the subject of midwives in work-related psychological distress. 12 papers related to workplace interventions, they were excluded from this review because this chapter is concerned with the nature of work-related stress in midwifery populations rather than the provision of support. One study was rejected as it related to other professionals providing care to labouring women, and two studies were added through a snowballing of the literature, whereby reference lists were assessed for other papers of relevance (Choong et al. 2014). Finally, 30 papers were selected for inclusion.

Limitations

Professionals who practise as midwives are frequently referred to as obstetric nurses or nurse-midwives, and may be amalgamated within nursing cohorts, or referred to as general healthcare staff. Therefore, some studies may have avoided retrieval by omitting to identify their cohorts as midwives.

Additionally, although this review sought to retrieve high quality peer reviewed studies via its inclusion criteria's, the quality of each individual paper has not been rigorously assessed. This was because this review sought to examine a wide range of evidence in relation to this topic in order to construct an overview of understanding, rather than assess these studies for their scientific rigor.

Results

The studies selected for review took place in the following countries:

- Australia (Farrell and Shafiei 2012, Jordan et al. 2013, Mollart, Newing and Foureur 2009, Schluter, Turner and Benefer 2012)
- Croatia (Knezevic et al. 2011)
- France (Garel et al. 2007)
- Ireland (Begley 2002)
- Israel (Halperin et al. 2011)
- Italy (Mauri et al. 2015)
- Japan (Mizuno et al. 2013, Sato and Adachi 2013)
- Nigeria (Afolayan and Dairo 2009)
- New Zealand (Schluter, Turner and Benefer 2012)
- Poland (Kalicińska, Chylińska and Wilczek-Różyczka 2012)
- The United states of America (Beck, LoGiudice and Gable 2015)
- The United kingdom (Davies and Coldridge 2015a, Gillen et al. 2009, Hunter 2004, Hunter 2005, Hunter and Warren 2014, Rice and Warland 2013, Sheen, Spiby and Slade 2015)
- Turkey (Oncel, Ozer and Efe 2007)
- Uganda (Muliira and Bezuidenhout 2015, Muliira, Sendikadiwa and Lwasampijja 2015)

Some study designs included convergent, parallel mixed-methods, critical literature reviews (Hunter 2001, Leinweber and Rowe 2010, Sheen, Slade and Spiby 2014, Wallbank and Robertson 2008), and an exploratory qualitative descriptive study (Hunter and Warren 2014). Data was collected within other studies via individual and group interviews (Halperin et al. 2011, Hunter 2004, Hunter 2005, Mauri et al. 2015, Mollart, Newing and Foureur 2009, Rice and Warland 2013), narratives (Begley 2002), diary-keeping (Begley 2002) and questionnaires (Afolayan and Dairo 2009, Beck, LoGiudice and Gable 2015, Begley 2002, Bennett and Wells 2010, Farrell and Shafiei 2012, Garel et al. 2007, Gillen et al. 2009, Hutchinson 2014, Jordan et al. 2013, Kalicińska, Chylińska and Wilczek-Różyczka 2012, Knezevic et al. 2011, Mizuno et al.

2013, Oncel, Ozer and Efe 2007, Sato and Adachi 2013, Schluter, Turner and Benefer 2012, Sheen, Spiby and Slade 2015).

Findings

The literature retrieved describes how distressed midwives may carry on working in distress, and use this persistence as a maladaptive coping strategy. This persistence in the workplace may become dysfunctional, and may not allow midwives to recognise psychological ill health in themselves. Long hours, the introduction of new technologies in healthcare, job security, 'emotion work', trauma exposure, dysfunctional working cultures and a lack of career progression have become strong predictors of work-related psychological distress in midwives (Afolayan and Dairo 2009, Farrell and Shafiei 2012, Hunter 2001, Sheen, Slade and Spiby 2014). Additionally, the overarching philosophy that midwives should be able to cope with anything may hinder the promotion of healthy, and/or help seeking behaviours. However, the wider findings in this literature review point towards both occupational and organisational sources of work-related psychological distress for a variety of midwifery populations.

Occupational Sources of Distress

The high degree of empathic identification which characterises the midwife–woman relationship may place midwives at risk of experiencing secondary traumatic stress (the potential emotional impact of caring for others in distress) when caring for women experiencing traumatic birth (Leinweber and Rowe 2010, Sheen, Slade and Spiby 2014). Secondary traumatic stress in midwives is reported at high to severe levels (Beck, LoGiudice and Gable 2015). These high levels of distress may mean that a midwife's ability to professionally engage with childbearing women and their families may be compromised. This may also make them more likely to leave the profession (Wakelin and Skinner 2007).

Within the labour and delivery rooms of the United States, midwives most frequently cited neonatal demise/death, shoulder dystocia, and infant resuscitation as being the incidents in which their secondary traumatic stress had originated (Beck, LoGiudice and Gable 2015). This becomes significant as specific interventions of support are

developed in response to the most salient adverse events. Client-related burnout is well established to be related to this type of work with clients, patients, students or other kind of recipients (Hildingsson, Westlund and Wiklund 2013). One other study cited that 80–90% of 556 Japanese midwives have been highly stressed by qualitative job overload, with one out of every three to five displaying a psychological disorder such as depression and/or anxiety (Sato and Adachi 2013). As such, the emotional and psychological impact of caring for childbearing women, their families and other colleagues may require further attention in any new interventions designed to support midwives in this area.

Midwives report having difficulties in functioning professionally during the unexpected reality of a rare and stressful clinical situation (Halperin et al. 2011). This may lead to distressing feelings of guilt, rumination and diminished professional confidence. In sum, 33% of 421 UK midwives surveyed have been found to develop symptoms of clinical posttraumatic stress disorder following a traumatic event (Sheen, Spiby and Slade 2015). These symptoms included feelings of fear, helplessness and 'horror' (Vermetten 2015). Following clinical investigations and traumatic births, midwives in the United States expressed a need for a safe forum to share their experiences with colleagues, as they had no place to talk and 'unburden their souls' (Beck, LoGiudice and Gable 2015). Some of these midwives had lost their belief in birth as a 'normal' and physiological process, developed Post-Traumatic Stress Disorder (PTSD), and many left the midwifery profession. The development of PTSD symptoms is associated with burnout, and as such, the exposure to trauma may impact significantly upon the wellbeing of the workforce (Sheen, Spiby and Slade 2015). This becomes significant as the world tries to recruit a high-quality midwifery workforce in the face of a global shortage of midwives (Oulton 2006).

Complex maternity care

Upon providing ethically complex and emotive clinical tasks such as Termination of Pregnancy (TOP), many midwives report significant emotional distress (Garel et al. 2007, Mauri et al. 2015, Mizuno 2011). How the midwife manages emotional midwifery work is crucial in determining the quality of patient experiences, as the stressors involved in conducting a TOP are associated with the development of

compassion fatigue (Hunter 2001, Mizuno 2011). Equally, the psychological distress experienced by midwives caring for families experiencing stillbirth, neonatal loss and miscarriages remains relatively high, as midwives continue to provide emotionally intense and deeply empathetic care (Wallbank and Robertson 2008). This is significant as the demanding task of providing empathy may often conflict with the midwives need to protect themselves psychologically, and yet empathy and compassionate care have been identified as fundamental tenets of the profession (Francis 2013, The Nursing and Midwifery Council (NMC) 2015).

Midwives who provide antenatal care to families with complex social needs such as domestic violence or drug and alcohol use have reported cumulative feelings of frustration, inadequacy and vicarious trauma over time (Mollart, Newing and Foureur 2009). This emotional and stressful work, which often requires long working hours has led to some of these midwives utilising unhealthy coping strategies such as harmful daily drinking (Schluter, Turner and Benefer 2012). This is significant as we begin to understand the consequences of cumulative exposure to complex and emotive maternity work.

Midwives in developing countries

Midwives working within resource poor, developing countries experience traumatic incidents and death more frequently (Oestergaard et al. 2011, World Health Organization, UNICEF and United Nations Fund for Population Activities 2012). In a survey of 238 midwives working in two rural districts of Uganda, many have displayed moderate to high death anxiety (93%), mild to moderate death obsession (71%) and mild death depression (53%) (Muliira and Bezuidenhout 2015). Furthermore, 74.6 % of 224 midwives working again, in rural areas of Uganda, developed moderate or high death anxiety following prolonged exposure to maternal death (Muliira, Sendikadiwa and Lwasampijja 2015). This becomes significant as the midwifery profession looks to maintain a healthy workforce in these areas towards achieving goals which call for a reduction in the global maternal and neonatal mortality rates (Alkema et al. 2016, Banozic, Skevington and Todorova 2015).

Occupational sources of distress for student midwives

Student midwives also experience work-related psychological distress. When they narrate their most distressing placement related event, their beliefs about the uncontrollability of thoughts and danger, beliefs about the need to control thoughts, and rumination over that traumatic incident were all significantly associated with posttraumatic stress symptoms (Bennett and Wells 2010). Student midwives have also reported feeling unable to speak out and ask for help within hierarchical midwifery workplaces (Begley 2002). This becomes significant as a new generation of midwives will also need to effectively manage their mental health whilst carrying out demanding and emotional midwifery work.

Organisational Sources of Distress

Midwifery cultures have historically been seen as hierarchical, and it has been suggested that this may have led to the subordination of midwives, bullying, ineffective team working and a reduction in professional autonomy (Begley 2002). It has also been proposed that midwives can form elite 'clubs' in the workplace and exclude those of lesser rank (Begley 2002). However, it is unclear whether this situation has remained the same over the last 15 years. Additionally, as it is the obstetrician takes the most senior position within the hierarchical structure, it has also been suggested that this could restrict the midwife's ability to innovate and develop optimal levels of confidence in his or her own professional role (Begley 2002). This working culture may not allow midwives, or the midwifery profession to thrive, as midwives worry about workplace aggression and bullying (Farrell and Shafiei 2012). Inhibited professional progression, bullying and subordination have been identified as key predictors of psychological distress (Afolayan and Dairo 2009, Schluter et al. 2011, Skinner et al. 2011). This provides some understanding of the predictors of stress, which may in turn be used to support midwives in preventing work-related psychological distress more effectively.

When a traumatic birth occurs, midwives can find it difficult to work between the medical model of care and the midwifery model of care (Rice and Warland 2013). In a qualitative thematic content analysis of open text responses, some of the 246-certified nurse-midwife respondents felt 'betrayed' and 'abandoned' by obstetricians in what

was described as an ‘unsupportive’, ‘toxic’, ‘hostile’ and ‘unsafe’ working environment (Beck, LoGiudice and Gable 2015). As such, new understandings in relation to the nature of these interprofessional conflicts and disruptive behaviours which create tensions in what has been described as the ‘domination’ of the medical model of childbirth over midwifery practice could be usefully explored through future research (Johanson, Newburn and Macfarlane 2002, Reiger 2008, Veltman 2007).

In this regard, other midwives report feeling ‘stuck’ between their desire to work within the midwifery model and the realities of practising within a medical model of childbirth, whilst being ‘bullied, undermined and intimidated’ because of the power currently held by the medical model of childbirth (Hunter 2005, Rice and Warland 2013). Such interpersonal conflict has been positively correlated with hostility, depression, anxiety and fatigue in midwifery professionals (Hastie and Fahy 2011, Sato and Adachi 2013). As such, the professional identity, role and scope of midwifery practice may need further authority within maternity services, so that midwives can feel empowered to practice as an equal specialist in maternity care. Those who express high levels of job satisfaction, and those who perceive that others have a positive opinion about the midwifery profession are observed to have lower levels of work-related stress and burnout (Oncel, Ozer and Efe 2007). This may indicate that raising the professional profile of midwifery and placing more value upon midwives in practice could play a part in strategies designed to remedy psychological distress in midwifery populations.

‘Emotion work’ can be defined as the emotional regulation required in the display of organisationally desired emotions (Zapf et al. 1999). Challenging models of midwifery care, high expectations, working intimately with women in pain, and managing the emotions of other’s can all place emotional burden upon the midwife (Hunter 2001). Negotiating inter-collegial conflict in midwifery is a major source of emotion work, which has been identified as likely to exacerbate workforce attrition and psychological distress (Hunter 2005). This provides some understanding of the conflicts between ideals and practice, which can result in frustration, psychological distress and burnout (Hunter 2005).

In one study of 58 Australian midwives, almost 30% experienced moderate to high levels of work-related burnout (Jordan et al. 2013). Midwives can experience burnout as a result of dysfunctional working cultures, work stress, and poor job satisfaction (Oncel, Ozer and Efe 2007). In a sample of 60 Croatian midwives, over three-quarters (76.7%) reported that their job is stressful (Knezevic et al. 2011). This work-related stress was reportedly due to insufficient work resources, insufficient number of co-workers, poor organisation at work, poor communication with superiors and a high volume of emotional work. This suggests that organisational sources of work-related stress may also require attention, as while midwives may be supported individually, they may still face a continuation of stressors originating from the 'organisation'.

Organisational sources of distress for student midwives

The culture that student midwives observe is sometimes described as 'spiteful and cruel', where midwives are seen to behave 'coldly' like 'robots' who are 'emotionally shut down' (Davies and Coldridge 2015a). Within this qualitative descriptive study, one student midwife stated that "It's [midwifery is] supposed to be a caring profession but a lot of people I come across are the least caring people you could meet". Student midwives can also observe a lack of care towards themselves and other midwives in a culture permissive of bullying (Gillen et al. 2009). Workplace aggression and bullying from both staff and patients has been reported as being a frequent occurrence within the maternity workplace, with approximately half of staff reporting workplace aggression in the past month, 36% reporting violence in the workplace from patients or visitors and 32% reporting bullying by colleagues (Hutchinson 2014). Such disruptive working cultures in maternity services have been suggested to threaten patient safety (Veltman 2007).

Student midwives may also feel despondent upon the realisation that childbearing women do not get the care that they expect due to organisational pressures and excessive workloads (Davies and Coldridge 2015a). During semi structured interviews, some midwifery students who identified with these feelings of stress talked about excessive smoking, drinking or eating as ways in which they manage their stress (Davies and Coldridge 2015a). This introduction to the midwifery profession may not be conducive to a positive introductory experience, and may have serious implications

for future retention and recruitment strategies, as new students in training may assume some of the negative perspectives and behaviours communicated via their qualified mentors (Begley 2002). Additionally, the emotional demands of training to become a midwife accompanied by a lack of support have also been cited as being partly responsible for why some student midwives do not transition into qualified midwifery practice (Hughes 2013).

In summary, these findings illustrate a global and contemporary picture, where both midwives and student midwives experience work-related psychological distress and yet at times, carry on working regardless. Some are frustrated when they cannot practice to the best of their ability due to organisational inadequacies and obstructive working cultures. A variety of organisational pressures and features of emotional work have been identified as predictors of psychological distress in midwifery professionals. In addition to the clinically significant impacts of direct trauma exposure, inter-professional conflicts and organisational cultures are highlighted as threats to the midwife's psychological wellbeing.

Midwives working within developing countries, and those caring for women with complex social needs may present with specific symptomologies which relate to their particular area of midwifery practice. In any case, midwives in work-related psychological distress often feel that sources of support are inadequate, and would like access to a safe space in order to unburden their distress (Beck, LoGiudice and Gable 2015). Midwifery is sometimes seen as a pleasurable and privileged job by society and by midwives themselves (Knapp 2015). Yet the needs of those in psychological distress may not have been understood, prioritised or comprehensively acknowledged.

Some midwives have been unsatisfied with the support programmes and interventions currently on offer (Hutchinson 2014). This presents future research with new opportunities to develop effective, evidence based interventions designed to support midwives in work-related psychological distress. Midwives can seek out their own coping strategies, develop self-awareness, reflect, vent, positively re-frame events, cultivate a professional identity and employ self-distraction techniques in order to increase their own resilience towards workplace adversity (Muliira and Bezuidenhout

2015, Warren and Hunter 2014). However, it is as yet unclear which strategies may be most effective in supporting midwifery populations.

Exposure to trauma and psychologically distressing events could adversely affect the wellbeing of midwives and the care provided to women (Sheen, Slade and Spiby 2014). Future research has the opportunity to explore and develop evidence-based solutions to support midwives in work-related psychological distress. The provision of effective support could be significant for midwives, and student midwives both personally and professionally. Service users may also benefit from the provision of effective support for midwives, as the quality and safety of maternity services may also be enhanced (Downe, Finlayson and Fleming 2010, Haigh 2013, Illing et al. 2013, King, Laros and Parer 2012, Longo 2010, The Royal College of Physicians 2015, Veltman 2007).

The retrieved literature has shown how midwives working in resource poor areas, where they are exposed to death more frequently experience anxieties specifically linked to death in practice (Muliira and Bezuidenhout 2015, Muliira, Sendikadiwa and Lwasampijja 2015). This correlates with other research, which demonstrates that although midwives and student midwives' experiences and symptomologies remain broadly similar, midwives practising in African, Arabic- and Spanish-speaking countries appear to come across the psychological barriers to providing high quality maternity care more frequently (World Health Organization 2016). As such, it will be important for new support interventions to be able to reach these midwifery populations, some in geographically remote locations.

As this review of the literature has demonstrated that midwives from around the world experience work-related psychological distress, this thesis will explore the provision of support for both midwives and student midwives around the world. In exploring the literature, it is clear that the causes of work-related psychological distress in midwifery populations are both occupational and organisational. Whilst there are initiatives to help overcome the barriers to midwives providing high quality maternity care, adequate support provision for midwives is lacking (World Health Organization 2016). Other literature advocates that midwives are a distinct, and non-

medical profession, who are also in need of psychological support (Eadie and Sheridan 2017, World Health Organization 2016).

However, prior to exploring which components may be most suited to which particular type of intervention designed to support midwives in work-related psychological distress, it will be important to describe the concepts and definitions which relate to work-related psychological distress, work-related stress and the stressors which relate to their presence.

Definitions of stress; stressors and work-related psychological distress

Stress can be defined as a feature of the external environment that acts on an individual (a stressor), the individual's responses to environmental demands, threats, and challenges, or the interaction between the two (Ganster and Perrewé 2011). Work-related stress can be described as the process by which workplace psychological experiences and demands (stressors) produce both short-term and long-term changes in mental and physical health (Ganster and Rosen 2013). Such work-related stress can manifest physiologically, psychologically, behaviourally and socially, with detrimental consequences to both the individual and the organisation (Cox and Rial-Gonzalez 2002). The stress state can be defined as an on-going process that involves the person interacting with their environment, making appraisals of that interaction and attempting to cope with, and sometimes failing to cope with, any problems that arise (Cox, Griffiths and Rial-González 2000).

The concept of psychological distress is broadly defined as a general state of maladaptive psychological functioning, which occurs in response to prolonged or acute exposure to stressful occurrences (Abeloff et al. 2000, Ryrie and Norman 2004). Psychological distress has five defining attributes: (1) perceived inability to cope effectively, (2) change in emotional status, (3) discomfort, (4) communication of discomfort, and (5) harm (Ridner 2004).

More specifically, psychological distress is defined as a unique, discomforting, emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary or permanent, to the person (Ridner 2004). Therefore, in line with this description, work-related psychological distress will

be defined in this thesis as a unique, discomforting, emotional state experienced by an individual in response to a specific work-related stressor or demand that results in harm, either temporary or permanent, to the person.

Types of Psychological Distress

The types of psychological distress that this thesis will explore in a midwifery context are namely emotional exhaustion, stress, secondary trauma, PTSD, depression and anxiety, burnout and compassion fatigue. In doing so, it is important to consider how these types of psychological distress and their symptomologies may overlap and interact with one another. The use of terms work-related stress and distress has evolved over time as these terms have been closely interlinked and used interchangeably (Bourbonnais, Comeau and Vézina 1999, Thorsteinsson, Brown and Richards 2014, Vermeulen and Mustard 2000).

Emotional exhaustion, burnout and compassion fatigue have all been used synonymously in workforce research (Ball et al. 2012). It has also been argued that workplace burnout is a type of depression, as there is a large overlap between burnout, depression and anxiety symptoms in the workplace (Atallah et al. 2016, Bianchi, Schonfeld and Laurent 2015, Schonfeld and Bianchi 2016). Other workforce research has linked burnout in midwives and conditions such as traumatic stress (Sheen, Spiby and Slade 2015, Wallbank and Robertson 2013) as well as stress symptoms (Skinner et al. 2007), and both positive and negative mental states (Wallbank and Robertson 2013). It is also important to recognise that midwives may experience an overlap of these in both their personal and professional lives.

Stress has been described as a physical, mental or emotional response to a change (Seyle 1983). In the short term, such stress can instigate a useful and rapid response to challenges. However, once stress exhaustion occurs, the stress response may lead to negative physical effects and psychological problems such as anxiety, depression and addiction (Cohen, Janicki-Deverts and Miller 2007, Sinha 2008). Stress is associated with symptoms of burnout, cognitive problems, depression and anxiety (Glise, Ahlborg and Jonsdottir 2012). The environmental events that trigger the stress process are commonly referred to as stressors, while an individual's responses to such

stressors are generally defined as strains (Griffin and Clarke 2011). Whilst a small amount of stress in the short term can be useful, the daily wear and tear of continuously adapting to stressors in the short-term can lead to long-term damage to multiple physiological processes (McEwen 1998). Similarly, long-term exposure to both the frequent negative effects and the emotional consequences of stress may lead to decreased emotional well-being over time (Charles et al. 2013).

Vicarious traumatisation and secondary traumatic stress are terms used to describe the potential emotional impact that working with other people may have upon healthcare professionals over time (Klein 2009, Naturale 2015). This particular type of stress response can occur as a result of knowing, or helping, a traumatised or suffering person (Huggard 2003). Within maternity services, staff may experience a range of psychological and emotional reactions whilst caring for those families experiencing hurt, harm and loss of life (Leinweber et al. 2016, Wallbank and Robertson 2008). These reactions to trauma may include, but are not limited to crying, sadness, intense sorrow, anger, frustration, nightmares, avoidance, depersonalisation, substance abuse, recurring thoughts, and guilt (Coldridge and Davies 2017, Regehr and Bober 2004, Schrøder et al. 2016a, Schrøder et al. 2017). The professional delivering care in these situations may experience 'secondary' or 'vicarious' traumatic stress, and thus may become the 'second victim' (Denham 2007, Wu 2000, Wu and Steckelberg 2012). The symptomologies associated with this type of psychological distress have been linked with those of PTSD (Fligey 1995).

PTSD can develop following either a real or perceived traumatic event or 'stressor' (de Boer et al. 2011). Those who develop PTSD respond to such a traumatic event with intense feelings of fear, helplessness, or horror (Friedman and Resick 2014). They subsequently endure chronic psychological distress, as they repeatedly re-live the traumatic stressor through intrusive, flashback memories (Vermetten 2015). Ultimately, PTSD develops from the inability to cope with the memory of the traumatic event or 'stressor' (Zoladz and Diamond 2016). Here, symptoms can include the display of reckless or self-destructive behaviour, memory flashbacks, hypervigilance, emotional numbness and avoidance (DSM-5 American Psychiatric Association 2013). However, Acute Stress Disorder following an indirect, or direct traumatic event can

also result in symptoms of shame, guilt, anger and self-doubt (National Institute of Mental Health (NIMH) 2015). Significantly, PTSD is often accompanied by depression, substance abuse disorders, and/or other anxiety disorders, which may result in a display of unethical behaviour (Kouchaki and Desai 2014, National Institute of Mental Health (NIMH) 2015).

Depression and anxiety are well-established co-morbid conditions, with anxiety often contributing to the onset of depression (Ferrari et al. 2013). Symptoms of major depression include feelings of worthlessness, chronic fatigue, a sense of guilt, reduced concentration and poor decision making (DSM-5 American Psychiatric Association 2013). These symptoms may cause clinically significant distress. Anxiety generally refers to feelings of nervousness, worry, fear, nervous unease, and physical sensations such as dizziness and shaking (Beck et al. 1988). Although individually distinct, the symptoms of both anxiety and depression also largely overlap with those seen in burnout syndrome (Bianchi, Schonfeld and Laurent 2015).

Burnout is a syndrome consisting of emotional exhaustion, depersonalisation and negative thinking towards others (Yoshida and Sandall 2013). Midwives have been identified as a group at risk of exhibiting high levels of emotional exhaustion and burnout (Borritz et al. 2006, Filby, McConville and Portela 2016). Work burnout is defined as a state of prolonged physical and psychological exhaustion which is perceived as related to the person's work, and client burnout can be defined as a state of prolonged physical and psychological exhaustion which is related to the person's work with clients, patients, students or other kind of recipients in a variety of professions (Hildingsson, Westlund and Wiklund 2013). Symptoms are closely associated with psychological trauma, and occur when a one's emotional resilience is reduced.

Compassion fatigue ensues once one's emotional stores are depleted and the ability to offer compassion is burnt out (Mendes 2014). Compassion fatigue, developed over time, is a construct associated with workers who practise compassion in situations with extended exposure to the suffering of others, accompanied by a lack of emotional support in the workplace (Hegney et al. 2014). The symptoms of compassion fatigue

include sadness, depression, anxiety, intrusive images, flashbacks, numbness, avoidance behaviours, cynicism, poor self-esteem and survivor guilt (Hooper et al. 2010). As such, the symptoms of compassion fatigue can also be linked to burnout, depression, anxiety and traumatic stress.

As the symptom profiles of these types of psychological distress overlap so frequently, the term 'psychological distress' can be used as an umbrella term for a number of related, but distinct constructs. Subsequently, as this thesis aims to present a case for the development of an intervention designed to support midwives in work-related psychological distress, it is important to explore the prevalence of work-related psychological distress in midwifery populations in order to understand the breadth and depth of the issue.

Prevalence of work-related psychological distress in midwifery populations

The prevalence of moderate to severe work-related burnout, depression, anxiety and stress in Australian midwifery populations is reported as high, with 64.9% of 1037 midwives participating in a recent cross-sectional survey study reporting moderate to high levels of burnout, and 20% reporting depression, anxiety and stress symptoms (Creedy et al. 2017). In the United Kingdom, another survey study reported that approximately one third of 421 midwives experience current posttraumatic stress symptoms at levels indicative of clinical relevance following exposure to a traumatic perinatal event (Sheen, Spiby and Slade 2015).

Prolonged exposure to midwifery work over time may result in midwives becoming burnt out. In one survey of Swedish midwives, 15.5% (n=72) scored high in the subscale of work burnout, and 15% (n=69) scored high in the subscale of client burnout (Hildingsson, Westlund and Wiklund 2013). Furthermore, in a 5-year prospective intervention study conducted in Denmark and comprising of 2,391 human service workers, midwives were among the top 3 professions reporting the highest levels of both work and client-related burnout (Borritz et al. 2006). In Norway, 20% of 598 midwives also reported personal or work-related burnout, and 5% reported client-related burnout in another cross-sectional survey (Henriksen and Lukasse 2016).

Although these primary cross-sectional survey studies are predominantly conducted within first world countries, in Senegal, 80% of 226 midwives surveyed also reported "high" levels of emotional exhaustion, whilst 94% reported "average–high" levels of emotional exhaustion (Rouleau et al. 2012). Additionally, another cross-sectional survey of 123 midwives working in Iran reported that 58% experienced either severe or very severe levels of work-related stress (Kordi et al. 2014).

These self-report surveys are cross-sectional, because they collect information on a population, at a single point of time to assess attitudes and explore phenomenon that cannot directly be observed (Håkansson 2013). This cross-sectional survey method has been used successfully in other research looking to explore the wellbeing of healthcare staff (Smart et al. 2014). Cross-sectional survey methods are good at answering questions about prevalence, prognosis, diagnosis, frequency and aetiology but not questions regarding the effect of an intervention (Del Mar, Hoffmann and Glasziou 2010). The findings of cross-sectional studies can also be limited due to prevalence-incidence or 'Neyman' biases, an inability to provide causal inferences, or by only providing a snapshot of data which may only be present for a limited timeframe (Levin 2006). Whilst such cross-sectional studies are considered to be lower in the hierarchy of evidence (Ingham-Broomfield 2016), a global cross-sectional survey presented in collaboration with the World Health Organisation represents the largest involving midwifery personnel to date, and amalgamates findings from 93 different countries (World Health Organization 2016).

Providing an overall picture on the prevalence of work-related distress in midwifery populations, findings from this global study report that 6% of 2470 midwives from Europe, the Americas, Africa, Asia and the Pacific feel 'traumatised' at work on a daily basis (World Health Organization 2016). Additionally, 15% of these midwives are rarely or never supported at work, 45% are exhausted and 10% want to leave the midwifery profession altogether. The analysis within this report suggests that these negative feelings are likely to come as the result of workplace pressures, which may run the risk of midwives developing burnout, and mean that their ability to give quality care is seriously compromised (World Health Organization 2016). This finding is consistent with other research conducted in low and middle-income countries, where burnout is

suggested to disempower midwives to provide high quality care (Filby, McConville and Portela 2016).

The findings from this global online survey come from two qualitative consultation processes, which will be described in greater detail due to both the significance to this research, and their application to a greater and global midwifery population. Firstly, a multilingual participatory workshop was attended by 42 midwives from 14 countries. Such participatory methods are beneficial in developing collaborative and productive partnerships with participants, providing participants with a voice, and harnessing participant engagement to stimulate positive change (Jagosh et al. 2012). Subsequently, a global online cross-sectional survey was conducted in four languages (Spanish, French, English and Arabic) with 2,470 respondents from 93 countries. Qualitative methods such as the ones used in this study can be particularly helpful with inductive research in work and occupational health psychology, and are frequently used where there is limited knowledge (Spector and Pindek 2015).

Overall, the findings of this global survey demonstrate that midwives experience work-related psychological distress around the world. Therefore, it will be relevant within this thesis to also incorporate midwives from non-UK and non-western countries, as such work-related psychological distress may mean that their ability to give quality care is compromised around the world (World Health Organization 2016). Additionally, it will be important to synthesise what is known about the causes and consequences of work-related psychological distress, and understand how these relate to the wider literature on healthcare professionals.

The causes of work-related psychological distress

General life stressors or 'causes of distress' have been classified into three broad categories; (i) Catastrophic events (ii) Major life changes and (iii) Daily hassles (Auerbach and Gramling 2003). Work-related stress has historically been considered as having a multifactorial aetiology (Baker 1985). Yet more recent studies have found that self-perception of stress at work can be predicted by two specific dimensions: perceived high demands and poor relationships in the workplace (Joseph 2013, Marcatto et al. 2014). Others have defined work-related stressors in relation to time

pressures, amount of work to do, work difficulty, and empathy required versus the inability to show one's emotions at work (Joseph 2013, Tsai 2012).

Work-related stress can occur in any profession, yet for this research it is important to consider stress in the health care professions. For instance, in nursing, inadequate staffing, poor skill mix, role ambiguity and inter-professional conflict can cause work-related stress (Andela, Truchot and Van der Doef 2016, Evans, Pereira and Parker 2008). Other work-related stressors have also been evidenced in the medical profession to include long work hours, sleep deprivation and professional responsibility (Burbeck et al. 2002, Klein et al. 2011, Tziner et al. 2015). These stressors are not unique to such professions, and a number of health professions may experience similar work-related stressors, including midwives.

Midwives are exposed to high levels of stress in their work environment (Jahromi et al. 2016, Sato and Adachi 2013). High stress levels occur due to sustained arousal from stressors, as opposed to short term arousal, which may only produce low levels of stress (Brown et al. 1991). In midwifery, severe occupational events or 'stressors', which may produce such sustained arousal have been defined as 1) the death of an infant due to delivery-related causes during childbirth or while on the neonatal ward; 2) an infant being severely asphyxiated or injured at delivery; 3) maternal death; 4) very severe or life threatening maternal morbidity; or 5) other stressful events during delivery, such as exposure to violence or aggression (Wahlberg et al. 2017). Exposure to birth trauma has been acknowledged as an occupational stressor which can lead to posttraumatic and occupational stress for midwives (Leinweber et al. 2016). Other workplace stressors for midwives have been reported as excessive workload, staff shortages, inadequate preparation for adversity, pressures from service users, constraints on practice and autonomy, a demanding need for concentration, attention, and knowledge, lack of support, interpersonal conflict, excessive workloads, exposure to death and dying, discrimination and inter-professional conflict (Banovcinova and Baskova 2014, Hunter and Warren 2014, Sato and Adachi 2013).

This literature demonstrates that both midwives, nurses and physicians experience broadly similar stressors in the workplace, which may all result in work-related

psychological distress. Also, the healthcare environment as a workplace in general includes a panoply of stressors which can negatively affect employees. Generally, these have been described as work overload, lack of independence and rewards, and stressors that stem from patients. Additionally, all healthcare professionals may at some point have the universal stressor of contact with suffering and/or dying patients (Ruotsalainen et al. 2008).

Overall, the causes of work-related stress and distress are broadly related to sociodemographic factors, subjective perceptions, personality characteristics, coping processes, and both positive and negative workplace experiences (Iliceto et al. 2013). Whilst work-related stress is associated with both financial and human costs to society, a wider range of consequences relating to work-related psychological distress can also support greater understanding in this area (Hassard et al. 2017).

The consequences of work-related psychological distress

Work-related psychological distress is associated with a number of negative consequences both at the organisational level (e.g. low productivity, greater number of accidents, increased turnover and absenteeism) and at the individual level (e.g. health issues, anxiety, depression and burnout) (McKnight et al. 2016, Palmer, Cooper and Thomas 2004). For all healthcare professionals, the stressor of working with potentially suffering and/or dying service users, accompanied by the need to regulate personal emotional responses can result in reduced clinical effectiveness, decreased motivation, and development of dysfunctional behaviour and attitudes in the workplace over time (Ruotsalainen et al. 2008). For the midwife, compassion fatigue may hinder the provision of high quality maternity care and result in a symptomatic display of uncaring behaviour (Wallbank and Robertson 2013).

The adverse consequences of psychological distress in the healthcare workplace can be significant. Many doctors suffering work-related burnout have co-morbidities such as depression, poor cognitive function and substance dependency (Brown, Goske and Johnson 2009, Privitera et al. 2014). In nursing, psychological distress has been associated with depression, obesity, insomnia, intra-relational conflicts and aggression, and increased alcohol intake and drug abuse (Adriaenssens, De Gucht and

Maes 2015). The most extreme consequence of psychological distress is death by suicide, where the risk for healthcare professionals is high (Alderson, Parent-Rocheleau and Mishara 2015, General Medical Council (GMC) 2015, Gold, Sen and Schwenk 2013, Strobl et al. 2014).

More generally, the consequences of poor psychological health in the healthcare workforce is associated with increased infection, medical error and mortality for services users (The Royal College of Physicians 2015). Saliently, 60%-70% of healthcare professionals admit to having practised at times when they have been distressed to the point of clinical ineffectiveness (Boorman 2010, National NHS Staff Survey Co-ordination Centre 2014, Romani and Ashkar 2014). For the healthcare worker, work-related psychological distress can result in a marked reduction in quality of life, irregular menstrual bleeding patterns, poor sleep quality, bodily exhaustion and an increased risk of motor vehicle accident (Mohamadirizi et al. 2012, Papathanasiou 2015, West, Tan and Shanafelt 2012). As part of the healthcare workforce, midwives may also experience these same consequences of work-related psychological distress. Yet studies relating to the consequences of psychological distress have been described as lacking for midwifery populations (Creedy et al. 2017).

In reference to systematic reviews of mental health in health professionals, stressors relating to inter-professional conflicts, exposure to patient suffering and professional responsibility remain apparent for mental health professionals (Edwards and Burnard 2003, Fothergill, Edwards and Burnard 2004), social workers (Coyle et al. 2005), cancer professionals (Trufelli et al. 2008), doctors, students and nurses (Beck 2011, Seys et al. 2013b). The most common outcomes associated with these stressors were episodes of occupational burnout, secondary traumatic stress and compassion fatigue, although levels of prevalence in each profession vary significantly in each study. Such outcomes are more likely to co-occur among professionals exposed indirectly to trauma through their work (Cieslak et al. 2014). Workers frequently exposed to direct trauma at work such as emergency staff and paramedics may be more resilient to secondary traumatic stress as they more readily anticipate such direct trauma, and are better prepared via training (Palm, Polusny and Follette 2004).

Based on previous estimates of a 6% prevalence of traumatic stress symptoms in childbearing women (Creedy, Shochet and Horsfall 2000), a midwife who provides care for an average of 200 women per year may experience 12 direct encounters with trauma per year. This may be considered relatively infrequent. As birth rates have remained either fairly consistent or become slightly higher in some areas over time, this prevalence of such exposure may be broadly mirrored over future years (Sedgh, Singh and Hussain 2014). As such, midwives may experience cumulative episodes of occupational burnout, secondary traumatic stress and compassion fatigue, as they may not have the same resilience to secondary traumatic stress that healthcare workers dealing with frequent direct trauma may have. Additionally, midwives are experienced in providing maternity care to well women, and are not always adequately prepared to deliver care to unwell women experiencing severe morbidity due to obstetric complications (Eadie and Sheridan 2017).

Nevertheless, as with all of the causes and consequences of work-related psychological distress presented here, the mechanisms and theories for how such stressors lead to the outcomes and levels of stress they produce will next be explored.

Theories of work-related stress

In addition to evidence-based research, theory-based research can address different knowledge perspectives to reflect a more holistic approach to the problem under study, effectively guiding the development, design, and delivery of an intervention (Wolf 2015). Therefore, in order to secure a more holistic approach to this research, a theory or model of work-related stress must be assigned to underpin this work. This research is concerned with supporting midwives in work-related psychological distress. In taking this approach, two distinct theories; the transactional, which focuses on the structural features of a person's interaction with their environment, and interactional theories, which are more concerned with psychological mechanisms, will be most relevant in this context (Cox, Griffiths and Rial-González 2000, Sidjimova, Dyakova and Vodenicharov 2013).

Applying theories to intervention research

The findings of one recent literature review suggest that in intervention research there is a gap between work-stress theory and its application in the design and development of online interventions for the management of work-related stress (Ryan et al. 2017). This literature review identified 48 online interventions for the management of work-related stress and supporting the psychological well-being of workers, 66% of which were atheoretical in nature. Of the studies included, n=38 were RCT's, n=8 were cohort studies, n=1 study incorporated a pre-and post-test design, and n=1 study presented a qualitative evaluation of an online intervention. Some theory-based interventions cited within this review were underpinned by social cognitive theory (Cook et al. 2007, Cook et al. 2015, Shimazu et al. 2005, Villani et al. 2013), the transtheoretical model of social cognitive theory (Hughes et al. 2011), the transtheorectical model of change (Kim et al. 2015), and self-efficacy theory (Volker et al. 2015). Interventions which used stress-specific theoretical models have all drawn from transactional models of stress (Lazarus 1986), and all reported improvements on a range of measures related to employee well-being, stress, and/or mental health (Ryan et al. 2017). All but one of these theory-based interventions were "individual"-focused (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Williams et al. 2010). One was "organisation" focussed (Stansfeld et al. 2015).

The individual focussed online intervention programmes delivered by Ebert and colleagues, 'GET.ON Recovery' and 'GET.ON Stress' combined both problem and emotion-oriented coping strategies as a basis for their development (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016). Such strategies are again derived from the transactional model of stress (Lazarus 1986). In four randomised controlled trials of these interventions conducted with samples sizes of n=128 teachers using 'GET.ON Recovery' over a 6-week period (Ebert et al. 2015), and n=264 insurance company employees using 'GET.ON Stress' over a period of 7-weeks (Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016) results demonstrated medium to large reductions in stress perception (Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016), and insomnia (Ebert et al. 2015). Improvements were seen in the 'GET.ON Stress' RCT's on measures related to mental-health, work-related health and skills and

competences (Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016). The RCT on 'GET.ON Recovery' saw sustained moderate to large improvements in mental health, sleep, perseverance cognitions and recovery experiences outcomes (Ebert et al. 2015).

The 'Stress GYM' delivers 9 online modules, each individual focussed, and grounded in the theoretical underpinnings of the stress-specific model of cognitive appraisal (Lazarus 1986). A cohort study recruited n= 142 military personnel to use this online intervention without specifying a time period or offering support (Williams et al. 2010). This study found that there was a significant reduction in stress intensity post-intervention. The organisation focussed online intervention delivered by Stansfeld and colleagues delivered an e-learning health promotion course to managers, based on the transactional model of stress (Stansfeld et al. 2015). In their pilot of a clustered RCT demonstrating small benefit from the intervention on well-being, n=350 employees recruited from mental health services provided a response to the Warwick Edinburgh Mental Wellbeing Scale at baseline and n=284 at follow-up.

Whilst some interventions included within this literature review were atheoretical in nature, or were underpinned by non-stress-specific theories, the intervention research studies described in detail above have all used the stress-specific transactional model in the design of online interventions, and have all reported promising results (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010). They have also used this model in developing components such as online cognitive-behavioural, motivational, e-learning, relaxation, and mindfulness techniques to effectively support employee well-being and enable staff to manage their work-related stress. As such, a stress-specific theoretical model which is grounded within the transactional theories of stress may also be most appropriate for this research.

Transactional theories of stress

The most commonly used transactional theory suggests that stress is the direct product of a transaction between an individual and their environment which may tax their resources and thus threaten their wellbeing (Lazarus 1986, Lazarus and Folkman 1987). Yet a more recent version of this theoretical model suggests that it is the

appraisal of this transaction that offers a causal pathway that may better express the nature of the underlying psychological and physiological mechanisms which underpin the overall process and experience of stress (Lazarus et al. 2001).

In this sense, any aspect of the work environment can be perceived as a stressor by the appraising individual. Yet the individual appraisal of demands and capabilities can be influenced by a number of factors, including personality, situational demands, coping skills, pervious experiences, time lapse, and any current stress state already experienced (Prem et al. 2017). One multidisciplinary review provides a broad consensus that stressors really only exert their effects through how an individual perceives and evaluates them (Ganster and Rosen 2013).

As such, the experience of workplace stress according to the transactional theory, is associated with exposure to particular workplace experiences, and a person's appraisal of a difficulty in coping. This experience is usually accompanied by attempts to cope with the underlying problem (Aspinwall and Taylor 1997, Guppy and Weatherstone 1997). In order to recognise these external and internal elements of workplace stress, Cox (1993) outlined another modified transactional theory. This theory represented the sources of the stressor, the perceptions of those stressors in relation to his/her ability to cope, and the psychological and physiological changes associated with the recognition of stress arising.

As with all transactional theories of work-related stress, it is the concept of appraisal that has been criticised for being too simplistic and for not always considering an individuals' history, future, goals and identities (Harris, Daniels and Briner 2004). Additionally, in his later works, Lazarus stressed that his transactional theories of stress failed to acknowledge the outcomes associated with coping in specific social contexts and during interpersonal interactions (Lazarus 2006a). This research is concerned with managing, preventing and recognising work-related psychological distress in midwifery populations. Consequently, a theory of stress which amalgamates the transactional model of stress with the associated outcomes of stress may be most suited to this research. As interactional theories of stress focus on the impact of environmental

factors on the individual, it would subsequently be appropriate to explore such models here (Tallodi 2015).

Interactional theories of stress

Interactional models emphasise the interaction of the environmental stimulus and the associated individual responses as a foundation of stress (Lazarus and Launier 1978). For instance, the Effort-Reward Imbalance (ERI) theory posits that effort at work is spent as part of a psychological contract, based on the norm of social reciprocity, where effort at work is remunerated with rewards and opportunities (Siegrist 1996, Siegrist 2012). Here, it is the imbalance in this contract that can result in stress or distress. Yet in contrast to transactional theories of stress, this imbalance may not necessarily be subject to any appraisal, as the stressor may be an everyday constant occurrence.

The Person-Environment Fit theory is one of the earliest interactional theories of work-related psychological distress, suggesting that work-related stress arises due to a lack of fit between the individual's skills, resources and abilities, and the demands of the work environment (Caplan 1987, French, Caplan and Van Harrison 1982). Here, interactions may occur between objective realities and subjective perceptions and between environmental variables and individual variables. In this case, it has been argued that stress can occur when there is a lack of fit between either the degree to which an employee's attitudes and abilities meet the demands of the job or the extent to which the job environment meets the workers' needs (French, Rodgers and Cobb 1974).

The Job Demand-Control (JDC) theory supposes that work-related stress can result from the interaction between several psychological job demands relating to workload such as cognitive and emotional demands, interpersonal conflict, job control relating to decision authority (agency to make work-related decisions) and skill discretion (breadth of work-related skills used) (Karasek Jr 1979). The JDC model is concerned with predicting outcomes of psychological strain, and workers who experience high demands paired with low control are more likely to experience work-related psychological distress and strain (Beehr et al. 2001).

The original concept of job demand and control was expanded in 1988 to become the Demand Control Support (DCS) theory, describing how social support may also act as a buffer in high demand situations (Johnson and Hall 1988). As social support as a coping mechanism can moderate the negative impacts of job stress, another later version of the JDC theory was developed to suggest that it is those individuals who experience high demands paired with low control and poor support who are most at risk of work-related psychological distress (Van der Doef and Maes 1999). These later versions of the JDC theory were developed, as earlier versions were considered to be too simplistic and ignorant of the moderating effects of social support upon the main variables. However, the perceived job demands and decision autonomy outlined in the JDC theory have been acknowledged as being key factors in determining the effects and outcomes of work on employees' health (Cox, Griffiths and Rial-González 2000).

Use of stress-specific theories in intervention research

Currently, there is a gap between stress-specific theories and their application in the design and development of online interventions designed to support those in work-related psychological distress (Ryan et al. 2017). It has been suggested that to better understand stress, researchers need to think in process terms so that their research is guided by ideas about how things work (Lazarus 2006b). This advocates that a process-orientated theory which builds on describing processes may also provide a suitable underpinning for this research.

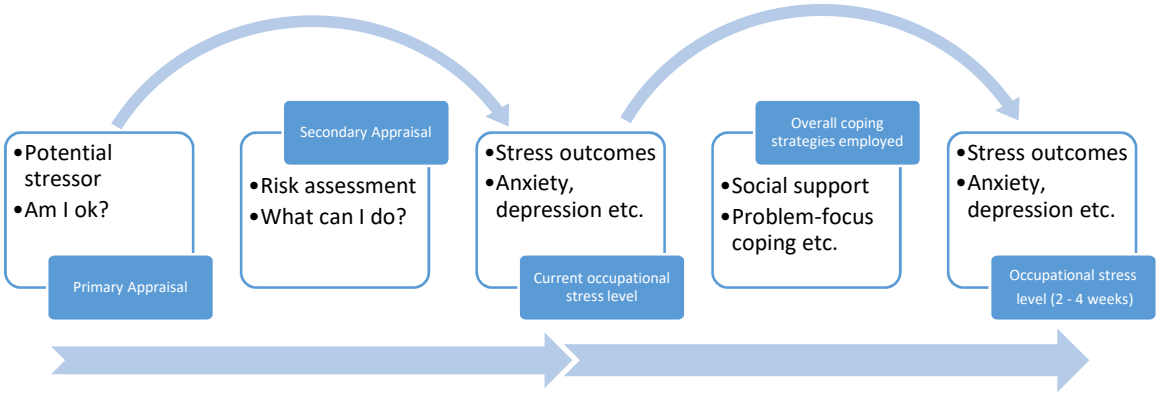
Some previous intervention research has successfully applied Lazarus' transactional theory of stress to the design and development of online interventions designed to support the workforce in work-related psychological distress (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010). However, the perceived job demands and decision autonomy outlined in the earlier developed JDC theory may also be key in determining the effects and outcomes of work on employees' health (Cox, Griffiths and Rial-González 2000). Additionally, the JDC model supposes that work-related stress can result from the interaction between stressors such as high emotional demands, interpersonal conflict, and low job control relating to poor decision authority (Karasek Jr 1979). These stressors have been listed as some of the major stressors facing midwifery populations around the world (World

Health Organization 2016). Therefore, a theoretical, process-orientated model which combines both Lazarus' transactional theory of stress and coping (Lazarus 1986) and Karasek's JDC theory (Karasek Jr 1979) may provide the most appropriate underpinning for this thesis.

One such model which incorporates both of these theories is the revised transactional model of occupational stress and coping presented by Goh and colleagues (Goh, Sawang and Oei 2010). This model, shown in figure 1 demonstrates how individuals appraise, cope with and experience the outcomes of occupational stress. This process involves an individual firstly encountering a potential stressor and appraising their experience of it. Subsequently, this model demonstrates how the individual then goes on to a secondary phase of risk appraisal, where coping strategies are initiated in response to the individuals experience of the initial stressor. The model also outlines how immediate outcomes and outcomes after 2 to 4 weeks are involved throughout this process of stress and coping.

In this case, the model demonstrates a direct link between the primary appraisal of the stressor and primary stress outcomes, and also a direct link between the primary and secondary stress outcomes. This process demonstrates how the appraisals of stressful events can significantly impact on an individual's experience of stress and its associated outcomes. This model also provides support to the effect of emotions on a person's choice of coping strategy (Ficková 2002). Notably, this model posits that the experience of stress, coping and the development of negative outcomes can occur at different points in the process of occupational stress and coping, and can be triggered by both psychological and behavioural coping factors.

Figure 1: The Revised Transactional Model of Occupational Stress and Coping



This model not only describes the process of occupational stress and coping, but also the immediate and the subsequent outcomes of work-related stress. Moreover, this model allows the nature of the potential stressor to remain open to the appraisal of the individual. Used in this research, this would allow midwives to acknowledge that psychological distress can occur as a result of an unlimited number of stressors, when appraised as such by the individual. This model also demonstrates the fluid nature of stress outcomes in the transactional process. Such a model would be useful to illustrate the process and development of work-related stress and coping, as midwives look to understand processes which may lead them to more effectively manage work-related psychological distress in themselves and others.

This model may also appropriately underpin the development and design of an online intervention designed to support midwives in work-related psychological distress, as it uses the same components of the transactional theory used successfully in preceding online interventions, which report improvements on a range of measures related to employee well-being, stress, and/or mental health (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010). The reason that this particular revised transactional model may be most suited to this research, is because it maintains the integrity of Lazarus' highly applicable

transactional theory whilst also using other relevant research findings to build a chronology of influence between appraisal, coping and work-related stress outcomes (Goh, Sawang and Oei 2010). As such, it is this theory which will be used to underpin this research and any subsequent work in this regard, yet it is also important here to rule out other alternate models of stress.

Alternate models of stress

Early psychological models of stress may be suitable for describing how environmental events generate stressful appraisals for individuals. Yet another theoretical model, devised via a multidisciplinary review of work stress and employee health identifies the intervening physiological processes that link stress exposure to health outcomes (Ganster and Rosen 2013). This Allostatic load model of the stress process builds on earlier cognitive appraisal models of stress and the work of Seyle (Seyle 1983) to describe the developments of allostasis in the process of stress. Allostasis is the process of adjustment for an individual's bodily systems that serve to cope with real, illusory, or anticipated challenges to homeostatic (stable) bodily systems. This model proposes that continued overstimulation leads to dysregulation, and then to poor tertiary health outcomes. However, the sequence of this model has proven difficult to validate empirically. Additionally, this research is concerned with the psychological rather than the physical outcomes of work-related stress. As such, this allostatic model would not be appropriate for use in this case.

Another model of work stress has been developed in response to the Health and Safety Executive's (HSE) advice for tackling work-related stress and stress risk assessments (Cousins* et al. 2004, HSE 2001). This model, developed by Cooper and Palmer underpins the theory and practice advocated by the HSE (Palmer, Cooper and Thomas 2003). This model explores the stress-related 'hazards' or sources of stress facing employees in the workplace. The acute symptoms of stress are also set out, and these symptoms relate to the organisation, as well as the individual. The negative outcomes are outlined for both an individual's physical and mental health, however beyond this, outcomes are presented as financial losses for both the individual and the organisation. As this research is concerned with supporting the midwife as an

individual, the organisational repercussions in relation to work-related stress are not relevant to this work at this time.

Another model of work stress developed by Cooper and Marshall sets out the sources of stress at work, factors which determine how an individual may respond to such stressors, go on to experience acute symptoms, and eventually go on to reach the chronic disease phase affecting one's physical and/or mental health (Cooper and Marshall 1976). This model is concerned with the long-term consequences of work-related stress, as well as the acute symptoms of, sources of, and the individual characteristics associated with work-related stress. Whilst this research is concerned with the causes and consequences of work-related psychological distress in midwifery populations, this model fails to demonstrate the overall process and experience of work-related stress. As such, it is not wholly suitable for use in the management, prevention and recognition of work-related psychological distress in midwifery populations.

The above models all outline potential stressors or hazards relating to the workplace. Yet work-related stressors cannot always remain separate from general life stressors. Illustrating this, the Conservation of Resources (COR) Model, an integrated model of stress looks to encompass several stress theories relating to work, life and family (Hobfoll 1989). According to this theory, stress occurs when there is a loss, or threat of loss of resources. This is because individuals ultimately seek to obtain and maintain their resources, loosely described by the authors as objects, states, conditions, and other things that people value. Some of these stressors may relate to resources such as one's home, clothing, self-esteem, relationship status, time and/or finances. In this context, work/relationship conflicts may result in stress, because resources such as time and energy are lost in the process of managing both roles effectively (Hobfoll 2001). This may in turn result in job dissatisfaction and anxiety, although other resources such as self-esteem may moderate such conflicts and stress (Hobfoll 2002). Such a model would be useful in the development of resource-focused interventions which aim to make changes in employees' resources and subsequent outcomes (Halbesleben et al. 2014). Yet this is not the aim of this research.

This exploration of work-related stress theories has singled out the revised transactional model of occupational stress and coping presented by Goh and colleagues as being most applicable to this research (Goh, Sawang and Oei 2010). However, in order to situate this theory appropriately within the early stages of intervention development, the problem requiring the solution must be wholly clarified and reiterated.

Identifying the problem

Previous research has identified that midwives can experience work-related psychological distress whilst caring for childbearing women and their families (Hunter 2011, Leinweber et al. 2016, Schrøder et al. 2016a, Schrøder et al. 2016b, Sheen, Spiby and Slade 2015). In addition to any impacts of distress on midwives themselves (Mohamadirizi et al. 2012), this may also have implications for maternity care, as the wellbeing of healthcare staff is linked with the quality and safety of healthcare services (Hall et al. 2016, Maben et al. 2012, Sawbridge and Hewison 2013, The Royal College of Physicians 2015). More specifically, poor staff wellbeing has been correlated with an increase in infection and mortality rates (Boorman 2009, Boorman 2010, Francis 2013).

Whilst work-related psychological distress can negatively impact upon a midwife's both personal and professional life (Wahlberg et al. 2016), there are also other consequences for the maternity services. These may include staff shortages (Jarosova et al. 2016), an increase in clinical errors (Boorman 2009), reduced productivity and a reduction in care quality (Black 2012). Financial consequences may also include increased costs in relation to litigation and recruitment (Edwards et al. 2016). Midwives in work-related distress may also be less able to communicate effectively or develop empathetic and therapeutic relationships with childbearing women (Leinweber and Rowe 2010). They may also incur more sickness absence than other colleagues (Henriksen and Lukasse 2016). These consequences all have implications for the delivery of high quality maternity services.

A recent maternity review has suggested that maternity staff report higher levels of perceived stress and a less supportive work environment than other healthcare staff (Cumberlege 2016). This report recommends that healthcare services "recognise the

impact on staff and have appropriate support structures in place to support them to report adverse events and to deal with their own emotional reaction to the incident". Individually, midwives may respond to distress in a variety of ways. Some may use active coping, venting, the positive reframing of events, self-distraction and substances to manage their psychological distress (Begley 2002, Muliira and Bezuidenhout 2015, Saridi et al. 2016). Yet some of these coping strategies may obstruct the provision of high quality maternity care.

Alongside these issues, the prevalence and consequences (personal, professional and organisational) of work-related psychological distress in midwifery populations add to the need for effective psychological support for midwives in the workplace. However, whilst there are initiatives to help overcome the social, professional and economic barriers to high quality midwifery practice, gaps remain in the exploration of adequate support provision for midwifery populations practising in work-related psychological distress (World Health Organization 2016). Due to the direct links between work-related psychological distress and poorer personal, organisational and professional outcomes, it is this area of focus which may deliver some promise in supporting midwives to provide high quality care, and enjoy a higher quality of both personal and professional life.

Midwifery populations around the world suggest that the provision of a safe space to unburden, effective peer support, networking and the sharing of experiences could enable the midwifery profession to overcome some of the barriers to providing high quality care (Beck, LoGiudice and Gable 2015, World Health Organization 2016). Yet they also suggest that they feel unable to speak out and ask for help within hierarchical midwifery workplaces (Begley 2002). As such, midwifery populations around the world may benefit from the provision of both confidentiality and anonymity when seeking help. Online delivery may be most appropriate for this task, using intervention components drawn from the transactional model of stress, used effectively in other intervention research (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010). Yet prior to making any further assumptions, the suitability of this medium must first be explored in more detail.

Why an online intervention?

The prevalence and consequences of work-related psychological distress accompanied by the need for effective support in the midwifery workforce remains broadly similar in a variety of countries. Therefore, in order to support geographically diverse midwifery populations in work-related psychological distress, the internet may offer broad coverage and easy access to support. This notion is echoed by other researchers, who suggest that online interventions which can reach larger numbers of people are required (Maher et al. 2014, Muñoz 2010).

Online interventions designed to ameliorate psychological stress can be effective and have the potential to reduce stress-related mental health problems on a large scale (Heber et al. 2017). Online interventions can also provide a low-cost and more accessible alternative to face-to-face support for employees (Ebert et al. 2014, Lal and Adair 2014). This lower cost may in turn make widespread use and adoption more feasible and acceptable (Craig et al. 2008). These factors may also make an online intervention more suited to supporting a larger group of midwives in a variety of geographical locations. Such interventions can also be made culturally portable and adaptable, and can therefore be expanded to effectively support other populations around the world (Brijnath et al. 2016, Harper Shehadeh et al. 2016).

There are a variety of effective online interventions for the delivery of support (Bakker D, Kazantzis N, Rickwood D, Rickard N 2016, Barak et al. 2008, Davis and Calitz 2016, Knaevelsrud and Maercker 2007, Kuester, Niemeyer and Knaevelsrud 2016, Lim and Thuemmler 2015, Spijkerman, Pots and Bohlmeijer 2016). Users of online support interventions report benefits such as group cohesiveness, information exchange, universality, instillation of hope, catharsis, altruism, improved mental health literacy, flexibility in terms of standardisation and personalisation, interactivity, consumer engagement, and psychological and social support (Chung 2014, Erfani, Abedin and Blount 2016, Idriss, Kvedar and Watson 2009, Lal and Adair 2014, Vilhauer 2009). Similar benefits are also noted in the use of other online interventions drawn from the transactional model of stress (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010). As such, new online

interventions which use a stress-specific model in their design could also generate similar benefits for midwives as a target population.

For employees in general, online interventions have the potential to reduce stress in the long-term, and have been considered a valuable alternative to face-to-face interventions as they may offer a cost-effective, convenient and evidence-based way of supporting the mental health of workers on a large scale (Heber et al. 2016, Lehr et al. 2016). This is significant, as some midwives who engage in face-to-face support can find it challenging to attend all sessions and complete homework given between sessions (Foureur et al. 2013, van et al. 2015, Warriner, Hunter and Dymond 2016). As such, an online intervention may be more suited to midwives requiring more flexible access to less structured support interventions. Online interventions have been evidenced as being capable of enhancing positive mental health and psychological well-being in nursing and allied health populations (Bolier et al. 2014, Cieslak et al. 2016), yet this promise has yet to be tested for midwifery populations, whose role is considered to be similar, yet distinctly non-medical.

Additionally, health care professionals are known to display poorer help-seeking behaviours from early in their careers (Dyrbye et al. 2015, Edwards and Crisp 2016, Galbraith, Brown and Clifton 2014). These poor help-seeking behaviours are largely attributed to workplace stigma, fear of punitive action and the avoidance of appearing weak (Gold et al. 2016, Monroe and Kenaga 2011, Robertson and Thomson 2015). As such, the anonymity and confidentiality often offered as the principle advantage to internet based interventions may also enable some midwives to seek help where they may not otherwise have done so (Crisp and Griffiths 2014, Haemmerli, Znoj and Berger 2010, Kenwright et al. 2004, Wootton et al. 2011, Ziebland and Wyke 2012).

An online intervention may be one option midwives around the world may turn to when aiming to prevent, manage and understand work-related psychological distress. However, prior to exploring the development of such an intervention, further clarity regarding how this particular online intervention may exist at this stage is required.

Proposing a complex online intervention

Internet-based interventions are a promising approach to the prevention and treatment of mental health problems (Sander, Rausch and Baumeister 2016). An online intervention designed to support midwives in work-related psychological distress would be a complex intervention, and as such, would benefit from adherence to the Medical Research Council's (MRC) Framework for developing and evaluating complex interventions (Craig et al. 2008). A complex intervention combines different components in a whole that is more than the sum of its parts (Hawe, Shiell and Riley 2004). The proposed online intervention will be a complex one because it will employ a number of interacting components, seek to evaluate a number of outcomes and tailor its' design to the needs and priorities of midwives in work-related psychological distress (Craig et al. 2008).

Evaluating and exploring a complex intervention is about practical effectiveness (Trussell 1999). This research sits within the primary development phase of the MRC framework for developing and evaluating complex interventions (Craig et al. 2008). This development phase consists of identifying the evidence base, identifying/developing theory, and modelling processes and outcomes. The next step in any future research would be to test feasibility, pilot testing procedures, estimate recruitment and retention, and determine sample sizes for ongoing research (Craig et al. 2008). In proposing the development of a new online intervention to support midwives in work-related psychological distress using a stress-specific model in its design, it will be important to explore which online components may be most suitably applied. In this case, suggested components will be based on the revised transactional model of occupational stress and coping presented by Goh and colleagues (Goh, Sawang and Oei 2010).

The revised transactional model of occupational stress and coping demonstrates how those experiencing work-related stress seek social support as a way of coping (Goh, Sawang and Oei 2010). In the largest online global survey of midwives, participants also proposed that social support networks, peer support, networking and the sharing of experiences were required for midwives to feel safe, secure and satisfied in their working life (World Health Organization 2016). Online peer to peer support has also

shown significant promise in other research supporting those experiencing mental health issues (Ali et al. 2015). Online social support or 'social networking' can be of particular benefit to those coping with stigmatised health issues, those who are time and travel limited, and those who lack support resources in the face-to-face world (Wright 2016).

A social networking tool can be defined as a web-based service that allows individuals to construct a profile within a bounded system, articulate a list of other users with whom they share a connection, and connect with, view and traverse their list of connections and those made by others within the system (Ellison 2007). The provision of a 'social networking' component within the online intervention may encourage self-disclosure, improve one's ability to cope with a stressor, decrease rates of depression and stress, and enhance mood (Huang 2016, Li et al. 2015, Oh, Ozkaya and LaRose 2014). As such, one component of an online intervention to support midwives in work-related psychological distress may include the provision of peer support tools within a social network of midwifery professionals.

Some individuals may have difficulty constructing the concept of mental ill health in themselves (Trippany, Kress and Wilcoxon 2004, Van Voorhees et al. 2006). Additionally, some burnt out clinicians have been found to perceive their own personal needs as "inconsequential" (Shanafelt et al. 2002). Online interventions which are tailored to a specific population, deliver evidenced-based content, and promote interactivity and experiential learning are more likely to be successful in promoting improvements in mental health literacy (Brijnath et al. 2016). Another online intervention, driven by the transactional model of stress to support the psychological wellbeing of the workforce has also been designed for participants to develop an awareness of stress (Williams et al. 2010). Therefore, a targeted online intervention to support midwives and student midwives in work-related psychological distress may include interactive learning components designed to promote the development of insight and the recognition, management and/or prevention of mental ill health.

Equally, mental health e-learning resources have the potential to be widely effective (Karasouli and Adams 2014). An online intervention to support midwives in work-

related psychological distress may also engage users in self-management exercises, which have been evidenced to effectively support professionals in the workplace (Lehr et al. 2016). Such components may include online wellbeing and gratitude diaries (Cheng, Tsui and Lam 2015), audio-narrated videos and graphics designed to promote goal setting, problem-solving, the identification and restructuring of negative thoughts, and effective time management (Billings et al. 2008), and positive psychology and mindfulness exercises (Feicht et al. 2013). These components have been incorporated in other online interventions, rooted within the transactional models of stress (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010).

In line with these other interventions, rooted within the transactional models of stress an intervention to support midwives could also be individual, rather than organisation-focussed, and aim to identify, manage, cope with and reduce work-related psychological distress (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010). Yet in rooting the delivery, features, functionalities and components of such an intervention within the revised transactional model of occupational stress and coping, both users and researchers may also be more able to comprehend how each of these relate to the amelioration of work-related psychological distress overall (Goh, Sawang and Oei 2010).

The relevant theories, concepts, contexts and rationales associated with the development of the proposed complex online intervention have been explored thus far within this chapter, as this is more likely to result in an effective intervention than is a purely empirical or pragmatic approach (Albarracín et al. 2005). These explorations have exposed gaps in research and new ideas in the form of a proposed online intervention to be examined. As such, new research questions can now be developed using this ‘gap-spotting’ approach, which is the most dominant way of developing research questions from the existing literature (Sandberg and Alvesson 2011).

Development of research questions

Even at this early stage of research, it is important to begin thinking about implementation, and ask questions such as 'would it be possible to use this?' and 'what are the obstacles?' (Craig et al. 2008, Glasgow, Lichtenstein and Marcus 2003). An online intervention could provide confidentiality and anonymity to both midwives and student midwives in work-related psychological distress seeking support. Yet this may have ethical implications, as midwives may be able to divest disclosures without consequence. If such issues remain unexplored, then any further planning in the development of such an online intervention may not be possible. This is because at present, any midwife registered with the Nursing and Midwifery Council (NMC) must abide by its codes of conduct. Such codes require a midwife to be fit to practise.

The NMC states that being fit to practise requires a nurse or midwife to have the skills, knowledge, good health and good character to do their job safely and effectively (The Nursing and Midwifery Council (NMC) 2015). The NMC is required to protect the public in this regard by investigating various allegations, including misconduct, lack of competence, not having the necessary knowledge of English, criminal behaviour and serious ill health. If the identity of a midwife remained unknown, yet their fitness to practise became compromised, no allegations could be linked to any particular midwife. Additionally, although other registered midwives must be supportive of colleagues who are encountering health or performance problems according to the NMC, this support must never compromise or be at the expense of patient or public safety. Consequently, in providing anonymity and confidentiality to support midwives in distress, any particular person who may be placing patient or public safety at risk could not be identified. Therefore, such an individual may never be held to account, either by their peers, the public or the regulator, and this set of circumstances may not be acceptable to either the midwifery profession, the regulator or the public at large.

The ethical issues outlined above may also be apparent for midwives around the world. Accordingly, the aim of research question one will be to explore these ethical issues in greater depth, so that in line with the MRC framework for developing complex interventions, decisions can be made as to whether or not the intervention can work and be accepted in everyday practice (Craig et al. 2008). Additionally, these

ethical considerations must be examined, as the provision of confidentiality and anonymity and their subsequent corollary, amnesty may conflict with deeply entrenched beliefs and values linked to the accountabilities and codes of conduct which a midwife is expected to uphold, and as such may hinder any further progress in developing this complex intervention (Craig et al. 2008).

According to the MRC framework for developing complex interventions, it is important to explore the existing evidence in relation to whether or not the proposed intervention is likely to be effective, implementable, and favourable (Craig et al. 2008). It is suggested that such information is ideally collated via a systematic review. Although the proposed online intervention presented here may effectively support midwives and student midwives in work-related psychological distress, it is not comprehensively known what support interventions are already available, what outcomes they produce, and how users may experience them. Thus, research question two will aim to examine existing support provisions in order to inform the development of this research.

Equally, although the online features proposed for this intervention may be evidence and theory based, the preferred features of an online intervention are as yet unclear. This gap in research suggests that further study is required. Therefore, research question three aims to explore the preferences of midwives and other key stakeholders in relation to what should be prioritised in the content development, design and delivery of an online intervention designed to support midwives in work-related psychological distress. This will be an important phase in the development of this online intervention, as once the preferences of midwives and other key stakeholders are explored, future co-production can be more strategic in designing this intervention in line with these preferences, and the revised transactional model of occupational stress and coping (Goh, Sawang and Oei 2010). This research also reflects the research processes recommended by the MRC framework for developing complex interventions, to be done during the early development and planning phase (Craig et al. 2008).

The specific research questions to be explored within this thesis are:

1. What are the ethical considerations in relation to the provision of online interventions to support midwives and/or student midwives in work-related psychological distress?

2. a) What interventions have been developed to support midwives and/or student midwives in work-related psychological distress? and b) What are the outcomes and experiences associated with the use of these interventions?

3. What are the areas of expert consensus in relation to the delivery, features, functionalities and components of an online intervention to support midwives and/or student midwives in work-related psychological distress?

Chapter two explores the ethical considerations in relation to the provision of online interventions to support midwives in order to address research question one via a critical literature review. A mixed-methods systematic review is presented within chapter three. This review addresses research question two, in identifying those interventions already in existence to support midwives and/or student midwives in distress, and by exploring the outcomes and experiences of using these interventions via the literature retrieved. Research question three is addressed via a 2-round Delphi study reported within chapter four, where the priorities and preferences for the content development, design and delivery of this proposed online intervention are defined via consensus.

Chapter Conclusions

This chapter has presented a global overview of current understanding in relation to the nature and origins of work-related psychological distress in midwifery populations. The relevant theories, concepts, contexts and rationales associated with the development of a proposed complex online intervention have also been explored.

Notably, this chapter has presented the known prevalence of midwives who feel traumatised and unsupported at work on a daily basis. Such negative feelings can lead

to burnout and other types of work-related psychological distress. It was also shown how work-related psychological distress may manifest itself following particular stressors. The causes and consequences of work-related psychological distress in midwifery populations accompanied by the lack of evidence based support provision available for midwives has demonstrated a need for further intervention research in this area. However, it is not currently known what the preferences of midwives may be in the design of an online intervention, and whether or not confidentiality and anonymity may be practicable for professional midwives experiencing work-related psychological distress. It is also not clear what interventions are already available to support midwives in work-related psychological distress, what outcomes they produce and how midwives may experience their use. In subsequent chapters, this thesis will aim to address these gaps in research.

In line with the early phase of the MRC framework for developing complex interventions, chapter two will firstly explore the ethical considerations as they relate to the provision of confidential and anonymous online support for midwifery populations. This will be important, as such components may conflict with deeply entrenched values, and may therefore hinder any further progress in developing this complex intervention (Craig et al. 2008).

Chapter Two: Confidentiality, anonymity and amnesty for midwives in work-related psychological distress seeking online support – A critical literature review

Chapter one has provided a background and context to this research. It has also outlined the concept of a proposed online intervention designed to support midwives in work-related psychological distress. This chapter presents a critical review of the literature which argues that the provision of confidentiality, anonymity and amnesty within this online intervention to support midwives should be upheld in order to secure the greatest benefit for the greatest number of people. This research has been published elsewhere (Pezaro, Clyne and Gerada 2016).

The overriding question associated with this review is: What are the ethical considerations in relation to the provision of online interventions to support midwives and/or student midwives in work-related psychological distress?

The ethical considerations in relation to online interventions to support midwives in work-related psychological distress have yet to be explored. As a first step towards effective decision making in this area, it is important to acknowledge that midwives can be reluctant to seek help for fear of stigma (Currie and Richens 2009, Robins 2012, Sheen, Spiby and Slade 2016, Young, Smythe and Couper 2015). Those who prefer to engage in online support rather than traditional face-to-face services have previously done so because of stigma, shame, linguistic barriers and inconvenience (Chang 2005, Suler 2004). As such, an online intervention which offers anonymity, confidentiality and their corollary, amnesty, may be the preferred option for some midwives in place of face to face support.

Some midwives fear being removed from their professional register, and perceive their regulator to be punitive (Wier 2017). Consequently, midwives may only disclose an episode of impairment or issue of concern without fear of retribution or regulatory referral for the purpose of help seeking. This may require the provision of confidentiality, anonymity and consequentially, amnesty. In exploring the principles of biomedical ethics, Beauchamp and colleagues also point to a need for both anonymity

and confidentiality, as they have been classified in this context as key factors required in the facilitation of patient care (Beauchamp and Childress 2001). This is because without the promise of confidentiality and anonymity, those in need of help may not be adequately trusting to reveal crucial information about some of the more sensitive issues relating to their psychological wellbeing. This would consequently undermine the delivery of appropriate care (Jones 2003, Kipnis 2006, Saunders, Kitzinger and Kitzinger 2015). However, midwives are professionally accountable for patient care, their own health and fitness to practise. As such, the provision of anonymity, confidentiality and their corollary, amnesty, in this particular case require further ethical exploration and debate.

Society has seen several successful episodes where a period of amnesty has been granted for the benefit of all. Examples of this include gun, drug and knife amnesties, where individuals can admit to an offence without any risk of reprisal (Eades 2006, Kenyon et al. 2005, Kirsten 2005). In the context of healthcare, there have also been successful 'DUMP' (Disposal of Unwanted Medication Properly) campaigns, where unwanted medicines have been relinquished to pharmacies for safe disposal without the fear of judgement or retribution (West et al. 2014). The benefits of these periods of amnesty are that those in need of help may take a unique window of opportunity to seek help, where they may not otherwise have done so. Some of the risk of harm to others can also be removed. For midwives in distress seeking support online, amnesty via confidentiality and anonymity could enable the disclosure of an impairment or issue of concern, without fear of retribution or regulatory referral. Such online disclosures may lead to a midwife in distress seeking face-to-face support or initiating behaviour change. This may be done via specific strategies such as those outlined within the Pathways Disclosure Model (Cooper 2004).

Within the Pathways Disclosure Model, it is the safety of absolute anonymity and confidentiality which remain key to recovering from episodes of psychological distress (Cooper 2004). Although this model has only previously been applied to those with gambling and alcohol addictions, this model could also be applied to supporting midwives using an online intervention during work-related psychological distress in relation to disclosure about an impairment or issue of concern. Figure 2 demonstrates

the various steps towards face-to-face disclosure as outlined by Pathways Disclosure model (Cooper 2004). This model demonstrates how users who may initially disclose nothing about their distressing situation can begin by reading information and adopting a 'lurking' state online. Users may then move throughout the early phases of online participation into a leadership state, where they may then move to make face-to face disclosures. The model shows how they may then take a full leadership role in the disclosure of their distressing situation for the purpose of face-to-face help seeking.

Figure 2: The Pathways Disclosure Model

(Cooper 2004)

It has been reported that midwives work in cultures which promote service and sacrifice, which may be prioritised above the individual rights of midwives' (Calvert 2014, Kirkham 1999, Kirkham and Stapleton 2000). As such, online interventions that prioritise the needs of midwives in psychological distress may be one option midwives may turn to for support. Such interventions may also have the potential to become a powerful tool in improving midwife health and wellbeing. This may in turn protect the public more widely, improve patient care and the quality of safer healthcare services for all (The Royal College of Physicians 2015).

There is strong and recent evidence to support the implementation of online psychotherapeutic interventions, which have proved beneficial in providing effective and therapeutic support for other populations in psychological distress (Allen et al. 2016, Barak et al. 2008, Kuester, Niemeyer and Knaevelsrud 2016). An effective and therapeutic online intervention can be defined as one where members are able to communicate, find information and engage (Preece 2000).

Some of the benefits of providing support online rather than within a face-to-face scenario are increased accessibility, identity protection, and, comfort for users (Harris and Birnbaum 2015). In an online environment, the benefits of anonymity for vulnerable online users include a significant disinhibition effect, increased feelings of safety and an increased ability for the user to speak openly and honestly for the purpose of developing a therapeutic connection (Harris and Birnbaum 2015). For midwives, this could mean speaking openly for the purpose of recovery and help seeking, which could in turn improve the safety and quality of maternity services.

Confidentiality

Confidentiality is a mutual understanding between two or more parties, where it is the belief of the sender that his or her information will not be shared, and the promise of the receiver to protect and not disseminate the information shared (Ellenchild 2000). For midwives, confidentiality is a professional obligation and can only be broken in the interests of patient and public safety. Confidentiality in the context of an online intervention would mean that users would be expected to keep the identities of individual names, organisations and places confidential. In this context, providing

confidentiality to midwives online will also inhibit other users from reporting concerns to professional regulators, as all users remain unidentifiable.

Confidentiality and anonymity in combination are particularly important to help those needing support with suicidal ideation (Kerkhof, van Spijker and Mokkenstorm 2013). However, confidentiality may be legitimately broken if a person is at risk of harming themselves. As this would conflict with the provision of anonymity, there is an ethical decision to be made with regards to how this trade off might be managed. It has been proposed that for those feeling vulnerable, allowing for anonymous and confidential contact and support online may be the optimal method of engagement (Carretta, Burgess and DeMarco 2015). This may be because those in distress often avoid professional help, and online services can provide anonymity, confidentiality, a sense of immediacy and are highly acceptable to younger people (Gulliver et al. 2012, King et al. 2006, Santor et al. 2007). Additionally, research has shown that those at higher risk of suicidal ideation may be more likely to engage with online support (Dunlop, More and Romer 2011).

However, providers of online support interventions may not have the ability to assess the mental state of the participant or intervene in a time of crisis. This is of concern as some virtual environments can be emotionally dangerous for the user (Williams 2012). Any mitigation of risk and harm must be balanced with the benefits associated with supporting midwives.

Anonymity

Anonymity has three distinct features: identity protection, action anonymity and visual anonymity (Burkell 2006). Identity protection allows a real-world entity to remain unidentified, action anonymity enables a real-world entity to feel 'unknown' by their actions, and visual anonymity relates to a real-world entity having his or her appearance go unnoticed (Kambourakis 2014). Without anonymity, many online activities could become potentially risky to users, as users may become reluctant to share their thoughts openly for fear of stigma, punitive action and/or identification (Calvert and Benn 2015, Clement et al. 2015, Crisp and Griffiths 2014, Kambourakis 2014). Encouraging the disclosure of shameful symptoms and related behaviours could

be associated with positive outcomes (Hook and Andrews 2005, Smyth, Pennebaker and Arigo 2012). Therefore, the principle of anonymity could be considered for online interventions designed to support midwives and encourage them to speak openly.

Anonymity in the context of online interventions to support midwives in work-related psychological distress would mean that midwives would be able to experience full identity protection as they interact. This anonymity would be given with the intention of promoting positive therapeutic engagement and help seeking behaviours. This is significant, as the key to achieving a positive disclosure and a request for real world help may correlate with the relative amount of anonymity participants are afforded (Cooper 2004, Suler 2004).

Nevertheless, in an anonymous cyber space, obligation and accountability can be challenging to achieve where individual users cannot be identified. As the purpose of an online intervention is to support its users, it may be that an online intervention designed to support midwives would not seek to enforce or achieve accountability in this context, particularly given that other channels and processes exist to achieve accountability and uphold professional conduct. The concept of accountability is referred to as "taking responsibility for one's nursing judgments, actions, and omissions as they relate to life-long learning, maintaining competency, and upholding both quality patient care outcomes and standards of the profession while being answerable to those who are influenced by one's nursing practice" (Krautscheid 2014).

Amnesty

Amnesty arises as the corollary component of both confidentiality and anonymity. Amnesty is a period of forgiveness, where a crime or misdeed is forgiven, forgotten, or 'pardoned' (Brush et al. 2001, Weisman 1972). Amnesty in the context of an online support intervention would mean that midwives would be able to disclose an impairment or issue of concern, without fear of retribution or regulatory referral for the purpose of help seeking and disclosure. However, midwives have a professional duty to disclose any unsafe professional practices to their regulator. Should a midwife disclose something of concern online but fail to inform the regulator, and/or their employer, this could put patients at risk of further harm and damage the reputation of

the profession. As such, some might argue that an amnesty should not be used for midwives in any context.

For doctors and other professional groups in psychological distress, punitive blame cultures, poor working cultures, dysfunctional multidisciplinary teams and policies can prevent the disclosure of episodes of ill health, addiction and psychological distress (BMA Medical Ethics 2010, Brooks, Gerada and Chalder 2013, Cohen, Winstanley and Greene 2016, Moberly 2014, Taylor and Ramirez 2010). At times, a doctor's insight into their need for help and treatment can also be diminished (BMA Medical Ethics 2010). As midwives report similar levels of psychological distress and cultures within the workplace, this set of circumstances may be equally apparent in midwifery populations. This may in turn result in a reluctance to seek help or speak openly, which would paradoxically put patients at risk if a compromised healthcare professional continues to practise whilst they are unfit to do so (Radhakrishna 2015). As such, a therapeutic space which permits amnesty may encourage help seeking behaviours, positive disclosures, a sense of catharsis, real world behaviour change, reflection and emotional disclosure for midwives in distress (Shim, Cappella and Han 2011).

This process may also be mapped against the pathways disclosure model (Cooper 2004). This is because midwives may be able to speak anonymously, reflect upon their situation and move toward face-to-face disclosure in a place where they cannot be identified. Similarly, this process can be reflected within the revised transactional model of occupational stress and coping presented by Goh and colleagues (Goh, Sawang and Oei 2010). This is because the safety of not being identified may allow midwives to more openly appraise their experience of psychological distress, reflect and choose the most appropriate coping tools to promote help-seeking.

Nevertheless, amnesty agreements may provoke moral discomfort. The Council for Healthcare Regulatory Excellence requires the Nursing and Midwifery Council to be seen to protect the public as a primary aim before supporting the wellbeing of the workforce (Traynor et al. 2014). It is also recognised that amnesty agreements for healthcare professionals may not be favoured by patients and the public. This research looks to explore these ethical considerations in order to aid the process of ethical

decision making. Thus, a review of the literature in this regard will be required for the purpose of exploring the ethical considerations relating to the provision of confidentiality, anonymity and amnesty for midwives seeking support online.

Methods

Aims

This critical review of the literature aims to identify and explore the ethical considerations associated with the provision of confidentiality, anonymity and amnesty in online interventions to support midwives in work-related psychological distress. In doing so, and in line with critical review methodology, this critical review of the literature also aims to identify conceptual ideas in relation to the provision of confidentiality, anonymity and amnesty for midwives seeking psychological support in a complex online intervention (Grant and Booth 2009).

Rationale for using critical review methodology

Critical review methodology provides the researcher with an opportunity to 'take stock' in an attempt to resolve competing schools of thought, thus providing what has been described as a 'launch pad' for the development of new conceptual hypotheses (Grant and Booth 2009). This critical review explores some of the ethical considerations in relation to the development of an online intervention to support midwives in work-related psychological distress, which may require the principles of confidentiality, anonymity and amnesty. Such components may conflict with deeply entrenched values, and as such may hinder any further progress in developing this complex online intervention (Craig et al. 2008). Therefore, this critical review of the literature was required to construct new arguments and a way forward for further intervention development.

Initial scoping searches did not reveal any literature in relation to the principles of confidentiality, anonymity and amnesty in this context. This illustrated that minimal consideration has been given to this topic previously. As such, there was a need to incorporate a range of literature within this review including grey literature. Other review methods, such as systematic reviews can rely on trial data and effect sizes.

These factors are not appropriate to the question currently under study. Therefore, discursive accounts of the issues involved were pursued.

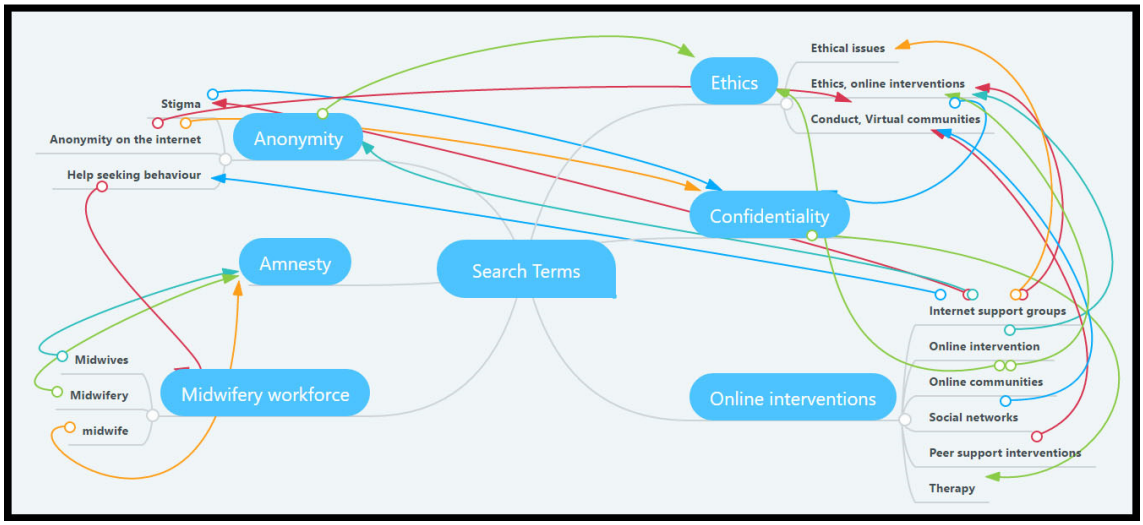
Search Strategy

This literature search took place between November the 2nd and December 23rd of 2015. Firstly, a background review of the literature was conducted, then a progressive search clarified the scope of the review. Subsequently a search for evidence was conducted. First, Academic Search Complete, Cumulative Index of Nursing and Allied Health Literature (CINAHL) with Full Text, MEDLINE and PsycINFO were searched concurrently for key papers of relevance. Subject headings were used where possible, as were related free text terms and proximity operators.

Concept mapping

Concept mapping enables the researcher to produce an interpretable pictorial view of interrelated ideas and concepts (Trochim and McLinden 2017). In order to add clarity to this search strategy, a concept map, which identifies how each term has been paired with other terms and concepts, and then used within concomitant searches is provided in figure 3.

Figure 3: Concept map of search terms



Search terms were chosen following a brief and scoping review of the literature in relation to midwives in work-related psychological distress, ethical considerations and online interventions. Search terms such as 'help seeking behaviour' and 'internet support groups' broadly relate to the 'coping strategies' component of the revised transactional model of occupational stress and coping presented by Goh and colleagues (Goh, Sawang and Oei 2010). The appraisal processes described by the revised transactional model of occupational stress and coping involves a global assessment of the individual's coping resources (Goh, Sawang and Oei 2010). As such, search terms like 'online communities' and 'anonymity on the internet' were used to identify coping resources available online.

As all search databases were searched concurrently, all search terms were confined to key words, rather than any specific headings, MeSH or subject terms relating to any one particular database. Using proximity operators and Boolean search operators such as 'and/or' is one way of linking terms and key concepts to achieve better precision when searching the literature (Boell and Cecez-Kecmanovic 2014). The search terms used here were related to the both the sub concepts and key concepts identified for this review, and were combined with the 'AND' Boolean operator or the 'OR' Boolean operator. Subsequently, available papers were found to relate to either anonymity, ethics, confidentiality 'OR' amnesty 'AND' online interventions 'AND' the midwifery workforce. The 9 stages of this search strategy in relation to the sub concepts and key concepts identified for this review are presented within table 1.

Table 1: Search Strategy for Critical Literature Review

Search Number	Search term (s)	Concept
S1	midwif* OR midwives	-Key concept
S2	online intervention*	-Key concept
S3	(S1 AND S2)	-Key concepts combined -Boolean operator 'AND'
S4	Amnesty	-Sub concept
S5	Confidentiality OR therapy	-Sub concepts combined -Boolean operator 'OR'
S6	anonymity OR stigma OR anonymity on the internet OR help seeking behaviour OR internet support groups OR online communities	-Sub concepts combined -Boolean operator 'OR'
S7	Ethics OR ethical issues OR ethics, online interventions OR Conduct, virtual communities OR social networks OR peer support interventions	-Sub concepts combined -Boolean operator 'OR'
S8	(S4 OR S5 OR S6 OR S7)	-All sub concepts combined -Boolean operator 'OR'
S9	(Search 3 AND Search 8)	-All key concepts combined with all sub concepts -Boolean operator 'AND'

Inclusion and exclusion criteria

All papers published in English from 1999 were considered for inclusion due to the fact that the majority of social networks (as they are defined in chapter one) began to emerge at approximately this time (Ellison 2007). All article types were considered for inclusion. Overall, 66 papers were retrieved, 6 exact duplicates were then removed, leaving 60 papers in total for review. Abstracts, titles and full texts were then scrutinised for their suitability for inclusion and relevance to the review's themes of confidentiality, anonymity and amnesty.

Studies had to refer to any ethical aspects which relate to either confidentiality, anonymity or amnesty within online interventions. This included studies which related to more general populations, where a reasonable portion of the midwifery population may be considered to reside. All types of literature and studies were considered for inclusion due to an anticipated low yield of relevant papers.

Selection and appraisal of documents

The 60 papers retrieved through this search strategy, and their reference lists were initially examined by the researcher. Paper titles and abstracts were screened for any relevance to the themes selected for this review. Articles that clearly did not meet the inclusion criteria were excluded, and any ambiguous papers were read more comprehensively through an iterative process of review. The remaining papers of relevance were then read in their entirety as the inclusion criteria were re-applied to inform final paper selections.

The relevance of each paper was judged by its ability to elucidate upon any aspect of either confidentiality, anonymity or amnesty in relation to online interventions designed to support healthcare professionals in distress. The rigor of each paper was judged from a 'fitness for purpose' perspective. Nine papers were chosen for inclusion. Others were omitted either due to their irrelevance to the subject matter, or due to their focus being upon adolescents or elite athletes, rather than comparable groups.

Data extraction, analysis and synthesis

Information was assimilated by annotation rather than 'extracting data'. Papers were examined for ideas relating to ethical dimensions of online interventions to support midwives in work-related psychological distress. The synthesis of findings was then related back to the underlying research question of the review.

This review takes a narrative approach. The findings of the review are presented as a synthesis of evidence. This synthesis explores the ethical considerations in relation to online interventions to support midwives in work-related psychological distress and the key themes of this review - confidentiality, anonymity and amnesty.

Results

Nine papers were selected following the approach outlined above. Papers included were discursive in nature (Damster and Williams 1999, Hair and Clark 2007, Harris and Birnbaum 2015, Humphreys and Winzelberg 2000), mixed method cohort studies (Shandley et al. 2010) content analyses (Im et al. 2005, Rier 2007a), one case study (Rier 2007b) and theoretical guidance papers (Sharkey et al. 2011, Williams 2012). None of the papers retrieved related to midwives or midwifery, therefore, themes of

salience in relation to those groups most like midwifery populations, including vulnerable groups comparable to midwives in psychological distress were extracted. Figure 4 outlines the process for paper selection. A summary of the papers selected for this review can be found in Table 2.

Figure 4. Critical Literature Review: Process of Paper Selection

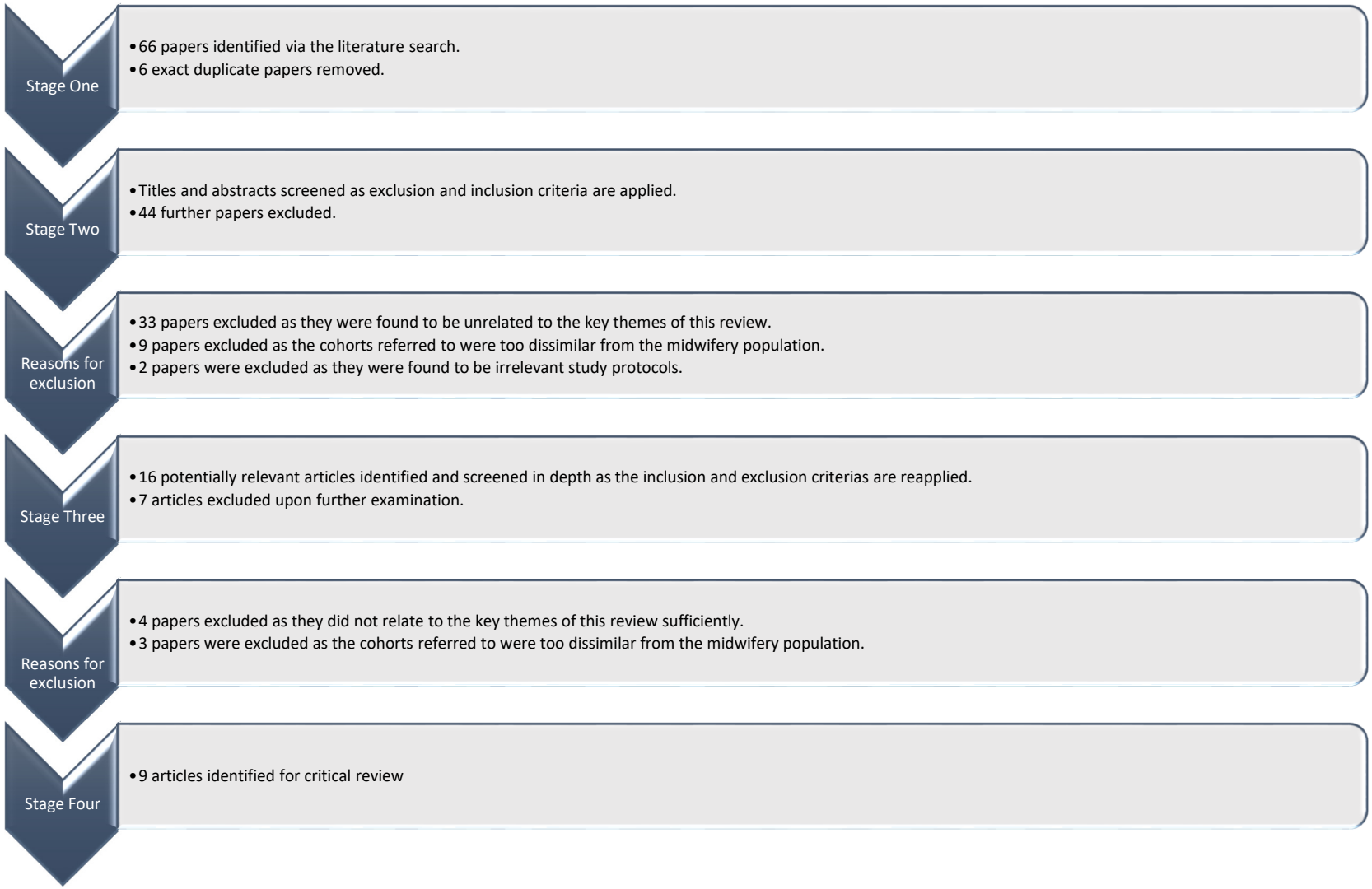


Table 2: Articles selected for inclusion: Critical Literature Review

Paper	Design	Sample	Aim, Design, analysis	Relevance and rigor	Themes extracted
(Damster and Williams 1999)	Discursive paper	N/A	To explore and identify threats to privacy and confidentiality in this use of the Internet.	- Very relevant to the application of other proposed interventions. - Issues highlighted are not academically tested.	- The implementation of registration. - Moderation of online chat rooms. - Unethical community site practices. - Balances between freedom of speech and accountability.
(Hair and Clark 2007)	Discursive paper	N/A	Contribute to the understanding of ethical decision-making processes within electronic communities.	-Relevant to the development of online services. -Relevant in understanding ethical decision making in the development of online communities and research.	-Exploring ethical decision making in the context of online communities. -synchronous versus asynchronous communication.
(Harris and Birnbaum 2015)	Discursive paper	N/A	To systematically review the ethical and legal challenges as well as benefits of online counselling.	-Relevant to the exploration of anonymity online. -Relevant to the exploration of risk during mental health crises.	- Legal Considerations and Potential Ethical Tensions. -Benefits of online support. - Accessibility, anonymity, technology, asynchronous communication, online security, informed consent, and the challenges of licensure, liability, and regulation.
(Humphreys and Winzelberg 2000)	Discursive paper	N/A	-To report initial strategies and guidelines for ethical behaviour in Internet-based groups. - To explore ethical liabilities and responsibilities for the professional participant.	- Very relevant in the development of safeguarding strategies to mitigate risk.	- Online confessions. -Risks associated with peer communication online. -Suggestions for professional psychologists using support groups.
(Shandley et al. 2010)	Cohort Study	154 participants (116 females; 38 males)	To evaluate the effectivity of Reach Out Central (ROC), an online gaming program designed to support the mental health of young people.	-Limitation of open trial methodology -Small number of male participants -Intervention designed for younger audience -Relevance to subject matter lies in the discussion of the preferences of young people when using an online intervention designed to support them.	-Online communication preferences. -The value of Internet interventions as a tool. -Ethical considerations in working with vulnerable people online.
(Im et al. 2005)	Content analysis	Internet Cancer Support Groups (ICSGs)	To view ICSGs in terms of how they provide a research setting and/or data-collection method that meet 5 evaluation criteria.	-Relevant in that the paper highlights potential ethical issues within other support groups.	- Confidentiality and anonymity issues. -Ethical use of Disclaimers. -Ethical use of Privacy Policies.
(Rier 2007a)	Content analysis	The primary data set included 16 lists hosted on seven different Internet sites. (message boards)	To examine how, on Internet HIV/AIDS support groups, participants discuss the ethics of disclosing HIV seropositivity to partners.	-Posters cannot be matched to their online personae. -Relevance to subject matter lies in the discussion of sensitive disclosures online.	-Problems associated with disclosure and help seeking. -Privacy issues. -Lying online.
(Rier 2007b)	Case study	A single discussion 'thread' in which group pressure persuades a fellow-participant to modify their behaviour.	To demonstrate the impact of group discussions, and their potential as agents of change.	- Relevant in the exploration of potential risks and opportunities for online discussion. - Relevant in the exploration of disclosure.	- 'Flaming' behaviour online. -Influential behaviours of online groups.
(Sharkey et al. 2011)	Lessons Learnt – Discursive paper	N/A	To present solutions and guidance for researchers in the development of online interventions.	- Relevance to subject matter lies in the discussion of ethical issues.	-Anonymity. -Appropriate Moderation techniques. -Lessons and guidance. -Prioritising anonymity.

Synthesis of results

To synthesise the data, any inferences or references to the key ethical themes of this review - confidentiality, anonymity and amnesty were annotated through an iterative process of re-examination. As a number of papers retrieved did not describe their methodologies in great detail, data extraction remained limited to principle findings and theoretical concepts.

Confidentiality

Damster and Williams indicate that health professionals should be suspicious of any attempts to erode confidentiality, whether in the medical or other sectors, as it is worthy of protection, not just for the good of individuals, but also for the good of society as a whole (Damster and Williams 1999). This discursive paper goes on to describe the medical ethics model, where a health professional will always strive to respect the confidentiality of information entrusted to [them] by the patient. In keeping with this model, they also state that it is the patient who has the right to decide who to share their information with, rather than the healthcare professional. Additionally, without the provision of confidentiality, Humphreys and colleagues assert that any ethical responsibilities associated with a psychotherapeutic relationship cannot be invoked (Humphreys and Winzelberg 2000).

Hair and Clark explore the ethical challenges of preserving the confidentiality and anonymity of those engaging within virtual communities (2007). They purport that a relatively rapid and synchronous form of communication such as one to one instant messaging, may give a user an increased sense of confidentiality. Harris and Birnbaum systematically review the ethical and legal challenges of delivering therapies to vulnerable people online (Harris and Birnbaum 2015). Conversely, they highlight that asynchronous communication may enable deeper reflection, increasing self-awareness and self-expression. In any case, Humphreys and colleagues suggest that all online users may at some point become confused as to which contributions may be confidential, group based, open or closed in nature (Humphreys and Winzelberg 2000).

Virtual communities value the free speech they uphold through the provision of confidentiality highly (Damster and Williams 1999). Damster and Williams go on to

report that however ‘outrageous’ this free speech may become, in the interest of maintaining a supportive online community, the moderation of discussions is seen by many as the preferred management option (Damster and Williams 1999). Hair and Clark maintain that users who choose to forfeit their own confidentiality must be made aware of any potential repercussions (Hair and Clark 2007).

As Shandley and colleagues explore the efficacy of a youth-focused online intervention, they highlight that some young people may not access effective help because they fear that their confidentiality might be broken (Shandley et al. 2010). They go on to share how an online intervention can effectively promote help seeking and support the health and wellbeing of younger people, especially when gamification techniques are employed. Within their online intervention, ‘Reach Out Central’, participants are encouraged to interact as they adopt the persona of a pre-determined character or avatar rather than exposing any real-world details about themselves. Each user or ‘player’ is assigned a coach to act as a guide and mentor as the user navigates their way through a series of interactions designed to remedy and explore episodes of psychological distress. Their results indicate that as young people engage with an online intervention in this way, they may experience a reduction in the use of maladaptive coping behaviours, increased resilience and adopt healthier coping behaviours (Shandley et al. 2010). Participation in this sense may follow the pathways disclosure model, as users are encouraged to engage and interact (Cooper 2004). As the user explores their own episodes of psychological distress, they may also be appraising their experiences in line with the revised transactional model of occupational stress and coping (Goh, Sawang and Oei 2010).

In learning lessons from a self-harm discussion forum study ‘Sharp Talk’, Sharkey and colleagues emphasise that vulnerable users of online interventions may desire confidentiality and anonymity as a condition of use (Sharkey et al. 2011). Within their protocols, they ensured that anything that may compromise a member's anonymity or confidentiality would be prohibited and removed accordingly. They also encouraged users to be known only by a chosen unique username or ‘pseudonym’ to ensure that confidentiality was maintained (Sharkey et al. 2011). In order to mitigate the risk of exposure in internet-based groups Humphreys and colleagues also propose that

professionals who access support groups in the role of a peer, should do so with the use of a pseudonym (2000). Yet when users of online interventions adopt pseudonyms or alternate identities as they converse within virtual communities, Damster and Williams assert that they may be unable to entirely hide behind either anonymity or confidentiality (Damster and Williams 1999). This is because over time, users come to know one another and recognise and identify the behavioral patterns in those individuals who interact on a regular basis.

Through their analysis of Internet Cancer Support Groups, Im and colleagues express concern that some online interventions fail to ensure and safeguard the confidentiality and anonymity of their members as they interact (Im et al. 2005). To enforce confidentiality, Damster and Williams highlight the need to consider the implementation of disclaimers, privacy statements and guidance when looking to facilitate online interventions (Damster and Williams 1999). It was identified by Im and colleagues that many websites use the terms “site disclaimer” or “privacy” to describe user information on “confidentiality” issues (Im et al. 2005). However, very few of these statements were aimed at preserving the confidentiality and anonymity of members. Instead, these statements tended to state that the online facilities were not to replace professional treatment and were to be used only for educational purposes. Throughout this analysis of online support groups, only one site out of 546 was found to warn its users not to post anything of a confidential nature (Im et al. 2005).

Fundamentally, when confidentiality is assured by an online intervention there are some immediate technical matters to consider. Harris and Birnbaum highlight the need to regularly update online security software, as the provision of online support remains an ever-evolving field (Harris and Birnbaum 2015). They also describe how breaches in online security may occur, as unauthorised individuals intercept wireless signals and compromise what is thought to be confidential information. Hair and Clark add that with the existence of search engines, archiving software and the retrieval of verbatim quotes, seemingly private and deleted posts may be recorded technically, without user knowledge (Hair and Clark 2007).

The provision of online confidentiality also has practical implications where the collection and tracking of data would usually occur through the use of website 'cookies' and mailing lists. In this regard, Damster and Williams refer to the difficulties in obtaining consent for obtaining and sharing personal data without invading the provision of confidentiality (Damster and Williams 1999). In order to address some of these ethical considerations, Sharkey, Humphreys and colleagues suggested that their participants created new email accounts upon joining the online community, as well as unique pseudonyms (Humphreys and Winzelberg 2000, Sharkey et al. 2011).

Anonymity

Damster and Williams report that the internet has a long-standing legacy and reputation for facilitating anonymity (Damster and Williams 1999). Sharkey and colleagues concur with this statement, and report how young people who self-harm expect anonymity and enjoy its protective nature (Sharkey et al. 2011). Harris and Birnbaum also highlight the safety that anonymity can offer those seeking support, as it more readily allows for open and disinhibited disclosures (Harris and Birnbaum 2015). In this case, they suppose that an online intervention may be the safest place to discuss the most challenging and emotional issues. Yet they also report that anonymity can encourage roleplay and misrepresentation. Damster and Williams agree by suggesting that anonymous communication can encourage verbal violence (Damster and Williams 1999). Nevertheless, during a self-harm discussion forum study, Sharkey and colleagues stressed that without anonymity, online users of interventions can be reluctant to engage (Sharkey et al. 2011). As a result, this particular study rejected any alternatives to providing anonymity as discouraging to potential participants.

Reir explores the ethical dynamics of an HIV/AIDS online support group, and the moral suasions of its members through two content analyses (Rier 2007a, Rier 2007b). Anonymity is of great importance within this online support group, as group members often wanted to conceal the nature of their illness and, in some instances, their homosexuality. Face-to-face disclosures within this population are sometimes avoided, as disclosing their HIV status is often tantamount to admitting stigmatised behaviours or lifestyle choices. Within this online group, Rier describes how the group displayed an authentic mix of opinion, yet the most common position regarding

disclosure ethics is full disclosure (Rier 2007b). As members of the group admit to disclosure avoidance, other members of the community make frequent and persuasive calls for disclosure. Ultimately, the provision of anonymity within this group enabled honest moral debates, open disclosures and personal reflections within the group (Rier 2007b).

Such moral suasions may evoke the pathways disclosure model, as users begin to participate in discussion, and then go on toward face-to-face disclosure as a result (Cooper 2004). Equally, moral suasions may also evoke the appraisal and re-appraisal of an event in line with the revised transactional model of occupational stress and coping presented by Goh and colleagues (Goh, Sawang and Oei 2010).

Reir goes on to explore how these frequent calls for disclosure within the same HIV/AIDS online support group may translate into moral suasion within its community via a second content analysis of online group discussion (Rier 2007a). As in the example given, one member openly disclosed how they had been engaging frequently in unprotected sex without disclosing their HIV status. Following a series of comments which debated this as a moral issue, the member reflected upon their behaviour and decided to then disclose their acts and name those now at risk anonymously via their physician. The paper then goes on to highlight other instances where a group member is initially unsure about what to do but is willing to make anonymous disclosures online in order to seek advice. Some other individual members under scrutiny are described as initially resisting the dominant discourse, but then eventually become prepared to declare real world behaviour change either anonymously or otherwise, having been swayed by group discussion (Rier 2007a).

Online anonymity is important for those who wish to conceal any individual circumstances or behaviours they consider to be shameful (Rier 2007b). Humphreys and colleagues recognise that healthcare professionals sometimes participate in Internet-based groups anonymously to address their own psychological and behavioural problems (Humphreys and Winzelberg 2000). Humphreys and colleagues recommend that the healthcare professional should maintain clear and consistent role definition as they switch between the roles of both therapist and casual member of

the online community (2000). Rier suggests that online participants can regard positive and moral persuasion as part of their ethical responsibilities, duty and function(Rier 2007a). Conversely, Sharkey and colleagues purport that those who are vulnerable online, may be at risk of coercion rather than positive influence (Sharkey et al. 2011). Hair and Clark add that should names be associated with 'public' posts online, unsolicited contact and harassment may occur outside of the virtual community space (Hair and Clark 2007). The use of pseudonyms is again suggested in order to uphold ethical practice in this case.

When users refuse to disclose misdeeds in a real-world context, 'flaming' behaviours can also occur in protest to any perceived injustice online (Rier 2007b). In seeking a balance between anonymity and accountability in online discourse, Damster and Williams (1999) suggest a compromise of requiring users to initially register their identity with a moderator as they join the virtual community. Moderators may be health professionals or peer group members. The user may then choose to use their real name, or a pseudonym for any interactions they then make. In this case, anonymity remains a choice, and only the moderator can delete, report and remove inappropriate content or users. Additionally, Hair and Clark maintain that it must be decided whether the online community offers anonymity to all members, just primary posters, certain individuals or only those who respond to open posts (Hair and Clark 2007).

Within the findings of an online forum study, Sharkey and colleagues reported that moderators were needed to ensure that anonymous online safety can be maintained, and a strong consensus that moderators ought to get involved in providing support (Sharkey et al. 2011). Contrary to this finding, Humphreys and colleagues recommend that health professionals should not imply a therapeutic relationship online, when the ethical responsibilities in doing so cannot be met, as may be the case where users remain anonymous online (Humphreys and Winzelberg 2000). In order to support online moderators in their task, Sharkey and colleagues suggest that online interventions issue forum rules and employ private messaging facilities, links to other online support, a discussion room for forum moderators and a 'report' button for users (Sharkey et al. 2011).

It was suggested by Humphreys and colleagues that, should an online intervention allow individuals to anonymously seek support, a potentially important avenue of assistance may be opened to professionals who need help but fear being identified (Humphreys and Winzelberg 2000). Yet they also identify that concerns may arise where users remain anonymous in a time of crisis, as there lies a consequent inability to intervene. Nevertheless, some online interventions such as 'Sharp Talk', explored by Sharkey and colleagues have rejected the alternatives to total anonymity, as they have placed more value upon encouraged participation and the protective nature of anonymity in pursuit of a utilitarian approach to support (Sharkey et al. 2011). Yet should the focus of conversation turn toward suicidal thoughts, or self-harm, Sharkey and colleagues also highlight that this may increase the vulnerability of users (Sharkey et al. 2011).

Harris and Birnbaum (Harris and Birnbaum 2015) assert that online interventions provide a natural and therapeutic sense of anonymity for users, and explore how this conflicts with the need to verify a user's identity. They go on to state that it is difficult, if not impossible, to acquire accurate and valid information on a user's identity, and question whether this acquisition may be of benefit to the user in any event. In the context of extreme risk and serious clinical issues, they also recognise the ethical obligations and duties of care in relation to the need to report those at risk for appropriate intervention (Harris and Birnbaum 2015). In these cases, they propose that face-to-face services may be swifter in providing immediate emergency care. Additionally, some methods of online support may not be able to express timely, and much needed, empathy to those in severe distress. In order to improve upon the lack of demonstrable empathy to those in distress online, the use of emoticons is suggested (Harris and Birnbaum 2015).

Communication on the Internet can make issues of privacy, confidentiality, and personal relationships confusing (Humphreys and Winzelberg 2000). When exploring the therapeutic properties of an online community, Damster and Williams (1999) highlight the conflicts between promoting the principles of anonymity and confidentiality, whilst also encouraging openness and freedom and ensuring the safety of participants. Harris and Birnbaum (2015) highlight the legal and ethical dilemmas

where face-to-face contact remains absent and the provision of anonymity is upheld. They draw attention towards the inability to assert clinical judgement, gain informed consent, report accurate concerns in a timely manner, and establish the mental or physical capacity of the user online.

Nevertheless, Harris and Birnbaum insist that online interventions must always conform to duty-to-report or duty-to-protect statutes (Harris and Birnbaum 2015). However, Humphreys and colleagues purport that because online users may come from a broad geographical area, it would be unlikely that any ethical responsibilities in the event of an emergency would be able to be executed completely in any case (Humphreys and Winzelberg 2000). In addition to this, Harris and Birnbaum assert that any statues may vary from place to place, and that the online user may reside in a separate jurisdiction to that of the online community. In order to mitigate risk, Harris and Birnbaum endorse the creation of emergency contact lists and details of supportive services within the user's community to enable swift self-referral to localised face-to-face support during emergencies (Harris and Birnbaum 2015).

Amnesty

Hair and Clark describe both confidentially and anonymity as the 'starting point' for defining themes to be interpreted as 'ethical canons' or 'codes' (Hair and Clark 2007). Yet with total confidentiality and anonymity in place, their corollary, amnesty becomes inevitable. Within the retrieved literature there were no explicit references to amnesties within online interventions. However, the concept of amnesty became implicit within some of the papers, as some described the importance of total anonymity and/or confidentiality (Damster and Williams 1999, Harris and Birnbaum 2015, Humphreys and Winzelberg 2000, Im et al. 2005, Sharkey et al. 2011).

In the online discussion forums of an HIV/AIDS support group, one episode of amnesty is highlighted where an online user modifies their undesirable offline behaviour as a result of anonymous online disclosure (Rier 2007a). This was done with the understanding that there would be no negative consequences in doing so. In this case, the user experienced the support of the online community, the development of insight and a real-world behaviour change. This mirrors the pathways disclosure model, where

a user begins by anonymously disclosing online, and then subsequently showing leadership in changing their behaviour and 'recovering' as a result of online support (Cooper 2004). Equally, this process can be applied to the revised transactional model of occupational stress and coping, as the user appraises, re-appraises and then copes with their stressful situation (Goh, Sawang and Oei 2010).

To illustrate how online interventions may present extreme ethical dilemmas, Humphreys and colleagues (2000) describe a case study in which the father of a five-year-old girl confesses to her murder within an online support group. Within this scenario, some members of the community reported the crime to the authorities, and yet the healthcare professionals involved did not. In effect, the healthcare professionals respected the confidentiality of the disclosure and afforded the perpetrator amnesty. This ignited debate as to what the purpose, roles and responsibilities of an online support group may be, although no conclusions are presented in this case.

Some users within online communities have been seen to assume the role of a moral agent, and attempt to influence fellow users to exercise 'responsibility' by disclosing and acting upon their compromising predicaments to the appropriate authorities (Rier 2007b). In this sense, users of an online intervention look to guide both the online and offline behaviours of other users in order to achieve the most desirable outcome. Rier highlights these episodes during online egalitarian moral debates, where an inherent amnesty enabled those in distress to be persuaded to 'do the right thing' whilst maintaining a private identity. Reir concludes by suggesting that such online communities are a mechanism for engaging in support and moral suasion, where users seek help and enforce what the community defines as 'ethical conduct' within a real-world scenario (Rier 2007b). A process like this would adhere to the pathways disclosure model as users are persuaded to make face-to-face disclosures via participation (Cooper 2004). Similarly, these persuasions may force the processes of appraisal and coping as they have been described in the revised transactional model of occupational stress and coping (Goh, Sawang and Oei 2010).

Discussion

This critical review has identified nine papers that explore key themes of confidentiality, anonymity and amnesty in relation to online interventions designed to provide support. The provision of confidentiality online is highly valued by those seeking online support. Confidentiality is particularly important in promoting help-seeking, with some online users suggesting that they may not engage in help-seeking without it. The protective nature of anonymity can also encourage more open disclosures and engagement from online users. Any amnesties provided can also encourage more open disclosures and help seeking where there are no negative consequences to declaring any individual circumstances or behaviours which a user may consider to be shameful. Following such disclosures, online users can also be persuaded to change their real-world behaviours to fall in line with what the community defines as 'ethical conduct' within a real-world scenario. Some of these findings have also been mapped against the pathway to disclosures model, where anonymous participation online can lead to face-to-face disclosures and help seeking offline (Cooper 2004). Additionally, the revised transactional model of occupational stress and coping has been followed where online users have appraised, re-appraised and then applied coping strategies to their situation (Goh, Sawang and Oei 2010).

However, ethical dilemmas remain where there is a legal duty to report, disclose and act upon concerns which may put both the online user (whether a midwife user, or public user) and the public at risk. Ethical considerations are also highlighted, as obligations to ensure that appropriate and real-world care is given to the online user may not be met should both anonymity and confidentiality be guaranteed in full.

There are a range of ethical considerations to consider in the development of online interventions to support midwives. However, in order to develop insights into the influence of context, these findings must also be mapped against ethical and legal considerations.

Legal and ethical considerations associated with online interventions

Developers of online interventions designed to support those in distress can follow the e-Health Code of Ethics, which ensures that people worldwide can confidently and

with full understanding of known risks realise the potential of the Internet in managing their own health and the health of those in their care (e-Health Ethics Initiative 2000). However, this guidance does not cover the development of unique online sources for the provision of support to healthcare professionals (Vayena, Mastroianni and Kahn 2012). Midwives in the United Kingdom must maintain public confidence in the nursing professions and uphold standards and professional behaviour (The Nursing and Midwifery Council (NMC) 2015). These midwives have a duty to escalate any professional concerns pertaining to both themselves and their colleagues, yet if a concern arises within an online platform, a midwife may be left unable to identify the perpetrator or escalate concerns.

Concerns relating to patients

Midwives in the United Kingdom are duty bound to ensure that any support that they give to colleagues must not compromise or be at the expense of patient or public safety (The Nursing and Midwifery Council (NMC) 2015). Midwives in distress may disclose episodes of impairment, medical error or display unprofessional behaviour within an online intervention designed to support them. These episodes of impairment may put patients at immediate risk of harm, and may ordinarily prompt a referral to the regulators and further investigation for the immediate protection of the public. Yet the issues highlighted here may prompt the question as to whether a midwife in distress has the same rights to confidentiality as the 'typical' online user in distress.

In relying on the process of moral peer review and culture setting, online interventions may sacrifice immediate public protection in favour of wider and more sustainable advances in public safety and protection. Midwives have a legal obligation and duty of care to maintain the confidentiality of their patients in line with professional codes of conduct. However, in the context of a confidential online intervention, issues surrounding patient harm, neglect and patient risk may become apparent, without the assurance that an appropriate real-world response has been actioned. As such, the wellbeing of vulnerable patients could be placed at risk in favour of supporting the midwife in immediate distress.

Concerns relating to midwives

Midwives who seek out an online platform for support may be psychologically vulnerable. Elsewhere, it has been argued that those providing online interventions should know the location and identity of those users at risk of suicide in the event of a psychological emergency (Rummell and Joyce 2010). Yet this may not be possible for an online intervention offering total anonymity to its users. Despite this, it has also been argued that the benefits of providing online therapies far outweigh these risks (Ravis 2007). Moreover, the challenge to locate a suicidal online user has been found to be no more difficult than locating an 'at risk' individual engaging with telephone therapy (Rochlen, Zack and Speyer 2004). As such, in signposting the anonymous midwives who engage with an online platform towards outside sources of support, an online intervention may offer a portal for knowledge exchange and ongoing care in the absence of immediate professional support.

Although the literature rarely highlights the legal considerations of providing support via online interventions, midwives currently have a legal obligation and duty of care to maintain the confidentiality of colleagues in line with their professional codes of conduct. However, in the context of online interventions, the legal regulations that apply to online interaction may mean that the dissemination of concerns to any third party becomes prohibited (Dever Fitzgerald et al. 2010). Additionally, as internet access becomes global, users and facilitators will need to consider their legal jurisdiction and authority to practice in areas beyond both their professional or geographical territory.

It is also of note that anonymity may become less appropriate for serious cases, where there may be an ethical obligation or duty to report a midwife for immediate preventative action. In these cases, decision makers and registered clinicians are reminded of the requirement to follow duty to report and protect statutes. These questions, related to jurisdictional challenges may require further dialogue with professional associations and regulatory bodies (Harris and Birnbaum 2015).

Legal and ethical issues endure where there remains an inability to assert clinical judgement, gain informed consent and establish mental capacity whilst users remain

unidentifiable online (Harris and Birnbaum 2015). In order to address legal and ethical considerations, some online interventions have used disclaimers and privacy statements as a means of either protecting the intervention against its own accountabilities or to instruct its users upon how they may or may not expect their privacy to be upheld (Im et al. 2005). Legal obligations vary geographically and nationally, from one country to the next. In England for example, the law is the same whether you work in the south of England or the north of England, yet in many states of America, there may be conflicting legal obligations in force. In this context, a global online intervention for midwives could establish its own codes of conduct and level of accountability, guided by the level of accountability set by regulators around the world.

Facilitators of an online intervention designed to support midwives could be specialist healthcare professionals or individual midwives proficient in restorative supervision and peer support. However, these professionals would still be legally obligated to report impaired midwives to their regulatory body. As such, strong privacy statements and usage policy agreements may be required.

Confidentiality, anonymity and amnesty

If online interventions were developed to support midwives in psychological distress, there lies the risk of non-disclosure of poor clinical practice, as midwives may look to seek anonymous support in order to avoid accountability. Without being able to identify the users of an online intervention, no real-world referrals or accountability can reliably be pursued. Therefore, it may be that society is only willing to permit an amnesty in the cases of relatively trivial matters, rather than in severe cases. However, any attempt to measure the degrees of severity may result in some episodes not being perceived as objectively severe in nature.

For an online intervention to support midwives, it will be important to decide which control measures should be employed to discourage undesirable behaviours such as those which may undermine public confidence in the profession. The online inhibition effect in these cases can be ‘toxic’ (Allen et al. 2016). Other online communities hold a ‘real name’ policy in order to hold users to account, however these have previously

inhibited the development of productive online communities (Cho and Kwon 2015). In this case, midwives who are reluctant to speak openly may not engage with an intervention where they may be further held to account.

Moderators of online support groups have noted that trust in confidentiality and anonymity is an essential part of maintaining a successful health-related online support group (Coulson and Shaw 2013, Frost, Vermeulen and Beekers 2014, Kauer, Mangan and Sanci 2014). The provision of anonymity and confidentiality may also appeal to those who would ordinarily feel unable to disclose a sensitive issue. As confidentiality and anonymity have been cited as two of the most important features of an online peer support forum, these two principles may be key features in online interventions to support midwives in work-related psychological distress (Horgan, McCarthy and Sweeney 2013). To mitigate risk, users may require ethical guidance in relation to the maintenance of confidentiality in the context of any work-related discussions.

When a user is grappling with a moral issue, they may be more likely to disclose in an online environment that allows for anonymity for the purpose of help seeking. In an online environment, where morality can be debated, users can also be persuaded by the community to modify their behaviours and eventually make real world disclosures. In this context, an online intervention may have the ability to change any reticent behaviour seen in some midwives, which would in turn aid help seeking and increase public protection. As such, the serious risks involved with the provision of amnesty online may be mitigated somewhat by the possibility of encouraging a larger number of midwives to seek help, modify any risky behaviours and move towards a real-world disclosure and self-referral in line with the pathways disclosure model (Cooper 2004).

Ethical decision making

Ethicists are largely concerned with doing right, following the principles of justice, beneficence through identifying risk; and preventing harm through protecting privacy, being honest, obtaining consent and respecting a person's inherent value as a human being (Hair and Clark 2007). Ethical decision making within the creation of electronic communities can be derived from two main philosophical approaches. These have

been described by Hair and Clark as deontology, which is focussed upon using codes of conduct in decision making, and teleontology, which advocates achieving the greatest good for the greatest number of people (Hair and Clark 2007). As such, developers of online communities must balance the effects upon the entire community with the individual risks that may arise (Hair and Clark 2007).

It has been suggested that individuals progress through three different levels as they make moral judgements: (a) the pre-conventional level, when moral decisions are based on rewards and punishments and obedience to authority; (b) the conventional level, when individuals recognise societal laws and rules and are concerned regarding collective welfare and (c) the post-conventional level, when moral decisions are based on internalised moral values and abstract principles (Kohlberg 1981). At the peak stage of moral decision development, a concern for wider social justice and human rights becomes evident (Kohlberg 1981).

Ethical dilemmas such as those presented within this chapter are often complex and ambiguous. Many ethical decision-making frameworks exist to assist nursing populations in making ethical choices (Mallari, Grace and Joseph 2016). These often focus upon the alleviation of suffering, responsibilities to the public and professional accountability, where the nurse or midwife's primary commitment is to the patient. Midwives who use an online intervention could be analogous to patient users if the work of Damster and Williams is applied to the present issue (Damster and Williams 1999). In any case, within these ethical frameworks there is also a focus on personal health and wellbeing, collegial support, competency maintenance and professional growth, as it is widely recognised that both patients and the public are safest whilst nurses and midwives remain in optimal mental and physical health.

Generally, ethical decision-making within the nursing professions leans toward a favourable risk-benefit ratio (Mallari, Grace and Joseph 2016, Peter 2006). To expand upon the descriptions given by Hair and Clark (2007), teleological approaches focus upon the final effects of human action (Noble 1967). Conversely, the wider philosophical approach of utilitarianism is founded upon the premise that an action is ethical if the outcomes of the action lead to the greatest benefits for society at large

with the fewest possible negative consequences (Beuachamp and Bowie 1983). In this context, society may gain the greatest benefit from supporting the midwifery workforce. Yet if midwives are to be supported via an online intervention, society may also have to accept that midwives may need confidentiality, anonymity and amnesty in order to seek help.

Strengths and limitations

Usually, conceptual ideas develop through a process of evolution, with each successive change adding to its predecessors. Yet this critical review methodology has provided an opportunity to reflect on previous ideas, and present a new supposition in relation to a previously unexplored topic of interest. This supposition is that midwives should be granted the provision of confidentiality, anonymity and amnesty online so that they may disclose episodes of impairment or issues of concern, without fear of retribution or regulatory referral. Yet there may still be a need to explore what internal mechanisms may be acceptable or preferable for this type of intervention, for example, in moderating the content of such an online intervention.

Critical reviews are not systematic. Additionally, there is no formal requirement to present methods of the search, synthesis and analysis explicitly (Grant and Booth 2009). This lack of formal clarity may therefore obstruct the replication of this review. Additionally, within any critical review, the emphasis is on the conceptual contribution of each item of included literature, rather than on formal quality assessment (Grant and Booth 2009).

Unfortunately, this review did not retrieve any papers that directly addressed the subject of midwives using online interventions, therefore it has been necessary to extrapolate from other groups such as those experiencing self-harm or HIV/AIDS to midwives. Also, whilst this a review has synthesised the literature in relation to several ethical considerations, the interpretative elements are unavoidably subjective and therefore any conclusions made can only be considered as a foundation for further review.

Conclusions

The principles of confidentiality, anonymity and amnesty online may appeal to midwives in work-related psychological distress who feel stigmatised, are pressured for time, fear retribution and/or frequently access the internet (Berger, Wagner and Baker 2005, Burns et al. 2010, Currie and Richens 2009). However, in deciding whether this provision may be ethically justifiable, online intervention providers must weigh up the risk/benefit ratio to both patients, midwives and the wider general public (Watson, Jones and Burns 2007). This chapter has discussed and characterised the most morally justifiable and ethical decision from a utilitarian perspective as, the greatest good for the greatest number (Shaw and Post 1993).

Online interventions may offer an opportunity to improve the help seeking behaviours, rates of disclosure, and provision of therapeutic support of midwifery populations when they allow for confidentiality, anonymity and amnesty (Crisp and Griffiths 2014, Haemmerli, Znoj and Berger 2010, Kenwright et al. 2004, Wootton et al. 2011). The consequences of failing to adequately support midwives in work-related psychological distress may mean that the maternity services experience a less compassionate workforce, reduced productivity, reduced standards of care and increased rates of error (Chana, Kennedy and Chessell 2015, Currie and Richens 2009, Dasan et al. 2015, Mastracci and Hsieh 2016, The Royal College of Physicians 2015). As such, this chapter argues that the morally justifiable decision may be that providing an opportunity for midwives to manage their emotional fears, improve their emotional wellbeing, optimism, mental health literacy and openly engage with emotional support via an online intervention may outweigh any potentially damaging processes (Mo and Coulson 2014).

International codes of conduct promote that midwives should ‘support and sustain each other in their professional roles, and actively nurture their own and others’ sense of self-worth’ (International Confederation of Midwives (ICM) 2014). The Nursing and Midwifery Council also recognise the importance of the need for their registrants to ‘be supportive of colleagues who are encountering health or performance problems’ (The Nursing and Midwifery Council (NMC) 2015). Yet the caveat associated with this

support is that it must never compromise or be at the expense of patient or public safety. This chapter argues that in effectively supporting midwives anonymously online, both patients and the public may be protected via more sustainable means. As such, the benefits of allowing anonymous free speech for the purpose of supporting midwives in distress may outweigh the need for the immediate identification and reporting of episodes of impairment for the purpose of instant accountability.

The risks associated with providing online interventions to support midwives in psychological distress may be somewhat mitigated by the ethos of the support group, which may preclude confrontations' over risky and/or immoral behaviour (Klitzman and Bayer 2003). Users may also embrace a collective philosophy that promotes adages such as, 'honesty is the best policy' and 'do unto others' (Rier 2007b). Therefore, in influencing positive group behaviours, midwives may exercise their own responsibilities to disclose issues to regulatory bodies where appropriate with the support of others in line with the pathways disclosure model (Cooper 2004). This chapter proposes this to be the preferred outcome for online support interventions, where midwives receive support and yet moral accountability is respected.

Additionally, in line with other populations accessing online interventions for support and practical advice, midwives may not necessarily reject their existing moral frameworks at the same time (Rier 2007b). Therefore, the morally justifiable and ethical decision, promoting the greatest good for the greatest number may be to permit anonymity, confidentiality and amnesty. Midwives may need to be able to disclose an impairment or issue of concern, without fear of retribution or regulatory referral for the purpose of help seeking and disclosure. This chapter argues that midwives should be granted the provision of confidentiality, anonymity and amnesty online for this purpose. Such disclosures may in turn promote help seeking, behaviour change and recovery from work-related psychological distress in line with the pathways disclosure model (Cooper 2004). This process may also engage the revised transactional model of occupational stress and coping, as in the examples provided, online users are able to re-appraise their experiences and coping strategies (Goh, Sawang and Oei 2010).

This chapter has explored the ethical, legal and moral issues associated with the development of online interventions designed to support midwives in work-related psychological distress. Although this research argues that the principles of confidentiality, anonymity and amnesty should be upheld in the pursuit of the greatest benefit for the greatest number of people, there is also call for a further dialogue in relation to this matter in pursuit of robust ethical stability. Subsequently, it will be important to explore whether interventions designed to support midwives in work-related psychological distress exist, how midwives may experience them, and what outcomes they produce, so that further development decisions can be made.

Chapter Three: A systematic mixed-methods review of interventions, and the outcomes and experiences associated with them for midwives and student midwives in work-related psychological distress

Whilst chapter two has explored some of the ethical issues in relation to the provision of an online intervention, it is also important to explore the existing evidence in relation to interventions designed to support midwives in work-related psychological distress. This evidence is important as it may both guide the direction of future research in this area and enable new interventions to incorporate the most effective components into their design. The MRC framework for developing complex interventions suggests that such information ideally be collated via a systematic review (Craig et al. 2008). For this task, it would be prudent to explore how any existing interventions in this area work.

It is not yet known how many interventions are available and designed to support midwives and/or student midwives in work-related psychological distress, what outcomes are associated with these interventions, and how users experience them. To achieve this, a systematic mixed-methods review was performed with the main objectives being to identify interventions designed to support midwives and/or student midwives in work-related psychological distress, and gather evidence in relation to the outcomes and experiences associated with their use. This research has been published elsewhere (Pezaro, Clyne and Fulton 2017). The publication associated with this research can be found in appendix 1, and can be checked against the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines checklist (Moher et al. 2009).

Rationale

Although recent healthcare strategies recognise the need to act upon evidence of high levels of stress in the healthcare workforce and improve the working lives of staff (Ham, Berwick and Dixon 2016, West et al. 2015), there is little known about

interventions designed for midwives and/or student midwives (Austin, Smythe and Jull 2014, Strobl et al. 2014).

A more comprehensive understanding of interventions designed to support midwives and/or student midwives in work-related psychological distress is required to establish a strong foundation for further research and the development of the most effective interventions. Previous reviews of this type have not included either midwives and/or student midwives as an isolated population sample (Awa, Plaumann and Walter 2010, Guillaumie, Boiral and Champagne 2016, Murray, Murray and Donnelly 2016, Regehr et al. 2014, Romppanen and Häggman-Laitila 2016, Ruotsalainen et al. 2015). Therefore, this review uses the segregated systematic mixed-methods review approach to examine the literature on interventions designed to support midwives and/or student midwives in work-related psychological distress.

Objectives

The objectives of this review are to identify any interventions that have been designed to support midwives and/or student midwives as a population in work-related psychological distress and to gather evidence in relation to any outcomes and/or experiences associated with their use.

In line with the revised transactional model of occupational stress and coping, it will be important to identify the most appropriate coping and appraisal strategies for those in work-related psychological distress in the face of work-related psychological distress (Goh, Sawang and Oei 2010). Such coping strategies could be identified by gathering evidence in relation to how midwives experience the use of interventions designed to support them. Equally, a midwife's appraisal of an event may also be captured within the outcomes associated with the use of an intervention. Therefore, the research questions to be addressed within this review are: 1) What interventions have been developed to support midwives and/or student midwives in work-related psychological distress? and 2) What are the outcomes and experiences associated with the use of these interventions?

Methods

This research is concerned with both the outcomes and the experiences associated with interventions designed to support midwives and/or student midwives in work-related psychological distress. In order to meet study objectives, the segregated systematic mixed-methods review design, as described by Sandelowski, has been employed (Sandelowski, Voils and Barroso 2006). This methodology is described as 'the design of choice' where a synthesis presents qualitative and quantitative findings separately. This method also allows the researcher to subsequently organise findings into a short line of argument synthesis, which provides a contemporary 'picture of the whole' (Barnett-Page and Thomas 2009, Noblit and Hare 1988).

This review method fits these research questions, as it has similarly done so in other recent reviews looking to establish and assess the nature and usefulness of interventions (Preddy and Bird 2017, Watson and Downe 2017). This is because in this context, qualitative enquiry can work alongside quantitative research to explore how intervention is experienced and why it works to make an impact, rather than merely stating the positive or negative outcomes of an intervention (Harden 2010).

Protocol and registration

The protocol for this systematic mixed-methods review has been registered within PROSPERO, an international database of prospectively registered systematic reviews in health and social care, at http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016036978. This PROSPERO record can also be found in appendix 2. The published version of this systematic mixed-methods review has been reported in compliance with the PRISMA guidelines (Moher et al. 2009). This publication is presented in appendix 1. A detailed PRISMA checklist which can be mapped against this publication can be found in appendix 3. The protocol registration number for this review is CRD42016036978.

Eligibility Criteria

All independent, peer reviewed studies published in English between 2000 and 2016 were considered for inclusion in order to reflect a more contemporary midwifery workplace.

All types of interventions and length of follow up were considered. Selected papers had to identify at least one intervention designed to support midwives and/or student midwives in work-related psychological distress. Any studies that met these criteria also had to report at least one outcome measure.

Participants/ population

This review included studies conducted with populations of both midwives and student midwives. This review defined the 'midwife' in line with the definition given by the International confederation of midwives (ICM's) definition that a midwife is a person who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife' (ICM International Confederation of Midwives 2011).

Student midwives were included due to the fact that they perform midwifery work, experience similar episodes of work-related psychological distress and are the successors of the profession (Coldridge and Davies 2017, Davies and Coldridge 2015b). Although it was recognised that student midwives effectively practise within a different role, and may experience different manifestations of work-related psychological distress, they were also considered to form a part of the midwifery workforce.

Interventions

To be included, studies had to evaluate an intervention designed to support midwives and/or student midwives experiencing work-related psychological distress.

Psychological distress has five defining attributes: (1) perceived inability to cope effectively, (2) change in emotional status, (3) discomfort, (4) communication of discomfort, and (5) harm (Ridner 2004). Psychological distress refers to a unique, discomforting, emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary or permanent, to the person (Ridner 2004). Therefore, in line with this description, work-related psychological distress was defined as a unique, discomforting, emotional state experienced by an

individual in response to a specific work-related stressor or demand that results in harm, either temporary or permanent, to the person.

The outcomes that were considered to be associated with 'work-related psychological distress' in a midwifery context were defined as burnout, compassion fatigue, stress, anxiety, depression, cognitive impairment and/or any emotional distress formed in partnership with working within the midwifery profession.

Comparator(s)/ control

So that a larger number of potential studies could be included, studies were not required to include either a comparator or control group.

Outcome(s)

Primary outcomes

The identification of interventions designed to support midwives and/or student midwives in work-related psychological distress.

Secondary outcomes

Any quantitative and/or qualitative outcomes and/or experiences relating to intervention use were considered to be secondary outcomes.

Information sources

The systematic search was conducted between March 31 and May 24, 2016, using 6 electronic databases; namely PsycINFO, PsycARTICLES, MEDLINE, Academic Search Complete, Scopus and CINAHL. The use of these multiple databases is recommended in pursuit of conducting a more comprehensive search (Abdulla et al. 2016). In addition, the reference lists of identified studies were manually searched in an attempt to identify additional publications. The authors of papers identified for inclusion were also contacted to enquire about any further papers relevant for inclusion. Paper retrievals concluded on June 6, 2016.

Search

This search strategy was formulated subsequent to an initial and broad scoping review of the literature in relation to intervention research, midwives, student midwives and work-related psychological distress. During this scoping review, the abstracts and key words of significant papers were scanned and identified. Recurring phrases and key words were then taken and applied to this search. This search strategy was designed to be very broad in nature to capture as many studies relating to the research questions as possible. This approach aligns with current best practice (Machi and McEvoy 2016).

Initially, keywords and terms relating to the identification of the midwifery profession were employed. Secondly, terms and headings available within each electronic database used which broadly related to any of the outcomes that were considered to be generally associated with 'work-related psychological distress' were used. Lastly, terms relating to work, employment, occupation and professional health were used in conjunction with terms associated with the management of general wellbeing, interventions, treatments, therapies and coping behaviours. These terms were used in order to capture the existence of any interventions designed to support this target population at work and any outcomes or experiences associated with their use.

Terms relating to workplace support interventions and the midwifery profession were used in order to capture relevant literature to address the first research question associated with this chapter: 2a) What interventions have been developed to support midwives and/or student midwives in work-related psychological distress?

Subsequently, terms relating to outcomes and experiences such as 'burnout', 'compassion fatigue' and 'depersonalisation' were used in order to collate user outcomes and experiences. This was done to address the second research question associated with this chapter: 2b) What are the outcomes and experiences associated with the use of these interventions?

Search terms were also aligned with the revised transactional model of occupational stress and coping presented by Goh and colleagues in order to more broadly map search terms to address the research questions associated with this review (Goh, Sawang and Oei 2010). As this review is predominantly concerned with interventions, search terms were more strongly correlated with the coping strategies component of this stress-specific model. However, in order to include all relevant literature, search terms which related to the stress-related outcomes and appraisal components of this revised transactional model of occupational stress and coping were also used (Goh, Sawang and Oei 2010).

Subsequently, truncations were used, and categories were 'exploded' where possible to improve the sensitivity of the search, account for spelling variations and to identify differences in any search terms used. Boolean logic was employed as each subset of similar terms relating to population, outcomes, interventions and experiences were combined with the word 'OR' and subsequently the lists of each subset were then combined with 'AND' in order to unite comparable concepts within the literature. This search strategy was modified in order to suit the various syntax, subject headings, MeSH headings and thesauruses utilised by the 6 databases used to conduct the search. Table 3 details the CINAHL with Full Text search, the complete search strategy used for all databases is presented in appendix 4.

Table 3: CINAHL with Full Text Search

Interface - EBSCOhost Research Databases **Search Screen -** Advanced Search **Database: CINAHL with Full Text Search** **Limiters -** Published Date: 20000101-20161231; Scholarly (Peer Reviewed) Journals **Search modes -** Find all my search terms		
#	**Query**	**Results**
S14	S5 AND S9 AND S13	211
S13	S10 OR S11 OR S12	673,083
S12	AB (work* OR job OR occupation* OR employment OR Profession*) AND AB ("Employee Assistance Programs" OR MM "Workplace Intervention" OR "Resilience (Psychological)" OR "Coping Behavior" OR "Coping behaviour" OR "Psychological Endurance" OR "Stress and Coping Measures")	105
S11	TI (work* OR job OR occupation* OR employment OR Profession*) AND TI ("Employee Assistance Programs" OR MM "Workplace Intervention" OR "Resilience (Psychological)" OR DE "Coping Behavior" OR "Coping behaviour" OR "Psychological Endurance" OR "Stress and Coping Measures")	37
S10	(MH "Coping+") OR (MH "Help Seeking Behavior") OR (MH "Employee Assistance Programs") OR "Employee Assistance Programs" OR (MH "Occupational Health Services") OR (MH "Peer Assistance Programs") OR (MH "Self Care") OR (MH "Stress Management") OR "Workplace Intervention" OR "anxiety management" OR "Cognitive Techniques" OR (MM "Disciplines, Tests, Therapy, Services+") OR (MH "Relaxation Techniques") OR (MH "Behavior Therapy") OR (MM "Therapeutics+") OR (MH "Mind Body Techniques+") OR (MH "Alternative Therapies+") OR "coping measures" OR "resilience"	672,917
S9	S6 OR S7 OR S8	150,853
S8	AB ((work* OR job* OR occupation* OR employ* OR Profession*)) AND AB ((stress* OR burnout OR pressure* OR compassion fatigue OR wellbeing OR well being OR well-being OR psychosomatic health OR cognitive wellbeing OR cognitive well being OR cognitive well-being OR professional wellbeing OR professional well being OR professional well-being))	29,758
S7	TI ((work* OR job* OR occupation* OR employ* OR Profession*)) AND TI ((stress* OR burnout OR pressure* OR compassion fatigue OR wellbeing OR well being OR well-being OR psychosomatic health OR cognitive wellbeing OR cognitive well being OR cognitive well-being OR professional wellbeing OR professional well being OR professional well-being))	4,254
S6	(MM "Stress, Occupational") OR (MH "Job Satisfaction") OR (MH "Impairment, Health Professional") OR (MM "Stress, Psychological+") OR (MM "Burnout, Professional") OR (MH "Depersonalization") OR (MH "Mental Fatigue") OR "compassion fatigue" OR (MH "Anxiety+") OR (MH "Depression") OR (MM "Stress Disorders, Post-Traumatic+") OR (MH "Organizational Culture+") OR (MM "Quality of Working Life") OR (MM "Occupational Health") OR (MH "Psychophysiologic Disorders+") OR (MH "Substance Use Disorders")	128,314
S5	S1 OR S2 OR S3 OR S4	23,998
S4	AB midwif* OR midwives	10,886
S3	TI midwif* OR midwives	11,964
S2	(MM "Midwifery+")	9,183
S1	(MM "Midwives+")	4,565

Study selection

Retrieved articles from all databases were exported into a RefWorks database and duplicate articles were removed. Firstly, an initial assessment of the retrieved articles was performed to identify potentially eligible studies which referred to interventions of support. Titles and abstracts were screened for relevance. These screened articles were then cross checked and assessed for accuracy of selection. The full texts of eligible articles were assessed against the inclusion criteria. Articles which did not meet the inclusion criteria were excluded.

Data Collection process

Data was extracted from selected studies using the MAStARI data extraction instrument from JBI-NOTARI (Pearson 2004). This tool is presented within appendix 5.

Data items

Study population information, study methods and outcomes of significance to both the primary and secondary outcomes of this review were extracted from the data. Any anecdotal findings were omitted from the data collected.

Quality Appraisal

Scientific rigor is important in research, as the findings of more rigorous studies may be assigned more value. The key components of scientific rigour have been described more recently as reliability, generalisability and validity (Morse 2015). If a study has reliability, it will have the ability to obtain the same results if it were to be repeated (Morse 2015). If a study is generalisable, results can be extended and applied to other populations, places or times than those directly studied (Flick 2014). However, it must be noted that the findings of a rigorous qualitative study cannot be generalised, only applied to other participants or alternate contexts (Petty, Thomson and Stew 2012). If a study has validity, any inferences made will be accurate and well-founded (Polit and Beck 2012).

Yet scientific rigor may be assessed differently in both qualitative and quantitative research, as the desired outcomes for both may differ substantially. A rigorously conducted qualitative study is concerned with the integrity of design, the

trustworthiness of findings, the meticulousness of analysis and the clarity of reporting (Munhall 2012). A rigorously conducted quantitative study is precise, and uses specific measuring tools, a representative sample, and a tightly controlled study design (Grove, Burns and Gray 2014).

Quality appraisal in this context is the process of systematically examining the retrieved research to judge the extent to which a study's design, conduct, and analysis has minimised selection, measurement, and confounding biases, and its trustworthiness, value and relevance (Burls 2009, Lomas et al. 2005). There are many tools and checklists designed to appraise the quality of studies. Quality appraisal tools differ from reporting guidelines, as reporting guidelines are designed and followed to encourage better designed studies that will be easier to read and understand (West et al. 2002). Such reporting guidelines direct how a study should be presented or 'reported'. Reporting guidelines are not to be used for assessing the quality of studies. However, they can make the process of quality appraisal more efficient.

In this mixed-methods review, the methodological quality of all eligible articles identified were assessed. This was done using the scoring system for appraising mixed-methods research, and concomitantly appraising qualitative, quantitative and mixed-methods primary studies in mixed reviews, as published by Pluye and colleagues (Pluye et al. 2009). This scoring system uses 15 quality criteria. A score was assigned to each of these criteria as follows; presence/absence of quality criteria; 1/0 respectively. A 'quality score' was then calculated via the following formula [(number of 'presence' responses divided by the number of 'relevant criteria') × 100]. Overall quality scores are presented in table 4. This tool was selected due to its ability to comprehensively quality appraise all of the study types selected for inclusion concomitantly and efficiently.

Risk of bias in individual studies

In order to assess risk of bias within the mixed-methods, quantitative and qualitative studies retrieved, the assessment of methodological rigor tool devised by Hawker and colleagues was applied at study level (Hawker et al. 2002). This tool was chosen due to

its ability to assess bias in both mixed-methods, qualitative and quantitative research as appropriate.

Summary measures

Cohen's d, an effect size used to indicate the standardised difference between two means, and 95% confidence intervals (CI) were calculated using pre-and post-intervention quantitative data where possible. CI for the effect size between pre-and post-intervention data were calculated for the quantitative results reported by both Wallbank, and Foureur and colleagues (Foureur et al. 2013, Wallbank 2010). For the study presented by Warriner and colleagues (Warriner, Hunter and Dymond 2016), 95% CI for the proportion that reported positive impact were calculated using the Wilson procedure with corrections for continuity (Wilson 1927). These calculations are presented in table 6.

Synthesis of results

As this review was regarded as the configuration, rather than the assimilation of both qualitative and quantitative research findings, results are presented in line with the segregated systematic mixed-methods review approach (Sandelowski, Voils and Barroso 2006). As such, the data extracted was categorised and grouped together as being either qualitative or quantitative. Here, the qualitative and quantitative results of each study are presented separately, and narratively.

Risk of bias across studies

Publication, time lag, selective outcome reporting and language biases were considered throughout the process of review.

Results

The search strategy identified 524 articles. Sixty-one duplicate articles were removed to reveal 463 articles for further screening. At this stage, 429 articles were excluded as they fell outside the scope of this review. This left 34 articles to screen for eligibility, 6 of which were selected for inclusion. Articles were excluded because they either did not test a targeted intervention (n=13), did not focus on psychological distress (n=8) or presented themselves as a literature review (n=7). The study selection process is outlined in Figure 5. Table 4 presents the papers selected for inclusion.

Figure 5. PRISMA Flow Diagram

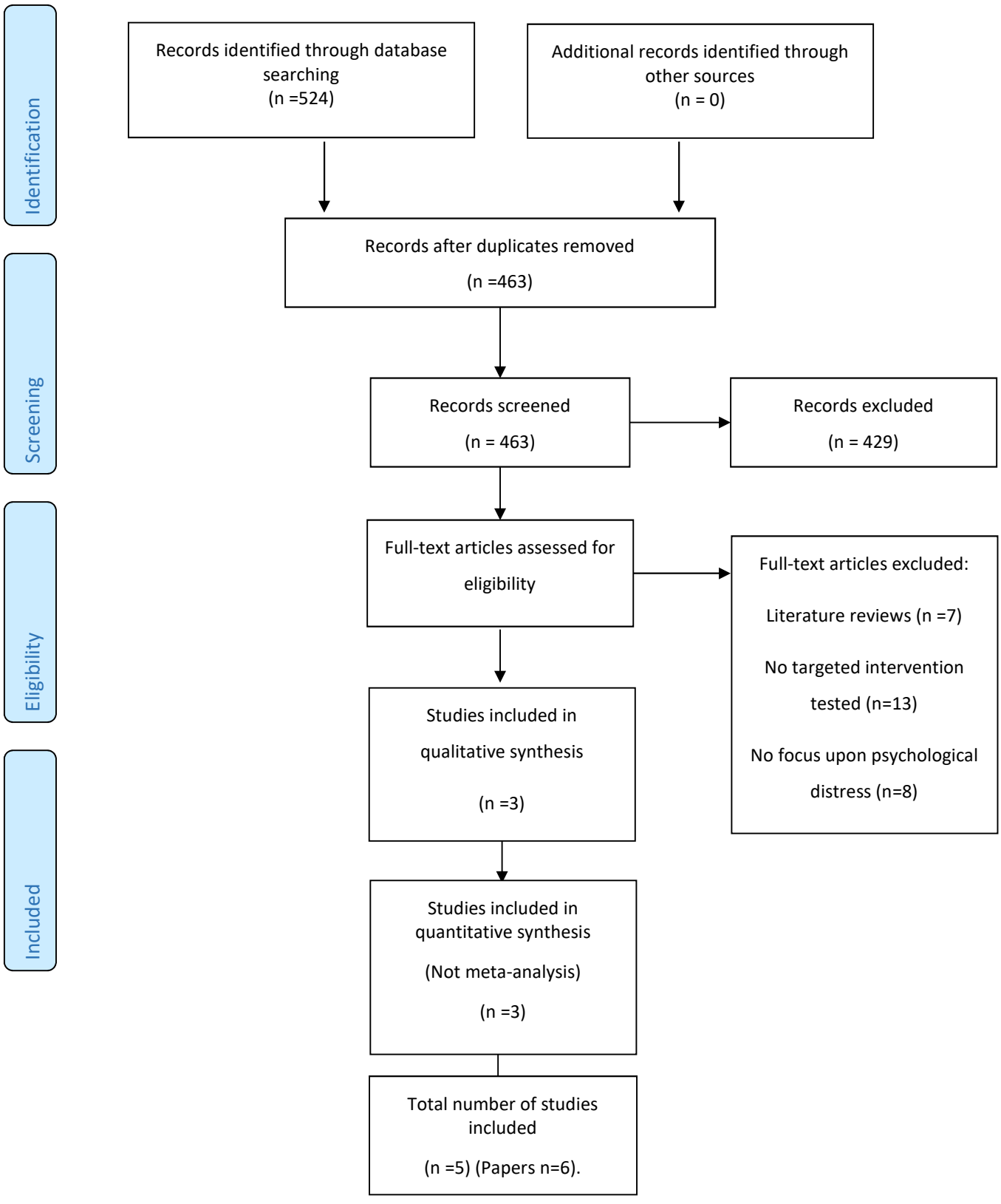


Table 4: Study overviews and characteristics

Paper Retrieved	Sample Number	Period of Study	Sample Type	Study Design	Intervention	Measurement Tools	Place of Study	Quality Score*
(Foureur et al. 2013)	40	8 weeks and 1-day intervention period 4-8-week follow up period	Nurses (50%) and midwives (50%)	Mixed-methods pilot study (No comparison group)	Mindfulness based stress reduction programme (MBSR)	-Log books -GHQ-12 -SOC – Orientation to Life scale -The DASS scale -Qualitative interviews -Qualitative focus group	Australia	67%
(van et al. 2015)	14	7-week intervention period 2-week follow up period	First year nursing and midwifery students	Cohort study	7-week stress management and mindfulness course	-Qualitative semi-structured focus group interviews	Australia	50%
(Wallbank 2010)	30	6 'sessions of supervision'	Midwives and Doctors working in obstetrics and gynaecology	Pilot study (2 randomised samples)	6 sessions of clinical supervision given by a clinical psychologist	-Positive and negative affect schedule (PANAS) -Professional Quality of Life scale (ProQol) -Impact of Event Scale (IES)	United Kingdom	67%
(Warriner, Hunter and Dymond 2016)	46	8 weeks and 6 days intervention period 4–6-month follow up period	Hospital (30%), community (30%) and research midwives (9%), maternity support workers (18%), student midwives (9%), doctors (2%) and lecturers (2%)	Cohort study	Mindfulness Course	-Immediate post follow-up quantitative questionnaire -4–6-month follow-up quantitative questionnaires	United Kingdom	33%
(McDonald et al. 2013)	14	6-month intervention period 6-month follow up period	Nurses and midwives	Qualitative case study	Work-based resilience workshops partnered with a mentoring programme	-Qualitative interviews - Participant evaluations -Field notes	Australia	67%
(McDonald et al. 2012)	14	6-month intervention period Immediate post-intervention data collection	Nurses and midwives	Qualitative case study	Work-based resilience workshops partnered with a mentoring programme	-Qualitative interviews -Field notes -Research journal	Australia	50%

*Quality score: = [(number of 'quality criteria presence' responses divided by the number of 'relevant criteria') × 100].

Study Characteristics

This systematic mixed-methods review identified 6 papers for inclusion. A total of 144 participants were included within this review (assuming the same 14 participants were included within 2 papers relating to the same study) (McDonald et al. 2012, McDonald et al. 2013). All studies included samples of either midwives and/or student midwives. However, studies also included nurses, doctors, student nurses, maternity support workers and lecturers in their study samples (Foureur et al. 2013, McDonald et al. 2012, McDonald et al. 2013, van et al. 2015, Wallbank 2010, Warriner, Hunter and Dymond 2016).

Interventions delivered

In total, n=100 (69%) participants were delivered mindfulness interventions, n=14 (10%) participants were delivered work-based resilience workshops partnered with a mentoring programme, and n=30 (21%) participants were either randomly allocated to a control group or delivered the intervention of clinical supervision.

Intervention delivery periods varied from 7-8 weeks (Foureur et al. 2013, van et al. 2015, Warriner, Hunter and Dymond 2016) to 6 months (McDonald et al. 2012, McDonald et al. 2013). One study did not specify the period of evaluation (Wallbank 2010). Of those that did, follow up periods varied between 2 weeks (van et al. 2015) and 6 months (McDonald et al. 2013, Warriner, Hunter and Dymond 2016).

Study design

Some of these studies were described as either pilot or feasibility studies, yet only two (Foureur et al. 2013, Wallbank 2010) were found to conform to the standardised definitions of either a pilot or a feasibility study (Abbott 2014, Arain et al. 2010). As such, some studies were redefined as cohort studies (van et al. 2015, Warriner, Hunter and Dymond 2016), where both a comparison and/or control group are not a necessary feature (Dekkers et al. 2012), as they each analysed either repeated outcome measures and/or observed a cohort of participants distinguished by some variable (DiPietro 2010, Doll 2004, Hellems, Kramer and Hayden 2006). These papers may also have been

described as case series, however, they did not use the required validation tools needed to meet this criterion (Carey and Boden 2003). Case series also cannot be used to draw any inferences regarding treatment effect. Two of the papers retrieved (McDonald et al. 2012, McDonald et al. 2013) each fittingly reported themselves to be one part of a larger collective case study in which midwifery cohorts were included (Gerring 2004).

Outcomes

Data within the study by Foureur and colleagues (Foureur et al. 2013) was extracted via log book entries, qualitative interviews and a focus group, the GHQ-12 general health questionnaire, the SOC – (Sense of Coherence - Orientation to Life scale), and the DASS (Depression, Anxiety and Stress Scale). The study by Wallbank used the PANAS schedule, the ProQol (Professional Quality of Life) scale and the IES (Impact of Event Scale) scale to extract data (Wallbank 2010). Other studies used a research journal and field notes, 'evaluations' and qualitative interviews (McDonald et al. 2012, McDonald et al. 2013), qualitative focus group interviews (van et al. 2015) and evaluation questionnaires (Warriner, Hunter and Dymond 2016).

All studies reported positive outcomes in relation to the psychological wellbeing of midwives. These positive outcomes related to an improved sense of wellbeing (Warriner, Hunter and Dymond 2016), reduced stress (Wallbank 2010, Warriner, Hunter and Dymond 2016), enhanced confidence, self-awareness, and assertiveness, self-care (McDonald et al. 2012, McDonald et al. 2013), improved general health and sense of coherence (Foureur et al. 2013), improvements in compassion satisfaction and a reduction in burnout and compassion fatigue (Wallbank 2010), a sustained positive impact on anxiety, resilience, self-compassion and mindfulness (Warriner, Hunter and Dymond 2016) and increased concentration, clarity of thought and a reduction in negative cognitions (van et al. 2015).

Risk of bias assessments for the individual studies are presented in table 5 using the assessment of methodological rigor tool devised by Hawker and colleagues (Hawker et al. 2002).

Table 5: Risk of bias within studies using the assessment of methodological rigor tool

Item of assessment	Foureur et al (2013) (Foureur et al. 2013)	van der Riet et al, (2015) (van et al. 2015)	Wallbank (2010) (Wallbank 2010)	Warriner et al (2016) (Warriner, Hunter and Dymond 2016)	McDonald et al (2013) (McDonald et al. 2013)	McDonald et al 2012) (McDonald et al. 2012)
Abstract and title	Fair No structured abstract	Good Structured abstract with full information and clear title	Fair Abstract with most of the information	Poor Inadequate abstract	Fair Abstract with most of the information	Poor Inadequate abstract
Introduction and aims	Poor Some background but no objectives or research questions	Poor Some background but no specific research questions	Poor Some background but no specific aim	Poor Some background but no aim/objectives/ questions	Poor No research questions outlined	Poor Some background but no aim/objectives/ questions
Methods and data	Fair Method appropriate, description could be better	Good Clear details of the data collection and recording	Fair Method appropriate, description could be better	Good Method is appropriate and described clearly	Good Clear details of the data collection and recording	Poor Method described inadequately
Sampling	Poor Sampling mentioned but few descriptive details	Good Response rates shown and explained (small sample size)	Fair Most information given, but some missing	Fair Most information given, but some missing	Fair Most information given, but some missing	Fair Most information given, but some missing
Data analysis	Fair Descriptive discussion of analysis	Good Description of how themes derived	Fair Descriptive discussion of analysis	Fair Quantitative	Fair Descriptive discussion of analysis	Poor Minimal details about analysis
Ethics and bias	Fair Lip service was paid	Fair Lip service was paid	Very poor No mention of issues	Very poor No mention of issues	Good Ethical issues addressed (no mention of bias)	Poor Brief mention of issues
Findings/results	Good Sufficient data are presented to support findings	Poor presented haphazardly	Fair Data presented relate directly to results	Good Results relate directly to aims	Good Findings explicit, easy to understand	Poor Findings presented haphazardly
Transferability/ generalizability	Fair Some context and setting described	Poor Minimal description of context/setting	Fair Some context and setting described	Good Sufficient data are presented to support findings	Fair More information needed to replicate	Fair Some context and setting described
Implications and usefulness	Fair No implications for policy considered	Poor No suggested implications	Fair Did not suggest ideas for further research	Fair No suggestions for further research	Good Contributes something new	Fair Does not suggest ideas for further research

Results of individual studies

Findings from mindfulness based interventions whereby participants were asked to attend sessions and complete additional home based practice were reported by 3 of the studies included (Foureur et al. 2013, van et al. 2015, Warriner, Hunter and Dymond 2016). Another two papers report the effects of work-based resilience workshops partnered with a mentoring programme (McDonald et al. 2012, McDonald et al. 2013), and one study examined the effectiveness of clinical supervision in reducing staff stress (Wallbank 2010). All interventions were delivered face-to-face. Interventions were facilitated by experienced psychologists, the Oxford Mindfulness Centre and books (Warriner, Hunter and Dymond 2016), a workshop facilitator (Foureur et al. 2013), counsellors (van et al. 2015), a clinical psychologist (Wallbank 2010) and invited 'expert presenters' (McDonald et al. 2012, McDonald et al. 2013).

Table 6: Outcomes considered, summary findings, effect estimates and confidence intervals

Study	Outcome	95% Confidence Interval for effect size	Cohen's d	Summary of findings
(Wallbank 2010)	Treatment Group			-A reduction in staff stress, burnout and compassion fatigue -Increase in compassion satisfaction -No statistically significant difference in the scores of the control group compared with their earlier scores.
	Total stress impact of events (IES) and (PANAS)	(-3.64 to -1.67)	2.66	
	Compassion fatigue (ProQol)	(-1.50 to -0.01)	0.76	
	Compassion satisfaction (ProQol)	(0.15 to 1.65)	-0.90	
	Burnout (ProQol)	(-2.95 to -1.17)	2.06	
	Control Group			
	Total stress impact of events (IES) and (PANAS)	(-0.63 to 0.80)	-0.09	
	Compassion fatigue (ProQol)	(-0.60 to 0.82)	-0.10	
	Compassion satisfaction (ProQol)	(-0.84 to 0.58)	0.13	
	Burnout (ProQol)	(-0.33 to 1.11)	-0.39	
(Foureur et al. 2013)	Orientation to life (SOC)	(0.23 to 1.23)	-0.75	-Improved general health and sense of coherence -Lower stress levels
	Comprehensibility (SOC)	(0.12 to 1.11)	-0.62	
	Manageability (SOC)	(-0.11 to 0.84)	-0.37	
	Meaning (SOC)	(-0.29 to 0.66)	-0.18	
	Depression (DASS)	(-0.82 to 0.14)	0.33	
	Anxiety (DASS)	(-0.72 to 0.24)	0.29	
	Stress (DASS)	(-1.16 to -0.18)	0.67	
	General health (based on sum of Likert ratings) (GHQ12)	(0.38 to 1.38)	-0.88	
	General health (based on dichotomous scoring) (GHQ12)	(-1.10 to -0.11)	0.61	
(van et al. 2015)	Attending to self	-No statistical data available		-Stress reduction -An enhanced ability to attend to self and others
	Attending to others			
	Cognitive function			
	Stress			
	Self-awareness			
Study	**Outcome**	**95% confidence interval for proportion positive**	**Cohen's d**	**Summary of findings**
(Warriner, Hunter and Dymond 2016)	Stress (based on Positive impact n (%)Likert ratings)	(0.60 to 0.94)	No mean differences available	-Sustained positive impact on stress, anxiety, resilience, self-compassion and mindfulness -Positive impact on depression -Benefit in home life, work life and workplace culture
	Depression (based on Positive impact n (%)Likert ratings)	(0.12 to 0.52)		
	Resilience (based on Positive impact n (%)Likert ratings)	(0.47 to 0.85)		
	Self-Compassion (based on Positive impact n (%)Likert ratings)	(0.51 to 0.88)		
	Anxiety (based on Positive impact n (%)Likert ratings)	(0.45 to 0.85)		
	Mindfulness (based on Positive impact n (%)Likert ratings)	(0.70 to 0.98)		
	Benefit to home life (based on dichotomous scoring)	(0.65 to 0.96)		
	Benefit to work life (based on dichotomous scoring)	(0.70 to 0.98)		
	Benefit to workplace culture (based on dichotomous scoring)	(0.36 to 0.78)		
(McDonald et al. 2013)	Confidence	-No statistical data available		-Reduced experience of stress -Increased assertiveness at work, collaborative capital and understanding self-care practices -Improved relationships, communication and wellbeing
	Self-awareness			
	Self-care			
	Assertiveness			
(McDonald et al. 2012)	Workplace culture	-No statistical data available		-A closer group dynamic, more supportive communication, assertiveness and confidence -Growth in knowledge of personal resilience -Increased conflict resolution skills

Quantitative study findings

Foureur and colleagues present a pilot study in which 20 nurses and 20 midwives from two metropolitan teaching hospitals in New South Wales, Australia, who self-identified as experiencing stress in the workplace took part in a mindfulness-based stress reduction (MBSR) programme (Foureur et al. 2013). This intervention was designed to increase the of coherence and improve the health of midwifery and nursing populations and also to decrease depression and anxiety. The workshop facilitator delivered this one-day workshop, introduced the research, then went on to discuss the impact of stress on being in the present moment, introduce the concept of mindfulness, describe grounding and diffusion strategies and report how participants might form 'effective habits' (Foureur et al. 2013).

Participants also received a copy of a 'mindfulness practice CD', and were asked to complete three questionnaires prior to workshop attendance and again 4–8 weeks after participation. Of those who participated in follow up surveys, N = 14 (50%) provided log books of their experiences, N=28 (70%) of participants returned the post-intervention surveys, and N=10 (35.7%) of those participants contributed their experiences within either a focus group or individual interview (Foureur et al. 2013). Participants reported that they practised their newly learnt techniques over 44.4% of the available daily practice periods.

Foureur and colleagues used the short form GHQ-12 questionnaire (Goldberg et al. 1997), the SOC – Orientation to Life scale (Eriksson and Lindstrom 2006) and the DASS scale to evaluate an adapted MBSR intervention (Lovibond and Lovibond 1995). A reduction in stress levels for some participants was reported. Statistically significant differences were found on scores for the GHQ12 measure, the SOC-Orientation to life scale and the stress subscale of the DASS, where improvements were seen in the general health of midwives, their sense of coherence and orientation to life. One's sense of coherence has been defined as "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that 1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable, 2) the resources are available to one to meet the demands posed by these

stimuli; and 3) these demands are challenges, worthy of investment and engagement" (Antonovsky 1987) p. 107. The concept of one's orientation to life comprises of three components signifying an ability to cope with stress; life's meaningfulness, comprehensibility and manageability (Antonovsky 1987).

Another evaluation of a mindfulness based programme recruited 38 midwives out of a cohort of 43 healthcare staff to participate in an 8-week course (Warriner, Hunter and Dymond 2016). This study reveals a set of practices that can be incorporated into daily life to help break the cycle of unhappiness, stress, anxiety and mental exhaustion. The course, 'Mindfulness: Finding Peace in a Frantic World' runs for 60-90 minutes per week, and participants are invited to commit to 30 minutes of home practice daily for 6 days of the week. For this study, 46 participants were recruited, with 43 completing the course. Of these participants, 78% (n= 36) were identified as midwives. Course attendance averaged 87% for available sessions, non-attenders largely cited unavailability due to work shifts, sickness and vacation leave as reasons for absence.

Immediate post-intervention evaluation questionnaires indicated that 97% of participants found the course helpful, useful and would recommend it to others. Ongoing benefits were observed via a 4-6-month post-intervention questionnaire, where the majority of participants reported a sustained positive impact on stress (83%, n=19), anxiety (68%, n=15), resilience (70%, n=16), self-compassion (74%, n=17) and mindfulness (91%, n=21) (Warriner, Hunter and Dymond 2016). At the end of the 4-6 month follow up period, the majority of staff reported that they were applying their newly learnt skills either weekly or daily. At this time, 50% (n=6) of the participants who reported that depression was relevant to them, also reported that the mindfulness course had had a positive impact on their mood. Overall, this study reports significant and positive impacts for staff, as respondents reported benefit in home life (87%, n=20) work life (91%, n=21) and the culture of their workplace (59%, n=13) (Warriner, Hunter and Dymond 2016).

With regards to clinical supervision being delivered as an intervention provided by a clinical psychologist over 6 sessions, Wallbank reports a significant reduction in subjective stress levels, burnout and compassion fatigue (Wallbank 2010). The clinical supervision

being delivered in this study was 'restorative' in nature, and applied the Solihull approach (Douglas 2006).This approach uses 'containment' as a method of processing anxiety and emotions so that the ability to 'think' is restored.

Thirty midwives and doctors participated in this study, and were allocated (presumably equally) to either a control (n=15) or treatment (n=15) group. Wallbank utilises the PANAS Schedule, the ProQol scale and the IES scale to calculate standardised measures before and after treatment. The treatment group received 6, one-hour clinical supervision sessions delivered by a clinical psychologist. Within the treatment group, there was a significant difference in the amount of subjective stress scores ($p<0.0001$), with average scores decreasing from 29 to 7. There was also a significant difference found in compassion satisfaction scores, as average scores increased from 37 to 41 ($p=.001$). Compassion satisfaction can be defined as the experience pleasure one gets from helping others (Fligey 1995). Additionally, average burnout scores decreased from 27 to 14 ($p<0.0001$) and compassion fatigue/secondary trauma average scores decreased from 16 to 12 ($p=.004$). For the control group, follow up results showed no statistically significant differences between post-study scores and earlier scores, apart from those relating to compassion fatigue, where scores slightly increased, yet were still not significant ($p=0.846$).

Interpretation of confidence intervals and effect sizes

Of the 6 papers retrieved, 3 provided enough statistical data to calculate CI and/or effect sizes for the outcomes measured (Foureur et al. 2013, Wallbank 2010, Warriner, Hunter and Dymond 2016). As shown in table 6, only two studies were suitable to calculate effect sizes via Cohen's d (Foureur et al. 2013, Wallbank 2010). More recently, Cohen's d has defined size effects to be either d (0.01) = very small effect, d (0.2) = small effect, d (0.5) = medium effect, d (0.8) = large effect, d (1.2) = very large effect, and d (2.0) = huge effect (Sawilowsky 2009). As such, the study by Wallbank has demonstrated a large effect size in measurements of compassion satisfaction and a medium effect size in measurements of compassion fatigue for the intervention group receiving clinical supervision (Wallbank 2010). Huge size effects were also noted for this group in measurements of burnout and

the composite scores associated with the total stress impact of events. However, for the control group, all size effects were calculated to be either small or very small.

In the study by Foureur and colleagues, medium size effects were calculated in scores relating to participants' orientation to life, stress, comprehensibility and general health based on dichotomous scoring (Foureur et al. 2013). Large size effects were calculated for scores relating to general health based on the sum of likert ratings, and scores relating to manageability, meaning, depression and anxiety were calculated to be small. A positive or negative Cohen's d represents the direction of the effect. For example, a negative effect size indicates an increase between the mean values, and a positive effect size indicates a decrease between the mean values.

Confidence intervals can be interpreted as being relatively narrow (e.g. 0.40 to 0.50), to being very wide (e.g. 0.50 to 1.10) (Schünemann et al. 2008). As such, none of the CI presented in table 6 can be defined as narrow. The wider intervals calculated demonstrate uncertainty in the estimated range within which one can be reasonably sure that the true effect or result actually lies. As these studies included small sample sizes, wider confidence intervals are to be expected, yet less assurance about the effects or results in these cases can be interpreted without larger sample sizes, reduced dropout rates and further information.

However, coupled CI values on the same side of zero (either positive or negative) indicate that an effect or result is significant. This is demonstrated in the study conducted by Wallbank, where each of the statistically significant CI for the treatment group fall on either the negative or positive side of zero, whilst the statistically insignificant CI presented for the control group do not (Wallbank 2010). Raw data were not available for these calculations.

Qualitative Study Findings

In Foureur and colleague's qualitative analysis of the effectiveness of an MBSR programme, 8 participants described feelings of being relaxed, calmer and more focused as a result of participation. Participants also described a new-found realisation of the importance of self-care, an increased capacity to be more aware of people, a tendency to

seek help more freely, and be able to control thoughts and stress more effectively (Foureur et al. 2013). However, for a small minority of participants, there was a clear view that their participation in MBSR had done little to ameliorate their workplace stress, and one participant experienced feelings of dizziness, nausea and was "concerned about the safety to the 'soul'". This study reports that the majority of participants who received this intervention experienced short term insights into the impact of stress on cognition, emotions and behaviour, and developed strategies for being in the present moment (Foureur et al. 2013).

Van der Riet and colleagues piloted another 7-week stress management and mindfulness intervention, designed to build resilience, reduce stress levels and improve concentration (van et al. 2015). Here, 14 nursing and midwifery students were invited to participate in seven, weekly 1-hour sessions. Each session involved a didactic component and an experiential component. During these sessions, the practice of sitting mindfulness was taught. This involves the participant sitting in an upright position and meditating in order to 'pay attention' to oneself. Participants were trained to scan their bodies and focus upon various physical sensations. Students were then encouraged to practise the exercises regularly at home in between formal sessions (van et al. 2015).

Two weeks after the concluding mindfulness session, 10 first year nursing and midwifery students participated in a 60-minute semi-structured, focus group interview. Many reported that they could not wholly engage with this intervention, and only 1 student attended all seven sessions. Participants also reported becoming more attentive towards themselves and others and better able to care for themselves and others in conjunction with an increased self-awareness and reduction in negative cognitions (van et al. 2015). Students described an increased sense of 'presence', 'balance' and 'focus'. Overall, this study reports that participants experienced increased concentration and clarity of thought, in conjunction with increased awareness and a reduction in negative cognitions (van et al. 2015).

McDonald and colleagues explore the efficacy of an intervention consisting of 6 work-based resilience workshops partnered with a mentoring programme delivered over a 6-

month period (McDonald et al. 2013). At three phases of study: pre-intervention; immediately post-intervention; and at 6 months' post-intervention, 14 nurses and midwives were invited to participate in face-to-face, semi-structured interviews.

This intervention encouraged participants to draw, paint, build collages, use art, photography interpretation, music, journaling and creative movement as work-based learning tools. In reference to resilience building, this creative expression was used to explore constructs and emotional responses that were difficult to express by words alone. During workshops, hand massage, relaxation techniques and aromatherapy were introduced to promote work-related stress relieving strategies. Explicitly, this workshop series explored the topics of mentoring, establishing positive nurturing relationships and networks, building hardiness, maintaining a positive outlook, intellectual flexibility and emotional intelligence, achieving work/life balance, enabling spirituality, reflective and critical thinking, and moving forward and planning for the future with participants.

Participants included a combination of enrolled nurses, registered nurses and registered midwives, some holding dual qualifications. Following participation, both personal and professional gains from these work-based resilience workshops partnered with a mentoring programme were reported. These gains are described by the researchers as experiential learning opportunities, creative self-expression, exposure to new ideas and strategies, increased assertiveness at work, improved workplace relationships and communication, increased collaborative capital, and an increased understanding of self-care practices (McDonald et al. 2013). In another paper, referring to the same workplace intervention, the 14 nurses and midwives reported an improved sense of wellbeing and a reduction in stress when interviewed following its delivery (McDonald et al. 2012). Following participation in these work-based resilience workshops partnered with a mentoring programme, nurses and midwives also reported being able to communicate better with staff whom they feel may be hostile or manipulative towards them.

Those who engaged with these work-based resilience workshops partnered with a mentoring programme reported that they were able to develop self-care strategies and adopt a more self-caring attitude (McDonald et al. 2013). Through partaking in creative

activities, participants also reported that they were better able to develop an internal dialogue, drawing attention to their individual strengths and the hostile aspects of working the healthcare services (McDonald et al. 2013). Participants also report a willingness and improved ability to monitor and maintain resilience strategies for both themselves and their colleagues (McDonald et al. 2012). Professionally, colleagues participating in this intervention noted a closer group dynamic, more supportive communication, assertiveness and confidence in the clinical setting. Overall, these two papers reporting on the same intervention, state that work-based, educational interventions that focus on personal resilience have significant potential to empower, improve participants' wellbeing and reduce stress in both clinicians and students. However, it is unclear which findings relate exclusively to the midwives who engaged with this intervention type.

Line of argument synthesis

For these samples, participating in these interventions can have a positive effect on a variety of outcomes in relation to work-related psychological distress. However, the experiences of a small minority are less favourable, and others are unable to engage wholly in these interventions as provided. Clinical supervision may produce short-term positive benefits, yet those who practice newly learnt mindfulness techniques regularly, and participate in resilience workshops partnered with a mentoring programme may experience positive effects over a longer period of time.

Midwives and student midwives who engage with interventions designed to support them can experience increased cognitive function, improved working relationships with colleagues and a greater appreciation of self-care practices. Feelings of being relaxed and facing the present moment with a sense of clarity can also be experienced. Additionally, as midwives and student midwives develop strategies to manage their own psychological and workplace experiences, they can also develop assertiveness, improved communication skills and workplace resilience. The consensus of these studies is that interventions designed to support midwives and/or student midwives in work-related psychological distress can provide a range of both personal and professional benefits for

users. However, given the lack of data for comparison, small sample sizes and a lack of high quality studies, this line of argument synthesis is tentative.

Risk of bias across studies

As the studies within this review report either significant or favourable results, they may be more likely to be published than studies with non-significant or unfavourable results, and therefore be at risk of publication bias. Time lag biases may also be present within the studies selected, however, due to lack of relevant information these cannot be explored. Language biases, where non-English language articles are more likely to be rewritten in English if they report significant results are not likely in this case, as the studies selected for review were conducted within majority native English speaking countries. Selective outcome reporting is recognised where non-significant study outcomes are entirely excluded on publication, however, it is not possible to assess these biases in this case without access to individual participant data.

Discussion

This systematic mixed-methods review has identified 6 papers and 5 studies which evaluate interventions designed to support midwives and/or student midwives in work-related psychological distress. The strength of evidence for each of the outcomes reported in any of these studies cannot be rated highly. These studies include evaluations of 3 MBSR programmes, 1 work-based resilience workshop partnered with a mentoring programme, and the provision of clinical supervision.

Specifically, clinical supervision, the formal provision by senior/qualified health practitioners of intensive, relationship-based education and training, that is case-focused and which supports, directs and guides the work of colleagues (supervisees) (Milne 2007), has been found to result in a marked reduction in subjective stress levels (Wallbank 2010). Here, medium, large and huge effect sizes were noted for the treatment group, whereas either small or very small effect sizes were calculated for the control group.

Evaluations of work-based resilience workshops partnered with a mentoring programme reported enhanced confidence levels, increased self-awareness, improved assertiveness and an increased focus upon self-care in midwifery populations, where midwives felt

better able to build and maintain their personal resilience (McDonald et al. 2012, McDonald et al. 2013). This particular work-based intervention has also been found to have a sustained positive effect upon stress, anxiety, resilience and self-compassion (McDonald et al. 2013).

Participation in a mindfulness intervention was associated with short term insights into the impact of stress on cognition, emotions and behaviour, an increased sense of wellbeing, increased self-awareness and a reduction in negative cognitions for midwives in distress (van et al. 2015). Mindfulness can be highly acceptable to midwives, who reported ongoing and significant benefits in both their home and work life, and upon the culture of their workplace (Warriner, Hunter and Dymond 2016). Mindfulness practice was also seen to result in better general health; a more positive orientation to life; improved comprehensibility; and lower stress levels (Foureur et al. 2013). For these outcomes, 'medium' and 'large' size effects were calculated, yet effect sizes relating to manageability, meaning, depression and anxiety were calculated to be 'small'. Nevertheless, these studies are too few in number to form a recommendation that providers of health care services should implement these interventions to support midwives and/or student midwives in work-related psychological distress.

The outcomes measured within these interventions reflect the central element of the revised transactional model of occupational stress and coping in relation to the assessment of current occupational stress levels (Goh, Sawang and Oei 2010). Yet within these studies, some participants who receive mindfulness interventions found it challenging to attend sessions and complete any 'homework' given (Foureur et al. 2013, van et al. 2015, Warriner, Hunter and Dymond 2016). This can be in part due to clinical work pressures, the provision of uncomfortable surroundings, programme structure and time limitations (Foureur et al. 2013, van et al. 2015). As such, any future intervention would only be feasible if midwives are afforded time within the busy clinical workplace to dedicate themselves to committed and ongoing participation. It may also be prudent to develop and explore more flexible and accessible ways to deliver effective support to midwives and/or student midwives in work-related psychological distress.

The components which structure these interventions generally focus upon the development of effective coping strategies and the appraisal of stressful events in line with the revised transactional model of occupational stress and coping presented by Goh and colleagues (Goh, Sawang and Oei 2010). Nevertheless, in relation to those in work-related psychological distress, there are often no reliable clinical biomarkers present to assess the effectiveness of interventions designed to support such populations. Therefore, it is the user-reported outcomes which become the principle way in which the effectiveness of an intervention can be assessed (Buhse and Mühlhauser 2015). The majority of user-reported outcomes in the studies presented were positive in nature. Thus, the user-reported outcomes achieved have established effectiveness for these particular interventions in dealing with work-related psychological distress. This review has also been able to measure effectiveness by empirically calculating effect sizes where possible. The majority of the effect sizes calculated were positive, therefore any outcomes correlated to these can also be described as effective to a greater or lesser extent. However, it must be noted that any assessments of effectiveness are usually made during the evaluation phase, rather than during the pilot and feasibility testing phase of developing a complex intervention (Craig et al. 2008).

This review chose to utilise the MAStARI data extraction instrument from JBI-NOTARI (Pearson 2004), as this instrument has an evidence based ability to enable a reviewer to efficiently extract evidence using an information mastery approach. In order to assess the quality of such evidence within the retrieved studies, this review had originally considered using the 'Strength of Recommendation Taxonomy' (SORT) (Ebell et al. 2004) and the Cochrane risk of bias tool (Higgins and Altman 2008). However, although these tools are deemed to be scientifically rigorous in nature, they would have been inappropriate for the majority of mixed-methods research retrieved by this review, and therefore underutilised, as certain elements of the appraisal and data extraction process would not apply.

Had this study employed the Grading of Recommendations, Assessment, Development and Evaluations (GRADE) guidelines to assess risk of bias and study quality, a wider range of methodological flaws within a wider range of studies may have been possible (Guyatt et al. 2011). This tool also enables the reviewer to assess the consistency and

generalisability of results across a range of studies. As such, this tool would have been a preferred option, had a larger sum of studies been retrieved. Yet with a small number of mixed-method research in need of appraisal, the scoring system for appraising mixed-methods research, and concomitantly appraising qualitative, quantitative and mixed-methods primary studies in mixed reviews, as published by Pluye and colleagues was considered to be most appropriate (Pluye et al. 2009). This was because this tool enabled the researcher to quality appraise all of the study types selected for inclusion methodically, concomitantly and efficiently. For this same reason, the assessment of methodological rigor tool devised by Hawker and colleagues was applied at study level (Hawker et al. 2002). These research decisions have certainly strengthened the rigor and quality of research in this regard.

The aim of this systematic mixed-methods review was to focus on midwives and student midwives, yet the populations included within the studies retrieved were more heterogenic than just midwives and/or student midwives alone. None of the studies within this review solely related to either qualified midwives or student midwives. Given that there are interventions designed exclusively to support the wellbeing of other groups of healthcare professionals at work, future intervention research could usefully account for the fact that the midwifery profession is a separate profession, which may also require targeted support.

Additionally, none of the interventions identified focussed upon either the organisational or the societal aspects of supporting staff in work-related psychological distress. Instead, the included studies focus upon individualised interventions. Similarly, interventions which draw from stress-specific transactional models of stress are also primarily focussed upon the individual. This is demonstrated in the review of such interventions conducted by Ryan and colleagues (2017), where all but one was "individual"-focused. Likewise, the revised transactional model of occupational stress and coping presented by Goh and colleagues also focusses upon appraisal, coping strategies and outcomes in relation to the individual, rather than the organisation (Goh, Sawang and Oei 2010).

However, the paucity of attention given to both the organisational or the societal aspects of supporting staff in work-related psychological distress may lead to the conceptualisation that the burden of work-related psychological distress is primarily an individualised responsibility, rather than a corporate or societal responsibility. The challenge will be to explore the development of a wider range of support interventions more rigorously. Future intervention studies may be improved by recruiting larger samples to focus upon longer-term outcomes for midwifery populations. It will also be important for any new or ongoing pilot studies to progress towards undertaking adequately powered randomised controlled trials.

Limitations

This review is limited to international findings captured within first world countries. Other studies may have avoided retrieval, as this search strategy was conducted using only the English language. Owing to a paucity of information, it has not been possible to conduct additional analysis such as sensitivity, subgroup analyses, meta-analysis or meta-regression.

Two of the papers retrieved provided case studies in relation to one single intervention. This may have altered the weight of evidence in this regard. This has also meant that the same 14 participants have been studied within 2 of the papers retrieved.

There is no clear understanding of how these particular interventions lead to the outcomes they produce. In order to identify those interventions which may be most suitable for future use, it is important to understand how any current interventions function (Moore et al. 2015). This form of process evaluation in the assessment of any complex intervention is imperative, because these evaluations assist developers and decision makers to distinguish between interventions that are fundamentally flawed (failure of intervention concept or theory) and those that are poorly delivered (implementation failure) (Craig et al. 2008, Rychetnik et al. 2002). Process evaluations may examine the views of participants, help to correct implementation problems, distinguish between an intervention's components, explore the process of implementation, receipt, and setting of an intervention, investigate any contextual and/or variable factors, assess

potential reach and support the interpretation of findings (Wight and Obasi 2003). As such, the interventions identified within this review along with any new interventions in development could be optimised by undertaking process evaluations to identify and overcome implementation problems.

Additionally, some baseline data is absent and it is unclear whether treatment fidelity measures have been used to assess delivery. Interventions are also not described in such a way that these studies could be accurately replicated (Craig et al. 2008). Moreover, workplace distress, and any change in the experience of or response to workplace distress, was not directly measured. Sample sizes were also small. Moreover, the heterogeneity of these samples made some findings difficult to extrapolate solely to midwifery populations. The retrieved studies are not of high quality, and only one study included a control group. Therefore, some of the outcomes apparent may be due to other factors such as social desirability effects or the therapeutic alliance with those administering the intervention rather than the type of intervention or mode of delivery per se.

Conclusion

At present, there is a lack of high quality studies which identify and evaluate potential interventions to deliver effective support for midwives in work-related psychological distress. This systematic mixed-methods review has retrieved and analysed 6 papers. These papers present the outcomes of mindfulness interventions, work-based resilience workshops partnered with a mentoring programme, and the provision of clinical supervision, and the experiences of the midwives in work-related psychological distress who engage with them. The findings from these studies illustrate a range of benefits and constraints associated with each intervention as they pertain to the midwifery workforce.

All selected studies reported a variety of both personal and professional benefits for midwives. This is the first mixed-methods systematic review to report the outcomes and experiences associated with the use of interventions designed to support midwives and/or student midwives in work-related psychological distress.

Similar reviews of interventions designed to support the psychological wellbeing of healthcare professionals in the workplace report encouraging results (Guillaumie, Boiral and Champagne 2016, Murray, Murray and Donnelly 2016, Regehr et al. 2014, Romppanen and Häggman-Laitila 2016, Ruotsalainen et al. 2015). Yet likewise, these other reviews do not identify high quality studies in relation to interventions designed to support midwives and/or student midwives in work-related psychological distress. Targeting midwifery populations for future intervention research may permit more concrete conclusions about the most effective design and delivery of such interventions.

One other review in relation to preventing stress in the healthcare workforce has included midwifery populations, and found that a variety of mindfulness interventions were beneficial to a variety of healthcare professionals (Burton et al. 2016). In line with the current review, this review also suggests that future intervention studies may wish to explore the provision of more flexible and accessible interventions. Although relevant in relation to midwifery populations, this review was restricted to the findings presented by Foureur and colleagues (Foureur et al. 2013).

Additional research is needed to build on this early foundation of evidence, and clarify which interventions or combinations of interventions might be most effective in addressing the pervasive problem of work-related psychological distress in midwifery populations. More flexible interventions, which provide a larger number of midwifery populations with wider access to support, perhaps online or away from scheduled sessions may secure greater adherence rates and isolate effects to determine which elements are affecting which outcome measures.

In terms of this research, the positive findings from this review would suggest that the components of these interventions should be considered for online development. Yet many of these components may only be suitable for face-to-face delivery. Additionally, it is unclear which components and interventions would be preferred by midwives. The next logical step in research will be to ascertain which components and which interventions may be most suitable for online development, and which may be preferred by midwives.

Ultimately, to secure excellence in maternity care, more rigorous, well-designed and generalisable studies in this area of intervention research are required.

This chapter has presented a systematic mixed-methods review of interventions designed to support midwives in work-related psychological distress. Overall, this thesis proposes that an online intervention may be useful to some midwives seeking support. Yet this review has demonstrated that although existing interventions may be somewhat effective, they are currently all delivered face-to-face. Therefore, there may be some scope to deliver some of these promising interventions online.

Online clinical supervision, although feasible would ideally require the professional to develop a trusting relationship with a supervisor prior to engaging in clinical supervision online (Kanz 2001). Additionally, it has been suggested that in order to be most effective, a sufficient amount of in-person time should be included within programmes of clinical supervision (Rousmaniere 2014). This would mean that confidentiality, anonymity and effective online clinical supervision as it has been described within this chapter may not be compatible in this context. Equally, the work-based resilience workshops partnered with a mentoring programme as they have been described within this review are not wholly transferable to an online environment. Yet mindfulness-based interventions delivered online have the potential to contribute to improving mental health outcomes, particularly stress, and as such, their use could be very applicable in an anonymous and confidential online intervention (Spijkerman, Pots and Bohlmeijer 2016).

In relation to the components of an online intervention to support midwives, the preferences of midwives are not yet known. As such, the next logical step in this research will be to achieve consensus in the preferences of midwives in relation to whether midwives would prioritise mindfulness-based and other components in an online intervention designed to support them. Therefore, the next chapter of this thesis aims to explore the priorities of midwives in the development of an online intervention designed to support them.

Chapter Four: Achieving consensus in the development of an online intervention designed to support midwives in work-related psychological distress: A Delphi Study

This thesis has explored the outcomes and experiences associated with interventions designed to support midwives and student midwives in work-related psychological distress. It has also evaluated the ethical issues in relation to the development of a complex online intervention designed to support midwives and student midwives in work-related psychological distress. The chapter previous to this has established that there are currently no interventions intended solely for either qualified midwives or student midwives in work-related psychological distress, and that these groups may require more flexible and accessible support. As this thesis proposes that an online intervention may be one option that some midwives experiencing work-related psychological distress may find useful, it is important to identify which components of an online intervention may be most preferable to this user group.

Accordingly, this chapter seeks the consensus of an expert group in what should be prioritised in the design and delivery of an online intervention designed to support midwives in work-related psychological distress. Research activities such as this are recommended by the MRC framework for developing complex interventions, to be conducted during the early development and planning phases of research (Craig et al. 2008). This study has been published elsewhere (Pezaro and Clyne 2016). The findings from this research and will ensure that any future co-production, development and evaluation of any online intervention of this type can be informed by the preferences of midwives and other key stakeholders.

Generally, online interventions offer unique benefits such as greater accessibility, anonymity, convenience and cost-effectiveness (Christensen, Batterham and Calear 2014). Yet it is not currently known what the most effective design and delivery method for an online intervention designed to effectively support midwives in work-related psychological

distress would be. Neither is it currently known what the preferences of midwives and other stakeholders would be in this regard. In order to address these gaps in research, the Delphi method has been chosen as an appropriate research method.

The Delphi Method

The Delphi method was chosen due to its ability to facilitate anonymous discussion, regardless of the geographical distances between participants (Hasson, Keeney and McKenna 2000). Anonymity within the group reduces the likelihood of any one person dominating the conversation due to perceived status or expertise (Hannes et al. 2015). The anonymity the Delphi method facilitates can also allow for a disinhibited freedom of speech, which in turn, leads to a more open opinion giving (Strauss and Zeigler 1975).

The Delphi technique has been used extensively within health, social science and intervention research (Efstathiou, Ameen and Coll 2008, Walker and Selfe 1996, Webber et al. 2015). The Delphi method is concerned with gathering the opinions of experts (Habibi, Sarafrazi and Izadyar 2014, Hasson, Keeney and McKenna 2000). As such, the Delphi method was considered to be a suitable research tool to develop expert consensus about the design and delivery of an online intervention to support midwives and/or student midwives in work-related psychological distress (Powell 2003).

The distinct characteristics of the Delphi technique result in:

1. Anonymity

2. Iteration

3. Controlled feedback about one's own and the groups' response

4. A group response where a statistical criterion is used to define consensus (Jorm 2015, Rowe and Wright 2001).

Rationale

Although earlier chapters have drawn on existing evidence and theory, this research can be built upon via the undertaking of new research, involving stakeholders to identify priorities for the design and delivery of an online intervention designed to support

midwives. Finding the most effective components for an online intervention to support midwives will require this wider expertise (Michie et al. 2005, Noar and Zimmerman 2005).

Many key guidelines for developing complex interventions identified within one critical review suggest that an intervention can be developed and refined in light of data gathered through the opinion of 'experts' (Corry et al. 2013). The Delphi technique has previously been used successfully to garner nurses' expert opinions of workplace interventions for a healthy working environment (Doran et al. 2014). As such, the Delphi method was considered appropriate for this early stage of research, as it aptly facilitates the process of deciding upon priorities for the design and delivery of a complex online intervention designed to support midwives (Craig et al. 2008).

The research question associated with this chapter is: What are the areas of expert consensus in relation to the delivery, features, functionalities and components of an online intervention to support midwives and/or student midwives in work-related psychological distress?

Participants

There are no clear guidelines in relation to what panel size is most appropriate for Delphi study design (Jorm 2015, Keeney, Hasson and McKenna 2001). Prior to the start of this study, it was decided that a minimum of 30 experts would be recruited to form the Delphi panel. Heterogeneity within the expert panel played an essential part in ensuring study quality (Powell 2003). Therefore, panel members were selected from different fields relating to midwifery care, healthcare, psychological distress, professional practice and academia. They were identified through a stakeholder analysis, presented in appendix 6.

Inclusion criteria

Participants were eligible to participate if they possessed all or some of the following practical knowledge in either: midwifery, midwifery education, research, therapies, healthcare services, staff experience or patient experience. Participants were also eligible if they had been listed as an author in at least one academic paper relevant to either

midwifery, psychological trauma, psychology, psychiatry or healthcare services. No exclusion criterion was applied. Inclusion criteria are shown in figure 6.

Figure 6: Delphi Study Participant Inclusion Criteria

Expert Panel Inclusion Criteria
Either: A listed author in at least one publication relevant to • Midwifery • Psychology • Psychological trauma • Psychiatry • Health care services And/or: Practical knowledge in • Midwifery • Midwifery education • Research • Therapies • Health services • Patient Experience • Staff experience

Participant recruitment

Participant recruitment for panellists began in September 2015. Key papers related to the subjects of midwifery work, psychological distress, online interventions and interventions designed to support mental wellbeing were screened for potential subject experts. A snowballing of the literature led to the scanning of reference lists and the identification of other key papers of relevance (Choong et al. 2014). The authors of these papers were then invited to participate in the study via email and social media contact with a formal invitation to become a part of the panel (Appendix 7).

It was decided that should less than 50 experts be recruited before the Delphi study commenced, an additional 50 people would be invited to participate in order to compensate for potential dropout rates and avoid a failure to achieve adequate panel numbers (n=30).

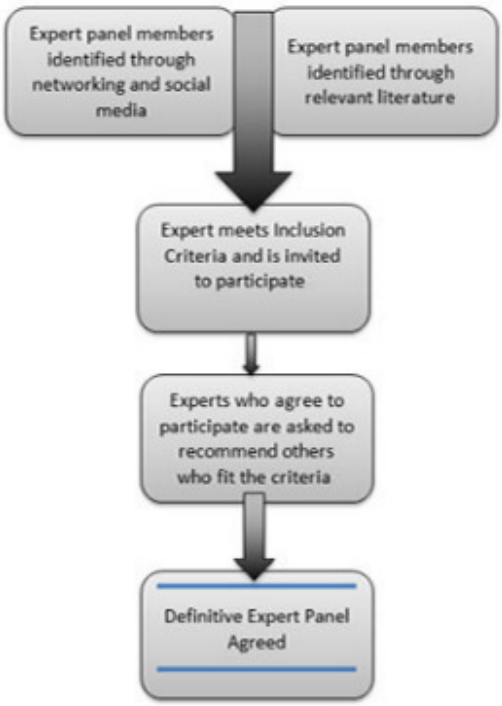
Social Network recruitment

It was anticipated that some experts recruited from the literature base may withdraw from the study during its course (Evers et al. 2005). Additionally, a literature based recruitment strategy alone may not have recruited the desired practical or clinical expertise in midwifery. Therefore, social media was also employed to recruit a wider variety of participants, and to compensate for potential dropout (Stewart, Sidebotham and Davis 2012). The researcher's social, academic and occupational networks were also consulted in order to identify potential experts who met the inclusion criteria. Suitable candidates received an email inviting them to participate in the Delphi study. In total, 185 experts were invited to participate.

Twitter is evidenced to be a highly effective tool for healthcare research recruitment (O'Connor et al. 2014). Twitter was used for research recruitment here due to its high-quality healthcare, research and academic communities in line with the study protocol, which is presented in appendix 18 and has been published elsewhere (Pezaro and Clyne 2015). Stakeholder groups identified in the stakeholder analysis were then asked to promote the study to their online followers. A link to a blog page with inclusion criteria, further information, support resources and an online survey was provided to facilitate this online recruitment (Pezaro 2015). Willing and suitable participants were then invited to express their interest in partaking in the study by contacting the researcher directly.

During this study, the research recruitment blog page was accessed 422 times. This blog page was also shared on Facebook 59 times, Linkedin 3 times and Twitter 47 times. Additionally, the blog page was shared to a further 236 unidentified websites by its readership. The destination of a further 77 shares via social media remain unknown. Figure 7 provides an overview of how experts were identified and recruited to participate within this study.

Figure 7: Delphi Panel Recruitment Process



Although participants remained anonymous throughout this study, some participants were keen to disclose their specific expert status. This research did not seek to verify the eligibility of each participant, participants simply consented to having the relevant expertise. The majority of participants who disclosed their expert status were either clinical and/or academic midwives. Other participants included psychiatrists, psychologists, healthcare, policy and midwifery leaders, and academic experts in the field of post-traumatic stress disorder, secondary trauma and psychological distress. Some experts also disclosed their country of origin as the United Kingdom, the United States of America, Australia, Nigeria, Israel, and Oman. However, the locations of each individual participant remain unknown.

Once experts had been identified, they were directed towards information about the aim and content of the Delphi Study. A formal invitation was also then disseminated (Appendix 7). Potential and recruited panel members were then asked to refer other suitable individuals to the study. This layer of recruitment aimed to eliminate any bias from

recruitment selection. This solicitation of nominations of appropriate field experts is also typically recommended as best practice in Delphi study design (Ludwig 1994).

Informed consent for all participants was obtained and collated as the first round of questioning began online. This included a consensual agreement to publish anonymised data and non-identifiable data results (Appendix 8). Participants were directed to appropriate support services both on and offline due to the sensitive nature of the subject matter. It was also specified that participants would receive copies of any publications which resulted from the study and a summary of outcomes.

Study Design

Achieving consensus is the primary aim of the Delphi Study, yet the measurement of consensus varies greatly. There is no firm agreement about the criteria for consensus within a Delphi study (Heiko 2012). Within this Delphi study, it was decided that a primary criterion of at least 60% of Delphi panel members must indicate a preference within 2 adjacent response points on a 7-point Likert scale for consensus to be reached. This scale was anchored at 'Not a priority' and 'Essential priority'. Any item could reach consensus at any point, whether at the higher or lower end of the scale. The presence of consensus in this study was specified in advance of data collection.

Rigid Delphi study designs have been criticised for their inability to allow their experts to elaborate on their opinions (Walker and Selfe 1996). Therefore, this Delphi design is a modified one (Beretta 1996, Habibi, Sarafrazi and Izadyar 2014), where the identity of experts remained unknown to the researcher, and free text response options accompany each statement put to panel members to provide experts with the opportunity to elaborate upon their opinions (Keeney, Hasson and McKenna 2001).

This 2-round Delphi study was conducted between the 9th of September and the 30th of November 2015. Accordingly, 39 questions about the design and delivery of an online intervention for midwives were posed to eligible participants over 2 rounds. Both rounds were completed online using Bristol Online Survey software and participants received anonymised feedback following both rounds. The aim of this study was to achieve

consensus in the design and delivery of an online intervention designed to support midwives in work-related psychological distress.

Development of questions in round one

Questions or 'statements' presented within the first round have been developed in response to the themes, literature and concepts which have emerged through chapters one, two and three. Questions from round 1 are presented in appendix 9. All statements are presented initially within appendixes 10 and 11. They are broadly themed around intervention design and practical inclusions, inclusions of therapeutic support and ethical inclusions. Whilst the development of these questions did not follow any specific method, they were peer reviewed in order to check for face validity prior to being presented to participants.

Firstly, as the components explored within chapter two may conflict with deeply entrenched values, and as such may hinder any further progress in developing this complex intervention (Craig et al. 2008), questions 1 to 5 were designed to achieve consensus about the provision of anonymity, confidentiality, amnesty and professional responsibilities online. These questions refer to signposting users to appropriate face-to-face support, reminding users of their professional codes of conduct, and confidentiality, anonymity and thus the provision of amnesty within this complex online intervention. Questions 18 and 19 also refer to email logins and online moderation. Although these may be seen as practical inclusions, they also refer to some of the ethical issues raised within chapter two. Questions 12 and 13 also refer to directing midwives toward alternate help and support, and other legal advice. These questions were also generated in response to the themes raised in chapter two. Such signposting and legal advice is also provided to other professional groups in healthcare by existing support interventions (Strobl et al. 2014).

Interactive learning components have been evidenced as being effective in supporting online users to better understand mental health (Brijnath et al. 2016). They have also been found effective in another intervention designed to support midwives in work-related psychological distress (McDonald et al. 2012, McDonald et al. 2013). This

intervention was identified within the systematic literature review presented in chapter three. As such, questions 6 and 7 were designed to relate to multimedia resources designed to assist midwives to recognise the signs and symptoms of psychological distress as a process. Similarly, questions relating to help seeking, sign posting and user assessments were related to the process of appraisal as guided by the revised transactional model of occupational stress and coping (Goh, Sawang and Oei 2010). Likewise, as self-management e-resources in mental health have the potential to be widely effective (Karasouli and Adams 2014, Lehr et al. 2016), questions 8 -11 related to the provision of online self-management techniques. Such self-management strategies have also been effective in another intervention designed to support midwives identified within the systematic literature review presented in chapter three (McDonald et al. 2012, McDonald et al. 2013). The question specifically relating to mindfulness also reflects the findings of chapter three, where three mindfulness interventions were found to be of benefit to midwives seeking support (Foureur et al. 2013, van et al. 2015, Warriner, Hunter and Dymond 2016).

Social support networks, peer support, networking and the sharing of experiences have also been suggested by the largest online survey of midwives as being required for midwives to feel safe, secure and satisfied in their working life (World Health Organization 2016). As online support communities or 'social networking' tools as they are defined in chapter one can be of particular benefit to those seeking psychological support (Wright 2016), questions 14-17 related to the sharing of personal experiences, a peer to peer discussion chat room and the communication of any work or home-based subjects of distress. These coping strategies can also be related to the 'coping strategies' component of the revised transactional model of occupational stress and coping (Goh, Sawang and Oei 2010). As the findings presented within the mixed-methods systematic review presented in chapter three demonstrate how some midwives can find it challenging to attend planned sessions or complete structured homework, question 20 refers to the flexibility of having access to an online support intervention whilst mobile.

Development of new questions for round two

Statements that did not achieve consensus in Round 1 were returned to participants in Round 2. In addition, 10 new statements were included in Round 2 on the basis of participant comments in Round 1. Again, whilst the development of these questions did not follow any specific method, they were peer reviewed in order to check for face validity prior to being presented to participants.

As some participants referred to the need to make an online intervention 'user friendly', question 10 referred to the creation of a familiar user interface, which may resemble other contemporary online platforms. As some participants referred to the provision of support being required in many parts of the world, question 11 referred to an online support intervention being available to midwives around the world. Questions 12 and 13 related to how such an online intervention should be moderated, as many participants were conflicted as to which approach may be most appropriate. As some participants expressed appreciation for the online intervention being available on a flexible basis, question 14 was expanded to ascertain whether or not the platform may be made available at all times. This need for flexibility in an intervention of this type is also reflected within the findings of the mixed-methods systematic review presented in chapter three.

Questions 15-18 were designed to achieve consensus as to how certain dilemmas may be best managed, as some participants expressed concerns for potential users who may be experiencing immediate crisis. As such, participants were asked to rate the priority of user assessments, data gathering, friends and family access and the identification of those at risk. Question 19 referred to the provision of a general statement in relation to professional codes of conduct, as some participants expressed moral discomfort in automatic reminders being repeatedly sent out to users. Again, these new questions posed in round two also reflect the ethical and practical issues raised in chapter two, and reflect the appraisal and coping components of the revised transactional model of occupational stress and coping (Goh, Sawang and Oei 2010).

Procedure

Panellists were invited to read the participant information listed in appendix 7. Subsequently, panellists were invited to participate in completing the first and second rounds of this study by following an online link to rate the statements presented. Expert panellists were only sent further correspondence if they indicated an initial interest in participation. In the absence of any response to either of the invitations sent, it was assumed that the recipient no longer had an interest in participating, and therefore received no further correspondence.

Experts who indicated that they would like to participate within the study but did not respond to the first round were sent 2 reminders via email or social media contact. Similarly, those who participated in round 1 but did not respond to the second round of questioning were also sent 2 reminders via email or social media contact. In order to withdraw from the study, experts had to directly contact the researcher and explicitly state their withdrawal.

2 weeks were allocated for Delphi subjects to respond to each round of questioning in line with similar studies and recommendations (Hsu and Sandford 2007). In total, a 5-week interval between the initiation of the first round and the start of the second round of questioning was allocated to participants to respond. Following each round, those who participated were sent a participant report (Appendices 10 and 11). Prompting reminders were also sent to participants 1 week before each round began in order to maximise participation.

Round 1

Round 1 comprised a list of 20 statements relevant to the delivery, features, functionalities and components of an online intervention to support midwives in work-related psychological distress. Participants were asked to choose a number that best represented their response to each statement with a 7-point likert response scale. This scale was anchored at 'Not a priority' and 'Essential priority'. Two questions were given for each statement: 'Why did you choose this rating of priority?', followed by: 'Do you have any additional comments you would like to share?' Space for free text responses was provided after each question. Finally, panellists had the opportunity to suggest new questions to be put forward during the second round of questioning.

Round 2

The 66 participants who completed round 1 were invited to take part in this second round of questioning. All panellists received feedback on the panel's responses to Round 1. They were then asked to read and deliberate upon these results prior to being invited to participate within a second round of questioning. The report delivered to participants following Round 1 can be found in appendix 10. Statements that did not achieve consensus in Round 1 were returned to participants in Round 2. In addition, 10 new statements were included in Round 2 on the basis of participant comments in Round 1 that were not reflected by the content of an existing statement.

Respondents were again invited to provide comments through the provision of a free text response option for each item in this second questionnaire. They were also given the opportunity to disclose why they had chosen to mark each item with lower or higher priority within an open text field. A participant report, which outlined the results from round 2, was delivered to those experts who participated within this second round, and can be found in appendix 11.

Analysis

Responses placed upon the 7-point scale were calculated against the measurement of consensus set for this study. Any free text responses provided by participants to specific items were analysed via thematic analysis (Braun and Clarke 2006). All open text

responses were coded and then assigned to emergent themes in a succession of refinements. The themes and categorisations of statements were then revised and refined following an inspection and reflective discussion. This thematic analysis of qualitative open responses was presented within table format and feedback to panel members after each round. The authorship of statements remained unknown throughout.

The mean, minimum and maximum score for each item was calculated and reported to panel members as feedback after each round. Basic numerical outcomes were also presented to panellists as percentages, where either the presence or absence of consensus could be confirmed. Analysis reports and results for both round 1 and round 2 are presented within appendix 12 and 13 respectively.

Results

Of those who were invited to participate in the study 35.7% (66/185) completed Round 1, and 66.6% (44/66) of those who contributed to Round 1 completed Round 2. Of the 20 statements posed during Round 1, 11 statements achieved consensus and 9 did not. Of the 19 questions posed within Round 2, 7 statements achieved consensus and 12 did not, giving a total of 18 consensus statements from the 30 statements posed to panellists. In total, 1604 free text responses were collected and categorised into 2446 separate statements. One free text response was removed in order to maintain confidentiality. An overview of results is presented in Figure 8. Data from the thematic analysis of open text responses are presented within appendix 14. Detailed summaries of the numeric results from rounds 1 and 2 are presented in tables 7 and 8 respectively.

Figure 8: Overview of Round 1 and 2 statements, themes and statements achieving consensus

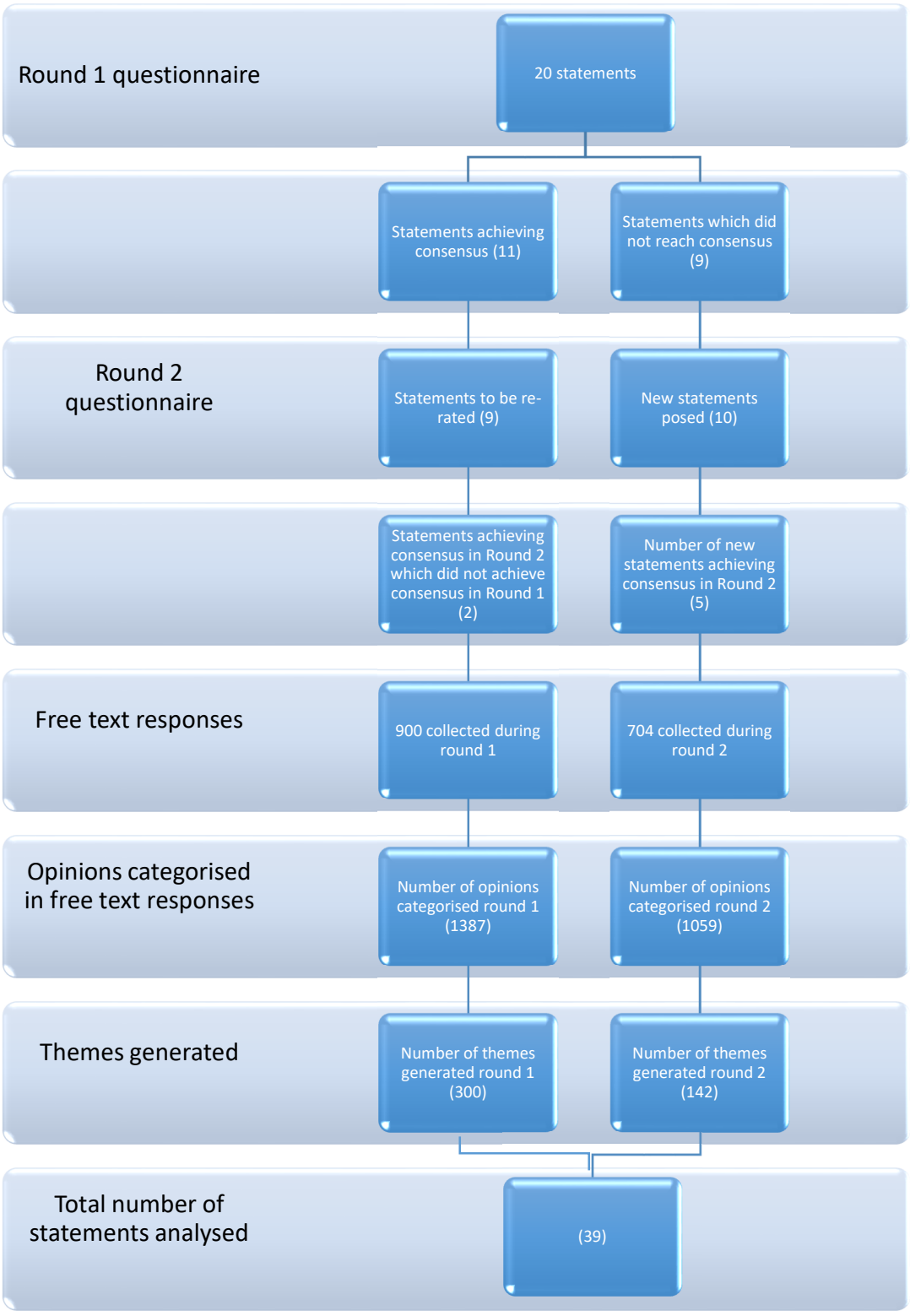


Table 7: Detailed summary of numeric results for Delphi study - Round 1

Statement	Consensus achieved	% of consensus	Minimum % score	Maximum % score
Ethical inclusions				
Confidentiality for all platform users and service users in all matters of discussion	Yes (high/essential priority)	90.90%	Not a priority/low priority/0/66 (0%)	Essential priority 54 /66 (81.8%)
Anonymity for all platform users and service users in all matters of discussion	Yes (high priority)	84.90%	Not a priority/low priority/0/66 (0%)	Essential priority 39/66 (59.1%)
Amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case	No	N/A	Low/somewhat a priority/3/66 (4.5%)	Essential priority 22/66 (33.3%)
Prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.	No	N/A	Somewhat a priority/0/66 (0%)	Essential priority 18/66 (27.3%)
Prompting platform users automatically to seek help, by signposting them to appropriate support	Yes (high/essential priority)	78.80%	Not a priority/low priority/somewhat a priority/0/66 (0%)	Essential priority 31/66 (47%)
Inclusions of therapeutic support				
The inclusion of Web-based videos, multimedia resources, and tutorials which explore topics around psychological distress	Yes (moderate/high priority)	68.20%	Not a priority/low priority/somewhat a priority/1/66 (1.5%)	High priority 27/66 (40.9%)
The inclusion of informative multimedia designed to assist midwives to recognize the signs and symptoms of psychological distress	Yes (high/essential priority)	71.30%	Somewhat a priority/0/66 (0%)	High priority 26/66 (39.4%)
The inclusion of multimedia resources which disseminate self-care techniques	Yes (high/essential priority)	74.20%	Low priority/0/66 (0%)	High Priority 29/66 (43.9%)
The inclusion of multimedia resources which disseminate relaxation techniques	Yes (moderate/high priority)	65.10%	Not a priority/low priority/somewhat a priority/1/66 (1.5%)	Moderate priority 23/66 (34.8%)
The inclusion of mindfulness tutorials and multimedia resources	Yes (moderate/high priority)	66.70%	Low priority/0/66 (0%)	High priority 27/66 (40.9%)
The inclusion of Cognitive Behavioural Therapy (CBT) tutorials and multimedia resources	Yes (moderate/high priority)	60.60%	Somewhat a priority/0/66 (0%)	Moderate Priority

				22/66 (33.3%)
The inclusion of information designed to inform midwives where they can access alternative help and support	Yes (high/essential priority)	86.40%	Not a priority/low priority/somewhat a priority/0/66 (0%)	Essential priority 31/66 (47%)
The inclusion of information designed to inform midwives as to where they can access legal help and advice	No	N/A	Not a priority/low priority/somewhat a priority/1/66 (1.5%)	Essential Priority 24/66 (36.4%)
Giving platform users the ability to share extended personal experiences for other platform users to read	No	N/A	Not a priority/1/66 (1.5%)	Moderate priority 17/66 (25.8%)
The inclusion of a Web-based peer-to-peer discussion chat room	No	N/A	Somewhat a priority/2/66 (3%)	High Priority 20/66 (30.3%)
Giving platform users the ability to communicate any work or home-based subjects of distress	No	N/A	Somewhat a priority/1/66 (1.5%)	Moderate priority/high priority 16/66 (24.2%)
Intervention design and practical inclusions				
An interface which does not resemble NHS, employer or other generic healthcare platforms	No	N/A	Low priority/somewhat a priority/2 (3%)	Essential priority 18/66 (27.3%)
A simple, anonymized email log-in procedure which allows for continued contact and reminders which may prompt further platform usage	No	N/A	Low priority/1 (1.5%)	Moderate priority 20/66 (30.3%)
An automated moderating system where “key words” would automatically initiate a moderated response	No	N/A	Not a priority/low priority/3 (4.5%)	Neutral 21/66 (31.8%)
Mobile device compatibility for platform users	Yes (high/essential priority)	71.20%	Low priority/somewhat a priority/0 (0%)	Essential priority 27/66 (40.9%)

Table 8: Detailed summary of numeric results for Delphi study - Round 2

Statement	Consensus achieved	% of consensus	Minimum % score	Maximum % score
Ethical inclusions				
Amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case	No	N/A	Not a priority/2/44 (4.5%)	High priority 9/44 (20.5%)
Prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct	No	N/A	Somewhat a priority/2/44 (4.5%)	High priority 9/44 (20.5%)
Inclusions of therapeutic support				
The inclusion of information designed to inform midwives as to where they can access legal help and advice	Yes (high/essential Priority)	65.90%	Not a priority/0/44 (0%)	High priority 17/44 (38.6%)
Giving platform users the ability to share extended personal experiences for other platform users to read	No	N/A	Not a priority/0/44 (0%)	High priority 11/44 (25%)
The inclusion of a Web-based peer-to-peer discussion chat room	Yes (moderate/high priority)	63.60%	Not a priority/1/44 (2.3%)	Moderate priority 15/44 (34.1%)
Giving platform users the ability to communicate any work or home-based subjects of distress	No	N/A	Not a priority/1/44 (2.3%)	Moderate/essential priority 11/44 (25%/25%)
Intervention design and practical inclusions				
An interface which does not resemble NHS, employer or other generic healthcare platforms	No	N/A	Not a priority/1/44 (2.3%)	Essential priority 13/44 (29.5%)
A simple, anonymized email log-in procedure which allows for continued contact and reminders which may prompt further platform usage	No	N/A	Not a priority/low Priority/0/44 (0%)	High priority 14/44 (31.8%)
An automated moderating system where “key words” would automatically initiate a moderated response	No	N/A	Low priority/2/44 (4.5%)	Neutral 13/44 (29.5%)
New items for consideration				
An interface which resembles and works in a similar way to current popular and fast pace social media channels (eg, Facebook)	No	N/A	Not a priority/0/44 (0%)	Neutral 12/44 (27.3%)
The inclusion of midwives from around the world	No	N/A	Not a priority/3/44 (6.8%)	Moderate priority 11/44 (25%)

Proactive moderation (ie, users are able to block unwanted content and online postings are “pre-approved”)	Yes (high/essential priority)	61.40%	Not a priority/1/44 (2.3%)	High priority 15/44 (34.1%)
Reactive moderation (ie, users are able to report inappropriate content to a system moderator for removal)	Yes (high/essential priority)	70.50%	Not a priority/1/44 (2.3%)	High priority 16/44 (36.4%)
24/7 availability of the platform	Yes (high/essential priority)	84.10%	Not a priority/low priority/0/44 (0%)	Essential priority 25/44 (56.8%)
The implementation of an initial simple user assessment using a psychological distress scale to prompt the user to access the most suitable support available	Yes (moderate/high priority)	70.40%	Not a priority/somewhat priority/1/44 (2.3%/2.3%)	High priority 25/44 (38.6%)
The gathering of anonymized data and concerns from users, only with explicit permission, so that trends and concerns may be highlighted at a national level.	No	N/A	Not/low/somewhat a priority/2/44 (94.5%)	Essential priority 15/44 (34.1%)
Access for a midwife's friends and family members	No	N/A	Essential priority/0/44 (0%)	Not a priority 17/44 (38.6%)
The follow up and identification of those at risk	Yes (high/essential priority)	63.70%	Low/somewhat a priority/1/44 (2.3%)	Essential priority 16/44 (36.4%)
The provision of a general statement about professional codes of conduct and the need for users to keep in mind their responsibilities in relation to them	No	N/A	Not a priority/1/44 (2.3%)	Essential priority 12/44 (27.3%)

Thematic analysis results

Raw data for round 1 and round 2 are presented within appendix 12 and 13 respectively. Spelling and grammatical mistakes made by the participants have been corrected accordingly.

Ethical inclusions

Confidentiality and anonymity were both considered to be an essential priority, with one participant describing how “some midwives would be fearful of people finding out they were finding it difficult to cope and would therefore seek anonymity to feel safe to access support” and another revealing how “anonymity would enable honesty and a true space to unburden” as “a confidential forum allows discussion to take place without feeling judged”. However, the corollary to confidentiality and anonymity, amnesty, is a source of tension, both within some participants who are ambivalent about amnesty and between participants with different perspectives.

Panellists remained largely conflicted in opinion about the provision of amnesty. Consequently, consensus was not achieved for the statement regarding amnesty in either Round 1 or Round 2. One comment illustrates this conflict well: “amnesty is an ethical issue, particularly relating to criminal matters, however without it midwives may not feel able to disclose their concerns causing distress”. Polarised views were also apparent, as one comment suggests that “people are not going to be fully revealing if they believe they will suffer as a result!” and another participant expressed concern that this statement “almost suggests that there may be grounds for this route to be considered”. Finally, one participant commented that “unless amnesty is assured confidentiality/anonymity won't be maintained”.

Opinion remained divided throughout both rounds of questioning about whether an online intervention designed to support midwives should remind users of their professional codes of conduct. Similarly, experts did not agree about whether the provision of a general statement about professional codes of conduct and the need for users to keep in mind their responsibilities in relation to them should be prioritised or not. Although participants expressed a loyalty to their professional codes of conduct, they also conveyed concerns about whether this may deter midwives from speaking openly and/or seeking help. There was also some concern that reminders about codes

of conduct may be seen as condescending. Experts were unable to agree upon whether this would inhibit the functionality of effective support or should be provided to reinforce the professional responsibilities of the midwife.

In terms of opening the online intervention up to global midwifery populations, many experts highlighted the challenges in relating to the various cultural and contextual differences across the globe. However, many acknowledged the need for midwifery support all over the world. Equally, when panellists were asked to consider whether an online intervention designed to support midwives in work-related psychological distress should prioritise access for a midwife's friends and family members, a consensus of opinion could not be reached. In this case, experts highlighted that midwives' may lose their anonymity if friends and family members were permitted access to the intervention. Many open text responses expressed the need to prioritise access to the intervention for midwives only. One in particular summarises that "while family and friends provide important support, the needs of the midwife should remain paramount."

Experts expressed a need to prioritise the implementation of an initial simple user assessment using a psychological distress scale to prompt the user to access the most suitable support available. This was largely "as individuals may not realise that they are in psychological distress "or "don't recognise the signs and symptoms of stress, PTSD, depression or anxiety". However, many remained unsure about what may trigger a response, how the user may be prompted, and what support may then be offered. Additionally, experts stated that midwives may feel uncomfortable with this level of screening. This point was also one of the reasons given by panellists reluctant to prioritise the gathering of anonymised data and concerns from users, even with explicit permission. Where many experts saw the benefits of capturing national trends, with one comment summarising that it may be "critical that trends are identified and strategies developed to address those trends at a national level", others were wary that if this was the case, midwives may be reluctant to engage.

Experts agreed that the intervention should prioritise the follow-up and identification of those at risk. However, there were requests to clarify the definition of what may classify someone as being "at risk". Some panel members suggested that "if suicidal behaviour is conveyed through the postings" or if there is "talk of harming someone",

those individuals may be identified as being “at risk”. Yet many open text responses illuminated the difficulties in following up anonymous users. Some experts were also unsure about how this particular component may be facilitated. Additionally, others purported that this should not be the responsibility or purpose of this particular online platform.

The expert panel concurred that midwives using the platform should be automatically prompted to seek help, by signposting them to appropriate support. However, some panellists questioned how this may be organised, what types of support may be on offer, and whether or not this provision may encourage users to pathologise normal reactions to certain types of events.

Inclusions of therapeutic support

In terms of the nature of the support within an online intervention to support midwives, the expert panel agreed that priorities include web based videos, multimedia resources and tutorials which explore psychological distress and assist midwives to recognise the signs and symptoms of psychological distress. One comment which illustrates a widely-held belief was that “midwives often feel guilty for catching up on sleep, having time out watching TV, gently exercising with friends etc.” As such, it was also agreed that an online intervention should prioritise resources which disseminate self-care techniques and Cognitive Behavioural Therapy (CBT) tutorials through a range of online media sources. Largely, it was inferred that this online intervention should establish itself as a "one stop shop”.

Expert participants also agreed that midwives in distress should be offered information designed to inform them where they can access alternative help and support. The most frequent reason given for this was the need for provision of choice. Equally, there was consensus that an online intervention should prioritise the inclusion of information to inform midwives about where they can access legal help and advice. During Round 1, participants noted that midwives could already source this information from trade unions such as the Royal College of Midwives (RCM), and may be further distressed by the thought of needing legal assistance. Yet one comment in particular highlighted the notion that “we live in a litigious and unforgiving world”. However, during Round 2, experts noted that midwives may need a wider range of

legal information available to them in order to be prepared should a need arise. One comment illustrated this by reiterating that “any help and advice is welcome”.

When expert panellists were asked whether an online intervention to support midwives should prioritise giving users the ability to share extended personal experiences for other platform users to read, no consensus of opinion was reached. Open text responses gravitated towards concerns relating to breaches in confidentiality, risk of misuse and the need for active moderation. However, a number of responses highlighted the potential cathartic and therapeutic benefits of both reading and writing personal experiences, providing opportunities for reflection, sharing, learning and fellow feeling with others.

Although experts did not agree to prioritise the inclusion of a web-based peer to peer discussion chat room during Round 1, within Round 2, this item became a moderate to high priority inclusion. While many experts expressed a need for the appropriate moderation of an online chat room, the benefits of peer based discussion were highlighted as a key component of support. One comment summarises these thoughts by stating that “sharing experiences and getting feedback from peers who have experienced similar situations is very helpful”. Crucially, it was also highlighted that this chat room “would require high volume site traffic to be viable and sustainable”. When asked about topics of discussion within the chat room, experts did not reach a consensus as to whether the chat room should give users the ability to communicate any work or home-based subjects of distress. However, these two subjects were seen as being intertwined.

Intervention design and practical inclusions

Regarding the aesthetics of the online intervention, opinions remained divided about whether the intervention should, or should not, resemble National Health Service (NHS), employer or other generic healthcare platforms. Although the panel acknowledged that the intervention should look trusted, professional and official, they were also wary that, should the intervention resemble an official healthcare organisation, midwives may feel unable to speak openly. One particular comment defines opinion in that “any resemblance to NHS etc.… could deter people from using the platform”, however, this same panellist also felt that the intervention “needs to resemble a clean professional image”. Additionally, panellists remained divided in

opinion and wary of an anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage. Although experts favoured the use of anonymity in log in procedures, some felt that prompting use may cause further distress.

In terms of accessibility and ease of use, experts agreed that making the intervention available to midwives in work-related psychological distress 24 hours a day and via mobile access should be made high to essential priorities. However, experts did not agree upon whether an online intervention to support midwives in work-related psychological distress should prioritise an interface which resembles and works in a similar way to current popular and fast paced social media channels: e.g. Facebook. In this case, many free text responses alluded to the fact that Facebook and other social media channels are perceived as risky to use by midwives. Nevertheless, many other comments suggested that emulating the familiarity of a known platform may promote an inherent ability for midwives to engage with the intervention more sinuously. Ultimately, one particular comment summarises that “ease of use and familiarity for most users will encourage engagement”.

The importance of effective moderation remained a recurrent theme throughout this study. Experts agreed that both proactive moderation (i.e., users are able to block unwanted content and online postings are 'pre-approved') and reactive moderation (i.e., users are able to report inappropriate content to a system moderator for removal) should be made a high to essential priority. One comment in particular highlights one recurring theme in that “the platform needs to be regulated to avoid inappropriate posts and language”.

Other interventions of this nature have employed an automated moderating system where ‘key words’ would automatically initiate a moderated response. However, this group of experts remained divided about whether this should be prioritised in an online intervention to support midwives. Many panellists cited the importance of regulation, however some were unsure about how this particular provision may work in the real world. Additionally, fears were raised that this provision may make the intervention seem impersonal. Overall, it was the principal judgment of this group that, easy 24-hour mobile access and “an easy log in and easy to use interface couldn't be more essential”.

Discussion

This Delphi study has built expert consensus regarding the priorities in relation to the delivery, features, functionalities and components of an online intervention to support midwives and/or student midwives in work-related psychological distress. Statements that were endorsed tended to favour those which enabled knowledge acquisition, ease of use, ongoing support, skill development, and human interaction. The highest priority scores were given to the provisions of anonymity (84.9%) and confidentiality (90.9%). For those items which achieved consensus, the lowest priority scores were given to the provisions of CBT resources (60.6%) and proactive moderation (61.4%). Conclusively, the expert panel agreed that each statement should be made at least a moderate priority.

Overall, the themes generated by this study were the reluctance of midwives to speak openly and/or seek help for fear of retribution, the need for both anonymity and confidentiality at all times, ease of use, effective moderation and the necessity to help and support midwives in work-related psychological distress. Challenges remain in how and whether or not to provide confidentiality and anonymity in facilitating effective online support for midwives in distress.

Interpretation of findings

Based on quantitative and qualitative responses, participants in this study do not readily differentiate between confidentiality and anonymity in this particular context. Their reasons or justifications for the requirement to have both confidentiality and anonymity are broadly very similar. Ethicists and intervention developers may differentiate between these two concepts but this group do not. There is no meaningful difference between confidentiality and anonymity for this stakeholder group, which largely comprises the potential end users of the proposed online resource.

When both confidentiality and anonymity are in place, their corollary, amnesty becomes apparent. Many of the expert panel members cited that midwives would not speak openly for fear of stigma and retribution. Indeed, these findings have been verified within other studies where midwives reported stigma, and a perceived punitive response to face-to-face discussions concerning work-related traumas (Currie

and Richens 2009, Robins 2012, Sheen, Spiby and Slade 2016, Young, Smythe and Couper 2015). As such, many of the expert panel members saw amnesty as an essential provision in supporting midwives to seek help. Other panel members were opposed to the provision of amnesty, either because they feared that this would be in direct conflict with moral or professional duties and obligations, or because they favoured immediate accountability for the direct protection of the public and patients. A number of panel members recognised both sides of this argument, and were therefore unable to decide their position in this case. This moral conflict is reflected in the many confidential health practitioner services that exist for doctors in distress (Braquehais et al. 2015, Brooks et al. 2014, Jones and Davies 2016). In these cases, the public recognise the value in offering impaired physicians identity protection for the purpose of remediation, yet they also call for open reporting where risks to patients and the public are identified within the public sphere.

The primary concern for those who are ambivalent or who are opposed to amnesty was the risk of harm to third parties by midwives; both preventing future harm and accountability for harm that has already occurred. Satisfying this concern will be essential for the acceptance of an online resource for midwives experiencing psychological distress. One element of negotiation may be to encourage those in distress to self-disclose episodes of impairment with the support of the online community. This idea is supported by one free text response which purports that "ideally an online platform should encourage the professional themselves to take action if appropriate". This outcome could result in more midwives coming forward in help seeking, for the benefit of maternity services as a whole.

It is clear that this expert group feel that a range of multimedia resources in relation to help seeking, diagnostic criteria, therapeutic and practical inclusions should be prioritised in the development of an online intervention to support midwives. Future developments should consider becoming a "one stop shop" for midwives in relation to this finding. Going further, it may be prudent to develop online interventions with the functionality to incorporate a range of midwifery populations, global healthcare workforces and other groups of clinical professionals as a prospective future growth model evolves. This concept is also supported by an expert response, suggesting that "in developing this platform for a specific group of midwives, a future goal may be to

adapt it for other specific groups once this project is functioning and any difficulties have been eliminated".

In developing an effective online intervention to support midwives in work-related psychological distress, the practicalities of galvanising a large user base, evolving a robust system of moderation and rousing the support of professional and regulatory bodies will be vital in securing its sustainability. Gaining the trust of midwives in distress and engaging them in using a safe online intervention may enable this one solution to flourish and improve the health of midwives, which crucially may increase protection for the public, secure the long-term health of midwives and increase safety for maternity services. This study will be integral to the development process of any online intervention designed to support midwives, as the application of this data to the development process optimises the likelihood of accomplishing an efficacious intervention overall.

Strengths and Limitations

Experts in the subject areas of both e-mental health and m-health were invited via the academic emails provided in recently published research papers to participate within this study. Midwives, psychologists, psychiatrists, other physicians and academic experts were also invited to participate. Whilst this Delphi study has harnessed the opinions of this diverse group of experts on a practice-related problem, it has been unable to verify the expert status of all participants due to the provision of participant anonymity. Therefore, some fields of expertise may not have been reflected in the data.

Although the decision to allow respondents to be completely anonymous in a Delphi study is an unusual one, it was feared that participants would feel unable to be completely open and honest without the provision of anonymity in place. As such, this course of action has undoubtedly impacted upon the confirmation of the participants' expertise, especially as the expertise of participants was not confirmed by the researcher, leaving participants merely to consent to having the relevant expertise.

Additionally, and unlike many Delphi studies, the feedback provided after each round did not include each participant's own previous response. This was again due to the provision of anonymity afforded to participants. Therefore, Participants were unable

to compare their own response to the groups response. Additionally, there has been a significant participant dropout rate between the 2 rounds. Therefore, the change in item endorsement may have been influenced by the different participants that remained in the study. This is a limitation of this study, but one that it is not possible to explore.

Though response rates may be deemed relatively low (35.7% and 66.6% respectively), these response rates are similar to those found in other Delphi studies (Brouwer et al. 2008, De Vet et al. 2005). Moreover, the Delphi technique relies upon the opinions of those recruited, yet its methodology requires empirical measures to determine consensus. The presence of consensus in this study has been determined empirically and was specified in advance of data collection.

Conclusions

This chapter has reported the results of a 2-round Delphi study to achieve expert consensus about the delivery, features, functionalities and components of online interventions to support midwives in work-related psychological distress. This study provides new evidence in relation to some of the key priorities for the development of such interventions. However, some practical, ethical and moral challenges remain unresolved. Future research has the opportunity to use this evidence to turn the vision of online support for midwives in distress into practice.

Chapter Five: Discussion

The purpose of this thesis was to present a case for the development of an online intervention to support midwives in work-related psychological distress. The motivation for this research was driven by personal experience, a desire to reduce psychological distress in midwifery populations, and, in turn, provide safer and higher quality maternity services. This research has been underpinned by the revised transactional model of occupational stress and coping presented by Goh and colleagues (Goh, Sawang and Oei 2010), and the MRC framework for developing and evaluating complex interventions (Craig et al. 2008).

Chapter one provided a narrative review of the literature in relation to the nature of work-related psychological distress in midwifery populations. This chapter provided a context for this research, set out the causes, consequences and prevalence of work-related psychological distress in midwifery populations, and led to the development of three overarching research questions:

1. What are the ethical considerations in relation to the provision of online interventions to support midwives and/or student midwives in work-related psychological distress?

2. a) What interventions have been developed to support midwives and/or student midwives in work-related psychological distress? and b) What are the outcomes and experiences associated with the use of these interventions?

3. What are the areas of expert consensus in relation to the delivery, features, functionalities and components of an online intervention to support midwives and/or student midwives in work-related psychological distress?

Chapter two explored ethical considerations in relation to online interventions to support midwives by conducting a critical review of the literature. This critical review addressed research question one. Subsequently, a systematic mixed-methods review presented in chapter three examined the outcomes and experiences associated with interventions for midwives and student midwives in work-related psychological distress. This research addressed research question 2. Lastly, and in order to address

question 3, a 2-round Delphi study was presented within chapter four. This research sought consensus from an expert panel in relation to the priorities for the delivery, features, functionalities and components of an online intervention to support midwives in work-related psychological distress.

This final chapter provides a synopsis of how this original research makes a significant and novel contribution to knowledge, makes a case for the development of an online intervention designed to support midwives in work-related psychological distress and answers the research questions presented. This chapter also provides a summary of findings, describes how this research relates to theory and the MRC framework for developing and evaluating complex interventions (Craig et al. 2008), and a section on personal reflexivity. Additionally, the strengths and limitations of this research are discussed, and new areas for future research are proposed.

Summary of findings

The narrative review of the literature in relation to the nature of work-related psychological distress in midwifery populations presented within chapter one identified 30 papers outlining the sources, nature and prevalence of work-related psychological distress in global midwifery populations. Findings showed that midwives from Nigeria, America, Ireland, the United Kingdom, Australia, France, Poland, Croatia, Israel, Italy, Japan, Uganda, Turkey and New Zealand can experience both organisational and occupational sources of distress.

Causes of psychological distress can include hostile behaviour towards staff, either from other staff or patients, workplace bullying, toxic organisational cultures, medical errors, traumatic 'never events', critical incidents, occupational stress, workplace suspension, whistleblowing, investigations via professional regulatory bodies and employers, and/or pre-existing mental health conditions. The consequences of psychological distress in midwifery populations include death by suicide, death anxiety, depression, burnout, depersonalisation, compassion fatigue, shame, guilt, substance abuse disorders, and symptoms of self-destructive and unethical behaviour. This research has been published, in part, elsewhere (Pezaro et al. 2015).

The critical review of the literature presented within chapter two identified 9 papers which were examined in order to identify and explore the ethical considerations in

relation to providing midwives in distress with confidential and anonymous online support. This review concluded that the principles of confidentiality, anonymity and amnesty should be upheld in the pursuit of the greatest benefit for the greatest number of people (Pezaro, Clyne and Gerada 2016).

The systematic mixed-methods review presented within chapter three found that no evidence-based online interventions for midwives in work-related psychological distress are currently available (Pezaro, Clyne and Fulton 2017). However, all of the studies reviewed reported both personal and professional benefits for midwives who engaged in mindfulness sessions, work-based resilience workshops partnered with a mentoring programme and clinical supervision offline. Nevertheless, research studies were limited to the western world, and some participants were unable to fully engage with these targeted interventions. Moreover, none of these studies were rated as high-quality evidence.

A Delphi study with 66 midwives and other subject experts has been reported within this thesis (Pezaro and Clyne 2016). Presented in chapter four, this research concluded that the future development of an online intervention to support midwives in work-related psychological distress should most highly prioritise confidentiality and anonymity. These particular findings reflect the conclusions presented within other recent research, where doctors also report that their engagement with any psychological support depended upon the promise and certainty of confidentiality (Bianchi, Bhattacharyya and Meakin 2016). The broader findings within this study provide evidence into the requirements, preferences and priorities of experts in relation to work-related psychological distress in midwifery populations.

Within this Delphi study, although participants expressed enthusiasm for the development of this online intervention, they also stressed that there would be a need for effective moderation within an online discussion forum, along with 24-hour mobile access. Participants also reported that additional legal, educational, and therapeutic components should be available within an online intervention designed to support midwives. As the users of such an online intervention may be distressed, these experts indicated that midwives should also be offered a simple user assessment to identify those people deemed to be at risk of either causing harm to others or experiencing

harm themselves. This would be done in order to direct those in need towards appropriate support.

This research was conducted in order to answer three specific research questions and present a case for the development of an online intervention designed to support midwives in work-related psychological distress. In the next section, the results of this research are used as evidence to present a case for the development of such an online intervention designed to support midwives in work-related psychological distress.

Presenting the case for the development of an online intervention designed to support midwives in work-related psychological distress

In response to the overarching research enquiry, and the 3 specific research questions assigned to chapters 2, 3 and 4, it is important to ascertain whether or not there is a case for this online intervention, and If so, what that case is, and to what extent it is supported. In order to comprehensively describe the proposed intervention for which this thesis has made a case for, the template for intervention description and replication (TIDieR) checklist and guide has been employed (Hoffmann et al. 2014). This checklist and guide is presented in table 9, and has been completed alongside the supporting evidence for each component. This table also reports how each item relates to relevant theory.

Table 9: Proposed online intervention to support midwives in work-related psychological distress

TIDieR item	Item	Evidence	Related theory base
Brief name of intervention	The Staff Health and Wellbeing (SHAW) Centre	-Findings from chapter one establish that this is an intervention for midwifery 'staff' - Delphi study findings suggest that the intervention should be a 'one stop shop'	N/A
Why: Goal of the elements essential to the intervention	For Midwives: -Identify work-related psychological distress -Manage work-related psychological distress -Reduce work-related psychological distress -Cope following episodes of work-related psychological distress	-Delphi study findings -Critical literature review findings -Systematic review results -Findings from chapter one	The revised transactional model of occupational stress and coping: - Appraisal -Outcomes -Coping
What Materials (Components)	The inclusion of Web-based videos, multimedia resources, and tutorials which explore topics around psychological distress	-Delphi study results	The revised transactional model of occupational stress and coping: - Appraisal -Outcomes -Coping
	The inclusion of informative multimedia designed to assist midwives to recognise the signs and symptoms of psychological distress	-Delphi study results	The revised transactional model of occupational stress and coping: - Appraisal -Outcomes -Coping
	The inclusion of multimedia resources which disseminate self-care techniques	-Delphi study results	The revised transactional model of occupational stress and coping: - Appraisal -Outcomes -Coping
	The inclusion of multimedia resources which disseminate relaxation techniques	-Delphi study results	The revised transactional model of occupational stress and coping: - Appraisal -Outcomes -Coping
	The inclusion of mindfulness tutorials and multimedia resources	-Delphi study results - Systematic review results -(Foureur et al. 2013, van et al. 2015, Warriner, Hunter and Dymond 2016)	The revised transactional model of occupational stress and coping: - Appraisal -Outcomes -Coping
	The inclusion of Cognitive Behavioural Therapy (CBT) tutorials and multimedia resources	-Delphi study results	The revised transactional model of occupational stress and coping: - Appraisal -Outcomes -Coping
	The inclusion of information designed to inform midwives where they can access alternative help and support	-Delphi study results -Critical literature review results	The revised transactional model of occupational stress and coping: - Appraisal -Coping

	The inclusion of information designed to inform midwives as to where they can access legal help and advice	-Delphi study results	The revised transactional model of occupational stress and coping: - Appraisal -Coping
	Social networking tool: The inclusion of a Web-based peer-to-peer discussion chat room	-Delphi study results -(Huang 2016, Li et al. 2015, Oh, Ozkaya and LaRose 2014) -Critical literature review results	The revised transactional model of occupational stress and coping: - Appraisal -Outcomes -Coping
	Self-management exercises and decision aids	(Lehr et al. 2016) -Chapter one results	-Components which have been incorporated in other online interventions, rooted within the transactional models of stress (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010) The revised transactional model of occupational stress and coping: - Appraisal -Coping -Outcomes
	Online self-monitoring wellbeing and gratitude diaries	(Cheng, Tsui and Lam 2015) -Chapter one results	
	Audio-narrated videos and graphics designed to promote goal setting, problem-solving and effective time management	(Billings et al. 2008) -Chapter one results	
	Positive psychology exercises	(Feicht et al. 2013) -Chapter one results	
What Procedures (delivery, features and functionalities)	Confidentiality for all platform users and service users in all matters of discussion	-Delphi study results -Critical literature review results	The revised transactional model of occupational stress and coping: -Appraisal -Coping
	Anonymity for all platform users and service users in all matters of discussion	-Delphi study results -Critical literature review results	The revised transactional model of occupational stress and coping: - Appraisal -Coping
	Prompting platform users automatically to seek help, by signposting them to appropriate support	-Delphi study results -Critical literature review results	The revised transactional model of occupational stress and coping: - Appraisal -Coping
	Mobile device compatibility for platform users	-Delphi study results	The revised transactional model of occupational stress and coping: -Coping
	Proactive moderation (ie, users are able to block unwanted content and online postings are “pre-approved”)	-Delphi study results -Critical literature review results	The revised transactional model of occupational stress and coping: - Appraisal -Coping
	Reactive moderation (ie, users are able to report inappropriate content to a system moderator for removal)	-Delphi study results -Critical literature review results	The revised transactional model of occupational stress and coping: - Appraisal -Coping
	24/7 availability	-Delphi study results -Critical literature review results -Systematic review results	The revised transactional model of occupational stress and coping: -Coping
	The implementation of an initial simple user assessment using a psychological distress scale to prompt the user to	-Delphi study results -Critical literature review results	The revised transactional model of occupational stress and coping: - Appraisal -Coping

	access the most suitable support available		-Outcomes
	The follow up and identification of those at risk	-Delphi study results -Critical literature review results	The revised transactional model of occupational stress and coping: - Appraisal -Coping -Outcomes
How	Online delivery	-Chapter one results -Delphi study results -Critical literature review results -Systematic review results	The revised transactional model of occupational stress and coping: -Coping
Tailoring	Individual-focused	-Chapter one results -Systematic review results - (Foureur et al. 2013, McDonald et al. 2012, McDonald et al. 2013, van et al. 2015, Wallbank 2010, Warriner, Hunter and Dymond 2016).	Individual-focused online interventions, rooted within the transactional models of stress (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Williams et al. 2010). The revised transactional model of occupational stress and coping: -Coping - Appraisal -Outcomes
	'One stop shop'	-Delphi study results	The revised transactional model of occupational stress and coping: -Coping - Appraisal -Outcomes

This comprehensive description of the intervention proposed in table 9, demonstrates how each chapter within this thesis has contributed evidence toward making a case for the proposed online intervention. In this instance, chapter one provides a strong case for the development of online support for midwives in work-related psychological distress by presenting robust evidence in relation to the prevalence, causes, consequences and sources of work-related psychological distress in midwifery populations. Chapter one also secures the case for an individual-focused intervention, which encompasses self-management exercises and decision aids, wellbeing and gratitude diaries, goal setting, problem-solving, effective time management and positive psychology exercises by presenting compelling evidence from the literature in relation to other theory-based interventions (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010).

As chapter one presents a wide range of evidence and original conclusions, such findings can be credited with providing a 'valuable contribution' to the strength of the overall case presented in this thesis (Green, Johnson and Adams 2006). This chapter also builds upon previous research done in the field of work-related psychological distress in healthcare professions, by focussing on a previously under-researched population; midwives.

The findings from the critical literature review presented in chapter two provided evidence in support of providing confidentiality and anonymity for midwives seeking support online. Furthermore, the findings from the Delphi study presented in chapter four also suggest that midwives, along with other key stakeholders would want to prioritise anonymity and confidentiality in an online intervention designed to support them. Indeed, the highest priority scores were given to the provisions of anonymity (84.9%) and confidentiality (90.9%) in this case. Whilst these findings strengthen the ethical arguments presented in chapter two, Delphi study participants did not reach consensus about whether or not a resulting amnesty should be permitted in an online environment. Therefore, the findings presented in chapters two and four in relation to the provision of confidentiality, anonymity and amnesty in an online intervention to support midwives in work-related psychological distress point to neutral conclusions. Whilst there is a strong case for the provision of confidentiality and anonymity, there is a weaker case for amnesty in this instance. This presents the research community with

new knowledge. Nevertheless, should this proposed intervention permit anonymity and confidentiality as indicated, amnesty will be upheld by default. Additional research would therefore be useful to provide further evidence for any new decisions made in this regard.

These results in relation to anonymity and confidentiality reflect the findings of existing literature in the field of online intervention design, where the provision of both anonymity and confidentiality are seen as components which can make mental health online support interventions more acceptable, empowering, accessible, and safe (Musiat, Goldstone and Tarrier 2014, O'Leary et al. 2017). The evidence presented in chapter two's critical literature review has also provided new evidence to strengthen the case for prompting users automatically to seek help, identifying and following up those at risk, 24/7 access, effective moderation of user content, a web-based peer-to-peer discussion chat room and the inclusion of information designed to inform midwives where they can access alternative help and support. This critical review can be described as strong, because it is original and analytical in exploring an under-researched area (Jesson and Lacey 2006).

Systematic literature reviews are rule-driven and rigorous. As such, the evidence presented for this case via chapter three can be described as 'gold standard' (Bölte 2015). In this way, chapter three has provided evidence to strengthen the case for the inclusion of a mindfulness component within the proposed intervention (Foureur et al. 2013, van et al. 2015, Warriner, Hunter and Dymond 2016). This evidence conforms to what would be predicted on the basis of the processes described within the revised transactional model of occupational stress and coping (Goh, Sawang and Oei 2010). This is because the mechanisms which underpin MBSR, and lead to positive outcomes include cognitive change, insight, acceptance, compassion, attention regulation, self-regulation and self-awareness (Gu et al. 2015). As in Goh and colleague's model, these mechanisms encourage a fluid process of self-appraisal and coping in order to mediate the negative outcomes in relation to stress (Goh, Sawang and Oei 2010).

Within the first Delphi study about an online intervention to support midwives in work-related psychological distress presented within chapter four, 39 questions were posed over two rounds, 18 statements (46%) achieved consensus, 21 (54%) did not. Consequently, this research has been able to show 18 new priorities for the

development of an online intervention to support midwives in work-related psychological distress. Generally, these areas of expert consensus strengthen the case for the development of the majority of the delivery options, features, functionalities and components presented in table 9. Some of these include the provision of 24/7 access, CBT tutorials and informative multimedia components.

In some areas where consensus was not achieved, for example, in relation to amnesty, further research will be required to inform future decision making. However, for other items which did not achieve consensus, such as the sharing of experiences for the purpose of help-seeking, there is alternative evidence to show that these components may still be useful to some online users seeking psychological support (Musiat, Goldstone and Tarrier 2014, Naslund et al. 2016). Therefore, in some circumstances, future research can look to alternative evidence and theory to make forthcoming decisions in this regard. As the Delphi study presented has engaged a varied participant group, offering a range of relevant and diverse expertise, the expert consensus presented here as evidence can be described as a 'fundamental underpinning of science' (Jorm 2015).

A case for the development of an online intervention to support midwives in work-related psychological distress has been made by presenting new evidence incrementally throughout each chapter, culminating in the evidence-based delivery options, features, functionalities and components proposed in table 9. However, it is important to outline how each of these pieces of research make an original contribution to knowledge, and collectively meet the standards required of doctoral research.

Contribution to knowledge and originality statement

In line with Wellington's (2013) framework for assessing 'Doctorateness', this research can be considered to be an 'original contribution to knowledge' as it builds new knowledge by extending previous work on managing and preventing psychological distress in health professionals. Previously, reviews of research in this area had not encompassed either midwives or student midwives as a single sample group (Guillaumie, Boiral and Champagne 2016, Murray, Murray and Donnelly 2016, Regehr et al. 2014, Romppanen and Häggman-Laitila 2016, Ruotsalainen et al. 2015). Additionally, previous intervention research has not specifically targeted interventions

either toward qualified midwives or student midwives (Foureur et al. 2013, McDonald et al. 2012, McDonald et al. 2013, Wallbank 2010, Warriner, Hunter and Dymond 2016). In contrast to this, midwives and student midwives have remained the target population under study, making this thesis original throughout.

Within Wellington's (2013) framework for assessing 'Doctorateness', there are seven categories listed for which doctorates may contribute original knowledge. Therefore, in order for 'Doctorateness' to be unequivocally established for this thesis, it is important to apply the categories of this framework to each component of research. This process of application is outlined in table 10.

Table 10: Applying 'Doctorateness' to original knowledge

Category description	**Evidence**
Building new knowledge, e.g. by extending previous work or 'putting a new brick in the wall'.	The Delphi method has been used previously to assess the workplace needs of midwifery populations (Hauck, Bayes and Robertson 2012). Yet the views and opinions of an expert panel about the design and development of an online intervention designed to support midwives in work-related psychological distress have been gathered and presented for the first time within this thesis.
Using original processes or approaches, e.g. applying new methods or techniques to an existing area of study.	As the Delphi study presented within this thesis was a modified one, where the identity of experts remained unknown to the researcher, and free text response options accompanied each statement, it has also applied somewhat original processes and approaches to an existing area of study.
Creating new syntheses, e.g. connecting previous studies or linking existing theories or previous thinkers.	Chapter one presents the first narrative review to integrate studies of midwives in work-related psychological distress (Pezaro et al. 2015). This original knowledge demonstrates how midwives working in rural, poorly resourced areas who experience neonatal and maternal death more frequently can experience death anxieties, where midwives working in urban and well-resourced areas do not. This creation of new syntheses connects previous studies and existing theories together to form new knowledge. The mixed-methods systematic review presented within chapter three is the first of its kind to collate and present the current and available evidence in relation to existing interventions targeted to support midwives in work-related psychological distress (Pezaro, Clyne and Fulton 2017).
Exploring new implications, for either practitioners, policy makers, or theory and theorists.	Chapter two makes an original contribution to ethical decision making, and may be extrapolated and applied to other healthcare professions who may also now consider the provision of confidential support online.
Revisiting a recurrent issue or debate, e.g. by offering new evidence, new thinking, or new theory.	The original research presented in chapter two contributes to an ongoing academic dialogue in relation to ethical decision making.
Replicating or reproducing earlier work, e.g. from a different place or time, or with a different sample.	The mixed-methods systematic review, presented in chapter three somewhat replicates earlier work from a different place, time, and with a different inclusion sample (Shaw, Downe and Kingdon 2015).
Presenting research in a novel way, e.g. new ways of writing, presenting, disseminating.	The results of this research have been disseminated via popular media publications throughout. A further summary of this research is planned for publication. Furthermore, this research has also informed new guidance, published by the Royal College of Midwives, who also present the results of this research in a new way. This new guidance is intended to guide heads of midwifery to support midwives experiencing work-related stress. Evidence of this can be found in Appendix 15.

Generally, the research community communicates and continues to build original contributions to knowledge via publications in peer reviewed journals and conferences. A thesis being worthy of publication either in full or abridged form can establish it to be bonafide doctoral work (Wellington 2013). This statement is also echoed by regulations and guidelines for internal and external doctoral examiners (Jackson and Tinkler 2007, Tinkler and Jackson 2004). This is significant because the majority of this research, and a methodological protocol has been published elsewhere, contributing new knowledge to both the academic and healthcare communities (Pezaro et al. 2015, Pezaro and Clyne 2015, Pezaro and Clyne 2016, Pezaro, Clyne and Fulton 2017, Pezaro, Clyne and Gerada 2016). Therefore, these publications in peer-reviewed journals provide further evidence of how this thesis can be classified as bonafide doctoral work, demonstrating significance, originality and new contributions to knowledge in this regard. These papers can be accessed in appendices 1, 16, 17, 18, 19. Two summary papers have also been published within the royal college of midwives' Journal and the Nursing Times. These papers can be found in appendix 20 and 21 respectively.

Applying theory and a framework to this research

This research has been underpinned by the revised transactional model of occupational stress and coping presented by Goh and colleagues (Goh, Sawang and Oei 2010). This model outlines the fluid process of cognitive appraisal, coping and outcomes relating to those experiencing work-related stress. In the context of this thesis, the term 'appraisal' has related to how an individual assesses the degree of any risk or threat to their own wellbeing. The concept of coping in this context has been related to a variety of reactive behaviours following cognitive appraisal, which reflect a particular emotion resulting from an episode of work-related psychological distress. Outcomes in the context of this thesis have referred to the experience and consequences of work-related psychological distress. This thesis has also been underpinned by the MRC framework for developing and evaluating complex interventions (Craig et al. 2008).

The reasons for choosing a stress-specific theory for this research were partly due to the findings of a literature review performed by Ryan and colleagues, where interventions based upon a stress-specific theory were deemed to be effective (Ryan

et al. 2017). However, it is important to note that many other studies presented within this review which were either atheoretical, or based upon alternative theories also produced positive outcomes for their participants. As such, it is not wholly clear whether or not theory-driven interventions produce more favourable outcomes than atheoretical ones. Nevertheless, applying a process orientated theory to this research has meant that a better understanding of stress has been able to guide this research throughout (Lazarus 2006b).

As is common practice, the revised transactional model of occupational stress and coping has been used to apply a 'theoretical lens' to this entire body of research (Goh, Sawang and Oei 2010, Stewart and Klein 2015). The value of using such an approach means that in the longer term, future research will be able to better assess why this intervention is effective or not, as well as how effective it is (Craig et al. 2008). As with a majority of other intervention research, this thesis has similarly used theory to inform the choice and design of its proposed intervention (Davies, Walker and Grimshaw 2010). Some of the components presented within table 9 have evolved from components which have already been incorporated in other online interventions, rooted within transactional models of stress (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010). Others relate to the three types of components situated within the revised transactional model of occupational stress and coping (Goh, Sawang and Oei 2010).

The preliminary components of the revised transactional model of occupational stress and coping relate to the individual's 'appraisal' of a potentially stressful event (Goh, Sawang and Oei 2010). In relation to the goals of the elements essential to the intervention, it is the identification and management of work-related psychological distress which will engage the 'appraisal' component of this model. Here, components such as the inclusion of web-based videos, multimedia resources, and tutorials which explore topics around psychological distress will encourage midwives to appraise their own knowledge and experiences to increase their own understandings in this regard. Equally, multimedia resources designed to assist midwives to recognise the signs and symptoms of psychological distress will facilitate the self-appraisal of potentially stressful experiences.

Yet within both of these multimedia components, midwives will also be invited to appraise and explore any potential outcomes relating to work-related psychological distress in both themselves and others in the workplace. Therefore, the 'outcomes' component of the revised transactional model of occupational stress and coping also becomes engaged (Goh, Sawang and Oei 2010). In educating midwives about work-related psychological distress, it is anticipated that midwives may also be able to identify which types of coping strategies currently relate to their own encounters with work-related psychological distress. Thus the 'coping' component of the revised transactional model of occupational stress and coping will also be engaged through these particular components of the proposed intervention (Goh, Sawang and Oei 2010).

The inclusion of multimedia resources which disseminate self-care techniques, relaxation techniques, CBT techniques and mindfulness tutorials will introduce midwives to coping strategies designed to effectively manage work-related psychological distress. As well as the 'coping' component of Goh and colleague's model informing the development of these intervention components, the taught coping strategies may also require midwives to self-appraise their own thoughts and experiences in relation to work-related psychological distress (Goh, Sawang and Oei 2010). Not only do these coping strategies engage the 'appraisal' component of the revised transactional model of occupational stress and coping, they also engage the 'outcomes' component, as midwives may appraise their own 'outcomes' or levels of stress at the same time (Goh, Sawang and Oei 2010). Such components also support the goals of the elements essential to the intervention, as they aim to reduce work-related psychological distress, and enable midwives to more effectively cope following episodes of work-related psychological distress.

As midwives using the proposed intervention are presented with information designed to advise them where they can access alternative help and support, they will not only be self-appraising whether or not they are ready to seek and access alternative help and support, they will also be adopting new coping strategies should they choose to engage with the support on offer. Thus, in this case, both the 'coping' and 'appraisal' components of the revised transactional model of occupational stress and coping reflect the fluid process of stress and coping (Goh, Sawang and Oei 2010). Similarly, the

inclusion of information designed to inform midwives as to where they can access legal help and advice will engage these same components as midwives assess whether or not they are personally in need of legal help and advice, and if so, whether or not they may access the support put forward to them. Prompting platform users automatically to seek help, by signposting them to appropriate support may further facilitate this process.

Whilst the same fluid process of stress and coping may be reflected in how users engage with a web-based peer-to-peer discussion chat room (or not), midwives in this case may also appraise and share outcomes and coping strategies related to work-related psychological distress in partnership with other users. Thus, all three types of components within the revised transactional model of occupational stress and coping again reflect the proposed intervention's component in this instance (Goh, Sawang and Oei 2010). The self-management exercises, decision aids, self-monitoring, wellbeing and gratitude diaries, goal setting, problem-solving and effective time management along with positive psychology exercises proposed for inclusion have also been incorporated into other online interventions, rooted within the transactional models of stress (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Stansfeld et al. 2015, Williams et al. 2010). Yet all of these components involve the process of self-appraisal, the development of effective coping strategies and the management of stress outcomes. This is because, whilst using these components, midwives will be invited to self-appraise their own thoughts, feelings and experiences in relation to work-related psychological distress, and then use these appraisals to develop improved outcomes, effective decision making and new coping strategies.

The provision of confidentiality and anonymity in an online intervention designed to support midwives in work-related psychological distress may also enable midwives to conduct self-appraisals, as they may feel more at ease with the process of help seeking in this context. In turn, this may enable midwives to engage with effective coping strategies as they seek help where they may not have otherwise done so. This process relates to the 'appraisal' and 'coping' components of Goh and colleague's model, as the midwives will be able to self-appraise in private whilst seeking support or 'coping' (Goh, Sawang and Oei 2010). Equally, the provision of both proactive and reactive moderation in an online environment may enable users to engage in self-appraisal, as

other users observe and react to inappropriate online behaviours in this context. In this same sense, effective coping strategies may also be adopted by users as they are shared and suggested by the moderated user responses.

In order for users to adopt effective coping strategies more flexibly, the provision of 24/7 online access and mobile device compatibility is evidence-based within this research. Consequently, these functionalities fall in line with the 'coping' component of the revised transactional model of occupational stress and coping (Goh, Sawang and Oei 2010). The implementation of an initial simple user assessment using a psychological distress scale to prompt the user to access the most suitable support available will also enable users to access effective coping strategies more readily. Additionally, this would enable users to appraise their own outcomes and experiences in relation to work-related psychological distress, thus engaging all three types of components situated within the revised transactional model of occupational stress and coping (Goh, Sawang and Oei 2010). Yet the follow up and identification of those at risk may be required where users are unable to engage with effective coping strategies. In such cases, outcomes which indicate that a user may be at risk would be appraised by both the users and the moderators of the proposed intervention throughout this particular process of stress and coping.

The proposed online intervention will be individual-focused, in line with other online interventions, rooted within the transactional models of stress (Ebert et al. 2015, Ebert et al. 2016a, Ebert et al. 2016b, Heber et al. 2016, Williams et al. 2010). The fact that this intervention is also delivered online may enable midwives to engage with the revised transactional model of occupational stress and coping's process of coping more flexibly (Goh, Sawang and Oei 2010). Additionally, the variety of components delivered within the proposed 'one stop shop' may also enable midwives to engage with all three types of the revised transactional model of occupational stress and coping's components in one place (Goh, Sawang and Oei 2010).

As outlined throughout this research, the proposed intervention for which this thesis has made a case for is both theory-based and evidence-based. Such approaches have proven to be effective, as they provide an inclusive and generalisable analysis of the theoretically relevant constructs and behaviour change techniques involved in intervention development (Kok et al. 2004). Overall, in presenting some of the

relationships between cognitive appraisal, stress outcomes and coping, the revised transactional model of occupational stress and coping has been able to provide structure to this research (Goh, Sawang and Oei 2010). This is because this model has enabled the researcher to link the problem of midwives in work-related psychological distress and the direction and conclusions of this research with the transactional processes of appraisal, stress and coping for a broader understanding of the issues raised within this thesis (Goh, Sawang and Oei 2010, Wolf 2015).

This use of explicit theory has been suggested by one systematic review to help researchers understand barriers, mediating pathways and moderators in design interventions (Davies, Walker and Grimshaw 2010). The application of the revised transactional model of occupational stress and coping has been helpful and useful for this research in informing the choice and design of the intervention proposed within this thesis, understanding the processes involved in the development of work-related psychological distress and in justifying research decisions (Goh, Sawang and Oei 2010). However, it is the 'appraisal' and 'coping' components of this model which have been most useful. As this research moves towards feasibility and pilot testing in line with the next phase of the MRC framework for developing and evaluating complex interventions (Craig et al. 2008), greater use of the 'outcomes' component of this theory is anticipated.

In this case, the MRC framework for developing and evaluating complex interventions was used to guide how the intervention proposed within this thesis may be developed and evaluated (Craig et al. 2008). Currently, this research sits within the primary development phase of this framework. In adhering to this early phase, this research has been better able to define and quantify the problem under study, identify the population most affected or most likely to benefit from the intervention, and understand the pathways by which the problem under study is caused and sustained. This process has been crucial, as the effective design of an intervention depends on understanding the underlying problem, the context, and the processes involved in optimising the intervention (Campbell et al. 2007). Additionally, the MRC framework for developing and evaluating complex interventions has guided the researcher to match the most appropriate research methods with the most appropriate phases of

research, whilst understanding the constraints on design and weighing up the available evidence.

In an overall reflection, the use of the MRC framework for developing and evaluating complex interventions has greatly supported the structure and direction of this research, ensuring that any future work is built upon a solid foundation of scientific evidence. Similarly, the revised transactional model of occupational stress and coping has ensured that there is a theoretical understanding of the likely process of change, how things work and why (Goh, Sawang and Oei 2010). The use of this theory and framework has meant that this research has been able to give a more detailed description of the proposed online intervention. In turn, this will improve the likelihood that this intervention can be delivered faithfully during future evaluation phases, in line with the MRC framework for developing and evaluating complex interventions (Craig et al. 2008). Nevertheless, there are some other limitations and strengths to this research which must be declared.

Strengths and limitations

The strengths and limitations of each individual study have been outlined within the previous chapters of this thesis. However, the broader strengths and limitations of this thesis are discussed next.

Overall, this thesis has reported detailed research findings to address the complex issue of supporting midwives in work-related psychological distress. In order to do this, it has used multiple methods for gathering and analysing data. Whilst Ryan and colleagues (Ryan et al. 2017) have identified where previous research has explored the use of online interventions to support various populations in work related psychological distress, this research offers evidence from a previously unexplored area; midwives in work-related psychological distress.

The need to support health care professionals in the workplace has been established in previous publications (Guillaumie, Boiral and Champagne 2016, Murray, Murray and Donnelly 2016, Regehr et al. 2014, Romppanen and Häggman-Laitila 2016, Ruotsalainen et al. 2015). This thesis not only corroborates this stance, but also explores the mechanisms and processes involved in providing a solution for midwives online.

As chapter one integrated existing research to provide a contemporary and original picture of the problem under study, this chapter was able to guide the direction of subsequent research presented within this thesis (Green, Johnson and Adams 2006). The strong foundation given to this thesis enabled the researcher to then identify gaps in research, such as which types of interventions are available to support midwives in work-related psychological distress, and which type of support may be most effective for this population. However, some of the review methodologies used in this research have been confined to the synthesis of qualitative research only, and therefore any interpretations made may be influenced by the researcher's personal idiosyncrasies and biases (Dixon-Woods et al. 2006).

The critical review presented in this research explores the complex ethical arguments and ideas in relation to supporting midwives confidentially and anonymously online. Whilst this topic was an ambitious one to address in exploring areas of moral uncertainty, the findings of this research have implications for midwifery practice. This is because currently, midwives are required by the NMC to disclose episodes of impairment for the protection of the public. Such disclosures may result in professional sanctions. Yet the conclusions presented within this critical review suggest that episodes of impairment may be disclosed anonymously and confidentially for the purpose of help seeking and therefore, the wider protection of the public. As such, the new arguments, evidence and ideas presented here may influence and contribute to new policies and interventions to support midwives in work-related psychological distress. However, it could also be argued that this review has included too few papers with which to make such a strong argument (Tricco et al. 2016). Ultimately, both midwives and childbearing women may benefit from this research, through the implementation of effective support interventions to address the issues raised throughout this thesis.

Systematic reviews of research are the studies which sit at the top of the hierarchy of evidence (Bigby 2014). Therefore, the correctly executed mixed-methods systematic review presented within chapter three can be considered to use methodology of the highest quality. Additionally, systematic mixed-methods reviews such as the one presented within this thesis are able to combine the power of numbers with the power of stories to provide the best evidence for decision making (Pluye and Hong 2014). On

the basis of this review, decisions in relation to which face-to-face interventions would most effectively translate into the proposed online intervention have been made. Future decisions in relation to providing other forms effective support for midwives in work-related psychological distress may also be guided by this research. Furthermore, the study designs reported within the results of this review will also provide evidence in relation to which future research approaches may be most appropriate for testing the intervention proposed within this thesis. In conducting a systematic mixed-methods review, this thesis has provided the first scientific review of the evidence in relation to the outcomes and experiences of interventions available and designed to support midwives in work-related psychological distress.

Another recent systematic review and meta-analysis has explored the efficacy of mindfulness based interventions to support the psychological wellbeing of healthcare professionals (Burton et al. 2016). In widening the scope of investigation, this study has been able to capture a wider range of data, and therefore conduct a meta-analysis, where the systematic mixed-methods review presented within this thesis has not. However, similar issues remain in that often, studies still produce inconsistencies in follow up data collection and reporting measures. As such, the systematic mixed-methods review presented within this thesis may not necessarily have been enhanced by considering the use of any alternative approach or by widening the scope of its enquiry. However, since this review has been completed, an evaluation of a web-based holistic stress reduction pilot program among nurse-midwives has been published (Wright 2017). This intervention used yoga, meditation, and MBSR techniques on an alternating basis, over a 4-week period to help reduce perceived barriers to self- care activities. Results from this study, which evaluated an existing online intervention rooted within Watson's (1997) theory of human caring showed a potential for an improvement in stress levels and coping abilities after participation.

Whilst the Delphi approach holds no evidence of reliability, and is not a replacement for rigorous scientific literature reviews, it performs well as a means of gaining expert consensus, facilitating group communication and decision making (Keeney, Hasson and McKenna 2001). The strength of this methodology is that it has enabled this research to consult experts on a previously under-researched topic; the development of an online intervention designed to support midwives in work-related psychological

distress. The findings from this process have also enabled this research to make evidence-based decisions about what should be included within an intervention to support midwives in work-related psychological distress. Limitations remain in that should this study be repeated with another group of experts, there would be no guarantee that the same areas of expert consensus would be obtained.

Whilst terms used to describe the mechanisms of online interventions can vary, this thesis has chosen to use the terms 'delivery,' 'features', 'functionalities' and 'components', as they are used in the Consolidated Standards of Reporting Trials of Electronic and Mobile HEalth Applications and onLine TeleHealth (CONSORT-EHEALTH) throughout (Eysenbach and Consort-EHEALTH Group 2011). Yet for greater consistency, these terms could have also been incorporated within the information given to participants. Going forward, the consistent use of this terminology will be vital in describing this online intervention more dependably and comprehensively as it develops.

Ultimately, this thesis is a demonstrably coherent body of research as it has addressed what it set out to address, uses appropriate research methods, and links research questions, literature, findings and interpretations together logically to create new knowledge (Bryman 2015). Yet it must be noted that the research questions and arguments formulated within this thesis may be underlain with ideological and theoretical assumptions, and may have been influenced by some of the ontological and epistemological positions taken by the researcher. Therefore, it is also important to report upon a researcher's reflexivity and reflective processes as they have developed throughout the undertaking of this research.

Reflexivity

Philosophical, epistemological and ontological principles can guide a researcher's methodological approach (Darawsheh 2014). Data analysis can also depend on a researcher's individual intuition, creativity and imagination in reading data and reaching conclusions (Creswell 2012). As such, it is entirely possible that the conclusions I have drawn from the data collected within this research may have been influenced by my own philosophical, epistemological and ontological assumptions. The methodological approaches that this research has taken may also have been influenced by these assumptions, yet it has only been through retrospective reflection

that I have been able to make these connections, and make plans to adapt my own future research practices accordingly. This current research is rooted within the positivist paradigm (Gartrell and Gartrell 2002), yet I also now have a growing appreciation for constructivism (Glasersfeld 1996), interpretivism and interpretive research paradigms (Lin 1998).

Maintaining transparency in research clarifies the philosophical position of a researcher in relation to the research process, and provides rigor in research (Finlay and Ballinger 2006). In order to mitigate the influence of researcher bias for this research, I have maintained a reflective blog throughout, which has in turn continuously challenged my pre-existing assumptions and hypotheses. I partnered this activity with reflective peer group discussions, where I persistently questioned my motives for taking this research in particular directions. Furthermore, I repeatedly reflected upon how my interpretations matched the actual data collected. This was done in order to avoid favouring any preconceived position I may have in relation to the arguments I have presented.

In order to situate myself as the researcher in this work, I have reflected on many aspects of my identity, including my cultural background, thoughts, actions, emotions and assumptions, and how these factors may influence the research process and interpretation of findings. In order to provide transparency in this research, there are several of my personal characteristics and interpersonal relationships which must be declared. These have been acknowledged in table 11, in accordance with the primary reflexivity domain hosted within the consolidated criteria for reporting qualitative research (Tong, Sainsbury and Craig 2007).

Table 11: Personal characteristics and interpersonal relationships

Domain 1: Research team and reflexivity	
Personal Characteristics	
Interviewer/facilitator	I personally facilitated the Delphi study; rounds one and two.
Credentials	I am a registered midwife I am a Deputy Mayor (Town Councillor) Qualifications: Diploma in Midwifery MSc in Leadership for health and social care BA (Hons) in Communications and media with popular culture
Occupation	Midwife and PhD Student
Gender	Female
Experience and training	-Inexperienced with little training in qualitative methods -Personal experience of work-related psychological distress whilst working as a clinical midwife
Relationship with participants	
Relationship established	Some participants to the Delphi study had a prior relationship with me. These relationships in some cases were both personal and professional.
Participant knowledge of the interviewer	Participants were aware that the goal of the research was to subsequently design and develop an online intervention designed to support the midwifery workforce in work-related psychological distress.
Interviewer characteristics	Participants were aware of my reasons for and interests in the research topic. This information was provided in participant information, and via my reflective research blog.

As a midwife with personal experience of work-related psychological distress, I had to recognise that I may have underlying preferences for certain outcomes, applications and interpretations for this research. Reflexivity is a tool that has enabled me to evaluate my judgements, bias and performance within this research. Table 12 summarises some of the principle outcomes produced through the use of reflexivity in this research.

Table 12: Principle outcomes of employing reflexivity in the research process

Context of reflexivity	Reflection	Methods used to inject rigour into this research	Outcomes
Prior reading around the topic of psychological distress in midwifery populations made it more challenging to look at any new literature retrieved objectively.	I may need to recognise any influences of prior work, and appraise their effect logically and openly.	Supervisors to this research were frequently invited to review data analysis, and any new interpretations drawn from the literature.	Future actions could include memo writing to acknowledge and report on the potential for any prejudice in real time.
Whilst my own creativity has played an integral part in the emergence of themes and categories within the analysis of data collected, some of these may have been shaped by my preconceived notions of how participants may experience the world.	I may need to derive new ideas, categories and themes inductively, and then test them deductively.	Supervisors to this research reviewed the emergence of themes throughout data analysis. Conclusions were drawn following peer review. Supervisors to this research also contributed to the shaping of the questions presented within the chapter four Delphi study.	Future actions could include paused reflection when creating categories or themes within the data, to limit the effect of personal influence. However, it will be important not to be so reflexive as to stifle creativity, and thus provide description only.
As data emerged which challenged the emerging theory that some interventions could be effective in supporting midwives, I found it challenging to accept opposition to my own epistemological assumptions.	It is necessary to be open to alternative explanations when negative cases challenge an emerging theory.	Negative case analysis was employed throughout this research. Here, close attention was paid to elements of the data which did not support or appeared to contradict emerging patterns. This ensured that any conclusions drawn could account for the majority of cases.	Future actions could include the development a self-aware, and self-questioning approach to research. In future, I will prepare to more easily allow prejudices to be eliminated by data that oppose them.

This reflective discussion on the subjectivity and reflexivity of the researcher has been employed to raise the rigour of this research (Darawsheh 2014). Employing reflexivity in this research has helped me to understand myself both personally and professionally, by identifying aspects of my decision-making processes that have influenced this work in either a positive or negative way. I have also been able to deeply reflect upon some of the complex ethical issues associated with my profession. In future, identifying personal traits that may subjectively influence future research findings and processes will help me to use my subjectivity to achieve my ultimate goal, which is to fully explore and understand participant accounts, new theories and

phenomena. Ultimately, reflexivity in research is not a single or universal entity but an active, ongoing process that will continue to saturate my future research work.

Areas for future research

The answer to the overall research enquiry is 'yes', this thesis has a case for an online intervention designed to support midwives in work-related psychological distress. However, some more specific research is required in relation to how the intervention proposed may be accepted and engaged with by midwives. Future research in developing the online intervention proposed in this thesis should also include involving users and key stakeholders at every stage, as this is likely to result in 'better, more relevant science and a higher chance of producing implementable data' (Craig et al. 2008). Such involvement from these groups may also facilitate future decision making in relation to how the components of the proposed intervention are more specifically sourced, designed and delivered.

Equally, the use of mixed methods approaches will be of value when exploring any future counter-intuitive findings, as these approaches can provide far richer insights than any one single method of inquiry (Bradbury et al. 2015). Having established a case for the development of an online intervention designed to support midwives, the next research steps in developing the intervention will now be explored.

On the basis of the evidence presented in this thesis, the next step in research is to build and trial an intervention which includes the features, functionalities and components described in table 9. This next step in research also falls in line with the next phase of the MRC framework for developing complex interventions (Craig et al. 2008). Crucially, evaluations of interventions are often undermined by problems relating to the components of research design, which could have been addressed through feasibility and pilot testing (Prescott et al. 1999). Thus importantly, this next phase will include the design of testing procedures; estimation of recruitment and retention needs and the determination of adequate sample sizes (Craig et al. 2008).

The content which will complete the components of this online intervention may be well informed by examining what midwives are most likely to accept and use. Additionally, as findings in relation to the provision of confidentiality, anonymity and amnesty point to conflicting conclusions, questions in relation to this area of research

remain. Future research in this regard could usefully examine episodes of professional impairment and whether or not and how these link to the consequences of work-related psychological distress in midwifery populations. This examination may be done by conducting a content analysis of the episodes of impairment published within NMC case hearings and outcomes proceedings. In examining such episodes, developers of online interventions which permit confidentiality and anonymity for midwives seeking support may be better able to make informed decisions in relation to which forms of impairment an intervention of this type may permitting amnesty for.

Finally, whilst one of the objectives for the proposed intervention would be to trial effectiveness via an adequately powered RCT, it is not yet established whether such a study can be conducted. Therefore, this intervention will initially require feasibility and pilot testing. In order to progressively refine the most appropriate design of a full-scale evaluation, the MRC framework for developing complex interventions suggests that a series of studies may be needed (Craig et al. 2008). As such, the proposed initial three research questions to follow this thesis are:

1) a) What types of episodes of impairment currently occur most frequently in the midwifery profession? and b) do these episodes have any links to the consequences of work-related psychological distress, and if so, how?

2) How do potential users experience and engage with the content of an online intervention designed to support midwives in work-related psychological distress?

3) What are the experiences and outcomes associated with the use of an online intervention designed to support midwives in work-related psychological distress?

The purpose of the online intervention proposed within this thesis is to support individual midwives to manage, prevent, self-appraise and cope with the negative effects of work-related psychological distress in line with the revised transactional

model of occupational stress and coping (Goh, Sawang and Oei 2010). The 'outcomes' component of the revised transactional model of occupational stress and coping generally leaves the nature of stress outcomes open to the appraisal process (Goh, Sawang and Oei 2010). However, references to depression, anxiety and stress are made. As such, it is a reduction in these three outcomes which would be anticipated for this intervention. Additionally, the broader primary goal of this intervention is to improve midwives' professional quality of life through the identification and effective management of work related psychological distress. Therefore, the primary outcomes anticipated for this intervention would also be to observe improvements in a midwife's quality of professional life, and a reduction in the measure of stressors experienced.

Following the practical development of a working prototype, the identification of appropriate outcome measures will be required in order to evaluate the effectiveness of this intervention's features, functionalities and components as listed in table 9. Future process research in this area may also support the examination of how changes in the outcome itself may occur, which processes link to certain outcomes, and which types of events are considered to be most helpful during the process of change (Llewelyn and Hardy 2001). Yet initially, and in line with the other studies of interventions designed to support midwives identified within the systematic mixed methods review presented, this research could utilise the IES, ProQol and the DASS scales (Foureur et al. 2013, McDonald et al. 2012, McDonald et al. 2013, van et al. 2015, Wallbank 2010, Warriner, Hunter and Dymond 2016). Such tools would measure the anticipated and primary outcomes of the proposed intervention, described above as depression, anxiety, stress, professional quality of life and the impact of stressful events experienced.

Conclusion

Via a narrative literature review integrated into chapter one, a critical literature review, a mixed-methods systematic review and a 2-round Delphi study, this thesis has presented a case for the development of an online intervention designed to support midwives in work-related psychological distress. However, the strength of this case must be balanced against the strengths and limitations of this research, and the weight of evidence in answering the research questions as presented.

The phenomenon of online support for midwives in work-related psychological distress is an area in need of further research. This thesis integrates new evidence in favour of the development of an online intervention designed to support midwives in work-related psychological distress and has recognised the potential usefulness of this intervention in practice. Midwives are entitled to reduced psychological distress in the workplace, and both women and their babies deserve excellence in maternity care. The next challenge will be to turn this vision into practice.

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Appendix 1: A systematic mixed-methods review of interventions, outcomes and experiences for midwives and student midwives in work-related psychological distress

Appendix 2: Prospero record

UNIVERSITY of York
Centre for Reviews and Dissemination

NHS
National Institute for
Health Research

PROSPERO International prospective register of systematic reviews

A systematic mixed-methods review of interventions, outcomes and experiences for midwives and student midwives for work-related psychological distress

Sally Pezaro, Wendy Clyne

Citation
Sally Pezaro, Wendy Clyne. A systematic mixed-methods review of interventions, outcomes and experiences for midwives and student midwives for work-related psychological distress. PROSPERO 2016:CRD42016036978
Available from http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016036978

Review question(s)
The objectives of this review were to identify any interventions which have been designed to support midwives and/or student midwives as a population experiencing work-related psychological distress and to explore any outcomes and/or experiences associated with their use. The meeting of these objectives does not require either study control groups, the referral to any particular study type or study comparators.
The research questions to be addressed within this review are, specifically:
1) What is the nature and existence of interventions designed to support midwives and/or student midwives experiencing work-related psychological distress?
2) What are the outcomes and experiences associated with the use of these interventions?

Searches
This review will focus upon papers that have been published in academic journals from psychological, health management, occupational health and healthcare management fields of study. Relevant literature will be identified and retrieved by searching 6 electronic databases; namely PsycINFO, PsycARTICLES, MEDLINE, Academic Search Complete, Scopus and CINAHL. In order to confirm literature saturation, the reference lists of relevant studies identified throughout the search process will be scanned. The authors of papers identified for inclusion will also be contacted in order to gather any other papers relevant for inclusion.
The limits imposed upon the search and retrieved studies will be that articles must be published between the year 2000 and 2016. This will be imposed to capture contemporary midwifery working environments. Papers must also be written in English and must have been peer reviewed.
This search strategy was formulated subsequent to an initial scoping review of the literature, where key words were collected in preparation for the search and discussed between the review team. This search strategy will be modified in order to suit the syntax, subject headings, MeSH headings and thesauruses of the bibliographic databases as necessary.
The review will seek to identify a broad range of studies, particularly intervention studies and experimental studies for exploration.

Link to search strategy
http://www.crd.york.ac.uk/PROSPEROFILES/36978_STRATEGY_20160230.pdf

Types of study to be included
All peer reviewed studies will be considered for inclusion.

Condition or domain being studied
Psychological distress refers to a unique, discomforting, emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary or permanent, to the person. Therefore, in line with this description, work-related psychological distress was defined as a unique, discomforting, emotional state experienced by an individual in response to a specific work-related stressor or demand that results in harm, either temporary or permanent, to the person.
The outcomes that we considered to be associated with 'work-related psychological distress' in a midwifery context were defined as burnout, compassion fatigue, stress, anxiety, depression, cognitive impairment and/or any emotional distress formed in partnership with working within the midwifery profession.

Participants/ population
This review included studies conducted with populations of both midwives and student midwives. This review defined the 'midwife' in line with the definition given by the International Confederation of Midwives (ICM's) definition that a midwife is a person who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife' (ICM International Confederation of Midwives 2011).
Student midwives were included due to the fact that they perform midwifery work, experience similar episodes of work-related psychological distress and are the valued predecessors of the profession. Although it was recognised that student midwives effectively practise within a different role, and may experience different manifestations of work-related psychological distress, they were also considered to form a part of the midwifery workforce.

Intervention(s), exposure(s)

To be included, studies had to evaluate an intervention designed to support midwives and/or student midwives experiencing work-related psychological distress.
Psychological distress refers to a unique, discomforting, emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary or permanent, to the person. Therefore, in line with this description, we defined work-related psychological distress as a unique, discomforting, emotional state experienced by an individual in response to a specific work-related stressor or demand that results in harm, either temporary or permanent, to the person.

Comparator(s)/ control
Studies will not be required to include either a comparator or control component.

Context
Papers selected must identify at least one intervention designed to support midwives. Any appropriate intervention identified within the literature must also report at least one outcome measure, so that effectiveness can be evaluated.

Outcome(s)
Primary outcomes
The identification of interventions designed to support midwives and/or student midwives in work-related psychological distress.
Secondary outcomes
Any quantitative and/or qualitative outcomes relating to intervention use were considered to be secondary outcomes.

Data extraction, (selection and coding)
Data was extracted from selected studies using the MAStARI data extraction instrument from JBI-NOTARI. This tool will be made available on publication. Any discrepancies at this stage were again resolved through discussion, and any anecdotal findings were omitted from the data collected.

Risk of bias (quality) assessment
The assessment of methodological rigor tool devised by Hawker and colleagues will be applied at study level.

Strategy for data synthesis
Whilst taking a segregated systematic mixed-methods review approach, findings will be synthesised narratively

Analysis of subgroups or subsets
None Planned

Dissemination plans
Findings from this review will be published in a peer-reviewed journal, presented at academic conferences, and shared via social media.

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Anticipated or actual start date
01 April 2016

Anticipated completion date
29 July 2016

Funding sources/sponsors
This systematic literature review is funded by a full time PhD scholarship, provided by Coventry University.

Conflicts of interest
None known

Language
English

Country

England

Subject index terms status
Subject indexing assigned by CRD

Subject index terms
Humans; Midwifery; Orthotic Devices; Pregnancy; Publications; Stress, Psychological

Stage of review
Completed but not published

Date of registration in PROSPERO
27 March 2016

Date of publication of this revision
10 April 2017

Stage of review at time of this submission	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	Yes	Yes
Data extraction	Yes	Yes
Risk of bias (quality) assessment	Yes	Yes
Data analysis	Yes	Yes

Appendix 3: PRISMA Checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	218
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	218
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	219
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	219
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	219
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	219
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	219
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	221,

			235-241
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	220
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	220
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	220
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	220
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	220
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	220

Section/topic	**#**	**Checklist item**	**Reported on page #**
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	220
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	N/A
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	220
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	220, 222
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	227
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	221, 226

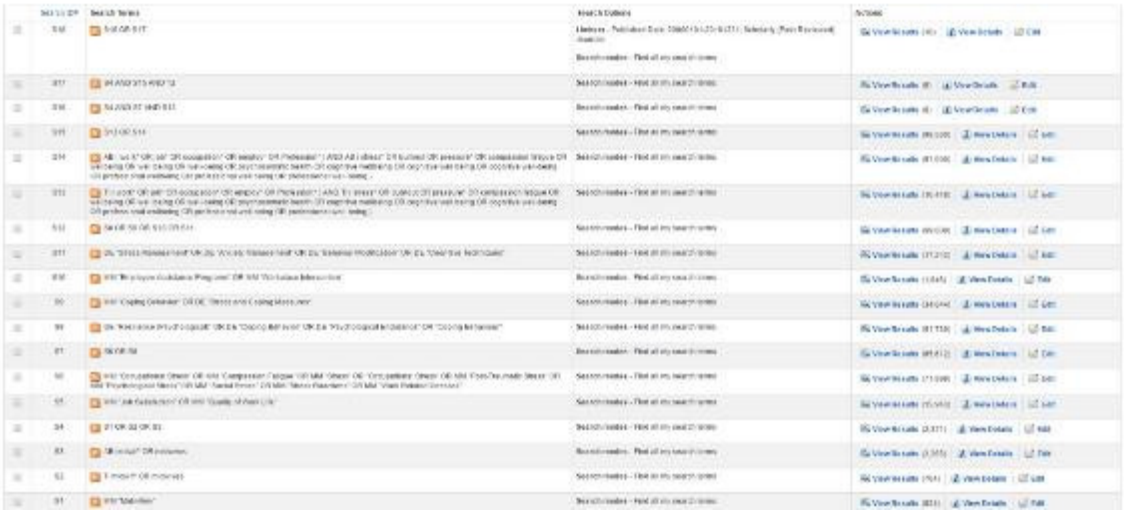
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	223, 226, 227
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	224
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	N/A
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	227
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	227
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	227
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	228

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

Appendix 4: Search Strategy for Systematic Mixed-Methods Review

Interface - EBSCOhost Research Databases **Search Screen -** Advanced Search **Database: PsycARTICLES and PsychINFO Search** **Limiters -** Published Date: 20000101-20161231; Scholarly (Peer Reviewed) Journals **Search modes -** Find all my search terms		
#	**Query**	**Results**
S18	S16 OR S17	10
S17	S4 AND S15 AND S12	6
S16	S4 AND S7 AND S12	6
S15	S13 OR S14	98,560
S14	AB (work* OR job* OR occupation* OR employ* OR Profession*) AND AB (stress* OR burnout OR pressure* OR compassion fatigue OR wellbeing OR well being OR well-being OR psychosomatic health OR cognitive wellbeing OR cognitive well being OR cognitive well-being OR professional wellbeing OR professional well being OR professional well-being)	97,000
S13	TI (work* OR job* OR occupation* OR employ* OR Profession*) AND TI (stress* OR burnout OR pressure* OR compassion fatigue OR wellbeing OR well being OR well-being OR psychosomatic health OR cognitive wellbeing OR cognitive well being OR cognitive well-being OR professional wellbeing OR professional well being OR professional well-being)	10,448
S12	S8 OR S9 OR S10 OR S11	69,609
S11	DE "Stress Management" OR DE "Anxiety Management" OR DE "Behavior Modification" OR DE "Cognitive Techniques"	17,236
S10	MM "Employee Assistance Programs" OR MM "Workplace Intervention"	1,846
S9	MM "Coping Behavior" OR DE "Stress and Coping Measures"	34,631
S8	DE "Resilience (Psychological)" OR DE "Coping Behavior" OR DE "Psychological Endurance" OR "Coping Behaviour"	51,730
S7	S5 OR S6	85,581
S6	MM "Occupational Stress" OR MM "Compassion Fatigue" OR MM "Stress" OR "Occupational Stress" OR MM "Post-Traumatic Stress" OR MM "Psychological Stress" OR MM "Social Stress" OR MM "Stress Reactions" OR MM "Work Related Illnesses"	71,877
S5	MM "Job Satisfaction" OR MM "Quality of Work Life"	15,934
S4	S1 OR S2 OR S3	2,370
S3	AB midwif* OR midwives	2,264
S2	TI midwif* OR midwives	704
S1	MM "Midwifery"	824

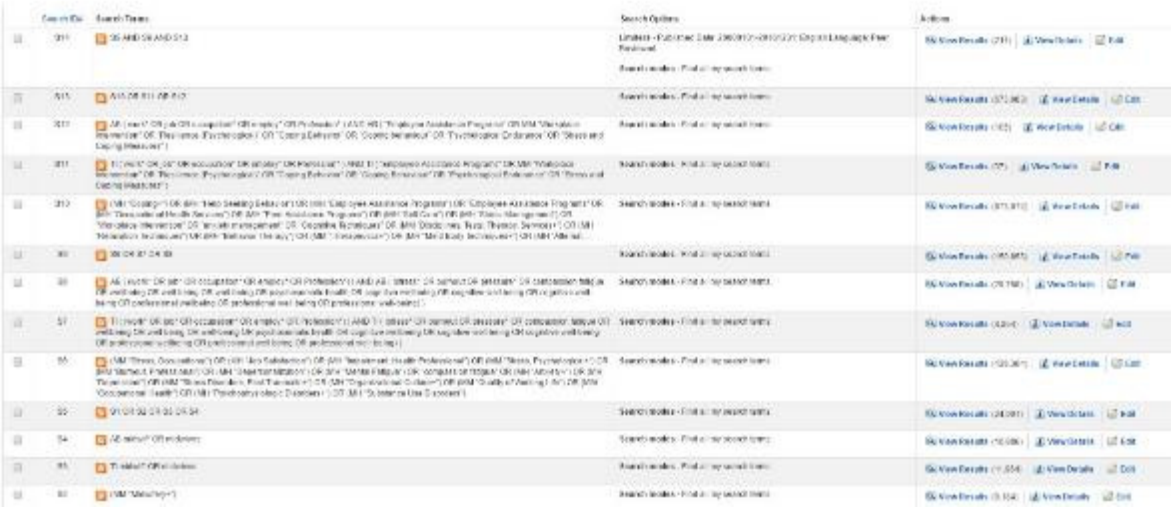
PsycARTICLES and PsycINFO Search



Interface - EBSCOhost Research Databases **Search Screen -** Advanced Search Database: CINAHL with Full Text Search **Limiters -** Published Date: 20000101-20161231; Scholarly (Peer Reviewed) Journals **Search modes -** Find all my search terms		
#	**Query**	**Results**
S14	S5 AND S9 AND S13	211
S13	S10 OR S11 OR S12	673,083
S12	AB (work* OR job OR occupation* OR employment OR Profession*) AND AB (“Employee Assistance Programs" OR MM "Workplace Intervention" OR "Resilience (Psychological)" OR "Coping Behavior" OR "Coping behaviour" OR "Psychological Endurance" OR "Stress and Coping Measures”)	105
S11	TI (work* OR job OR occupation* OR employment OR Profession*) AND TI (“Employee Assistance Programs" OR MM "Workplace Intervention" OR "Resilience (Psychological)" OR DE "Coping Behavior" OR "Coping behaviour" OR "Psychological Endurance" OR "Stress and Coping Measures”)	37
S10	(MH "Coping+") OR (MH "Help Seeking Behavior") OR (MH "Employee Assistance Programs") OR "Employee Assistance Programs" OR (MH "Occupational Health Services") OR (MH "Peer Assistance Programs") OR (MH "Self Care") OR (MH "Stress Management") OR "Workplace Intervention" OR "anxiety management" OR "Cognitive Techniques" OR (MM "Disciplines, Tests, Therapy, Services+") OR (MH "Relaxation Techniques") OR (MH "Behavior Therapy") OR (MM "Therapeutics+") OR (MH "Mind Body Techniques+") OR (MH "Alternative Therapies+") OR "coping measures" OR "resilience"	672,917
S9	S6 OR S7 OR S8	150,853
S8	AB ((work* OR job* OR occupation* OR employ* OR Profession*)) AND AB ((stress* OR burnout OR pressure* OR compassion fatigue OR wellbeing OR well being OR well-being OR psychosomatic health OR cognitive wellbeing OR cognitive well being OR cognitive well-being OR professional wellbeing OR professional well being OR professional well-being))	29,758
S7	TI ((work* OR job* OR occupation* OR employ* OR Profession*)) AND TI ((stress* OR burnout OR pressure* OR compassion fatigue OR wellbeing OR well being OR well-being OR psychosomatic health OR cognitive wellbeing OR cognitive well being OR cognitive well-being OR professional wellbeing OR professional well being OR professional well-being))	4,254

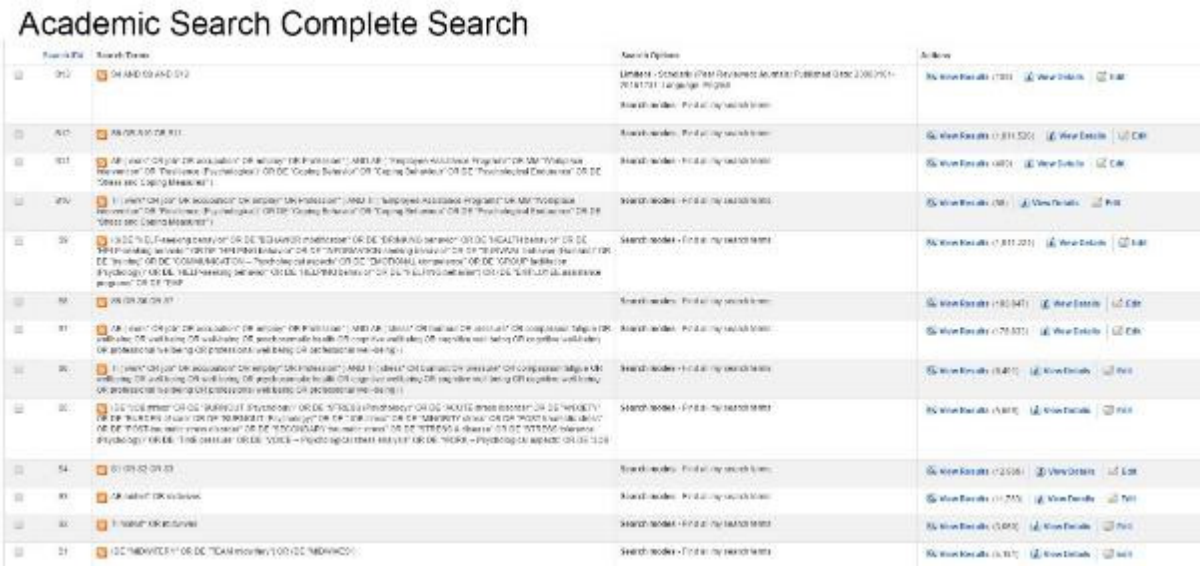
S6	(MM "Stress, Occupational") OR (MH "Job Satisfaction") OR (MH "Impairment, Health Professional") OR (MM "Stress, Psychological+") OR (MM "Burnout, Professional") OR (MH "Depersonalization") OR (MH "Mental Fatigue") OR "compassion fatigue" OR (MH "Anxiety+") OR (MH "Depression") OR (MM "Stress Disorders, Post-Traumatic+") OR (MH "Organizational Culture+") OR (MM "Quality of Working Life") OR (MM "Occupational Health") OR (MH "Psychophysiologic Disorders+") OR (MH "Substance Use Disorders")	128,314
S5	S1 OR S2 OR S3 OR S4	23,998
S4	AB midwif* OR midwives	10,886
S3	TI midwif* OR midwives	11,964
S2	(MM "Midwifery+")	9,183
S1	(MM "Midwives+")	4,565

CINAHL with Full Text Search



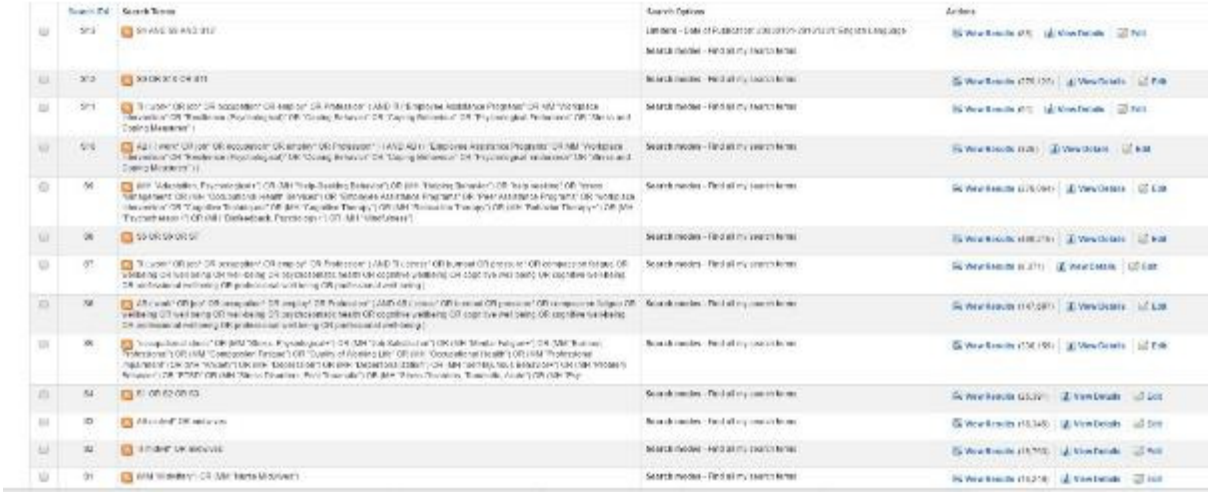
Interface - EBSCOhost Research Databases **Search Screen -** Advanced Search Database: **Academic Search Complete** Search **Limiters -** Published Date: 20000101-20161231; Scholarly (Peer Reviewed) Journals **Search modes -** Find all my search terms		
#	**Query**	**Results**
S13	S4 AND S8 AND S12	109
S12	S9 OR S10 OR S11	1,911,520
S11	AB (work* OR job* OR occupation* OR employ* OR Profession*) AND AB (“Employee Assistance Programs" OR MM "Workplace Intervention" OR "Resilience (Psychological)" OR DE "Coping Behavior" OR "Coping Behaviour" OR DE "Psychological Endurance" OR DE "Stress and Coping Measures”)	400
S10	TI (work* OR job* OR occupation* OR employ* OR Profession*) AND TI (“Employee Assistance Programs" OR MM "Workplace Intervention" OR "Resilience (Psychological)" OR DE "Coping Behavior" OR "Coping Behaviour" OR DE "Psychological Endurance" OR DE "Stress and Coping Measures”)	66
S9	((((DE "HELP-seeking behavior" OR DE "BEHAVIOR modification" OR DE "DRINKING behavior" OR DE "HEALTH behavior" OR DE "HELP-seeking behavior" OR DE "HELPING behavior" OR DE "INFORMATION-seeking behavior" OR DE "SURVIVAL behavior (Humans)" OR DE "training" OR DE "COMMUNICATION -- Psychological aspects" OR DE "EMOTIONAL competence" OR DE "GROUP facilitation (Psychology)" OR DE "HELP-seeking behavior" OR DE "HELPING behavior" OR DE "HELPING behavior") OR (DE "EMPLOYEE assistance programs" OR DE "EMPLOYEE well-being" OR DE "EMPLOYEE assistance program*" OR DE "EMPLOYEES -- Services for" OR DE "PERSONNEL management" OR DE "ALCOHOLISM & employment" OR DE "DRUGS & employment" OR DE "EMPLOYEES -- Counseling of" OR DE "PROBLEM employees" OR DE "SUBSTANCE abuse" OR DE "TREATMENT programs")) OR (DE "STRESS management" OR DE "PROGRESSIVE muscle relaxation" OR DE "TRAUMATIC incident reduction" OR DE "HEALTH self-care" OR DE "MENTAL health" OR DE "RELAXATION (Health)" OR DE "REST" OR DE "SELF-neglect" OR DE "SLEEP" OR DE "STRESS management" OR DE "PROGRESSIVE muscle relaxation" OR DE "ADAPTABILITY (Psychology)" OR DE "SELF-management (Psychology)")) AND (DE "PEER counseling" OR DE "COUNSELING" OR DE "train*" OR DE "COUNSEL*" OR DE "HOTLINES (Counseling)" OR DE "INTERNET counseling" OR DE "LEISURE counseling" OR DE "MENTORING" OR DE "MOTIVATIONAL interviewing" OR DE "MULTIPLE counseling" OR DE "PEER counseling" OR DE "PHILOSOPHICAL counseling" OR DE "REHABILITATION counseling" OR DE "SHORT-term counseling" OR (DE "PSYCHO*" OR "training" OR DE "AUDIOTAPES in psychotherapy" OR DE "AVERSION therapy" OR DE "BEHAVIOR therapy" OR DE "BIBLIOTHERAPY" OR DE "COGNITIVE therapy" OR DE "CONJOINT therapy" OR DE "DESENSITIZATION (Psychotherapy)" OR "Therap*" OR DE "EMOTION-focused therapy" OR DE "EMOTIONAL Freedom Techniques" OR DE "EXISTENTIAL psychotherapy" OR DE "FEELING therapy" OR DE "GRIEF therapy" OR DE "GROUP psychotherapy" OR DE "MULTIMODAL psychotherapy" OR DE "NARRATIVE therapy" OR DE "NATURE therapy" OR DE "OCCUPATIONAL therapy" OR DE "POETRY therapy" OR DE "PRIMAL therapy" OR DE "PROBLEM-solving therapy" OR DE "PSYCHIATRY -- Differential therapeutics" OR DE "PSYCHODYNAMIC psychotherapy" OR DE "PSYCHOSURGERY" OR DE "RADICAL therapy (Psychotherapy)" OR DE "REALITY therapy" OR DE "RECREATIONAL therapy" OR DE "REDECISION therapy" OR DE "REFRAMING (Psychotherapy)" OR DE "RELATIONAL-cultural therapy" OR DE "REMOTIVATION therapy" OR DE "RESISTANCE (Psychoanalysis)" OR DE "RESTRICTED environmental stimulation" OR DE "SHOCK therapy" OR DE "SOLUTION-focused therapy" OR DE "STRATEGIC therapy" OR DE "SUPPORTIVE psychotherapy" OR DE "TELECOMMUNICATION in psychotherapy" OR DE "TRANSFERENCE (Psychology)" OR DE	1,911,221

	"TRANSPERSONAL psychotherapy" OR DE "TREATMENT contracts (Psychotherapy)" OR DE "VIDEO recording in psychotherapy" OR OR "Counsell*" OR "Behaviour*" DE "VIDEO tapes in psychotherapy" OR DE "VIRTUAL reality therapy")	
S8	S5 OR S6 OR S7	180,765
S7	AB (work* OR job* OR occupation* OR employ* OR Profession*) AND AB (stress* OR burnout OR pressure* OR compassion fatigue OR wellbeing OR well being OR well-being OR psychosomatic health OR cognitive wellbeing OR cognitive well being OR cognitive well-being OR professional wellbeing OR professional well being OR professional well-being))	176,753
S6	TI (work* OR job* OR occupation* OR employ* OR Profession*) AND TI (stress* OR burnout OR pressure* OR compassion fatigue OR wellbeing OR well being OR well-being OR psychosomatic health OR cognitive wellbeing OR cognitive well being OR cognitive well-being OR professional wellbeing OR professional well being OR professional well-being))	6,490
S5	(DE "JOB stress" OR DE "BURNOUT (Psychology)" OR DE "STRESS (Psychology)" OR DE "ACUTE stress disorder" OR DE "ANXIETY" OR DE "BURDEN of care" OR DE "BURNOUT (Psychology)" OR DE "JOB stress" OR DE "MINORITY stress" OR DE "POST-traumatic stress" OR DE "POST-traumatic stress disorder" OR DE "SECONDARY traumatic stress" OR DE "STRESS & disease" OR DE "STRESS tolerance (Psychology)" OR DE "TIME pressure" OR DE "VOICE -- Psychological stress analysis" OR DE "WORK -- Psychological aspects" OR DE "JOB enrichment" OR DE "JOB stress" OR DE "BURNOUT (Psychology)" OR DE "EMPLOYEE well-being" OR DE "JOB satisfaction" OR DE "QUALITY of work life" OR DE "WORK environment" OR DE "WORK-life balance") AND (DE "WORK-life balance" OR DE "BURNOUT (Psychology)")	5,652
S4	S1 OR S2 OR S3	12,969
S3	AB midwif* OR midwives	11,782
S2	TI midwif* OR midwives	3,060
S1	(DE "MIDWIFERY" OR DE "TEAM midwifery") OR (DE "MIDWIVES")	5,178



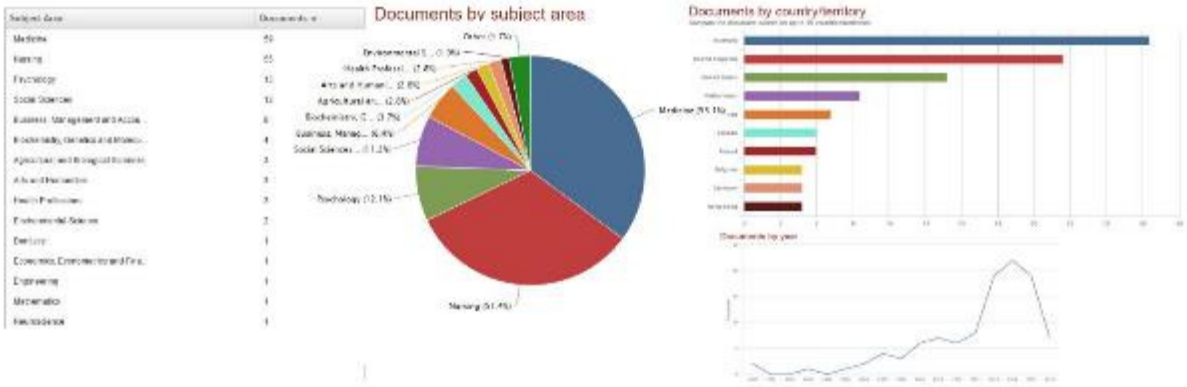
Interface - EBSCOhost Research Databases **Search Screen -** Advanced Search **Database: MEDLINE Search** **Limiters -** Published Date: 20000101-20161231; Scholarly (Peer Reviewed) Journals **Search modes -** Find all my search terms		
#	**Query**	**Results**
S13	S4 AND S8 AND S12	85
S12	S9 OR S10 OR S11	279,122
S11	TI (work* OR job* OR occupation* OR employ* OR Profession*) AND TI ("Employee Assistance Programs" OR MM "Workplace Intervention" OR "Resilience (Psychological)" OR "Coping Behavior" OR “Coping Behaviour” OR "Psychological Endurance" OR "Stress and Coping Measures”)	91
S10	AB (work* OR job* OR occupation* OR employ* OR Profession*) AND AB ("Employee Assistance Programs" OR MM "Workplace Intervention" OR "Resilience (Psychological)" OR "Coping Behavior" OR “Coping Behaviour” OR "Psychological Endurance" OR "Stress and Coping Measures")	326
S9	(MH "Adaptation, Psychological+") OR (MH "Help-Seeking Behavior") OR (MH "Helping Behavior") OR "help seeking" OR "stress management" OR (MH "Occupational Health Services") OR "Employee Assistance Programs" OR "Peer Assistance Programs" OR "workplace intervention" OR "Cognitive Techniques" OR (MH "Cognitive Therapy") OR (MH "Relaxation Therapy") OR (MH "Behavior Therapy+") OR (MH "Psychotherapy+") OR (MH "Biofeedback, Psychology+") OR (MH "Mindfulness")	279,064
S8	S5 OR S6 OR S7	469,215
S7	TI (work* OR job* OR occupation* OR employ* OR Profession*) AND TI (stress* OR burnout OR pressure* OR compassion fatigue OR wellbeing OR well being OR well-being OR psychosomatic health OR cognitive wellbeing OR cognitive well being OR cognitive well-being OR professional wellbeing OR professional well being OR professional well-being)	8,371
S6	AB (work* OR job* OR occupation* OR employ* OR Profession*) AND AB (stress* OR burnout OR pressure* OR compassion fatigue OR wellbeing OR well being OR well-being OR psychosomatic health OR cognitive wellbeing OR cognitive well being OR cognitive well-being OR professional wellbeing OR professional well being OR professional well-being)	147,697
S5	"occupational stress" OR (MM "Stress, Physiological+") OR (MH "Job Satisfaction") OR (MH "Mental Fatigue+") OR (MM "Burnout, Professional") OR (MM "Compassion Fatigue") OR "Quality of Working Life" OR (MH "Occupational Health") OR (MM "Professional Impairment") OR (MH "Anxiety") OR (MH "Depression") OR (MH "Depersonalization") OR (MH "Self-Injurious Behavior+") OR (MH "Problem Behavior") OR "PTSD" OR (MH "Stress Disorders, Post-Traumatic") OR (MH "Stress Disorders, Traumatic, Acute") OR (MH "Psychological Trauma") OR (MH "Trauma and Stressor Related Disorders")	338,159
S4	S1 OR S2 OR S3	26,391
S3	AB midwif* OR midwives	18,345
S2	TI midwif* OR midwives	18,753
S1	(MM "Midwifery") OR (MM "Nurse Midwives")	16,240

MEDLINE Search



Interface - EBSCOhost Research Databases **Search Screen -** Advanced Search **Database: Scopus Search** **Limiters -** Published Date: 20000101-20161231; Scholarly (Peer Reviewed) Journals **Search modes -** Find all my search terms		
#	**Query**	**Results**
	midwif* OR midwives AND occupational stress OR Job Satisfaction OR Burnout OR Compassion Fatigue OR Quality of Working Life OR Occupational Health OR Professional Impairment OR Wellbeing OR Well being OR Well-being OR Anxiety OR Depression OR PTSD AND work* OR job* OR occupation* OR employ* OR Profession* AND Workplace Intervention OR Coping OR stress management OR Occupational Health Services OR Therap* OR Cognitive Techniq* OR Program* OR Support*	**109**

Analyze search results Scopus Search



Appendix 5: MAStARI data extraction instrument

JBI Data Extraction Form for Experimental / Observational Studies

Reviewer ..... Date .....

Author ..... Year .....

Journal ..... Record Number .....

Study Method

RCT	☐	Quasi-RCT	☐	Longitudinal	☐
Retrospective	☐	Observational	☐	Other	☐

Participants

Setting

Population

Sample size

Group A _____ Group B _____

Interventions

Intervention A

Intervention B

Authors Conclusions:

Reviewers Conclusions:

Study results

Dichotomous data

Outcome	Intervention ( ) number / total number	Intervention ( ) number / total number

Continuous data

Outcome	Intervention ( ) number / total number	Intervention ( ) number / total number

Appendix 6: Stakeholder analysis

Stakeholder (s)	Area of interest	Contribution	Expectation
Current government CQC DoH CNST NHSLA NHS England NHS Employers NHS Wellbeing teams	• Improved NHS Services • Government Policy • Financial Savings • Care Quality • Reduced Risk/Litigation within NHS services. • Good Staff Health • Positive Patient Experience • Good Recruitment and Retention Rates • Targets • Positive Public Opinion • Risk Management • Austerity Measures	• Policy Backing • Low Risk Strategies for Implementation • Leadership in Innovation • A Clear Vision of Future NHS services • Integration with Current Healthcare Guidelines • Governance Standards for Consideration • Quality Standard Setting and Risk Assessments • Staff Survey Feedback • Ongoing Audit of Outcome Measures	• Improvements in NHS Services • Financial Savings • Implementation of Government Standards/Vision/Guidelines and Overall Policies. • Service Quality Assurance • Compliance with Government Leadership Direction. • CNST/CQC Standards Met • Improved Staff Wellbeing • Improved Recruitment and Retention Rates • Evidenced Based Solution to poor NHS Staff Health.
NHS Trusts Occupational health teams Human resources departments	• Patient Satisfaction • Increased Care Quality • Staff Health • Service Improvement • Clinical Governance • High CNST Level Attainment • Risk/Litigation Reduction • Staff Wellbeing • Good Recruitment and Retention Rates	• Staff Survey Knowledge • Motivation for Improving Care Quality • Priority Setting • Knowledge in Innovation • Feedback • Recommendations • Wellbeing Strategies • Current Guidance • Policy Recommendations • Ongoing Audit of Outcome Measures	• Service/Quality Improvements • Financial Savings • Reduced Risk and Litigation • High CNST Level Attainment • Quality Project Management • Improved Reputation • Reputation of 'Good Employer' • Evidenced Based Solution to Poor NHS Staff Health

	• Good Reputation • Targets		
Royal College of Midwives	• Midwife Wellbeing • Staff Support • Staff Representation • Reputation of Profession	• Endorsement of Intervention • Support for Users • Positive Promotion of Initiative • Feedback • Contribute Recommendations • Ongoing Audits of Outcome	• Improved Midwife wellbeing • Evidenced Based Solution to Poor Staff Health • Staff Support • Uphold the Reputation of Midwives • Represent Midwives Effectively
Nursing and Midwifery Council	• Public Safety • Public Image • Midwifery Regulation • Midwifery Reputation	• Support for Project • NMC Code Guidance • Ethical Guidance • Agreed Amnesty? • Public Safety Guidance • Feedback • Contribute recommendations • Audit Ongoing Outcomes • Awareness	• Competent Registrants • Healthy Registrants • Reduction in Referrals • Public Safety • Improved Care • Professional Reputation Maintained.
Matrons and Midwifery Leaders	• Maternity Service Improvement • Staff Wellbeing • Staff Morale • 'Working Smarter' • Reputation • Targets • Service Quality	• Staff Knowledge • Knowledge to Promote Supportive Cultures • Feedback • Contribute Recommendations • Audit Ongoing Outcomes • Generate Awareness	• Improved Maternity Service Outcomes • Overall Financial Savings • Risk Reduction • Improved Care • Improved Staff Wellbeing • Improved Staff Morale

Midwives and Student Midwives	• Self-Management • Wellbeing • Employment • Competence • Continued Professional Development • Positive Working Cultures • Effective Appraisals • Effective Working Teams • Quality Care Services • Staff Wellbeing • Good Reputation • Targets Met • Leadership	• Protected staff time • Permission for Project to go ahead/Continue • Allocation of Resources • Supportive Culture • Feedback • Contribute recommendations • Project Support • Generate Awareness	• Improved Maternity Service • Overall Financial Savings • Risk Reduction • Improved: • Care • Staff Wellbeing • Morale • Good Health • Supportive Employers • Supportive Regulatory Bodies • Supportive Representative Bodies
Service users and the public	• Improved Maternity Services • Care Experience • Reduced Risk • Good Outcomes • Professional Reputation • Maintain Trust • Midwife Wellbeing	• Patient and Public Opinion on Midwife Working Cultures • Opinions upon Ethical Dilemmas of Amnesty. • Public Expectations • Awareness • Support	• Public Safety • Service Improvements • Reduced Risk • Positive Outcomes • Healthy Midwives

Appendix 7: Formal invitation sent to potential participants

Formal Invitation to participate in an online Delphi Study to achieve Consensus in the Development of an Online Intervention Designed to Effectively Support Midwives in Work related Psychological Distress.

Traumatic work environments in maternity services may be associated with stress, vicarious trauma and anxiety. The need for an evidenced-based intervention is pressing, as healthcare staff report that they are close to having a breakdown in mental health.

Currently, there is a paucity of support for midwives, who could be at an increased risk of psychological distress due to the fact that they are independent practitioners, working in an area of high litigation. NHS staff surveys highlight workplace cultures that are not midwife-friendly This is of significance, as there is a clear link between staff wellbeing and patient care.

Online networks are one option people may turn to in psychological distress. As a consequence, midwives may find online networks a place to acquire the skills and resources required to manage their own mental wellbeing, improve their professional quality of life, and reduce symptoms of traumatic stress, depression and anxiety.

The focus of this research is to reach expert consensus on the needs of midwives in work-related psychological distress who may be supported via an online intervention. We are looking for your opinion, as part of an anonymous expert panel, in regards the development of an online intervention designed to support midwives in work-related psychological distress. We invite you to participate in 2 rounds of questioning, which explore what may be prioritized within such an online intervention.

We hope that the results of this study will form a consensus in how an intervention designed to support midwives in psychological distress should be designed, developed and used. The results of this study will direct the development of an online intervention designed to support midwives in work-related psychological distress, summarise expert driven consensus and direct future research.

You have been invited to participate in this study due to your expert knowledge in one or more of the following areas:

- Expert knowledge in Midwifery
- Psychology
- Psychiatry
- Psychological Trauma
- Healthcare services
- Practical knowledge in Midwifery
- Midwifery Lecturing
- Research
- Therapies
- Health Services
- Patient experience
- Staff Experience

However, you have no obligation to take part in this study and may decline or withdraw from the study at any time without need of any explanation.

Should you wish to take part, please express your interest in participation to the primary researcher, Sally Pezaro via the contact details listed below.

The first round of questioning is anticipated to take place during the first 2 weeks of October 2015. You will be asked to give your formal informed consent to participate at the beginning of the online questionnaire. This questionnaire should take around 30 minutes to complete, however you will have the opportunity to expand upon your answers to your own extent. You will also have the opportunity to suggest further questions to be put forward to the panel. You will be given 2 weeks to complete and submit your considered responses. You may also receive reminders to complete the survey should you need prompting to do so.

The research team will collate and evaluate all responses. The team will then produce a report which sets out all responses and results of the study. We anticipate that there will be some questions which may or may not reach group consensus. When 60% of panelists score within 2 adjacent points on a 7 point scale, consensus will be acknowledged. This will also be reported. You will receive a copy of the full report.

Three weeks after the submission deadline for the first questionnaire, you will be sent a link to a second online questionnaire. This questionnaire will contain

questions that may not have achieved consensus during the first round of questioning. You will be asked to review your initial response and be given the opportunity to amend your initial response should you wish to, based upon the overall response reported from the entire panel. There may also be additional questions added to this second questionnaire based upon additional questions suggested by the panel during the first round of questioning. New questions may also be based around new themes raised within the free text given in the first round of questioning. You will be given 2 weeks to complete and submit this questionnaire with your considered responses.

These new responses will also be collated and evaluated by the research team. Overall data will be presented and reported within a final research report. You will receive a copy of this report. We anticipate that a final published research paper may also arise as a result of this research. You will also receive a copy of such a paper.

There is a risk that you may experience psychological distress as a result of participating in this study due to the nature of its sensitive topic. We would urge you to access support from your named healthcare professional or access alternative support here: (www.healthystaff4healthypatients.wordpress.com) should you be affected by any of the content put forward within this research study.

We would also urge you to take the recommended health and safety precautions whilst working in a desk based environment whilst completing the questionnaires involved.

The benefit of taking part in this study is that you will become a part of new research which explores the concept of a new online intervention designed to support midwives in psychological distress. Should this be developed, it will be evidence based as a result of your participation, making it potentially more suitable for use and of worth to the wider community.

We invite you to remain informed about the development of any subsequent online intervention designed to support midwives in psychological distress that may come as a result of this Delphi Study. However, you may remove yourself from this project at any time without giving reason.

Any data you give will be protected and secured confidentially by the research team. Other members of the panel will not know who else is participating. The public will not know who has participated, and any quotes reported within this literature will not identify the contributor. The data collected throughout this study will be kept securely for at least three years from the end of the project in line with Coventry University's policy on Principles and Standards of Conduct on the Governance of Applied Research.

Should you have any complaints, concerns or questions at any time, you may contact the primary researcher or the Director of Studies via the contact details below. You can also use these contact details to inform the research team of your withdrawal should you so wish.

Primary Researcher:

Sally Pezaro

Twitter: @SallyPezaro

Centre for Technology Enabled Health Research (CTEHR)

Faculty of Health & Life Sciences

Mile Lane

Coventry CV1 2NL

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Author:

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Senior Research Fellow

FACULTY OF HEALTH AND LIFE SCIENCES

Coventry University

Priory Street

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CV1 5FB

Tel: 02477654636

Email: wendy.clyne@coventry.ac.uk

Should you not wish to participate, please ignore this correspondence.

Many thanks for your time and consideration

Appendix 8: Informed Consent Form

Achieving Consensus in the Development of an Online Intervention Designed to Effectively Support Midwives in Psychological Distress: A Delphi Study

This Delphi study forms a review of what should be included within an online intervention designed to support midwives in psychological distress, how this intervention should function, and how it should be used. The study will include 2 rounds of questioning, offered to a group of expert panelists. Questionnaire responses will be analysed in order to ascertain the direction in which the development of the online intervention should proceed. The aim is to form an expert consensus of opinion in this matter. You are invited to join the expert panel who will contribute to this study.

	Please tick
1. I confirm that I have read and understood the participant information sheet for the above study and have had the opportunity to ask questions.	☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason	☐
3. I understand that all the information I provide will be treated in confidence.	☐
4. I understand that I also have the right to change my mind about participating in the study for a short period after the study has concluded (Deadline 1 st December 2015).	☐
5. I agree that my anonymised quotes can be used as part of the research project.	☐
6. I agree to take part in this research projecy	☐

Appendix 9: Delphi Study Questions for Round 1

Achieving Consensus in how an Online Intervention Designed to Effectively Support Midwives in Psychological Distress should be developed: Delphi survey Initial questionnaire

Thank you for agreeing to participate in this Delphi survey which aims to decide how an Online Intervention Designed to Effectively Support Midwives in Psychological Distress should be developed. This survey should take you approximately 30 minutes to complete.

You have been chosen to participate within this study as an expert panelist due to your relevant expertise. Your opinion is a valuable one.

This survey forms a review of what should be included within an online intervention designed to support midwives in work related psychological distress, how this intervention should function, and how it should be used.

This questionnaire round is the first of 2 questioning rounds. Please answer all questions by rating how much, or how little you would prioritise each case put forward. You will have the opportunity to write about why you have given your rating for each question at each stage of the questionnaire.

Once we have received all responses from all expert panelists, we will collate and summarise the findings and formulate a second round of questioning based upon the comments provided and answers given. We will invite you to participate in this second round of questioning approximately 5 weeks after the first questionnaires are distributed.

Your participation in this study and your individual responses will be strictly confidential to the research team. Other panelists will not be able to see your responses. Any comments that are published will be anonymised.

If you feel that you have been affected by any of the questions within this study, please access this link for external support.
(www.healthystaff4healthypatients.wordpress.com/support)

Below we ask some questions about what should be prioritized in the development of an online intervention designed to support midwives in work-related psychological distress. Each question asks about platform users and service users.
Platform users are defined as midwives who are interacting with the platform, and the service users are defined as the general public, patients and families.

There are 20 questions in total, organized into the following categories:

-Ethical Inclusions

-Inclusions of Therapeutic Support

-Intervention Design and Practical Inclusions

For each question we would like you to choose a number that best represents your response. There are no right or wrong answers. It is your opinion we are interested in. You might also like to write a few words about your answer in the text box below each question.

Please begin when you are ready.

An online intervention designed to support midwives in work-related psychological distress should prioritise:

-Ethical Inclusions

1. Confidentiality for all platform users and service users in all matters of discussion.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

2. Anonymity for all platform users and service users in all matters of discussion.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

3. Amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

4. Prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

5. Prompting platform users automatically to seek help, by signposting them to appropriate support.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

- *Inclusions of Therapeutic Support*

6. The inclusion of web based videos, multimedia resources and tutorials which explore topics around psychological distress.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

7. The inclusion of informative multimedia designed to assist midwives to recognise the signs and symptoms of psychological distress.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

8. The inclusion of multimedia resources which disseminate self-care techniques

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

9. The inclusion of multimedia resources which disseminate relaxation techniques

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

10. The inclusion of information designed to inform midwives where they can access alternative help and support.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

11. The inclusion of information designed to inform midwives as to where they can access legal help and advice.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

12. Giving platform users the ability to share extended personal experiences for other platform users to read.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

13. The inclusion of a web based peer to peer discussion chat room.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

14. The inclusion of mindfulness tutorials and multimedia resources.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

15. The inclusion of Cognitive behavioural Therapy (CBT) tutorials and multimedia resources.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

16. Giving platform users the ability to communicate any work or home based subjects of distress.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

- Intervention Design and Practical Inclusions

17. An interface which does not resemble NHS, employer or other generic healthcare platforms.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

18. A simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

19. An automated moderating system where 'key words' would automatically initiate a moderated response.

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

20. Mobile device compatibility for platform users

1 – Not a priority	2 – Low priority	3 – Somewhat priority	4 – Neutral	5 – Moderate Priority	6 – High priority	7 – Essential priority

(Optional open text field) – Why did you choose this rating of priority?

(Optional open text field) - Additional Comments:

(Optional open text field available for round 1 only) – Are there any further questions you would like to subject to an expert panel priority rating during the next round of questioning?

Appendix 10: Delphi Study Participant Report – Round 1.

Delphi Study First Round Participant Report: Delphi Study to achieve Consensus in the Development of an Online Intervention Designed to Effectively Support Midwives in Work related Psychological Distress.

Round One

Thankyou from the research team

66 of you completed this first round of questioning designed to achieve consensus in the development of an online intervention designed to support midwives in work-related psychological distress. Thankyou! Your responses were informative, useful and very valuable to this study.

Overview of Round One

A total of 185 people were invited to participate in this Delphi Study. 66 (35.7%) of those participants invited completed the first round. Panellists were asked to assign a priority rating to 20 statements using a 7 point likert type scale. Prior to receiving your responses we set a criteria for consensus. As such, a consensus of opinion was considered to be reached when 60% or more of the responses fell within 2 adjacent response points on the 7-point scale.

example	Not a priority	Low priority	Somewhat a priority	Neutral	Moderate priority	High priority	Essential priority
An interface which does not resemble NHS, employer or other generic healthcare platforms	☐	☐	☐	☐	☐	☐	☐

Summary of Round One

The research team assessed whether each item had achieved a consensus of opinion or not. The team then went on to allocate each free text response with one or more themes of significance. Of the 20 questions posed, 11 lines of enquiry achieved consensus and 9 did not. A total of 900 free text responses were provided by the panel which were then categorised into themes by two of the research team. Table one summarises the results from round one of this Delphi study.

Table 1: Results Summary for Round One Questionnaire

	Question: An online intervention designed to support midwives in work-related psychological distress should prioritise:	Consensus achieved	% of Consensus	Mean Score	Comments submitted in free text	Statements Categorised	Themes Generated
1.	Confidentiality for all platform users and service users in all matters of discussion	Yes (High/ Essential Priority)	90.9%	6.61	58	85	17
2.	Anonymity for all platform users and service users in all matters of discussion	Yes (High Priority)	84.9%	6.27	51	88	22
3.	Amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case.	No	N/A	5.08	59	136	19
4.	Prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.	No	N/A	4.91	63	81	12
5.	prompting platform users automatically to seek help, by signposting them to appropriate support	Yes (High priority/ Essential Priority)	78.8%	6.15	48	79	17
6.	the inclusion of web based videos, multimedia resources and tutorials	Yes (Moderate priority/ High	68.2%	5.41	51	81	11

	which explore topics around psychological distress	priority)					
7.	the inclusion of informative multimedia designed to assist midwives to recognise the signs and symptoms of psychological distress	Yes (High priority/ Essential priority)	71.3%	5.85	50	80	18
8.	The inclusion of multimedia resources which disseminate self-care techniques	Yes (High priority/ Essential priority)	74.2%	5.89	45	67	16
9.	The inclusion of multimedia resources which disseminate relaxation techniques	Yes (Moderate priority/ High priority)	65.1%	5.41	41	55	21
10	The inclusion of mindfulness tutorials and multimedia resources	Yes (Moderate priority /High priority)	66.7%	5.38	45	59	22
11	The inclusion of Cognitive behavioural Therapy (CBT) tutorials and multimedia resources	Yes (Moderate priority/ High priority)	60.6%	5.12	42	62	25
12	The inclusion of information designed to inform midwives where they can access alternative help and support	Yes (High priority/ Essential priority)	86.4%	6.32	30	41	12
13	The inclusion of information designed to inform midwives as to where they can access legal help and advice	No	N/A	5.7	32	40	9
14	Giving platform users the ability to share extended personal experiences for other platform users to read	No	N/A	5.02	49	87	12
15	The inclusion of a web based peer to peer discussion chat room	No	N/A	4.79	48	78	18

16	Giving platform users the ability to communicate any work or home based subjects of distress	No	N/A	5.12	38	50	10
17	An interface which does not resemble NHS, employer or other generic healthcare platforms	No	N/A	5.24	38	50	13
18	A simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage	No	N/A	5.33	32	53	6
19	An automated moderating system where 'key words' would automatically initiate a moderated response	No	N/A	4.74	44	67	12
20	Mobile device compatibility for platform users	Yes (High Priority/ Essential Priority)	71.2%	5.97	36	48	8
					Total= 900	Total = 1387	Total =300

Table two summarises the responses given during round one of this Delphi study. Please note that percentages have been rounded toward the nearest whole number.

Table 2: Summary of round 1 responses

Topic of enquiry	Themes generated	Number of times referenced	%	Total number of statements categorised
Confidentiality for all platform users and service users in all matters of discussion	Confidentiality – Required for open and honest disclosure	24	28%	85
	Midwives - Fear retribution	6	7%	
	Confidentiality – Decided by user	5	6%	
	Confidentiality – for third parties	9	11%	
	Midwives - May need further support/ intervention	2	2%	
	Midwives – Feel shame if not managing	2	2%	
	Confidentiality – Needed to avoid public identification	3	4%	
	Confidentiality – Not possible online	2	2%	
	Confidentiality - Needed to protect the reputation of the profession	2	2%	

	Confidentiality – Context dependent	4	5%	
	Confidentiality – Essential criterion for provision of support	10	12%	
	Midwives – Need to feel safe	10	12%	
	Midwives – Have little existing provision	1	1%	
	Professional – Legal/Regulatory obligations	1	1%	
	Midwives – Fear consequences	1	1%	
	Confidentiality – High priority	2	2%	
	Midwives – Need reassurance	1	1%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
Anonymity for all platform users and service users in all matters of discussion	Anonymity – Required for open and honest disclosure	20	23%	88
	Anonymity – May prevent further intervention	3	3%	
	Anonymity – Needed for support	10	11%	
	Anonymity - Decided by user	7	8%	
	Feeling safe/safety - Required	4	5%	
	Midwives – Fear retribution	6	7%	
	Midwives – Support is highest priority	4	5%	
	Anonymity – Not possible online	3	3%	
	Professional – Legal/Regulatory obligations	4	5%	
	Anonymity – for third parties	5	6%	
	Midwives – Need assurances	1	1%	
	Anonymity is synonymous with confidentiality	2	2%	
	Midwives – Feel shame if not managing	2	2%	
	Anonymity – Use of pseudonyms	2	2%	
	Anonymity - could be misused/cause distress	4	5%	
	Practicalities – Additional support may be required	2	2%	
	Anonymity – Requires policy	1	1%	
	Practicalities – Legal obligations over raising concerns	2	2%	
	Practicalities – User verification	1	1%	
	Midwives – Fearful of disclosure	1	1%	
	Anonymity – Needed to seek support	1	1%	
	Anonymity – Needed to feel safe	2	2%	
	Anonymity – Unsure of relevance	1	1%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
Amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case.	Amnesty – Important/Helpful	19	14%	136
	Amnesty - Conflicted in opinion	13	10%	
	Amnesty - Cannot be supported	14	10%	
	Amnesty – Legal and ethical obligations – duty of care	18	13%	
	Amnesty – Required to facilitate support	13	10%	
	Amnesty – Automatic if confidentiality/anonymity is afforded	2	1%	
	Midwives – Fear speaking openly/retribution	15	11%	
	Practicalities – Intervention may be required	10	7%	
	Amnesty – may not be possible	9	7%	
	Midwives – Have little existing provision	1	1%	
	Midwives – Need support	1	1%	
	Midwives – Should self-report	4	3%	
	Intervention – Disclaimers may be required	1	1%	
	Practicalities – Further intervention by management required	2	1%	
	Amnesty – Required for recovery	5	4%	
	Midwife – Needs support	1	1%	
	Amnesty – May cause distress to others	3	2%	
	Intervention – Consider emulating the principles of	1	1%	

	comparable interventions.			
	Amnesty – Conflicted in opinion	3	2%	
	Intervention – Warnings may be required	1	1%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
Prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.	Prompting - May be harmful	8	10%	81
	Midwives – Will already be aware	11	14%	
	Prompting – Should be done sensitively	6	7%	
	Prompting – Helpful inclusion	18	22%	
	Prompting – Unhelpful inclusion	14	17%	
	Professional codes – adherence a professional responsibility	14	17%	
	Prompting – Need unclear	3	4%	
	Conflicted opinion	2	2%	
	Prompts – Not supportive	2	2%	
	Prompts – adherence to code a pre-condition of use	1	1%	
	Prompts – Sensitivity needed	1	1%	
	Codes of conduct – important to highlight	1	1%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
Prompting platform users automatically to seek help, by signposting them to appropriate support	Signposting to support – A useful inclusion	36	46%	79
	Prompts - unsuitable	2	3%	
	Practicalities – Dependent on the nature of support	4	5%	
	Practicalities – Needs a personalised tailored response	1	1%	
	Intervention – if evidence-based	1	1%	
	Safety is important	3	4%	
	Conflicted opinion	4	5%	
	Signposting to support – Clarity on method required	3	4%	
	Signposting to support – Help seeking may be low	9	11%	
	Signposting to support – Support must be high quality	2	3%	
	Midwives – In control of their own help seeking behaviours	3	4%	
	Signposting to support – A helpful inclusion	4	5%	
	Signposting to support - Could lead to users pathologising symptoms	1	1%	
	Signposting to support – intervention itself is sufficient	2	3%	
	Prompting - Consider alternative delivery	1	1%	
	Consider using third sector groups and organisations	1	1%	
	Automatic signposting - Clarity on method required	2	3%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
the inclusion of web based videos, multimedia resources and tutorials which explore topics around psychological distress	Multimedia tutorials – Helpful inclusion	40	49%	81
	Multimedia resources – Unhelpful inclusion	6	7%	
	Multimedia – Variety in content presentation useful	18	22%	
	Multimedia resources – Evidence based/high quality resources required	3	4%	
	Multimedia resources – Conflicted opinion	4	5%	
	Multimedia resources – benefit dependent upon the nature of distress	1	1%	
	Midwives – Greater need for alternative support	3	4%	
	Multimedia resources – Benefit dependent upon the nature of resource	3	4%	
	Midwives – Feel like failures	1	1%	

	Midwives – Material needs to be matched to user needs	1	1%	
	Usability - depends upon the content	1	1%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
The inclusion of informative multimedia designed to assist midwives to recognise the signs and symptoms of psychological distress	Informative Multimedia – Helpful inclusion	40	50%	80
	Informative Multimedia – Unhelpful inclusion	3	4%	
	Multimedia – Need a variety of resources	2	3%	
	Conflicted – Depends upon objectives/content	7	9%	
	Multimedia - Resources must be high quality/evidence based	1	1%	
	Multimedia - Needs to be unique	1	1%	
	Multimedia - Not required	2	3%	
	Midwives – Do not always recognise own distress	13	16%	
	Informative Multimedia - could lead to inappropriate self-diagnosis	3	4%	
	Midwives – Support is important	1	1%	
	Midwives – Help Seeking is important	2	3%	
	Organisational – Distress is a normal response to organisational issues	1	1%	
	Informative Multimedia – resource should be clear and simple.	1	1%	
	Informative multimedia – To be used in initial engagement	1	1%	
	Informative media – Requires a variety of options	1	1%	
	Midwives – Do not always recognise own distress	1	1%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
The inclusion of multimedia resources which disseminate self-care techniques	Multimedia self-help resources – Helpful inclusion	30	45%	67
	Multimedia self-help resources – Unhelpful inclusion	1	1%	
	Need a variety of resources	6	9%	
	Multimedia self-help resources – Needs to be useful	3	4%	
	Midwives - do not prioritise self-care	5	7%	
	Midwives – additional support may be needed	6	9%	
	Multimedia self-help resources - ease of use important	3	4%	
	Neutral	2	3%	
	Midwives – Need support and understanding	2	3%	
	Midwives – Do not always recognise own distress	2	3%	
	Resource – Must be multiple options available	2	3%	
	Midwives – Need assessment	1	1%	
	Midwives – Must be accountable	1	1%	
	Midwives – Provision of coaching	1	1%	
	Midwives - Meaning of self-care unclear	1	1%	
	Resources - Peer support is useful	1	1%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
The inclusion of multimedia resources which disseminate relaxation techniques	Relaxation techniques - A helpful inclusion	18	33%	55
	Relaxation techniques - An unhelpful inclusion	8	15%	
	Resources – Need a variety of options	4	7%	
	Relaxation is a self-care technique	2	4%	
	Resources - Must be easy to use	2	4%	
	Organisational - distress can have organisational cause	1	2%	
	Resources – Could emulate comparable alternatives	1	2%	
	Resources must be safe to use	1	2%	
	Midwives – shortage of support and understanding	1	2%	
	Outside pressures – May inhibit use	2	4%	

	Relaxation techniques– benefit dependent on technique used	1	2%	
	Midwives – often feel guilty	2	4%	
	Need to generate viral content	1	2%	
	Midwives – May need additional support	1	2%	
	Relaxation techniques – May convey the wrong message	1	2%	
	Resources - could/should explain theory behind relaxation	1	2%	
	Midwives – Can apply their own knowledge	1	2%	
	Resources - Need to simple and comprehensive	1	2%	
	Relaxation - Limited evidence base	1	2%	
	Relaxation techniques – Requires a range of options	4	7%	
	Techniques - Consider mindfulness	1	2%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
The inclusion of mindfulness tutorials and multimedia resources	Mindfulness - A helpful inclusion	26	44%	59
	Mindfulness - An unhelpful inclusion	2	3%	
	Resource – Need a variety of options available	3	5%	
	Mindfulness – Neutral opinion	2	3%	
	Mindfulness – Degree of evidence	2	3%	
	Mindfulness – Meaning unclear	3	5%	
	Midwives - should know this technique already	1	2%	
	Midwives – Face stigma	1	2%	
	Midwives - May not want face to face support	1	2%	
	Resources - need to be simple and safe to use	1	2%	
	Mindfulness - Midwives may be sceptical	2	3%	
	Mindfulness – Conflicted opinion	2	3%	
	Midwives – other pressures may inhibit use	1	2%	
	Midwives – Do not always recognise own distress	2	3%	
	Relaxation - synonymous with mindfulness	1	2%	
	Effectiveness - dependent on the degree of distress	1	2%	
	Mindfulness - A supportive professional friend would be better	1	2%	
	Resources - May send unwanted messages	1	2%	
	Resources – Must offer a variety of options	3	5%	
	Midwives – Must be risk assessed	1	2%	
	Midwives – Must be encouraged to seek professional help	1	2%	
	Resources – Must be accessible	1	2%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
The inclusion of Cognitive behavioural Therapy (CBT) tutorials and multimedia resources	CBT tutorials - A helpful inclusion	18	29%	62
	CBT tutorials – An unhelpful inclusion	3	5%	
	Resources - Need a variety of options to suit all	2	3%	
	Intervention - Users may need additional support	9	15%	
	CBT tutorials - reduced evidence base	1	2%	
	CBT tutorials – Unclear meaning	2	3%	
	CBT tutorials - Needs to be easy and safe to use	1	2%	
	Resources - too many interventions may weaken the effect	2	3%	
	Midwives – May not access other CBT support	2	3%	
	Midwives – Need safety to disclose	2	3%	
	Midwives – face stigma	2	3%	
	Midwives – other pressures may inhibit use	1	2%	
	Midwives – May not be convinced of positive effect	1	2%	
	Effectiveness – Dependent on evidence and context	2	3%	
	Midwives – may need a targeted intervention	1	2%	
	Resources - Need to offer as many options as possible	1	2%	

	Midwives – May be impractical	1	2%	
	CBT tutorials - need to be professional and simple to use	1	2%	
	Resources - Consider Dialectical Behavioural Therapy (DBT)	2	3%	
	(CBT) tutorials - Question evidence base	1	2%	
	Midwives – Need risk assessment	1	2%	
	Midwives – Need encouragement to seek help	1	2%	
	Therapies - Evidence base instils confidence	2	3%	
	CBT – Unfamiliar with the therapy	1	2%	
	EMDR – Works well	2	3%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
The inclusion of information designed to inform midwives where they can access alternative help and support	Signposted to help and support – A helpful inclusion	18	44%	41
	Help and support – Need a variety of options available	7	17%	
	Help and support – Must be evidence based	2	5%	
	Help and support – Face to face support preferable	3	7%	
	Alternative help and support – Unclear meaning	1	2%	
	Help and support - few resources actually available	1	2%	
	Therapies – Must be real and local	1	2%	
	Therapies – Too many = Confusion	1	2%	
	Midwives – Impaired functioning when distressed	2	5%	
	Therapies - EFT (Emotional Freedom Technique) can be useful	2	5%	
	Therapies – Suggest peer group debriefing	2	5%	
	Therapies – Suggest links to local occupational Health resources	1	2%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
The inclusion of information designed to inform midwives as to where they can access legal help and advice	Legal help and advice - A helpful inclusion	24	60%	40
	Legal help and advice - An unhelpful inclusion	4	10%	
	Legal help and advice – conflicted opinion	3	8%	
	Legal help and advice - Unnecessary	4	10%	
	Legal help and advice – Question evidence base for this	1	3%	
	Legal help and advice - Few resources available	1	3%	
	Legal help and advice - Not a priority	1	3%	
	Legal Help and advice – Varies globally	1	3%	
	Legal help and advice - Consider providing personal legal advice	1	3%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
Giving platform users the ability to share extended personal experiences for other platform users to read	extended personal experiences = A helpful inclusion	52	60%	87
	extended personal experiences – An unhelpful inclusion	5	6%	
	extended personal experiences - Must be optional	1	1%	
	extended personal experiences – conflicted opinion	6	7%	
	extended personal experiences – Requires moderation	7	8%	
	extended personal experiences = Must protect confidentiality	7	8%	
	extended personal experiences – Could be misused	2	2%	
	extended personal experiences - ethically problematic	1	1%	
	Midwives – if conducted within professional codes	1	1%	
	extended personal experiences - Requires anonymity	1	1%	
	extended personal experiences = Must protect anonymity	3	3%	
	extended personal experiences = Must remain professional	1	1%	

Topic of enquiry	Themes generated	Number of times referenced	%	Total number of statements categorised
The inclusion of a web based peer to peer discussion chat room	Peer to peer discussion - A helpful inclusion	31	40%	78
	Peer to peer discussion - An unhelpful inclusion	9	12%	
	Peer to peer discussion - Needs moderation	9	12%	
	Peer to peer discussion - Could risk confidentiality/anonymity	3	4%	
	Peer to peer discussion - Risk of unethical use	6	8%	
	Peer to peer chatroom - May not be used	2	3%	
	Peer to peer chatroom - Requires high volume site traffic	1	1%	
	Peer to peer chatroom - May require trained supporters	1	1%	
	Effectiveness – Depends upon help seeking behaviour	1	1%	
	Peer to peer chatroom - Requires rules and standards	1	1%	
	Professional – Legal/Regulatory obligations	1	1%	
	Midwives - May need local chat rooms	1	1%	
	Peer to peer discussion - Should be an optional choice	1	1%	
	Peer to peer discussion - Requires moderation	6	8%	
	Peer to peer discussion - Risk of misuse	1	1%	
	Peer to peer discussion - May risk anonymity/confidentiality	2	3%	
	Peer to peer discussion - Requires guidance	1	1%	
	Peer to peer discussion - May be local variations	1	1%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
Giving platform users the ability to communicate any work or home based subjects of distress	Discussions re: work or home based subjects of distress – A helpful inclusion	13	26%	50
	Discussions re: work or home based subjects of distress - intertwined	13	26%	
	Discussions – unhelpful inclusion	10	20%	
	Discussions - Should be kept separate	4	8%	
	Discussions - uncontrollable	1	2%	
	Discussions – May risk anonymity/confidentiality	1	2%	
	Discussions – Require moderation	3	6%	
	Discussions – Require support	1	2%	
	Priority – Depends upon the context	3	6%	
	Discussions re: work or home based subjects of distress – chaotic	1	2%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
An interface which does not resemble NHS, employer or other generic healthcare platforms	Resemblance – Should be authority neutral	28	56%	50
	Resemblance – Should be authority based	3	6%	
	Resemblance – Not important	3	6%	
	Resemblance - Variants on a global scale	1	2%	
	This would not matter if the intervention was clearly independent.	1	2%	
	Priority – user friendliness	5	10%	
	Question – relevance unclear	2	4%	
	Question – Cannot answer	1	2%	
	Midwives – Fearful of detection	2	4%	
	Intervention – Needs support of authorities	1	2%	
	Prioritise – visually safe space	1	2%	
	Intervention –confidentiality and anonymity important	1	2%	
	Intervention - Consider analysing feedback	1	2%	
Topic of enquiry	**Themes generated**	**Number of**	**%**	**Total**

		times referenced		number of statements categorised
A simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage	Anonymised email login procedure - A helpful inclusion	19	36%	53
	Anonymised email login procedure - An unhelpful inclusion	13	25%	
	Anonymised email login procedure – must be optional	1	2%	
	Priorities – A user-friendly intervention	9	17%	
	Prompting – A helpful inclusion	4	8%	
	Anonymised email login procedure – Unsure of alternatives	1	2%	
	Midwives – May require alternative support	1	2%	
	Prompting – An unhelpful inclusion	4	8%	
	Confidentiality must be upheld	1	2%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
An automated moderating system where 'key words' would automatically initiate a moderated response	'key words' initiating a moderated response – A helpful inclusion	15	22%	67
	'key words' initiating a moderated response – an unhelpful inclusion	13	19%	
	'key words' initiating a moderated response – Moderation is required	6	9%	
	'key words' initiating a moderated response – conflicted	5	7%	
	'key words' initiating a moderated response –must be supportive in nature	1	1%	
	'key words' initiating a moderated response – May not be adequate	8	12%	
	'key words' initiating a moderated response – Confusing	1	1%	
	Midwives – Need to be risk assessed	2	3%	
	Question – Need to know more	11	16%	
	Midwives – Must be protected from suicide	3	4%	
	'key words' initiating a moderated response – Must be sophisticated	1	1%	
	'key words' initiating a moderated response – Moderation = high maintenance	1	1%	
Topic of enquiry	**Themes generated**	**Number of times referenced**	**%**	**Total number of statements categorised**
Mobile device compatibility for platform users	Mobile device compatibility – High priority	35	73%	48
	Mobile device compatibility - Unhelpful	1	2%	
	Mobile device compatibility – Must work	6	13%	
	mobile device compatibility – Neutrality important	1	2%	
	mobile device compatibility – Must be secure	1	2%	
	Midwives – Require support	2	4%	
	Midwives – may not seek alternative support	1	2%	
	Intervention - Risky	1	2%	

Ethical Inclusions

Participants reached consensus and expressed a strong need to permit confidentiality within an online intervention. This was largely due to the opinion that midwives would not feel able to engage with or speak openly within an online intervention designed to support them without confidentiality. There was also a concern that midwives would not feel able to speak openly for fear of retribution or 'recriminations', either by their employer, regulator or by the public should the provision of confidentiality not be in place. Some users felt that the level of individual confidentiality should be left to the user to decide

There was concern about how anonymity may be achieved within an online intervention designed to support midwives. This was partnered with concerns around the ethical and legal responsibilities of both platform users and developers in providing reactive interventions to 'at risk' midwives. Additionally, concerns were raised about the obligations a user or developer may have in relation to the disclosure of dangerous practice, safeguarding issues, or discrimination which may put the reputation of the midwifery profession at risk.

Many respondents stated that people generally may feel more able to reveal personal information if they cannot be recognised. This provision of anonymity was therefore considered to have a therapeutic advantage. However concerns arose for some about the need to act upon potential disclosures of dangerous practice, which the provision of anonymity would prevent.

Some suggestions were made as to how anonymity could be achieved. For example, through the use of pseudonyms. Others suggested that users should be able to be 'traced' in exceptional circumstances for the protection of the service user and the public. Overall, the

consensus to this enquiry was that anonymity and confidentiality would be a high priority in the development of an online intervention designed to support midwives.

Participants were conflicted over whether or not amnesty should be permitted within an online intervention designed to support midwives. For some, it was clear that an amnesty would be therapeutic and provide midwives with an opportunity to speak openly, others had concerns regarding legal and ethical requirements to refer midwives who may be in breach of their professional responsibilities.

41% of 81 statements provided in relation to reminding users of their professional responsibilities in relation to codes of conduct, referred to the need the importance of adhering to the code and reporting breaches of codes of conduct. The importance of the midwife adhering to their professional responsibilities and codes of conduct remained a majority theme throughout.

Inclusions of Therapeutic Support

It was agreed that an online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of informative multimedia to help midwives recognise their own signs and symptoms of psychological distress, as 50% of statements in this category agreed that these would be a useful inclusion. 49% of subject specific statements agreed that multimedia designed to explore topics around psychological distress would also be a helpful inclusion. 3.32% of all generated statements referred to a need to offer a variety of options to accommodate all user types.

1% of statements in relation to self-care techniques and 3% of statements in relation to cognitive behavioural therapy detailed how those participants were unfamiliar with these particular therapies. On the topic of mindfulness, 5% of statements submitted that those

participants were not familiar with mindfulness as an approach. 44% of other statements given in regards to the provision of mindfulness, stated that it would be a high priority for inclusion. In regards to other types of therapeutic inclusions, 45% of subject specific statements agreed that the dissemination of self-care techniques would be a helpful inclusion, 33% of subject specific statements agreed that relaxation techniques would be a helpful inclusion, and 29% of subject specific statements agreed that Cognitive Behavioural Therapy would be a helpful inclusion. A few participants suggested other therapeutic approaches that could be considered, including Eye Movement Desensitization and Reprocessing (EMDR), Emotional Freedom Technique (EFT) and Dialectical Behaviour Therapy (DBT)

In relation to providing legal advice and information, there was concern for some that "the mere suggestion that they might want to access legal support may add further stress to midwives who hadn't previously considered that option". There were also some references to the fact that this information may already be freely available through unions or governing bodies.

Many statements categorised referred to the concept of fear in relation to speaking openly, retribution, bullying, complaints, litigation and investigations with one comment suggesting that "complaints, investigations and litigation are some of midwives biggest fears".

60% of subject specific responses in relation to the sharing of extended personal experiences agreed that this provision would be a helpful inclusion. One comment reported that "Writing and sharing is a very powerful and helpful tool in treating psychological distress". Another stipulated how experience "lived" has so much to give to the "reader". One other expert noted how "It is important to be able to share stories to help

with others supporting and to help the person involved feel heard and not alone and also that often just verbalising issues albeit online is a huge step to help process it and prevent people internalising it and making it worse". However, the majority of alternate statements referred to concerns in relation to potential breaches of ethics, professional codes and confidentiality.

Many participants felt that discussions around work-based stresses and personal stresses were inextricably linked, as 26% of subject specific responses referred to this standpoint. 26% of subject specific statements agreed that the ability to speak about both sources of distress at both work and home would be a helpful inclusion. Yet many subject specific responses (20%) believed that this would be an unhelpful inclusion. Others referred to a need to keep these discussions either focussed upon work-related stress or separate.

In relation to the provision of a web based peer to peer discussion chat room, a consensus of opinion was not reached. 40% of subject specific statements agreed that a web based peer to peer discussion chat room would be a helpful inclusion, yet the majority of related statements cited concerns in relation to the risks of breaching confidentiality and the risk of unprofessional behaviour. One statement explained how the participant had been "empowered by the exchanges of knowledge and experience" within alternative online support groups, however, the need for online moderation remained a highlighted theme.

Intervention Design and Practical Inclusions

Participants were asked whether the online intervention should prioritise an interface which does not resemble NHS, employer or other generic healthcare platform. Some participants were unsure as to why this may be important, as 10% of subject specific statements reflected. Others stated that midwives may feel safer in speaking out if they felt that the

intervention was somehow separated from authority, with 56% of subject specific responses agreeing that having a platform which remained unrelated to authority would be helpful. One participant noted however that the intervention "Needs to be supported by the NHS and look professional".

A large number of free text responses noted the importance of making sure that the intervention was "easy to use and visually appealing". Some also noted the need for the platform to be user friendly and easy to access.

In relation to the provision of an anonymised email login procedure, 36% of subject specific statements agreed that this would be a helpful inclusion. However, the panel became divided in opinion on whether the platform should prompt further usage via email, with 8% of statements referring to this as a helpful inclusion and 8% of statements regarding this as being an unhelpful inclusion.

In relation to the prioritisation of an automated moderating system where 'key words' would automatically initiate a moderated response, 16% of subject specific statements highlighted that panel members were unclear as to what this may mean. The issue we are referring to here is a safety measure which may allow the online platform to provide a message about National Suicide Prevention services if keyword searches suggest suicidal feelings. This is a concept described by Luxton and colleagues (Luxton, June, & Fairall, 2012).

Example Comment: I am having **suicidal thoughts** today.

Example automated response: As you have been discussing **Suicidal thoughts,** we would like to let you know that help is available at Lifeline on 131 114 or online. Alternatively you can call the Suicide Call Back Service on 1300 659 467.

Panel members remained divided on this issue, as 22% of subject specific statements indicated that an automated moderating system would be a helpful inclusion, and 19% of statements indicated that this would be an unhelpful inclusion.

Lastly, 73% of subject specific statements agreed that an online intervention designed to support midwives in work-related psychological distress should prioritise mobile device compatibility for platform users. Other statements in relation to this emphasised a general need to promote security and usability. One comment noted that some midwives may be averse to mobile platforms, overall, the panel expressed a consensus of opinion that mobile device compatibility should be a priority in the development of an online intervention designed to support midwives in work-related psychological distress.

Next Steps

We would like to thank all panel members for their responses, ideas and opinions. We hope that all 66 panel members will now move on to complete the second round of this Delphi study, so that further consensus may be reached.

We invite you to participate in round 2, as you consider the responses from your fellow panel members to round 1.

The questions which did not reach a consensus of opinion in round 1, along with some new questions based on your comments in round 1, will be presented to all panellists in round 2. Once again, there are no right or wrong answers. It is your opinion we are interested in. We look forward to receiving your responses, and thank you once again for all the time and trouble you have taken with this project.

References

Luxton, D. D., June, J. D., & Fairall, J. M. (2012). Social media and suicide: A public health perspective. *American Journal of Public Health, 102*(S2), S195-S200.

Appendix 11: Delphi Study Participant Report – Round 2.

Delphi Study second round Participant Report: Delphi Study to achieve Consensus in the Development of an Online Intervention Designed to Effectively Support Midwives in Work related Psychological Distress.

Round Two

Thankyou from the research team

44 of you completed this second round of questioning designed to achieve consensus in the development of an online intervention designed to support midwives in work-related psychological distress. Thankyou! Your responses were informative, useful and very valuable to this project.

Overview of Round Two

A total of 185 people were invited to participate in this Delphi Study. 66 participants completed the first round of questioning. These 66 participants were then asked to complete a second round of questioning. 44 (66.6%) of those invited to participate completed this second round of questioning. Panellists were asked to assign a priority rating to 20 statements during the first round of questioning and 19 statements during the second round of questioning using a 7 point likert type scale. 11 items achieved a consensus of opinion during round one, 9 did not. These 9 items were returned to the panel during this second round of questioning. 10 new questions were also brought before the panel during this second round of questioning. Prior to receiving responses, we set some criteria for consensus. As such, consensus of opinion was considered to be reached when 60% or more of the responses fell within 2 adjacent response points on the 7-point scale.

example	Not a priority	Low priority	Somewhat a priority	Neutral	Moderate priority	High priority	Essential priority
An interface which does not resemble NHS, employer or other generic healthcare platforms	☐	☐	☐	☐	☐	☐	☐

Summary of Round Two

The research team assessed whether each item had achieved a consensus of opinion or not. The team then went on to allocate each free text response to one or more themes. A total of 19 statements were put forward to the panel. Of the 19 questions posed within this second round, 7 statements achieved consensus and 12 did not. A total of 704 free text responses were provided by the panel. These were categorised into 1059 separate statements and allocated to a theme by two members of the research team. Table one summarises the results from round two of this Delphi study.

Table 1: Results Summary for Round Two Questionnaire

	Question: An online intervention designed to support midwives in work-related psychological distress should prioritise:	Consensus achieved	% of Consensus	Mean Score	Comments submitted in free text	Statements Categorised	Themes Generated
1.	Amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case.	No	N/A	4.61	58	103	14
2.	Prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.	No	N/A	4.18	49	72	12
3.	The inclusion of information designed to inform midwives as to where they can access legal help and advice.	Yes (High/Essential Priority)	65.9%	5.57	37	53	7
4.	Giving platform users the ability to share extended personal experiences for other platform users to read	No	N/A	4.75	47	71	7
5.	The inclusion of a web based peer to peer discussion chat room	Yes (Moderate /High priority)	63.6%	4.86	43	73	7
6.	Giving platform users the ability to communicate any work or home based subjects of distress	No	N/A	5.18	39	54	10
7.	An interface which does not resemble NHS, employer or other generic healthcare platforms	No	N/A	5.23	35	53	10

8.	A simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage	No	N/A	5.34	32	47	10
9.	An automated moderating system where 'key words' would automatically initiate a moderated response	No	N/A	4.48	34	51	9
10	An interface which resembles and works in a similar way to current popular and fast pace social media channels: e.g. Facebook	No	N/A	4.82	38	54	9
11	The inclusion of midwives from around the world	No	N/A	4.48	41	57	5
12	Proactive moderation (i.e, users are able to block unwanted content and online postings are 'pre-approved')	Yes (High/Essential priority)	61.4%	5.5	36	58	6
13	Reactive moderation (i.e., users are able to report inappropriate content to a system moderator for removal)	Yes (High/Essential priority)	70.5%	5.68	25	36	3
14	24/7 availability of the platform	Yes (High/Essential priority)	84.1%	6.3	33	41	4
15	The implementation of an initial simple user assessment using a psychological distress scale to prompt the user to access the most suitable support available	Yes (Moderate /High priority)	70.4%	5.39	31	45	6
16	The gathering of anonymised data and concerns from users, only with explicit permission, so that trends and concerns	No	N/A	5.39	33	50	6

	may be highlighted at a national level.						
17	Access for a midwife's friends and family members	No	N/A	2.68	33	47	6
18	The following up and identification of those at risk	Yes (High/Essential priority)	63.7%	5.59	31	55	5
19	The provision of a general statement about professional codes of conduct and the need for users to keep in mind their responsibilities in relation to them	No	N/A	5.07	29	39	6
					Total= 704	**Total = 1059**	**Total =142**

Table two summarises the responses given during round two of this Delphi study. Please note that percentages have been rounded toward the nearest whole number.

Table 2: Summary of round Two responses

Topic of enquiry	Theme	Number of times categorised	%	Total number of statements categorised
Amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case.	Amnesty – Required for open and honest disclosure	27	26%	103
	Midwives - Fear retribution	11	11%	
	Amnesty – Cannot be given in any circumstances	1	1%	
	Amnesty - Cannot be given in all cases	25	24%	
	Amnesty - Required for change/Help seeking	9	9%	
	Amnesty - Conflicted in opinion	15	15%	
	Amnesty - required for privacy	1	1%	
	Midwives - Have little support	2	2%	
	Amnesty - A helpful inclusion	3	3%	
	Intervention - Requires disclaimer policies	2	2%	
	Amnesty - Difficult to moderate	1	1%	
	Amnesty - An unhelpful inclusion	1	1%	
	Amnesty can enable resolution of situations	4	4%	
	Question - Meaning unclear	1	1%	

Topic of Enquiry	Theme	Number of times categorised	%	Total number of statements categorised
Prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.	Prompting professional codes - A helpful inclusion	21	29%	72
	Prompting professional codes - An unhelpful inclusion	17	24%	
	Prompting professional codes - Ethically essential	9	13%	
	Midwives - Already aware of codes - Not required	6	8%	
	Prompting professional codes - Not the purpose of the intervention	3	4%	
	Midwives - Duty of care should be priority	2	3%	
	Codes - Inadequate	1	1%	
	Prompting professional codes - Alternative approach required	6	8%	
	Midwives - Need support	1	1%	
	Midwives - Should remain professional even in distress	3	4%	
	Midwives - If needing reminders, should not be working	2	3%	
	Prompting professional codes - Requires sensitivity	1	1%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
Information designed to inform midwives as to where they can access legal help and advice.	Information, legal help and advice - A helpful inclusion	32	60%	53
	Information, legal help and advice - An unhelpful inclusion	4	8%	
	Intervention - A range of options should be made available	5	9%	
	Question - Meaning unclear	2	4%	
	Midwives - Fear retribution	1	2%	
	Midwives - Need support	6	11%	
	Information, legal help and advice - Can be found elsewhere	2	4%	
	Midwives - Blame themselves	1	2%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
Giving platform users the ability to share extended personal experiences for other platform users to read	Sharing extended personal experiences - A helpful inclusion	41	58%	71
	Sharing extended personal experiences- An unhelpful inclusion	6	8%	
	Sharing extended personal experiences - Moderation required	11	15%	
	Sharing extended personal experiences - Should be optional	6	8%	
	Sharing extended personal experiences - Undecided	2	3%	
	Sharing extended personal experiences - Risky	3	4%	
	Sharing extended personal experiences - effect may be context dependant	2	3%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
The inclusion of a web based peer to peer discussion chat room	Discussion chat room - A helpful inclusion	37	51%	73
	Discussion chat room- An unhelpful inclusion	11	15%	
	Discussion chat room - Moderation required	10	14%	
	Discussion chat room - More information required	6	8%	
	Discussion chat room - Risky	7	10%	
	Discussion chat room- Challenging to facilitate	1	1%	
	Discussion chat room - Consider additional features	1	1%	

Topic of enquiry	Theme	Number of times categorised	%	Total number of statements categorised
Giving platform users the ability to communicate any work or home based subjects of distress	Communicating any work or home based subjects of distress - A helpful inclusion	15	28%	54
	Communicating any work or home based subjects of distress - An unhelpful inclusion	9	17%	
	Communicating any work or home based subjects of distress -Inevitable	7	13%	
	Communicating any work or home based subjects of distress - Both subjects intertwined	16	30%	
	Communicating any work or home based subjects of distress - Risk of breaching confidentiality	1	2%	
	Communicating any work or home based subjects of distress - Requires moderation	2	4%	
	Communicating any work or home based subjects of distress - Undecided	1	2%	
	Communicating any work or home based subjects of distress - Difficult to engage whilst at work	1	2%	
	Communicating any work or home based subjects of distress - discussions need to remain workplace based	1	2%	
	Communicating any work or home based subjects of distress - Consider links to outside agencies	1	2%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
An interface which does not resemble NHS, employer or other generic healthcare platforms	Online intervention interface - Should not resemble NHS, employer or other generic healthcare platforms	21	40%	53
	Midwives - Fear bringing the profession into disrepute	1	2%	
	Online intervention interface - Should prioritise usability	6	11%	
	Online intervention interface - Should look professional	8	15%	
	Conflicted opinion	3	6%	
	Midwives - May not engage if they fear organisational involvement	11	21%	
	Intervention - Should be a safe haven	1	2%	
	Intervention - Must appear to be for midwives only	1	2%	
	Online intervention interface - Options should be researched	1	2%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
A simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage	Anonymised email login procedure - A helpful inclusion	19	40%	47
	Anonymised email login procedure - An unhelpful inclusion	4	9%	
	Anonymised email login procedure - Anonymity may not be possible	2	4%	
	Undecided	2	4%	
	Anonymised email login procedure - Can be used to intervene	3	6%	
	Anonymity - Essential	2	4%	
	Anonymised email login procedure - Ease of use a priority	8	17%	
	Anonymised email login procedure - Security a priority	2	4%	
	Anonymised email login procedure - Should be optional	2	4%	
	Anonymised email login procedure - Risky	3	6%	
Topic of enquiry	**Theme**	**Number of times**	**%**	**Total number of**

		categorised		statements categorised
An automated moderating system where 'key words' would automatically initiate a moderated response	An automated moderating system - A helpful inclusion	16	31%	51
	An automated moderating system - An unhelpful inclusion	9	18%	
	An automated moderating system - Meaning unclear	8	16%	
	Undecided	5	10%	
	Moderation - Should be a priority	3	6%	
	Intervention - Must be a safe space	1	2%	
	An automated moderating system - Must be appropriate	6	12%	
	Moderation - Should be a human response	2	4%	
	An automated moderating system - Should allow users to flag concerns	1	2%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
An interface which resembles and works in a similar way to current popular and fast pace social media channels: e.g. Facebook	An interface which resembles and works in a similar way to current popular and fast pace social media channels - Helpful	20	37%	54
	An interface which resembles and works in a similar way to current popular and fast pace social media channels - unhelpful	15	28%	
	Usability should be the priority	12	22%	
	An interface which resembles and works in a similar way to current popular and fast pace social media channels - Undecided	6	11%	
	Question - Misunderstood	1	2%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
The inclusion of midwives from around the world	The inclusion of midwives from around the world - Helpful	24	42%	57
	The inclusion of midwives from around the world - unhelpful	14	25%	
	The inclusion of midwives from around the world - Undecided	6	11%	
	The inclusion of midwives from around the world - Challenging to facilitate	11	19%	
	The inclusion of midwives from around the world - Could be made fit for purpose	2	4%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
Proactive moderation (i.e., users are able to block unwanted content and online postings are 'pre-approved')	Proactive moderation - Helpful	24	41%	58
	Proactive moderation - Unhelpful	11	19%	
	Proactive moderation - Must be tailored to suit context	11	19%	
	Proactive moderation - Meaning unclear	2	3%	
	Moderation - essential	9	16%	
	Midwives - Able to self-moderate	1	2%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
Reactive moderation (i.e., users are able to report	Reactive moderation - Helpful	24	67%	36
	Reactive moderation - Unhelpful	5	14%	
	Reactive moderation - Design challenges	7	19%	

inappropriate content to a system moderator for removal)				
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
24/7 availability of the platform	24/7 availability - Helpful	37	90%	41
	24/7 availability - Undecided	1	2%	
	Midwives - Need confidentiality	1	2%	
	Midwives - Have no time	2	5%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
The implementation of an initial simple user assessment using a psychological distress scale to prompt the user to access the most suitable support available	Simple user assessment - Helpful	25	56%	45
	Simple user assessment - unhelpful	2	4%	
	Simple user assessment - Context for use required	11	24%	
	Simple user assessment - Undecided	3	7%	
	Simple user assessment - Should be optional	1	2%	
	Simple user assessment - Context for use required	3	7%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
The gathering of anonymised data and concerns from users, only with explicit permission, so that trends and concerns may be highlighted at a national level.	The gathering of anonymised data and concerns - Helpful	32	64%	50
	The gathering of anonymised data and concerns - Unhelpful	11	22%	
	Midwives - Require anonymity	2	4%	
	The gathering of anonymised data and concerns - Undecided	1	2%	
	The gathering of anonymised data and concerns - Requires ethical consideration	3	6%	
	Midwives - Require confidentiality	1	2%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
Access for a midwife's friends and family members	Access for a midwife's friends and family - Helpful	4	9%	47
	Access for a midwife's friends and family - Unhelpful	17	36%	
	Access for a midwife's friends and family - Undecided	7	15%	
	Access for a midwife's friends and family - Ethical considerations must be recognised	10	21%	
	Access for a midwife's friends and family - Could require a separate, designated area	6	13%	
	Access for a midwife's friends and family - Need more information	3	6%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**

The following up and identification of those at risk	The following up and identification of those at risk - Helpful	23	42%	55
	The following up and identification of those at risk - Unhelpful	9	16%	
	The following up and identification of those at risk - Ethical considerations must be recognised	14	25%	
	The following up and identification of those at risk - Undecided	6	11%	
	The following up and identification of those at risk - Beyond the scope of this project	3	5%	
Topic of enquiry	**Theme**	**Number of times categorised**	**%**	**Total number of statements categorised**
The provision of a general statement about professional codes of conduct and the need for users to keep in mind their	A general statement about professional codes of conduct - Helpful	15	38%	39
	A general statement about professional codes of conduct - Unhelpful	8	21%	
	A general statement about professional codes of conduct - Must be applicable	2	5%	
	Midwives - Already aware of codes	4	10%	
	Online community - Should develop its own codes of conduct	2	5%	
	Achieving consensus - Frustrated by survey questions	5	13%	
	A general statement about professional codes of conduct - Requires sensitivity	3	8%	

Items which did not achieve a consensus of opinion within the first round of questioning

The first 9 statements put forward within this second round of questioning were statements returned to the panel which failed to reach a consensus in Round One. The purpose of this was to allow participants to consider these questions once more, in light of the group responses put forward following the first round of questioning. Participants were encouraged to deliberate upon the group response prior to approaching the second round of questioning. 2 of these 9 statements achieved consensus.

Participants agreed that the inclusion of information designed to inform midwives as to where they can access legal help and advice should be a high/essential priority. Consensus was 65.9%. 60% of free text responses alluded to this as a helpful inclusion for some, however, others suggested that this may be unhelpful, and suggested that midwives could access this information elsewhere.

Participants also agreed that the inclusion of a web based peer to peer discussion chat room should be a moderate to high priority. Consensus was 63.6%. The majority of participants suggested that this would be a helpful inclusion, however, many expressed concerns over the risks of speaking openly within an online forum, and expressed the need for appropriate moderation.

Seven lines of enquiry re-presented to the panel within this second round of questioning failed to achieve a consensus of opinion. Free text responses given within these items offered the research team key insights and ideas to explore. Some participants remained reluctant to the idea of providing amnesty within an online platform designed to assist midwives in distress. Here, although 26% of participant statements acknowledged that midwives may require an amnesty in order to speak openly and seek help, others expressed a moral discomfort in permitting this.

The panel also remained conflicted upon the subject of prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct, as many felt that this would be a helpful inclusion, others remained cautious about escalating fear and distress for midwives seeking help. 24% of panellist comments indicated that this would be an unhelpful inclusion, whilst alternatively, 29% of comments indicated that this inclusion would be a helpful inclusion. Upon the subject of giving platform users the ability to share extended personal experiences for other platform users to read, 58% of panellist statements agreed that this would be a useful inclusion for some. However, other panel members remained concerned that this may give rise to breaches in confidentiality, and advocated a need for strict moderation. Similar concerns and comments also arose as

the panel were asked about giving platform users the ability to communicate any work or home based subjects of distress.

Regarding the visual branding of the platform and any association with the NHS, employers or other generic healthcare platforms, some panellists reported that the platform "needs to feel legitimate" in order to enable midwives to feel confident in speaking openly. 40% of panellist statements felt that an online intervention designed to support midwives in work-related psychological distress should not resemble NHS, employer or other generic healthcare platforms, and many feared that midwives would be reluctant to speak out if they felt that they were being observed by an employer. Similarly, panellists expressed a fear that midwives may fear being "Identified" through the use of a simple, anonymised email login procedure which allows for continued contact and reminders. However, 40% of participant statements indicated that an anonymised email login procedure would be a helpful inclusion. Lastly, panellists were asked for their opinions about an automated moderating system where 'key words' would automatically initiate a moderated response. 31% of participant statements agreed that this type of moderation would be helpful, though some remained confused as to how this intervention may work in practice.

New items for consideration

10 new questions were put forward before the panel. These questions were either generated by the data collected during round one, or requested by the expert panel. 5 out of these 10 new questions achieved a consensus of opinion.

Participants were asked to give their opinions about whether an interface which resembles and works in a similar way to current popular and fast pace social media channels: e.g. Facebook should be prioritised. Although participants generally recognised a need for

platform users to enjoy an ease of use, they expressed a reluctance to approve the use of Facebook within the midwifery profession. Overall, 28% of participant statements indicated that this interface would be unhelpful, and 37% of participant statements indicated that this interface would be helpful. Participants were then asked whether the platform should be open for midwives from around the world to use. Although many participants were open to this, others expressed a need to primarily interact with a smaller cohort of local midwives in order to be able to be able to identify with a comparable group of midwives. It was suggested that a broader user group could become a future goal for the platform to accomplish.

Throughout both rounds of this Delphi study, many expert panellists have expressed a need to prioritise appropriate moderation for this online intervention designed to support midwives in work-related psychological distress. Therefore, panellists were asked to offer their opinions in relation to both proactive moderation (i.e., users are able to block unwanted content and online postings are 'pre-approved') and reactive moderation (i.e., users are able to report inappropriate content to a system moderator for removal). Although neither of these options achieved a consensus in opinion, the research team were able to explore key themes and ideas in relation to potential moderation techniques. Overwhelmingly, participants agreed that moderation should remain an essential priority. However, panellists were somewhat conflicted about whether this moderation should be proactive or reactive. Whilst both varieties of moderation were deemed applicable, 61.4% of participant statements indicated that proactive moderation would be helpful and 70.5% of participant statements indicated that reactive moderation would be helpful. It was acknowledged that users may not want to wait for content to be 'pre-approved', yet concerns remained over any potential exposure to harmful content. Alternatively, many

expressed that an ability to alert moderators to inappropriate content and an individual ability to block access to unwanted content may be sufficient in assuring appropriate moderation.

Overwhelmingly, 90% of participant comments agreed that the platform should be available to users 24/7. It was also agreed that the implementation of an initial simple user assessment using a psychological distress scale to prompt the user to access the most suitable support available should be prioritised, as 56% of participant comments suggested that this would be a helpful inclusion. However, panellists were unsure how this may be achieved or which user assessment tool may be appropriate. Additionally, some comments suggested that this component may be too intrusive for platform users. When asked about the gathering of anonymised data and concerns from users, with explicit permission, so that trends and concerns may be highlighted at a national level, 40% of panel member comments expressed that there would be value in highlighting trends and concerns. However, ethical considerations were raised and some were concerned that data collection may dissuade some platform users from candour. This concern was also cited as one reason that there should be no access for a midwife's friends and family members. However, no firm consensus could be reached upon this issue.

Panel members agreed that the following up and identification of those at risk was a high/essential priority (63.7%), though many identified difficulties in doing so. It was also suggested that this may be too intrusive for platform users wishing to remain anonymous. Lastly, panel members were asked whether the provision of a general statement about professional codes of conduct and the need for users to keep in mind their responsibilities in relation to them should be a priority. Although 38% agreed that this inclusion would be

helpful, 21% were concerned that this inclusion may be unhelpful and cause further distress. Some suggestions were made that the platform should evolve its own codes of conduct as a separate community of support.

Next Steps

We would like to thank all panel members for their responses, ideas and opinions kindly offered within this Delphi study. Your input to this study has been invaluable, and the research team now have a much deeper understanding of what should be prioritised in the development of an online intervention designed to support midwives in work-related psychological distress.

The research team now plans to publish the results of this study within a peer reviewed journal. Once this has been achieved, you will be sent a copy of any articles published. Should you wish to opt out of this and/or decline any future correspondence, please contact the research team accordingly.

The research team would like to thank you once again for all the time and trouble you have taken with this project.

Appendix 12 Delphi Study analysis report for round 1

1: All participants gave their full consent so that the researcher could verify that participants fitted the inclusion criteria, had understood the participant information in full, had given their consent for their anonymised quotes and results to be used for publication, and had given their full consent to participation.

2: **An online intervention designed to support midwives in work-related psychological distress should prioritize confidentiality for all platform users and service users in all matters of discussion.**

2.1 Confidentiality for all platform users and service users in all matters of discussion

Rank value	Option	Count
1	Not a priority	0
2	Low priority	0
3	Somewhat a priority	3
4	Neutral	2
5	Moderate priority	1
6	High priority	6
7	Essential priority	54

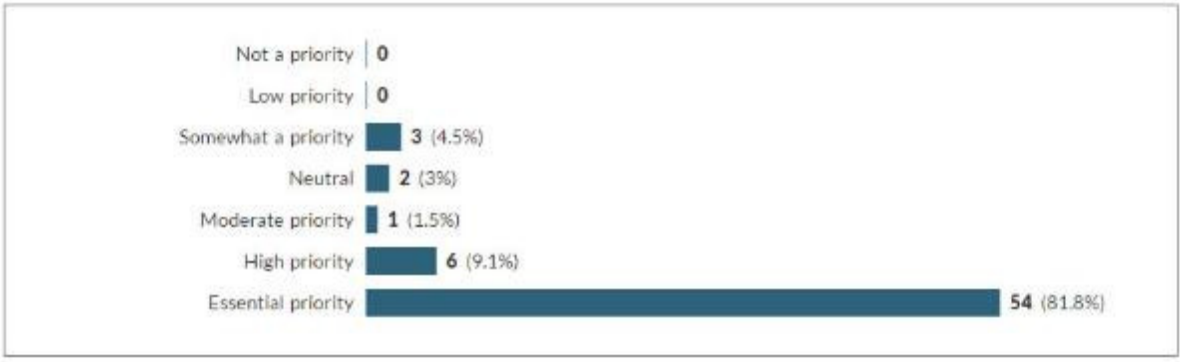
Mean rank	6.61
Variance	1.0
Standard Deviation	1.0
Lower Quartile	7.0
Upper Quartile	7.0

Consensus Achieved = Yes (High/Essential Priority) 90.9%

Minimum score = Not a priority/Low priority 0 (0%)

Maximum score = Essential Priority 54 (81.8%)

Confidentiality for all platform users and service users in all matters of discussion



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes assigned to
[This can be decided by the individuals concerned][3].	3
[Sharing of personal information and thoughts should be the user's choice to share.][3]	3
[Cos folk might hold back on their responses without this][1].	1
Many midwifery forums have [concerns about posting on line for fear of retribution by the NMC/public] [1, 2]. Their traffic has reduced in recent years and therefore the support that they provided has now reduced because of this.	1, 2
[To enable midwives to be completely open][1]	1
[People unlikely to be honest if they think information may be shared][1].	1
[Individuals could be concerned about other being aware] [12, 7].	12, 7
[it is essential that staff can share experiences and feelings in an open and honest way][1] [without fear of reprisals][2]	1, 2
Psychological distress may be attributed to a specific event involving a client so [important to protect their identity][4] whilst also [maintaining the professional reputation of midwives and other healthcare professionals] [9] involved who [may be experiencing distress] [12]	4, 9, 12
[People need to be able to be honest] [1] [if they know information will be shared they may hold back] [1] but maybe a [choice to disclose who they are if they wish?][3]	1, 1, 3
[Depends on the context] [10]. Confidentiality between service users [should work as an ethical codex] [4], but who/how should enforce this?	10, 4
[people will be ready to open up if confidentiality is guaranteed][1]	1
[To ensure that answers given of a sensitive and personal nature are assured] [12]. Also confidentiality reduces bias and gives greater validity and reliability to the findings of this study.	12
[In any research confidentiality beheld in high esteem][4]	4
[it will help midwives to share their fillings more freely and with openness][1]	1
[People may not utilise the service if they think they can be identified or 'outed' in terms of feeling distressed][1, 7]	1, 7
[Some platform users may want to share experience][1] in a group setting	1

I believe some [midwives would be fearful of people finding out][2] [they were finding it difficult to cope][6] and would therefore [seek anonymity to feel safe] [12] to access support	2, 6, 12
[Midwives have professional responsibilities to not break confidentiality] [4], and [can't be supported fully unless this requirement is met] [11]. They [won't be able to concentrate on getting support and recovering from distress unless this is covered] [11].	4, 11, 11
[The user needs to feel safe][12]	12
[Confidentiality is the cornerstone to enabling an individual to freely and expansively express their concerns, emotions, thoughts etc.][1, 11]	1, 11
[it is the only way people will feel able to open up][1]	1
[It is important to maintain confidentiality for all who could be involved to protect against further stress] [12, 4].	12, 4
[Participation would be determined by confidentiality statements][12]	12
[Midwives need to feel safe] [12] about exploring options for their wellbeing without [concern that colleagues or mother being able to check up on them][2, 7] and make possible negative judgements on them as individuals or on their practice	12, 2, 7
[Important to have a confidential 'space'] [11] if that's what people need at that time otherwise there could be [fear of criticism and recriminations] [2] which might lead to further stress. [I just don't believe people would use it if not confidential] [11]. People need to be able to trust in order to find support. [Confidentiality is an important part of making a safe place and fostering trust][9]	11, 2, 11, 9
[Midwives need to feel safe] [12] to explore these vulnerable issues and [confidentiality is an important part of creating a safe space] [12]	12, 12
[(1) An essential expectation and right][4] [(2) individuals may fear consequences and being identified][11]	4, 11
I believe that this is an area which has not been previously addressed. There is evidence that work related psychological distress is very disabling and currently [midwives have none or very little support][13]	13
[It will enable openness and honesty in discussions][1]	1
[To be able to express myself honestly then confidentiality is paramount][1]	1
This is a nice idea and [could be achieved in a one- on- one session if this were available] [10] but [the idea of posting something confidentially on the web is surely impossible?][8] Once it's out, it's out.	8, 10
[People tend to be more willing to discuss own psychological distress when information is confidential][1]	1
[If it is not confidential people asking for help will not be honest] [1] and may [need to offload about work situations] [1]. [It will also protect those they work with] [4]	1, 1, 4
[Midwives are unlikely to be able to consult faceless emotional support regarding professional issues if it is not confidential][1]. [Trust is an issue] [12].	1, 12
Work related psychological distress is related to other issues such as bullying and loss of Trust. [Midwives need to feel that they can share their experiences frankly] [1] and [without fear of reprisal] [2]; [this necessitates confidentiality] [1]. [However, midwives may decide to whistle blow and voluntarily forgo confidentiality][3].	1, 2, 1, 3, 10

[To enable trust in the intervention] [12] to obviously providing the scope and limitations of the confidentiality are explained.		12
[This may encourage use of the service][11]		11
[We must guard against any possible discrimination against someone engaging with the tool] [12]. [However, in extreme cases, intervention may be needed to properly support a midwife with profound distress][5].		5, 12
[People are more likely to use it if confidential][1, 11] [due to employer and regulator expectations and rules][2]		1, 11, 2
Has been part of midwifery education that they should be able to cope with all their profession exposes them to hence [can feel shame if not managing][6]		6
[This should be the same as if you were in a face to face intervention where confidentiality is a paramount][4].		4
As it is online it [must always be 100% confidential] [4]. A computer is not a person and able to give feedback or take part in a decision making process		4
[In order to create a safe space] [12]		12
[To enable full disclosure][1]		1
[don't think people will use it if they don't believe it is confidential][11]		11
For some participants this will be a high priority, [others may want to share more] [3]. [If safeguarding issues arise, action may be needed][5].		3, 5
[If the online intervention is purely focused on the individual] [10] then yes [confidentiality is key] [11] - however peer support can be powerful & if this is a component then confidentiality may need further consideration.		11, 10
	Theme	**Number of times categorised**
	Confidentiality – Required for open and honest disclosure	23
	Midwives - Fear retribution	6
	Confidentiality – Decided by user	5
	Confidentiality – for third parties	9
	Midwives - May need further support/ intervention	2
	Midwives – Feel shame if not managing	2
	Confidentiality – Needed to avoid public identification	3
	Confidentiality – Not possible online	1
	Confidentiality - Needed to protect the reputation of the profession	2
	Confidentiality – Context dependent	4
	Confidentiality – Essential criterion for provision of support	10
	Midwives – Need to feel safe	10
	Midwives – Have little existing provision	1

Do you have any additional comments you would like to share?

Comment	**Themes assigned to**
however, [there needs to be clarification of legal / professional obligations][1] in terms of dangerous practice highlighted	1

there can be consequences to posting experiences on existing social media groups as not always closed /confidential groups - and [may lead to disciplinary action][2]		2
NO		0
No		0
Online confidentiality is hard to guarantee, [how will you do that?][3]		3
In a study we have undertaken in Australia [confidentiality was rated very highly][4] (not yet published)		4
[Perhaps a statement saying that no identifying information will be collected including IP addresses?][3]		3
[Is important as it gives the respondent "free" space][4]		4
I have used a service which was independent of the workplace/employer but supplied by the employer. [If I thought that my discussions with the counsellor would go back to my employer I would not have engaged in the process of counselling] [6] with them. [I needed assistance to work through the issues and having complete confidence that any discussion was confidential][5].		6, 5
[Can an in built 'alert' highlight importance of seeking support...?][3]		3
	Theme	**Number of times categorised**
	Professional – Legal/Regulatory obligations	1
	Midwives – Fear consequences	1
	Confidentiality – Not possible online	1
	Confidentiality – High priority	2
	Midwives – Need reassurance	1
	Confidentiality - required to promote disclosure	1

3: **An online intervention designed to support midwives in work-related psychological distress should prioritise anonymity for all platform users and service users in all matters of discussion.**

3.1 Anonymity for all platform users and service users in all matters of discussion

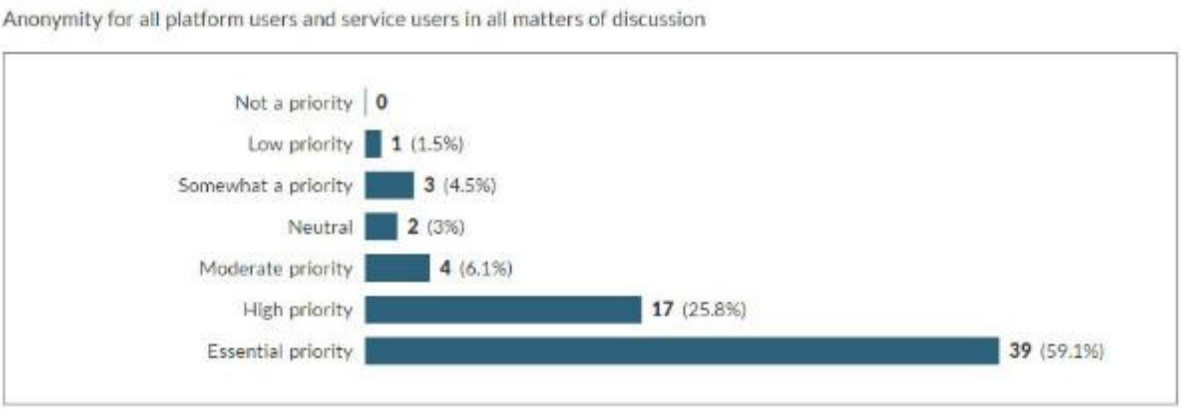
Rank value	Option	Count
1	Not a priority	0
2	Low priority	1
3	Somewhat a priority	3
4	Neutral	2
5	Moderate priority	4
6	High priority	17
7	Essential priority	39

Mean rank	6.27
Variance	1.35
Standard Deviation	1.16
Lower Quartile	6.0
Upper Quartile	7.0

Consensus Achieved = Yes (High Priority) 84.9%

Minimum score = Not a priority 0 (0%)

Maximum score = Essential Priority 39 (59.1%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes assigned**
See the answer above [(This can be decided by the individuals concerned.)][4] -and [when there is real trauma the psychological response is more important that covering everyone's backside] [7].	4, 7
[Without anonymity users may well be put off using the service] [3] in ties of dire need.	3
Essentially the same reason as (1) (cos folk might hold back on their responses without this)[1]	1
Same answer as above (Many midwifery forums have [concerns about posting on line for fear of retribution] [6, 1] by the NMC/public. Their traffic has reduced in recent years and therefore the support that they provided has now reduced because of this.)	6, 1

[People will feel more relaxed about being completely open about issue that is worrying them][1]	1
[see above re caveat about legal/professional need to report dangerous practice or abuse][9]	9
Same Question as 2? [(individuals could be concerned about other being aware)][1]	1
[users need to be protected from identification][5] - this [will facilitate more open and honest discussion][1]	1, 5
As above (Psychological distress may be attributed to a specific event involving a client so [important to protect their identity][10] whilst [also maintaining the professional reputation of midwives and other healthcare professionals][10] involved who may be experiencing distress)][3]	10, 10, 3
again [people need to be honest][1] but have [choice to disclose who they are if they wish][4]	1, 4
Have [anonymity will hopefully encourage more people to access the platform][1]	1
Same as above answer: [To ensure that answers given of a sensitive and personal nature are assured] [5]. Also confidentiality reduces bias and gives greater validity and reliability to the findings of this study.	5
In other to avoid biases	0
[it will help midwives to share their fillings more freely and with openness][1]	1
[People generally may feel more able to 'bare their souls' if they can't be recognised][1]	1
As above (Some platform [users may want to share experience][1] in a group setting)	1
same reasons as above (I believe [some midwives would be fearful of people finding out they were finding it difficult to cope][6] and [would therefore seek anonymity to feel safe to access support)][1] & (In a study we have undertaken in Australia [confidentiality was rated very highly (not yet published))][7]	6, 1, 7
[I don't see how you'd separate this from confidentiality] [1] - see previous answers. ([Midwives have professional responsibilities to not break confidentiality] [9], and [can't be supported fully unless this requirement is met] [3]. [They won't be able to concentrate on getting support and recovering from distress unless this is covered.)][3]	9, 3, 3, 12
as above [(The user needs to feel safe.)][5] & (Perhaps a statement saying that no identifying information will be collected including IP addresses?)[11]	5, 11
[Anonymity goes hand in hand with confidentiality][12] in the sense of [enabling the individual to freely express themselves][1]	12, 1
[You need to be able to signpost those users who are struggling and need further intervention][7]. [Anonymising would prevent this][2]	2, 7
Same as previous answer ([Midwives need to feel safe about exploring options for their wellbeing][5] without [concern that colleagues or mother being able to check up on them and make possible negative judgements on them as individuals or on their practice)][6]	5, 6
[It is important to have to option to be anonymous][3]. [I have not put it as essential as I wonder if it may be necessary and possible to build in a system which can respond to circumstances when anonymity is not appropriate][4,9]. Perhaps the platform administrator needs to be able to trace who people are for example. But this should only be utilised in rare and exceptional circumstances. I am thinking about [a situation when there appears to be a serious risk to health, either for the platform user or another individual] [2].	3, 4, 9, 2
[again safe space] [5]	5
as above (1) [An essential expectation and right] [3, 10] 2) individuals may fear consequences and being identified)[6]	3, 10, 6
sorry I find this a little confusing as it is [very similar to the above question][12] therefore I have scored the same	12

[Complete anonymity might mean that serious risk to service users goes unchecked][8, 9]		8, 9
[To encourage openness][1, 3]		1, 3
[To be able to speak without judgement of role] [1, 6] etc. . . .		1, 6
[I don't feel that the service would function as well otherwise][3]. [Anonymity would enable honesty] [1] and a [true space to unburden and discuss deep seated fears] [1].		3, 1, 1
Same reason as above [(If it is not confidential people asking for help will not be honest] [1] and [may need to offload about work situations] [1]. [It will also protect those they work with)] [10]		1, 1, 10
For the same reasons [confidentiality is necessary] [3]. (Work related psychological distress is related to other issues such as bullying and loss of Trust. [Midwives need to feel that they can share their experiences frankly and without fear of reprisal] [6]; this [necessitates confidentiality] [3]. However, [midwives may decide to whistle blow and voluntarily forgo confidentiality.)] [4]		3, 6, 3, 4
This depends what the aims and outcomes are and [how the support will be provided if this is the case][2]		2
Same as prior answer (Has been part of midwifery education that they should be able to cope with all their profession exposes them to hence [can feel shame if not managing)][13]		13
I feel [it is important that information and details will not be able to be leaked or distributed elsewhere] [5] – [concerned about online hacking] [8] – [could discussions be tracked?] [8]		5, 8, 8
as above (As it is online it [must always be 100% confidential][10]. A computer is not a person and able to give feedback or take part in a decision-making process)		10
as above (In order to create a safe space)[5]		5
There [should be a choice for participants over the way their identity is expressed and what they are prepared to share] [4]. [Usernames should provide confidentiality][3].		4, 3
[participants should be able to choose what they feel most comfortable with] [4]		4
	Theme	**Number of times categorised**
	Anonymity – Required for open and honest disclosure	18
	Anonymity – May prevent further intervention	3
	Anonymity – Needed for support	10
	Anonymity - Decided by user	6
	Feeling safe/safety - Required	4
	Midwives – Fear retribution	6
	Midwives – Support is highest priority	3
	Anonymity – Not possible online	3
	Professional – Legal/Regulatory obligations	4
	Anonymity – for third parties	5
	Midwives – Need assurances	1
	Anonymity is synonymous with confidentiality	2
	Midwives – Feel shame if not managing	1

Do you have any additional comments you would like to share?

Comment		Themes assigned
[Maybe an option to choose to disclose identity could be added] [3] if the [user to would like advice, feedback or referral to psychological therapies] [8.]		3, 5
[A nom de plume could be used to protect users being identified] [1]		1
NO		0
No		0
[People need to feel safe] [12] and so [anonymity provides that sense of safety] [12]; however, [there may be some who hide and take advantage of that anonymity] [2], creating stories that are not true - always possible I guess. [Whether that matters or not, I'm not sure] [13] - perhaps for statistical purposes? [Also distress for the person reading/listening to the story] [2]. I just had situation where a student made up a horrific story of domestic violence for her reflective piece - as it turns out, she fabricated and owned up to the whole thing, but not before [causing a certain amount of distress for those who read the story] [2].		2, 2, 2, 12, 12, 13
see previous response (I believe [some midwives would be fearful of people finding out they were finding it difficult to cope] [9] and [would therefore seek anonymity to feel safe to access support)][10, 4] & [(In a study we have undertaken in Australia confidentiality was rated very highly (not yet published))] [11]		9, 10, 4, 11
[Consider how you would risk assess those individuals who are suffering from psychological disturbance needing support beyond the online package] [5]		5
Thinking about how The Samaritans work. They have a [policy on confidentiality and anonymity which could be emulated] [6]		6
However, this does bring into question [obligations should dangerous practice or illegalities arise] [7] and the [responsibilities of the service owners and those concerned by posts] [7].		7, 7
I am hesitating already as online help is always limited and ultimately the [person will need to get help face to face] [5].		5
[Could a user engage with the resource using a pseudonym?][1] Names, even if not real, [help people to interact with each other] [4].		1, 4
Is there a [risk of anonymity being abused by participants] [2] (e.g. employers seeking information)? [Is there verification?][8]		2, 8
	Theme	**Number of times categorised**
	Anonymity – Use of pseudonyms	2
	Anonymity - could be misused/cause distress	4
	Anonymity – Optionality required	1
	Anonymity - Required for open disclosure	2
	Practicalities – Additional support may be required	2
	Anonymity – Requires policy	1
	Practicalities – Legal obligations over raising concerns	2
	Practicalities – User verification	1
	Midwives – Fearful of disclosure	1
	Anonymity – Needed to seek support	1
	Midwives – Support is a high priority	1

	Anonymity – Needed to feel safe	2
	Anonymity – Unsure of relevance	1

4: **An online intervention designed to support midwives in work-related psychological distress should prioritise amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case.**

4.1 Amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case

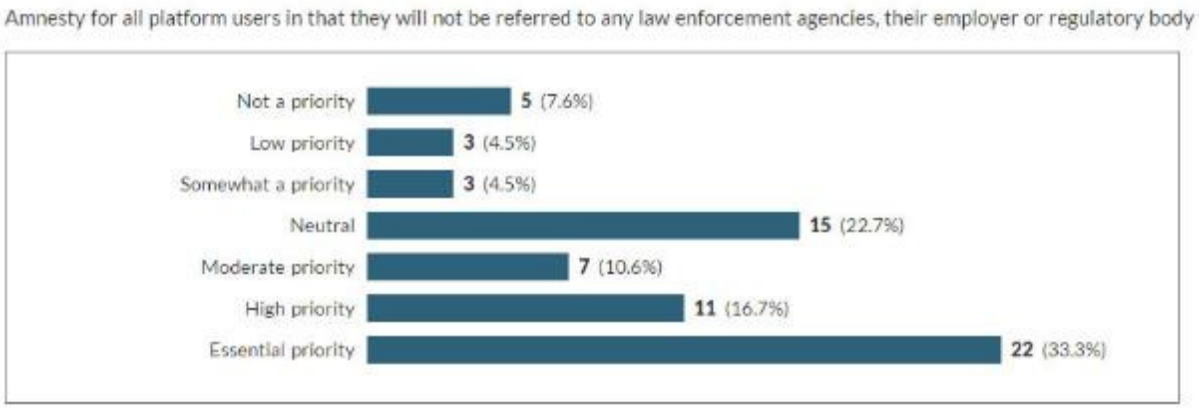
Rank value	Option	Count
1	Not a priority	5
2	Low priority	3
3	Somewhat a priority	3
4	Neutral	15
5	Moderate priority	7
6	High priority	11
7	Essential priority	22

Mean rank	5.08
Variance	3.52
Standard Deviation	1.88
Lower Quartile	4.0
Upper Quartile	7.0

Consensus Achieved = No

Minimum score = Low/Somewhat a priority 3 (4.5%)

Maximum score = Essential Priority 22 (33.3%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

308

Comment	Themes assigned to
I find this a strange question to have at this stage of a questionnaire. There are protocols for this- [no matter what amnesty is claimed if someone says they've killed someone they will be reported] [3, 4.]	3, 4
Again, without this, [users may well be afraid of the consequences of disclosure] [7] and [not access vital support services] [1].	7, 1
Would you want to do that (referral) in voluntary qualitative research, [sure recipe for failure] [5]?	5
Same answer as the first one. (Many midwifery forums have concerns about posting on line for [fear of retribution by the NMC/public] [7]. Their traffic has reduced in recent years and therefore the [support that they provided has now reduced because of this.)] [10]	7, 10
[This is a non-issue if midwives remain anonymous] [6]. I do feel [conflicted over this issue] [2] - what if the person has committed some heinous crime?	6, 2
If the person knows they are practicing inappropriately then [this should not be perpetuated] [3] or the mechanism could be [argued to be complicit in the abuse] [4]	3, 4
[Information that puts members of the public at risk should be disclosed] [3]	3
[users will not be encouraged to use it if] [1] this clause is not upheld for [fear of reprisals] [7]	1, 7
[Difficult] [2] as [amnesty is an ethical issue particularly relating to criminal matters] [4], however [without it midwives may not feel able to disclose their concerns causing distress] [1, 7]	2, 1, 7, 4
[Difficult] [2] [if someone is clearly in need of help hard to ignore] [8, 4]	2, 8, 4
[This was a difficult one to answer] [2], you hope that many midwives are aware of the responsibility of being open of our own capacity of fitness to practice. Therefore, being aware that [some information for our own safety and that of others] may result in some information sharing with those mentioned in the question.	2, 4
Although, [amnesty is important] [1] there is a [duty of care to protect any platform and service user from harm] [4]. Therefore [if illegal acts or safeguarding issues are apparent then I would hope that the researchers would act accordingly and not immorally] [3].	1, 4, 3
[If there is any element of criminality or disciplinary or unsafe practice there cannot and should not be an amnesty] [3]	3
So [people are able to explore the consequences of their actions] [1], free of reprisals [7]	1, 7
Experience with open disclosure evaluation shows [reluctance to disclosure due to fear of reflection being requested in a court of law as evidence] [7]	7
[This is difficult] [2] as the person reading it /responding would have an [ethical obligation to take action if they believed the person was still providing care but unsafe based on what is revealed] [4]	2, 4
Midwives are human just like everyone else and [need somewhere safe to discuss some of the most difficult times of their lives] [11]. [If they think there's a chance they'll get reported to employers or the police, this won't be possible] [1, 5, 7]	1, 5, 7, 11
This makes me wonder about international law? IS the platform going to be available internationally? [If so such an amnesty might not be able to be guaranteed in some countries?] [9]	9
[[There is a requirement for some level of amnesty] [1, 5] [as there is the need to report criminality] [3].] [2, 4]	1,2,3,4,5

[I need to reflect on this more] [2] - if they were describing safeguarding issues for example or could present a risk to women/children then [I don't think there can be an amnesty] [3]. However, [some degree of safety for them needs to be assured if they are going to open up and gain any benefit] [1, 7, 5.]	2, 1, 7, 5
[Not sure that any professional could expect such an undertaking] [3]	3
Again [midwives need to feel safe with exploring their own wellbeing without feeling watched or censored] [7, 5,]	7, 5
I think this [goes with the confidentiality and anonymity] [6]. [This is necessary] [5] to [reduce fear] [7] and [build trust and make it a safe place to 'visit'] [1].	1,5,6,7
[safe space] [1, 5] and [reduce fear] [7, 1] of litigation [will encourage openness and reflection] [1] which are key elements	1, 1 ,1, 7, 5
[I think this is difficult] [2] as it [may impact on the wellbeing of women and families in the midwives' care] [4]	2, 4
Midwives would use their SOM for any issues regarding regulation. I do [feel uncomfortable with this] [2] as I believe that if something is so serious that it is causing psychological distress then [clearly the midwife needs support without fear] [5, 7.] However [if a woman or baby has come to harm then it would need to follow the safeguarding and require investigation in a no-blame culture] [3, 4]	2, 3, 4, 5, 7
[Would like to tick essential priority] [2] but [serious criminal activity cannot be ignored] [4, 8]	2, 4, 8
To allow honesty] [1, 5] [without prejudice] [7]	1,5, 7
[this is difficult] [2] if [issues were needed to be highlighted to protect the public] [8]	2, 8
Because I think [it's a good idea] [1] on some levels. [More good than bad] [1], but [worrying on others] [2].	1, 1, 2
[Ethically and legally] [4] [I do not think you can give these assurances] [3.]	4, 3
Because there is [currently a climate of fear] [7] when mistakes are made/serious incidents happen.	7
[I don't think this can be ensured] [3]. [If there is a situation that someone is declaring they have been involved in a serious case that should be referred then there should be a mechanism to do this] [8]	3, 8
[Is it possible to achieve this?] [9] [Based on safeguarding and Codes of conduct?] [9, 4]	9, 9, 4
[This will encourage midwives to share experiences] [1, 5.]	1, 5
[Again it depends on the aims and objectives of the approach] [2]	2
If there were an [unlawful concern then this must be escalated][3, 4, 8] [not hidden, although dealt with professionally] [8]	3, 4, 8, 8
[Amnesty would give rise to concerns about safeguarding members of the public] [3, 4.]	3, 4
But [must allow for identification of serious breach of public safety to assure professional accountability] [3, 4, 8]	3, 4, 8
[If there is a requirement to report to someone - midwives would not want to use the resource to debrief if having psychological issues] [1, 5.]	1, 5
[In the case of causing harm or self-harm there must be intervention] [8] - the [platform must be ethical] [4]	8, 4
as above (In order to create a safe space) [1]	1
[unless amnesty is assured confidentiality/anonymity won't be maintained] [1, 5] – [staff are unlikely to use if they think it could lead to disciplinary issues] [5, 7]	1, 5, 5, 7

[Don't think this would be realistic] [9], as [if there was a legal requirement (eg. over safeguarding), it could be enforced by regulator or police] [8], [Better to be honest and state that information will not be shared unless required by law in certain rare circumstances] [8, 3.]		9,8, 8, 3
Ideally an online platform should encourage the professional themselves to take action if appropriate & support the NMC Code of Conduct] [4, 12.]		4, 12
	Theme	**Number of times referenced in free text**
	Amnesty – Important/Helpful	19
	Amnesty - Conflicted in opinion	13
	Amnesty - Cannot be supported	14
	Amnesty – Legal and ethical obligations – duty of care	18
	Amnesty – Required to facilitate support	13
	Amnesty – Automatic if confidentiality/anonymity is afforded	2
	Midwives – Fear speaking openly/retribution	15
	Practicalities – Intervention may be required	10
	Amnesty – may not be possible	4
	Midwives – Have little existing provision	1
	Midwives – Need support	1
	Midwives – Should self-report	1

Do you have any additional comments you would like to share?

Comment	**Themes assigned to**
[this is a very difficult point] [10] as [unless they have an opportunity to reflect they may not change practice or report] [4, 6]	10, 4, 6
NO	0
This situation is where the skill of those who are fielding this information comes in – [the support could include the opportunity for that person to reflect on their experiences to the degree that they would take 100% responsibility for their actions] [4] and [talk to management about it] [4, 6] – [in cases of misconduct, then management would have to work out how to manage the situation and the person best] [3].	4, 4, 6, 3
[Disclosure in a closed group or one to one needs protection and support] [5]	5
This [could be tricky to achieve] [10] and [might need a "we won't disclose unless required by law" proviso?] [2]	10, 2
[Users of the platform should be aware that there is the possibility of relevant criminal activity] [11] for example [being reported to law enforcement agencies, but that this would only be done after consultation with the individual] [1]. [It would be preferable if the individual were encouraged to self-report in the first instance] [8].	11, 1, 8
[As part of the professional code of conduct you would expect to be referred] [1]	1
Again [using the principles that The Samaritans use might be appropriate] [9].	9
Unless [someone is at risk of harm or is a danger to themselves or others] [3].	3
[If actions and or omissions had breached NMC code then obligation to be referred?] [10, 1]	10, 1

[This would be important for the midwife sharing her worries and is truly admirable] [4,] but [what position would it put other users in to read about it and then feel that that person's practice was potentially continuing unchecked and could endanger lives?] [7] That [could in turn worry them] [7] as it could be their sister or friend that that midwife then looked after.		4, 7, 7
[This may put the organisers of the service in a difficult position] [7] and [may not be workable] [12] as there will be [obligations with the Code] [1].		7, 1, 1
On the other hand, if [it became obvious that this person needs greater assistance and or treatment and shouldn't be working how this could be managed?] [3]		3
A [declaration can also be a cry for help to someone] [4] "else" ie not in the immediate group or hospital. A step removed		4
	Theme	**Number of times categorised**
	Practicalities – There is a duty to report concerns	5
	Intervention – Disclaimers may be required	1
	Practicalities – Further intervention by management required	2
	Amnesty – Required for recovery	5
	Midwife – Needs support	1
	Midwives – Ideally should self-report concerns	2
	Amnesty – May cause distress to others	3
	It would be preferable if the individual were encouraged to self-report.	1
	Intervention – Consider emulating the principles of comparable interventions.	1
	Amnesty – Conflicted in opinion	3
	Intervention – Warnings may be required	1

5: **An online intervention designed to support midwives in work-related psychological distress should prioritise prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.**

5.1 Prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.

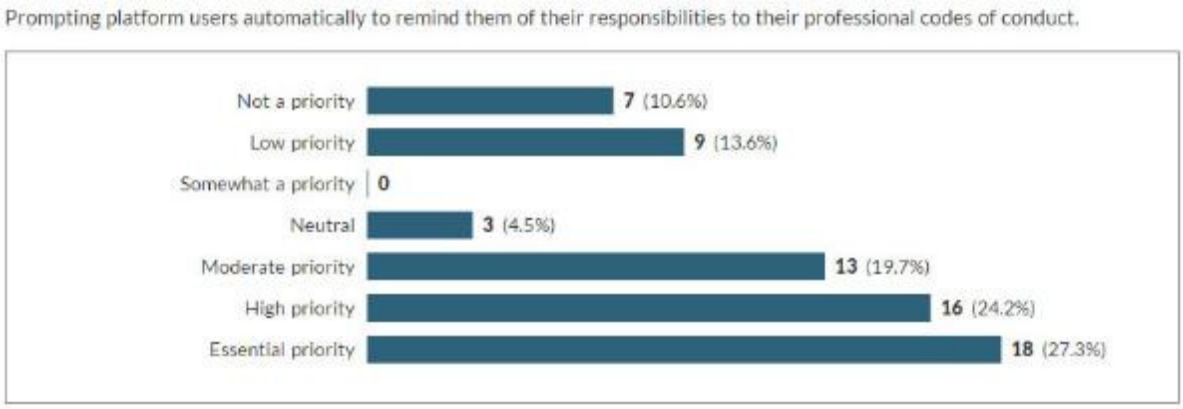
Rank value	Option	Count
1	Not a priority	7
2	Low priority	9
3	Somewhat a priority	0
4	Neutral	3
5	Moderate priority	13
6	High priority	16
7	Essential priority	18

Mean rank	4.91
Variance	4.29
Standard Deviation	2.07
Lower Quartile	4.0
Upper Quartile	7.0

Consensus Achieved = No

Minimum score = Somewhat a priority 0 (0%)

Maximum score = Essential Priority 18 (27.3%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes assigned to
[For goodness sake-if this is linked to trauma why we all of this be considered] [7] – [bit confused by these questions now] [7.]	7, 7
[As long as] [4] this is [done in a gentle and sensitive manner] [3] during a vulnerable time...the [user shouldn't feel threatened in anyway] [3] as the whole purpose of this is to preserve good mental health.	3, 4
Well [it's the basic benchmark for prof. behaviour no?][6]	6
[One would hope that it wouldn't be necessary] [2] and [sounds like a defensive measure on behalf of the website....] [5]	2, 5
I think [someone in psychological distress won't feel any better being reminded about The Code] [5]. [This may cause more harm][1].	5, 1
it is a [duty to report bad care] [6] or activity which puts [vulnerable people at risk] [6]	6, 6
This give individuals the [opportunity to reflect] [4] on their own actions	4
this would be a [helpful intervention][4]	4
[This is essential][4], where psychological distress is experienced judgement can be seriously altered so if amnesty and confidentiality cannot be guaranteed it will act as a reminder of [midwives' professional responsibility to their clients and colleagues][6]	4, 6
we [should always remain professional] [6] no matter what the circumstances	6
For the above reasons for my last answer ([This was a difficult one to answer] [8], you hope that many midwives are aware of the [responsibility of being open of our own capacity of fitness to practice] [6]. Therefore [being aware that some information for our own safety and that of others may result in some information sharing] [4] with those mentioned in the question.)	8, 6, 4

To me, this [seems contradictive] [1, 5] in the context of offering support.	1, 5
As above. This is of [utmost importance] [4, 6.]	4,
[Code of conduct are moral standard] [6] that guide any profession	6
Yes, that is part of the reasoning behind my comment above (So people are able to explore the consequences of their actions, free of reprisals)[4]	4
Our code of practice [cannot be altered][6]	6
this [could be distracting] [5] and seen as [obtrusive] [5] and [judgemental] [5]	5, 5, 5
In my view, there's a chance this [could come across as condescending] [1], when midwives in this state of distress are almost always giving their all (health, family wellbeing, mental wellbeing, etc.) to [fulfil their code of conduct] [6]. The [reminder would have to be written very carefully and supportively] [3] [to avoid hurting] [1] midwives in psychological distress coming to an online 'sanctuary' for support. You [can't underestimate the guilt/shame midwives feel at not meeting the code of conduct] [6].	1, 1, 6, 6, 3
[Not sure that I would want] [5] to be reminded that I have to behave within my professional code of conduct if I am feeling distressed.	5
Reminding the user of their professional code of conduct [could play a role in them crystallizing insight] [4] into their situation	4
Midwives [may be less likely to use a tool][5] like this if it is only going to quote the rules and the code at them.	5
[that is not the purpose of the platform][2]	2
[We all know this anyway][2]. If I were to explore in person wellbeing support services [I would not expect to be told what my responsibility as a midwife are] [2, 5]. And if I did it [may come across as a limit] [5] to what support could be given by this provider of care and support. [I don't feel it's appropriate] [5] for this to become anything connected to regulation of the profession. Supervision and management is part of that system which [may be part of the stress causing factors] [1] for the individual midwife.	2, 2, 5, 5, 5, 1
This is [useful and sensible] [4]. People can get 'carried away' online but they are professionals [need to abide by their professional rules] [6], standards and The Code. I think this would be welcomed as long as it is [a supportive reminder] [3] rather than a threatening tone.	4, 6, 3
this [presupposes midwives are not aware of the code][2] and think you need to [be careful][1] to offer psychological support not be more like line manager or corporate trust	2, 1
People in distress [may lose sight of key issues][4]	4
This is [off putting] [5] when you are already distressed.	5
This [should be second nature] [2]	2
[NMC code should be reiterated] [4, 6] but [profession does know the code] [2] - embedded throughout education and career.	4, 6, 2
When midwives would access this service they would presumably be feeling insecure and that they may not have done all that they could. To have 'This is how you should be' prompted at them would [potentially make them feel much worse] [1] and [leave the website] [4].	1, 4
They [should know this already][2]	2
I [can't see why] [7] this would help them	7

Because an amnesty is hard to achieve and consequently reminding Midwives of their professional responsibilities [should help to clarify] 4, [remind] [4] and [protect] [4] their reflective process. process	4, 4, 4
This [may not be received well] [5]	5
[Could be helpful] [4, 8] depending on the nature of the users issue although [need to be balanced] [3] so not interpreted as a performance measure.	4, 8, 3
We [should abide by our code of conduct at all times] [6]	6
The majority of [midwives do not need reminding] [2] of their responsibilities under the Code. The [tool, will be undermined] [1] if platform users feel chastised.	2, 1
it is a [good idea] [4], but [don't tell them off] [3]	4, 3
Most midwives [already have an awareness of this] [2] but [need to link it to their performance] [4] to ascertain where non achieving	2, 4
Midwives [need to constantly keep in mind their professional codes of conduct] [6]. However, there can be great challenges in the workplace in a number of areas when things are going pear-shaped in an emergency situation, with a lack of support from the employer (e.g. not enough staff, turf wars resulting in bad communication or lack of support of other medical colleagues)	6
[Yes this is a priority] [4] but a [job should not come before self] [3]	4, 3
Most [will have an awareness already] [2].	2
[better to encourage staff to come forward and admit errors] [2] so they can receive support (not blame) and help others learn from the mistake etc.	2
Think this [would alter the character of the intervention] [5] and [make it less personal] [5]. Can be a resource for people to use [rather than automatic prompts] [5].	5, 5
Critically we must support staff yet also [protect the public][6] in all of our actions	6

	Theme	**Number of times Categorised**
	Prompting - May be harmful	8
	Midwives – Will already be aware	11
	Prompting – Should be done sensitively	6
	Prompting – Helpful inclusion	18
	Prompting – Unhelpful inclusion	14
	Professional codes – adherence a professional responsibility	14
	Prompting – Need unclear	3
	Conflicted opinion	2

Do you have any additional comments you would like to share?

Comments	**Themes assigned**
NO	0
No	0
This requirement would [have to be handled sensitively and carefully] [3] and that's where the skill of the support person/s is so important	3

Maybe if others support this it can be part of the lead in material with a [tick box "I agree"][2] prior to getting into the intervention		2
As a platform that aims to provide psychological support, having the code of conduct 'front and centre' in the process would appear very rules based [not as supportive as if could be] [1.]		1
This could mean that interaction [may be seen as a way of "checking up"] [1] on the profession. Re: Kirkup		1
Maybe provide links or visible ways of accessing these codes [IF they're wanted] 2.		2
Important to [foreground the professional ethical dimension].		4
	Theme	**Number of times Categorised**
	Prompts – Not supportive	2
	Prompts – adherence to code a pre-condition of use	1
	Prompts – Sensitivity needed	1
	Codes of conduct – important to highlight	1

6: **An online intervention designed to support midwives in work-related psychological distress should prioritise prompting platform users automatically to seek help, by signposting them to appropriate support**

6.1 Prompting platform users automatically to seek help, by signposting them to appropriate support

Rank value	Option	Count
1	Not a priority	0
2	Low priority	0
3	Somewhat a priority	0
4	Neutral	7
5	Moderate priority	7
6	High priority	21
7	Essential priority	31

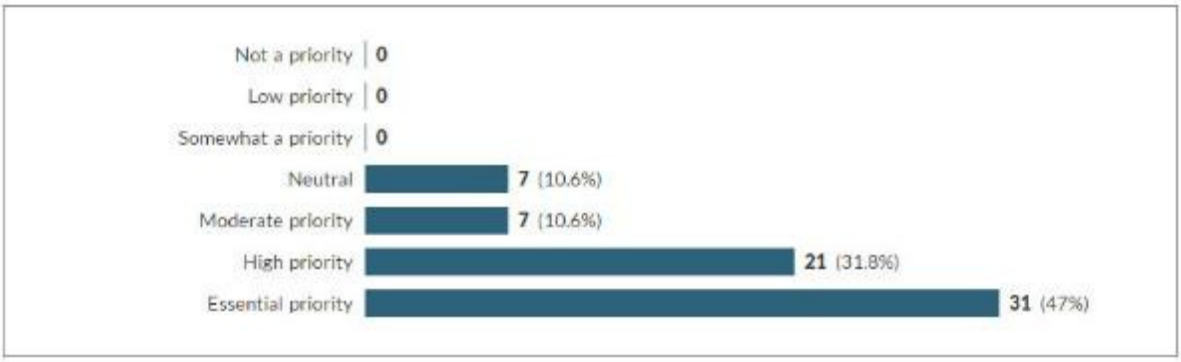
Mean rank	6.15
Variance	0.98
Standard Deviation	0.99
Lower Quartile	6.0
Upper Quartile	7.0

Consensus Achieved = Yes (High priority/Essential Priority) 78.8%

Minimum score = Not a priority/Low priority/Somewhat a priority 0 (0%)

Maximum score = Essential Priority 31 (47%)

Prompting platform users automatically to seek help, by signposting them to appropriate support



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comments	Theme assigned to
[Because some suicides have been reported] [1] in Australia.	1
I would envision that there [would be a help section, rather than requiring a prompt] [8]. I imagine that [would get annoying] [2] when using a website if prompts kept flashing up!	8, 2
[Vital to refer on if in distress] [1] and requiring support - but [who are you referring in to?][3]	1, 3
[would not be acceptable][6] to give them a platform to vent and then [leave them nowhere to go for help][1]	6, 1
When staff are under extreme stress they 'may not see the wood for the trees' [this could be all they need for self-help][1]	1
Links to support and counselling [would be very beneficial][1]	1
people will often only get help when they are ready so [signposting good idea][1]	1
[Not sure about the 'automatically' part][7]. Certainly, [signposting to appropriate support is vital] [1], but I'm [not sure I understand] [8] how this would be performed in reality.	7, 1, 8
[Extremely important factor][1] to reduce the risk of harm to platform users and others they come in contact with i.e. patients, family, friends, wider society. However, it is up to the platform user to engage in/accept appropriate support so this is an area where [difficulty in uptake may arise] [9].	1, 9
[Nobody is an island of knowledge][1]	1
[it will help midwives][1] obtain the help they need in a most efficient way	1
Yes, that [would be essential][1] as many people don't know where to go or who to trust	1
[Clarity with a Clear process][8] or [pathway to access Support is essential][1]	1, 8
[It would be supportive] [1] and [encouraging][1] and [demonstrate empathy][1]	1, 1, 1
[Yes, important] [1] - but only if the support they are referred to is [high quality and easy to follow] [10, 3]. Depression comes with a lack of ability to take action, and depression is often associated with the kind of burnout midwives experience. The support midwives are offered [must be very high quality] [10] or it could leave them feeling even more defeated.	1, 3, 10, 10
This [would only work if] [4] the online intervention said something like " your answers suggest that you would benefit from face-to-face- support in addition to the online support given here."	4
[It is essential][1] that the user is made aware of the various support modalities available to them	1
Choosing the [appropriate support may be tricky] [3] [though] [1].	1, 3
[Not sure all need to be prompted][2, 7] assumes dysfunction rather than resilience	2, 7

I guess like an online mental health triage service. [Yes I believe this w oh kid be helpful for midwives][1] to get a handle on what options of personal one to one support is available, and [especially good for those][1] personalities that tend to down play significant issues for themselves. [This could be enough] [1] to highlight they do have a significant need for extra support in their life and what that might look like for them.		1, 1, 1
This [could be very useful] [1]. Information about where to go for further help, what can be expected from different agencies and contact details [would be a valuable aspect of the platform][1]		1, 1
[Important] [1] but [depends how this is done and what it is] [3]... could be annoying or could be great][7]		1, 3, 7
[I have difficulty] with the response options here[7]. I think there [may be a step before automatic signposting] [5] and the evidence base is thin for where that should be.		7, 5
[Knowing where and how to seek help is a benefit][1] but [only the platform user knows the correct time to action this][11]		1, 11
[Platform users should have a want to access help] [11]		11
[Should enable them to "work" out the appropriate support for them] [1] [not tell them] [11.]		1, 11
[It's a good idea] [1]		1
[Always to be encouraged] [1] to enable rapid access and support for the individual.		1
Remember, [people may use the tool as an alternative to seeking other forms of support] [1], for whatever reason.		1
[Safety netting important] [6]		6
[Because in extreme distress the person may be unable to self-initiate help][1]		1
This [would be very helpful] [1] as it may not always be easy to access appropriate assistance or know where to obtain it.		1
[Yes this is essential] [1], if someone is accessing an intervention then they are looking for help		1
I think that [using the online intervention is simply a beginning to a helping process] [1] and [should not be seen as the process itself] [5].		1
[staff often don't know what is available to help them][1]		1
[Important][1] to remind participants that there are sources of help		1
Flagging importance of seeking additional support is [critical][1] – [in order to safeguard the individual & the system][6]		1, 6
	Theme	**Number of times Categorised**
	Signposting to support – A useful inclusion	36
	Prompts - unsuitable	2
	Practicalities – Dependent on the nature of support	4
	Practicalities – Needs a personalised tailored response	1
	Intervention – if evidence-based	1
	Safety is important	3
	Conflicted opinion	4
	Signposting to support – Clarity on method required	3
	Signposting to support – Help seeking may be low	9
	Signposting to support – Support must be high quality	2
	Midwives – In control of their own help seeking behaviours	3

Do you have any additional comments you would like to share?

Comments	Themes assigned to
Professional support [would benefit some users][1] rather than solely peer support - a link signposting them to sources of support [may enable them to seek help immediately][1]	1, 1
My point is, that one should thread carefully when referring / suggesting people to seek help automatically. This [could lead to pathologization/medicalization of normal reactions to adverse events] [2]. For this reason, I am sceptical towards the 'automatically', but it [might be just me reading and understanding it wrongly] [6].	2, 6
No	0
No	0
No	0
This [confuses me a little] [6]. The [online intervention IS support yet you think you need to point them to "appropriate support?"!][3]	3, 6
Accessing the platform [can provide the prompt the user requires][1] to encourage them to seek the ongoing support they may benefit from	1
[Consider prompting via matrix] [4]	4
The [help may just be engaging] [3] with the platform?	3
[Could this be done alongside the main content?] [4] As in in advert format but always present rather than an automatic prompt? So that people could access it when it was right for them rather than feeling beaten into it.	4
[Sign posting very important][1], [use third sector groups and organisations][5]	1, 5

	Theme	Number of times Categorised
	Signposting to support – A helpful inclusion	4
	Signposting to support - Could lead to users pathologising symptoms	1
	Signposting to support – intervention itself is sufficient	2
	Prompting - Consider alternative delivery	1
	Consider using third sector groups and organisations	1
	Automatic signposting - Clarity on method required	2

7: **An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of web based videos, multimedia resources and tutorials which explore topics around psychological distress**

7.1 The inclusion of web based videos, multimedia resources and tutorials which explore topics around psychological distress

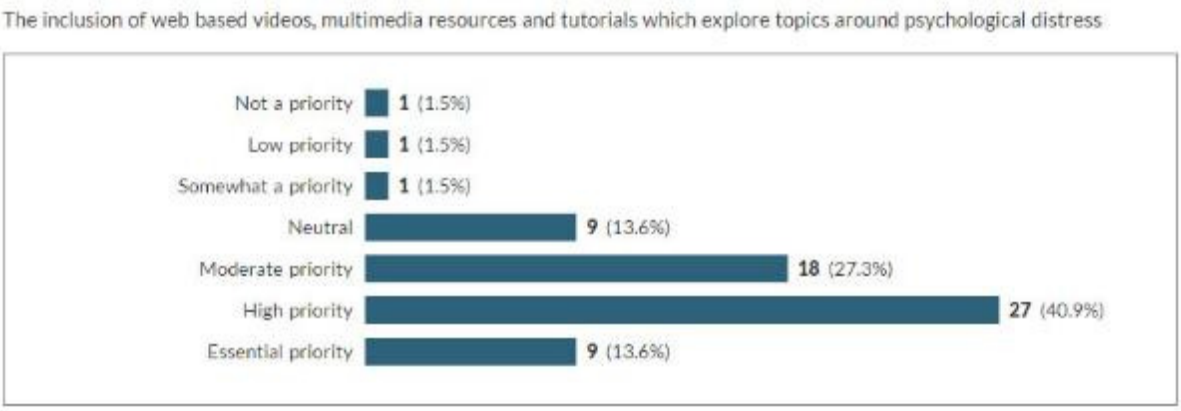
Rank value	Option	Count
1	Not a priority	1
2	Low priority	1
3	Somewhat a priority	1
4	Neutral	9
5	Moderate priority	18
6	High priority	27
7	Essential priority	9

Mean rank	5.41
Variance	1.36
Standard Deviation	1.17
Lower Quartile	5.0
Upper Quartile	6.0

Consensus Achieved = Yes (Moderate priority/High priority) 68.2%

Minimum score = Not a priority/Low priority/Somewhat a priority 1 (1.5%)

Maximum score = High Priority 27 (40.9%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comments	**Themes assigned to**
People vary in how they process information-but it's made me ask [what sort of distress are you imagining and why?][6]	6
[This would be beneficial] [1] but would [need to be location specific as not all areas provide the same services] [8].	1,8
I believe it's of only some of [a suite of aids] [3] to be employed.	3
[I am not sure about this][5]. I suppose I'd want to know if there was [evidence to support][4] it as a tool for improving psychological distress	5, 4

[May be a helpful feature][1] [depending on the resources][8] you link to	1, 8
people [need accessible][1] and [varied methods of learning][3] and online gives anonymity	1, 3
[Not a platform that would interest me][2]	2
the inclusion of [different visual mediums will be useful][1, 3] for users who prefer not to share their experiences with others	1, 3
This would be [really useful][1] and make a valuable tool	1
[Great idea] [1] often [people feel failure] by seeking help, so online from own home where accessible from home with peoples' busy lives is [great idea] [1.]	1, 1,
I think information should be provided and [presented in a variety of ways] [3], as suggested, to [encourage people to engage] [1] in support services. However, ethical considerations must be given as [some individuals may find the content of such material offensive or distressing] [2].	1, 2, 3
It enhances [more insight into the research][1]	1
[a good way to expose midwives to adequate and helpful information][1]	1
Having online resources for people to explore would be a [very useful and helpful][1] [adjunct to a human being on the end of the line/email/chatroom][3] etc.	1, 3
[Multimedia is important][1] as individuals [need a pick in mix method][3] to cope with stress one size does not fit all	1, 3
it would [depend on the nature of the therapeutic intervention][8] - these resources should only be used in context	8
[Yes,] [1] a [range of resources is a great idea] [3]. Videos work for many people, storytelling is often how we learn hard concepts best, [examples can provide the lightbulb moments][1]	1, 1, 3
if this is an intervention [for those already in distress][2] I [don't think "exploring topics around distress" should be a priority][7]	2, 7
The provision of such 'self-help' [materials can provide an important first step][1] in reducing any psychological distress being experienced	1
[I don't know] [5] if these would be helpful and [id be sceptical] [2] if this was employed if I signed up to something that was supposed to help me if I was in psychological distress.	5, 2
people relate to information in different ways so [a range of resources and tools are required] [3]	3
This [would provide a good visual and audio information sharing tool] [3] for those that are visual and auditory learners. It can get overwhelming reading heaps of psychology info. Also when an individual feeling stressed and having issues with depression reading and focusing is not always doable. Or only doable in variable degrees	3
Supporting people to find ways of helping themselves and showing them how to do this with examples would be another [important aspect of a support platform] [1]. The [emphasis should be on sharing, caring and support and resilience] [3] rather than just a place to moan (although there will obviously be a need for that too).	1, 3
1. [I am not aware that this is evidence based] [4] 2. This [may increase the likelihood of a midwife not receiving support] [2] as he/she may not be able to access these in their work time/ location thus encroaching on personal time	4, 2
This is a [great idea] [1] as it would signpost and midwives to real support and resources at a time when they may feel overwhelmed	1
[Increase awareness of condition] [1] and/or [to aid in understanding of it] [1].	1, 1
This is [very important] [1] as the need to explore issues first would help and this is accessible any time day or night.	1
This is a [fantastic idea] [1]	1

If someone is in such a state of distress [will they be wanting to look at videos, or read something] [5] [rather than talk to someone?] [7]		5, 7
I imagine this [could be a very useful] [1] means of support to some midwives.		1
[Helpful as an immediate intervention] [1]. Although [not everyone's preferred learning style] [3] and [need to be high quality] [4.]		1, 3, 4
[As long as] [1] they [don't detract from the individual] [5.]		1, 5
This is a [useful] [1] way for [some people] [3] to share, reflect etc.		1, 3
I see [greater need for one on one counselling support] [7] rather than an educative process that further [implies failure] [9]		7, 9
This [would be good] [1] for the time before a crisis situation or in the time of healing after an event once some work had been done to resolve issues.		1
[Yes] [1], this may open their mind that they are not alone, [be able to put into place ways of keeping themselves safe] [1], [give them strategies to help themselves] [1]		1, 1, 1
inclusion [will help] [1] support/educate staff		1
Evidence from Health Talk Online and elsewhere that appropriate video material [can help participants understand their feelings] [1] and [realise that they are not alone] [1].		1, 1
Inclusion of [resources that participants can chose to access is key] [3]		3
	Theme	**Number of times Categorised**
	Multimedia tutorials – Helpful inclusion	32
	Multimedia resources – Unhelpful inclusion	5
	Multimedia – Variety in content presentation useful	13
	Multimedia resources – Evidence based/high quality resources required	3
	Multimedia resources – Conflicted opinion	4
	Multimedia resources – Benefit dependent upon the nature of distress	1
	Midwives – Greater need for alternative support	3
	Multimedia resources – Benefit dependent upon the nature of resource	3
	Midwives – Feel like failures	1

Do you have any additional comments you would like to share?

Comments	**Themes assigned to**
[It enhances the resource] [1] and [gives more choice to users] [1]	1, 1
This [would work for some] [1], [not for others] [5]. [Could not stand alone] [2].	1, 5, 2
NO	0
No	0
sometimes you [fill more comfortable to seek help not from people but from multimedia resources] [1, 2]	1, 2
Short videos and downloadable podcasts explaining aspects [would be readily accessed] [1] - people are seeking resources on line more and more these days and to have specially targeted, evidence informed resources [would be very beneficial] [1]	1, 1
This question makes me [wonder if there needs to be two parts to this] [2] a "prevention and information " section and a "support"	2

A balance has to be found between the material provided and [ensuring that those with more severe psychological distress do not rely upon the available information as their crutch] [3]		3
[Content would determine how you expect these to be used] [4]		4
It [can be difficult to find the information required] [1] as well as what words to search with		1
[Using multi media will add variety and depth] [2]		2
[Have them available] [1] so they can be accessed if needed, [don't force them on the midwives!] [2]		1, 2
	Theme	**Number of times referenced in free text**
	Multimedia resources – Helpful inclusion	8
	Multimedia resources – Require a variety of options	5
	Midwives – Material needs to be matched to user needs	1
	Usability - depends upon the content	1
	Multimedia resources - Unhelpful	1

8: **An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of informative multimedia designed to assist midwives to recognise the signs and symptoms of psychological distress**

8.1 The inclusion of informative multimedia designed to assist midwives to recognise the signs and symptoms of psychological distress

Rank value	Option	Count
1	Not a priority	1
2	Low priority	1
3	Somewhat a priority	0
4	Neutral	5
5	Moderate priority	12
6	High priority	26
7	Essential priority	21

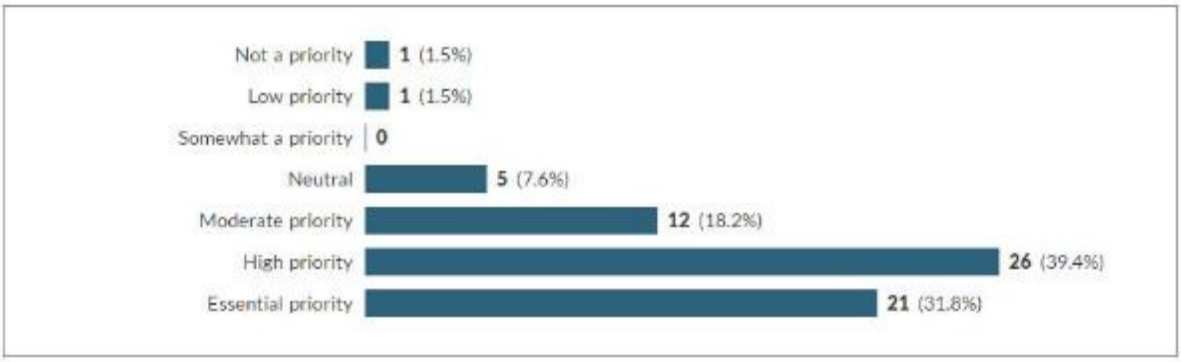
Mean rank	5.85
Variance	1.4
Standard Deviation	1.18
Lower Quartile	5.0
Upper Quartile	7.0

Consensus Achieved = Yes (High priority/Essential priority) 71.3%

Minimum score = Somewhat a priority 0 (0%)

Maximum score = High Priority 26 (39.4%)

The inclusion of informative multimedia designed to assist midwives to recognise the signs and symptoms of psychological distress



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comments	Themes assigned to
[No idea whether this would be effective or not] [4] – [what outcome is wanted; what problems are anticipated?] [4]	4, 4
I would assume they [midwife would have already recognised signs and symptoms] [7] if they have chosen to use the online tool.	7
[Anything helpful in raising awareness is valuable] [1].	1
[Signs and symptoms are really important] [1] as [we often don't see them in ourselves] [8] until we are way passed a certain point. [Info on burn out would be particularly helpful] [1].	1, 1, 8
As above ([May be a helpful feature] [1] depending on the resources you link to) [4]	1, 4
[varied and accessible methods of learning] [3]	3
[This may help] [1, 4]	1, 4
this [could be beneficial to midwives] [1] who are [unaware that they are struggling] [8]	1, 8
even as a trained healthcare professional [distress can affect judgement particularly of your own wellbeing] [8]	8
often [we don't realise how stressed or traumatised we are] [8] and we keep carrying on so [highlighting these symptoms great idea] [1]	1, 8
Once again; I worry that ["counting symptoms" could lead to pathologization of a normal condition.] [9]	9
Extremely important as [individuals may not realise that they are in psychological distress] [8] and [may enable self-help activities] [1]/ [inform where to seek further help and support] [1].	1, 1, 8
[This aid learning] [1]	1
a [good way to expose midwives to adequate and helpful information] [1]	1
Having a one stop shop, including signs and symptoms would [make it so easy for people to access] [1] and [get validation for how they feel] [1] - a [vital feedback tool] [1].	1, 1, 1
Sometimes working under stress is becoming the normal practice. We [need to highlight the signs and symptoms] [1, 8] to midwives to create clear awareness	1, 8
Again [depends on the nature of the intervention] [4] [if synchronous no but maybe if it's purely an asynchronous resource] [4]	4, 4

A [huge part] [1] of addressing psychological distress is [making sure midwives can identify when they are at risk] [8.]	1, 8
see response at 7 (if this is an intervention for those already in distress I [don't think "exploring topics around distress" should be a priority)] [2]	2
As what would most likely be a first point of contact [it would be advantageous] [1] for the user to be able to understand the apparent degree of stress they are experiencing with information/suggestions on an appropriate course of action	1
I can see how [this would work] [1] as I think [many Midwives don't recognise the sign and symptoms of stress, PTSD, depression or anxiety] [8.]	1, 8
I believe [this is what most platform uses would be wanting] [1] to have more awareness around. I know when I was having a work triggered emotional breakdown and especially when I wanted to understand what had happened as I was recovering something specific to being a midwife that would clearly identify what this distress was or had been [would have been great for me] [1]. Instead I checked out many different websites and at times found this overwhelming as too much info to process at a time of vulnerability	1, 1
I think [this is useful] [1] up to a point but I think [midwives will already have recognised this if they are visiting the platform] [7]. I would be slightly [cautious about encouraging midwives to pathologies their distress] [9.] But I can see that some common sense guidance on recognising depression and suicidal thoughts (and what to do about this) [would be essential] [1].	1, 7, 9, 1
See previous comment re the evidence-base for these modalities (I am not aware that this is evidence based) [5]	5
[Difficult at the time] [1] to [acknowledge signs/symptoms] [10]	1, 8
[Training helps to see it in others] [1] but [very difficult to see in oneself] [8] #Johari window.	1, 8
This [would be really useful] [1] both for the [individual] [1] and as [a means of supporting their colleagues] [1].	1, 1, 1
I think self-assessment of distress [would be helpful] [1] but [not on its own] [3] -needs solutions and was forward too	1, 3
If this is going to be a resource for support in the future [this would be helpful] [1]	1
This [could offer clarity and context] [1] for a distressed midwife seeking support.	1
[Helpful to raise awareness] [1] and [support the individual] [1] and [others] [1.]	1, 1, 1
[May help midwives] [1] recognise when they are suffering from psychological distress.	1
[supporting peers is key] [10] [asking for help is also important] [11]	10, 11
There is a big [difficulty in self-identifying you are at risk] [8] and as it is not spoken about isolation occurs	8
A tool [would be useful] [1] as it is [not always easy to see the symptoms in ourselves] [8] or [acknowledge that we need help] [11]	1, 8, 11
[Could be useful] [1], depends though – [could end up self-diagnosing!] [9]	1, 9
[will help] [1] to educate and support staff	1
Done effectively, this [could help people] [1] [recognise and accept that they are experiencing distress] [8]	1, 8
in order [to engage professionals it will need to provide a unique offer] [4, 6]	4, 6

	Theme	Number of times referenced in free text
	Informative Multimedia – Helpful inclusion	37
	Informative Multimedia – Unhelpful inclusion	1
	Multimedia – Need a variety of resources	2
	Conflicted – Depends upon objectives/content	7
	Multimedia - Resources must be high quality/evidence based	1
	Multimedia - Needs to be unique	1
	Multimedia - Not required	2
	Midwives – Do not always recognise own distress	13
	Informative Multimedia - could lead to inappropriate self-diagnosis	3
	Midwives – Support is important	1
	Midwives – Help Seeking is important	2

Do you have any additional comments you would like to share?

Comments	Themes assigned to
it [will be a way of assessing] [1] whether they are at risk of developing psychological distress	1
Is it always due to individual problems if a person experience psychological distress?... Maybe it is a [completely healthy and normal response to some structural problems] [3] that should be solved at an organizational level, not an individual level?	3
NO	0
No	0
the [information should be clear and simple] [4] (not complex)	4
A lot of hazing and bullying that goes on tends to undo people's sense of self and self of understanding what's happening; [good to have a checkpoint] [1]	1
see response at 7 (if this is an intervention for those already in distress I [don't think "exploring topics around distress" should be a priority)] [2] & (This question makes me wonder if there [needs to be two parts to this a "prevention and information " section and a "support")] [6]	2, 6
[It is only now that I can look back and realise what I was experiencing was a sign/ symptom of PTSD] [7]	7
In themselves and in others? if so [they can offer peer support] [1]	1
A [midwife may have a critical incident occur and go through the routine process and think it has been dealt with only to discover that it is affecting her life and work] [7] in subtle ways. Or there can be a vicarious complaint that comes much later which [can set the whole thing off again] [2.]	7, 2
[People asking for help are likely already to be further along the journey of recognition and acceptance] [2]. [Could this be used for initial engagement with the site?] [5]	2, 5

	Theme	Number of times Categorised
	Informative multimedia - helpful inclusion	3
	Informative Multimedia – Unhelpful inclusion	3

	Organisational – Distress is a normal response to organisational issues	1
	Informative Multimedia – resource should be clear and simple.	1
	Informative multimedia – To be used in initial engagement	1
	Informative media – Requires a variety of options	1
	Midwives – Do not always recognise own distress	1

9: An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of multimedia resources which disseminate self-care techniques

9.1 The inclusion of multimedia resources which disseminate self-care techniques

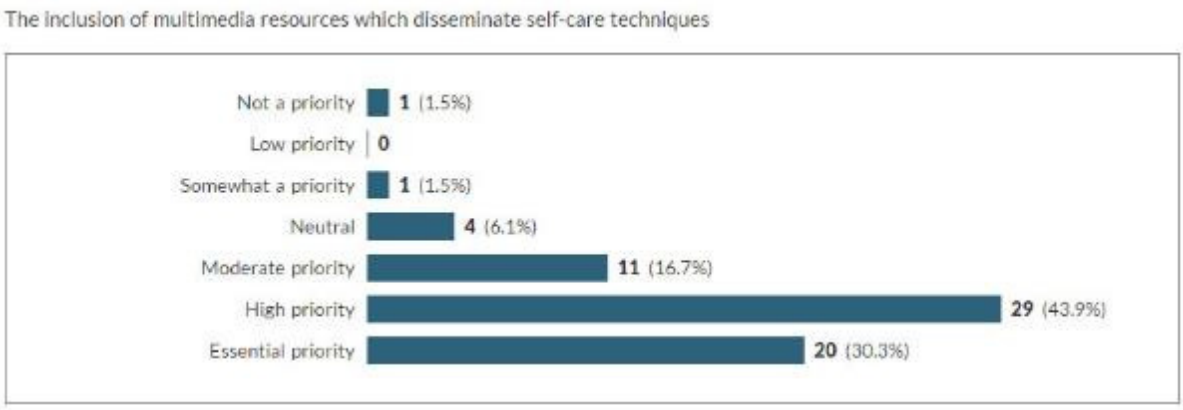
Rank value	Option	Count
1	Not a priority	1
2	Low priority	0
3	Somewhat a priority	1
4	Neutral	4
5	Moderate priority	11
6	High priority	29
7	Essential priority	20

Mean rank	5.89
Variance	1.22
Standard Deviation	1.1
Lower Quartile	5.25
Upper Quartile	7.0

Consensus Achieved = Yes (High priority/Essential priority) 74.2%

Minimum score = Low priority 0 (0%)

Maximum score = High Priority 29 (43.9%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comments	**Themes assigned to**
Completely [neutral about whether or not this can help] [8]	8
This [would be very useful] [1.]	1
As above [(Anything helpful in raising awareness is valuable.)] [1]	1
I think it [needs to go on beyond the normal trite][4]: have a bath, make sure you can some 'you time', spend time with the family stuff.... maybe [some actual stories][4] of how midwives have overcome particular situations with self-care techniques	4, 4
Now this [would be a helpful feature] [1] to enable midwives to begin to build emotional toolkit. However, I worry that it may [miss people in need of more professional input] [6]	1, 6
[best way to get information out] [1]	1
As above [this mode of support would not interest me] [2]	2
As there is a real shortage of support and understanding for midwives who maybe experiencing stress - learning self-help techniques are [extremely important] [1]	1,
again people are busy and face to face not for everyone so [giving choices is essential] [3]	3
As above. ([Extremely important] [1] as individuals [may not realise that they are in psychological distress] [11] and [may enable self-help activities/inform where to seek further help and support] [6]) However, this relies on the individual to engage fully with such material in order to reap the benefits.	1, 6, 10
[nice to have] [1], but should be very [easy and safe to use] [7]	1, 7
too many people [don't take care of themselves] [5]; a readily accessible list of self-care modalities can [give people ideas of what steps to take] [1]	1, 5
Self-care is so important and [often ignored or always last on an individual to do list] [5]	5
would be a [good support] [1] – [self-directed strategy] [1]	1, 1
If you can get a resource that spreads and helps a lot of midwives (viral content) [this would be amazing] [1] - it's hard to design viral content for lots of reasons, and impossible to guarantee a piece of content will disseminate, but aiming for this will often mean content is engaging and will communicate a message very well. This isn't an academic resource, but could be a very helpful book Sally: http://www.amazon.com/Contagious-Things-Catch-Jonah-Berger/dp/1451686579/ref=asap_bc?ie=UTF8	1
see response at 7 (if this is an intervention for those already in distress [I don't think "exploring topics around distress" should be a priority)] [2]	2
[It is essential] [1] that midwives have to hand information that can immediately facilitate them taking steps to alleviate some of the distress they are experiencing	1
Again, [not sure if this would make any difference] [8.] [But suppose it wouldn't do any harm] ...[8]	8
[useful first step] [1] for some people so [good to include it] [1]	1, 1
In most services this is all that is available [promoting individual resilience is the key to sustainability] [3]	3
[Goes without saying] [1]	1
[I see this as key] [1] and one of the big problems in midwifery. Midwives [tend to be ignorant about how and why they need to care for themselves] [5, 10]. It seems to be a cultural thing. Many midwives treat tea/meal breaks as an [optional extra] [5]. I think that tells us something about	1, 10, 5, 1, 1

how they view self-care. Yes [help with self-care techniques is really important] [1] and [has the potential to turn things around for individual midwives] [1.]	
[if diagnosing symptoms needs to provide help and not just by referral] [6]	6
Only [relevant if aware and prepared to help one's self] [14]	5
[important to give strategies and self-care] [1] - however [people are unique] [3] so how do we account for that	1, 3
I think that this [would be really helpful.] [1]	1
[Useful]. [1]	1
[Good to include] [1] provided [balanced with further support] [6] and [not just provided as only solution] [3.]	1, 6, 3
Someone using this tool [may well be looking for self-help] [1] as they do not wish to engage with other professionals about their issues.	1
Self-care [very important as a midwife][1, 9]	1, 9
This [has to be with the inclusion of personal support] [6, 3] as resources not able to recognise person's current ability to up lift or put strategies in place	6, 3
[Helpful] [1] but at the time of crisis [links to outside resources to assist or facilitate maybe more supportive] [6, 3.]	1, 6, 3
[Yes] [1,] if they are accessing this resource they are looking for help and support. Again don't force it on them!	1
[need to encourage staff to look after themselves more] [9] – [always put patients first sometimes at the expense of themselves] [5]	5, 9
[Practical means of self-help] [1, 4,] [possibly supported by app] [7.]	1, 4, 7
[this will allow professionals to take immediate action] [1]	1

	Theme	**Number of times Categorised**
	Multimedia self-help resources – Helpful inclusion	28
	Multimedia self-help resources – Unhelpful inclusion	2
	Need a variety of resources	6
	Multimedia self-help resources – Needs to be useful	3
	Midwives - do not prioritise self-care	5
	Midwives – additional support may be needed	6
	Multimedia self-help resources - ease of use important	2
	Neutral	2
	Midwives – Need support and understanding	2
	Midwives – Do not always recognise own distress	2

Do you have any additional comments you would like to share?

Comments	**Themes assigned to**
NO	0
I don't think it is enough to provide the ideas; many people [need to be 'accountable'] [5] to someone to say they've done it or not; what about [access to a coach or mentor] [6] so that	4, 5, 6

the person has their interest at heart, but not emotionally attached to check in with and [help the person stay on track?] [4]		
see response at 7 (This question makes me wonder if there [needs to be two parts to this a "prevention and information " section and a "support")] [3]		3
Making such information available [also has a preventative component] [1]		1
I thought I felt fine, I [thought self-help was to continue at work and work through it] [7]		7
[Self-care for one person can be very different to another?] [7] [Simplicity is the word I think of in self-care] [8] - one thing not a big list as that seems overwhelming like a set of tasks to achieve and then [you may measure yourself as failing if you do not achieve them?] [2]		7, 8, 2
[highlight importance of self-awareness] [1]		1
Would have to [have a range of strategies] [3] to cover difference personalities and different issues		3
[Peer support likely to be a significant] [9] feature of the intervention, how it is envisaged that this might develop? Under what circumstances?		9
	Theme	**Number of times Categorised**
	Multimedia self-help resources – Helpful inclusion	2
	Multimedia self-help resources – unhelpful inclusion	1
	Resource – Must be multiple options available	2
	Midwives – Need assessment	1
	Midwives – Must be accountable	1
	Midwives – Provision of coaching	1
	Midwives - Meaning of self-care unclear	1
	Resources - Should be simple	1
	Resources - Peer support is useful	1

10: An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of multimedia resources which disseminate relaxation techniques

10.1 The inclusion of multimedia resources which disseminate relaxation techniques

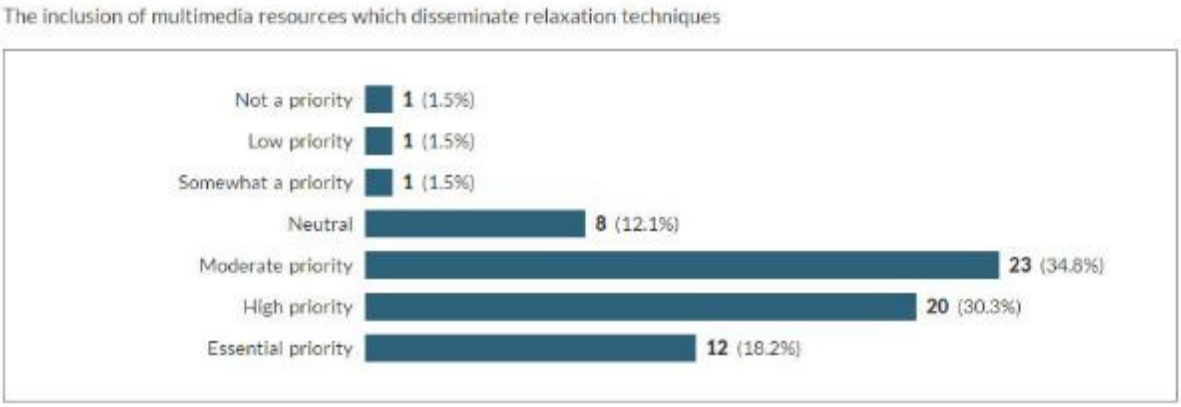
Rank value	Option	Count
1	Not a priority	1
2	Low priority	1
3	Somewhat a priority	1
4	Neutral	8
5	Moderate priority	23
6	High priority	20
7	Essential priority	12

Mean rank	5.41
Variance	1.42
Standard Deviation	1.19
Lower Quartile	5.0
Upper Quartile	6.0

Consensus Achieved = Yes (Moderate priority/High priority) 65.1%

Minimum score = Not a priority/Low priority/Somewhat a priority 1 (1.5%)

Maximum score = Moderate Priority 23 (34.8%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes assigned to
All these options imply that the problem is located in individuals-maybe the distress is a [reasonable response to a dysfunctional environment] [6]	6
One imagines [Midwives should be au fait with this one more than most?] [5]	5
Headspace app has proven useful to some people I know. [This feature could do the same thing.] [7, 1]	7, 1
[best way to reach majority] [1]	1
as above (this mode of support would not interest me) [2]	2

As last question (As there is a real [shortage of support and understanding for midwives] [9] who maybe experiencing stress - learning [self-help techniques are extremely important)] [1]	1, 9
[might help some] [1], but I have found my own personal ways to relax	1
[This is a good idea to relieve stress] [1] however [time constraints/family commitment/outside pressures may have a negative impact on uptake and engagement] [10]	1, 10
Any intervention [should not further compound the stress] 9	9
[need to be very simple and safe to use] [5, 8]	5, 8
Most of us haven't been taught how to relax, so [having these resources would be so beneficial] [1]	1
[Depends on the technique] 11	11
[good if contextualised within a program] [1]- lots of relaxation resources available already- therefore [needs to be in the context of a bigger picture guided intervention] [13]	1, 2
As in last comment. [(If you can get a resource that spreads and helps a lot of midwives (viral content) this would be amazing)] [13] Also, relaxation is often quite a personal thing, [hard to recommend effective techniques for all I think?] [3] Perhaps midwives need reminding that they're doing an incredible job. Events and demands they come across are so stressful and life changing that most of the population would need counselling to cope. Midwives often [feel guilty] [12] for catching up on sleep, having time out watching TV, gently exercising with friends etc. – it's not that they don't know how to relax, more that they're under tremendous time pressure and [feel guilty for taking time out] [12]. Just my thoughts.	3, 12, 13, 12
see 7 (if this is an intervention for those already in distress I [don't think "exploring topics around distress" should be a priority)] [2]	2
[Relaxation techniques go hand in hand with self-care techniques] [4]	4
[Needs individuals to buy into finding time to undertake techniques] [5, 10]	5, 10
[Part of the self-help] [4,] Also [good for all midwives to know well] [1,] and be able to personally and help their clients use. I know this is one of the most basic but helpful areas of self-development that [is given me much more resilience] [1]. Especially in relation to work related inter professional conflict and horizontal violence issues. If I'm more relaxed I manage to not own other people's bullshit.	4, 1, 1
[Yes] [1] this would be useful for some. How many [midwives advocate breathing and relaxation for women in labour but never try this out themselves as a relaxation technique?] [15] The majority I would guess. [Several different techniques should be offered] [3] to suit different personal preferences.	1, 3
[Strength of evidence][1]	1
[Different methods must be explored] [3] as not one size fits all.	3
I think these are fairly well publicised already but it [wouldn't do any harm] [1].	1
[Helpful] 1 but [may not suit everyone] [3]	1, 3
[this kind of stuff can be accessed elsewhere] [2]	2
[Possibly useful] [1]	1
Again [good resource to include] [1] as an immediate support balanced with others and as prioritised in line with evidence base.	1
A ["nice to have"] [1] but other factors more important	1

[not everyone finds 'relaxation' easy] [2]		2
[May not necessarily be appropriate to an individual] [2,]		2
Again, [would be helpful] [1] but there [an outside resource may be more helpful] [14] during the crisis - having it only online [may add to the isolation and depression a midwife may be feeling] [2]		1, 14, 2
[Some may find this useful] [1] – [don't think this is a priority] [2]		1, 2
	Theme	**Number of times Categorised**
	Relaxation techniques - A helpful inclusion	18
	Relaxation techniques - An unhelpful inclusion	8
	Resources – Need a variety of options	4
	Relaxation is a self-care technique	2
	Resources - Must be easy to use	2
	Organisational - distress can have organisational cause	1
	Resources – Could emulate comparable alternatives	1
	Resources must be safe to use	1
	Midwives – shortage of support and understanding	1
	Outside pressures – May inhibit use	2
	Relaxation techniques– benefit dependent on technique used	1
	Midwives – often feel guilty	2
	Need to generate viral content	1
	Midwives – May need additional support	1

Do you have any additional comments you would like to share?

Comments	**Theme assigned to**
Are they not able to [apply their unique knowledge to themselves] [4]	4
(Yet again; be careful about this approach. [Is the message that you have to learn to relax more/better in order to handle with your work?)] [2]	2
NO	0
[People need to understand the toll that stress takes] [1] and [why deliberate relaxation practice is important for their ongoing health and wellbeing] [1]; the resources [could explain the Polyvagal theory] [3] and how the ANS works so that they understand scientifically, the benefits of relaxation practices	1, 1, 3
[Needs to be very simple short] [5] and with [reference to further prolonged techniques] [7]	5, 7
see 7 (This question makes me wonder if there [needs to be two parts to this a "prevention and information " section and a "support")] [7]	7
[Limited evidence of relaxation] [6] over resilience techniques in effectively reducing distress	6
I had counselling and it [was one of the first techniques discussed and practised] [1]	1
A [variety of relaxation techniques] [7] – [visualisation][7] - or [suggestions of techniques they may try - yoga class etc] [7]	7, 7, 7
[Mindfulness could be useful too] [8]	8

	Theme	Number of times Categorised
	Relaxation techniques - A helpful inclusion	3
	Relaxation techniques – May convey the wrong message	1
	Resources - could/should explain theory behind relaxation	1
	Midwives – Can apply their own knowledge	1
	Resources - Need to be simple and comprehensive	1
	Relaxation - Limited evidence base	1
	Relaxation techniques – Requires a range of options	4
	Techniques - Consider mindfulness	1

11: An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of mindfulness tutorials and multimedia resources

11.1 The inclusion of mindfulness tutorials and multimedia resources

Rank value	Option	Count
1	Not a priority	1
2	Low priority	0
3	Somewhat a priority	1
4	Neutral	12
5	Moderate priority	17
6	High priority	27
7	Essential priority	8

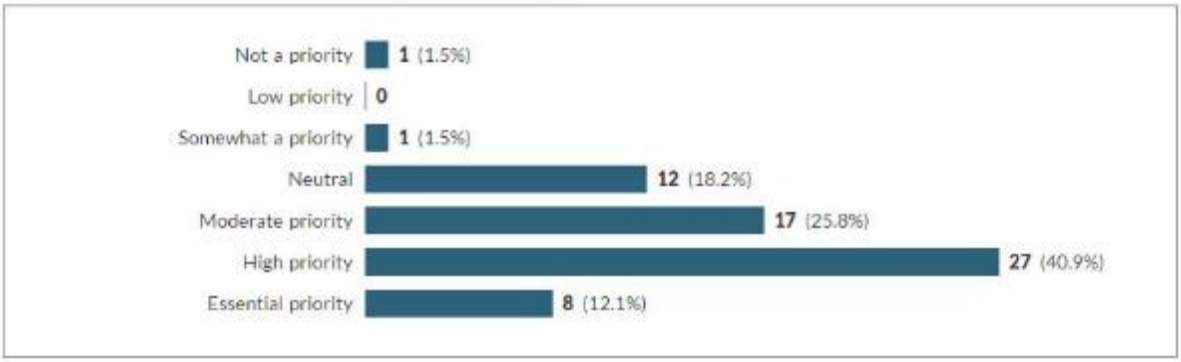
Mean rank	5.38
Variance	1.24
Standard Deviation	1.11
Lower Quartile	5.0
Upper Quartile	6.0

Consensus Achieved = Yes (Moderate priority/High priority) 66.7%

Minimum score = Low priority 0 (0%)

Maximum score = High Priority 27 (40.9%)

The inclusion of mindfulness tutorials and multimedia resources



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes associated with**
All the things I've said already [(Neutral)] [4]	4
Essentially same as above (10) [(Midwives should be au fait with this one more than most?)][7]	7
I have found mindfulness [particularly helpful] [1.]	1
it is topical and [helps many] [1] but [some may not respond to it][2]	1, 2
Many individuals are [not aware of what is happening as it is happening] [14.] They are concentrating on other things, completing electronic records but [not seeing what is happening in the room] [14].	14, 14
a [useful link] [1] that many would be interested to learn more about	1
[not sure what is meant by mindfulness] [6]	6
My reasons for choosing the last 3 questions as high priority is [due to stigma] [8] midwives [may not be ready to seek face to face help and support] [9] however [seek help using the highlighted resources] [1]	8, 9, 1
As above. (This is a [good idea to relieve stress] [1,] however [time constraints/family commitment/outside pressures may have a negative impact on uptake and engagement.)][13]	1, 13
It [reinforces learning] [1]	1
[need to be very simple and safe to use][10]	10
See previous answer; [relaxation and mindfulness practices are twins (in my view)][15] – [essential tools] [1] to manage stress and support our psychophysiological wellbeing	1, 15
Mindfulness is the new buzz word and [midwives may glaze over this as a fad][11]	11
[good emerging evidence re mindfulness as a strategy] [1]	1
Could be [very helpful] [1] in getting midwives to take action on mental wellbeing.	1
mindfulness is [certainly on way of helping] [1] those in distress	1
The inclusion of psychological techniques [may be beneficial to some] [1], [dependent on the degree of distress being experienced] [16]	1, 16
This [could be really useful.] [1]	1
[Excellent skills to foster] [1]	1
[So much benefit to Mindfulness] [1], and an increased general population awareness of its lifelong benefits. I wish all kids were taught this from a young age. Before I go into the hospital I do a short Mindfulness and relaxation technique. This [helps me let go	1, 1, 1, 1

of past hurts] [1] created by maternity power Struggles and previous horizontal violence. It [helps me present to the now] [1], and [see today's issues with today's eyes] [1]. Not reactive eyes from days gone by.		
Again it [will not appeal to all] [3] but it certainly [has a place] [1].		3, 1
[More focussed than just relaxation and?] [3] [more evidence base of efficacy] [5]		3, 5
as above (Strength of evidence) [5]		5
[Not sure what this is] [6]		6
[Can be a bit narrow] [12]. [Problem specific whereas if your diagnosis crosses across a couple of areas] [12]		12, 12
This is the [most relevant to me] [1] as I believe [this is the way forward when I feel psych distress] [1.]		1, 1
[I don't know very much about mindfulness.][6]		6
I think the [evidence on the benefits of mindfulness are getting stronger] [1]		1
mindfulness geared to practitioners [would be helpful][1] and it has been shown to increase resilience		1
As above this [may be helpful for some][1]		1
[Need to be balanced with evidence base] [5] on interventions and impact on targeted intervention.		5
[I have yet to evaluate mindfulness and its effectiveness].[4]		4
Again [many people are not familiar or sceptical re mindfulness][11]		11
As above [(May not necessarily be appropriate to an individual)] [2, 3]		2, 3
This should be a part of all midwifery training and [useful] [1] but [not necessarily at the time of a crisis] [2.]		1, 2
There is so much on the internet but some [links maybe helpful][1]		1
[should be included][1] because different techniques help different people		1
	Theme	**Number of times Categorised**
	Mindfulness - A helpful inclusion	26
	Mindfulness - An unhelpful inclusion	2
	Resource – Need a variety of options available	3
	Mindfulness – Neutral opinion	2
	Mindfulness – Degree of evidence	2
	Mindfulness – Meaning unclear	3
	Midwives - should know this technique already	1
	Midwives – Face stigma	1
	Midwives - May not want face to face support	1
	Resources - need to be simple and safe to use	1
	Mindfulness - Midwives may be sceptical	2
	Mindfulness – Conflicted opinion	2
	Midwives – other pressures may inhibit use	1
	Midwives – Do not always recognise own distress	2
	Relaxation - synonymous with mindfulness	1
	Effectiveness - dependent on the degree of distress	1

Do you have any additional comments you would like to share?

Comment	Themes assigned to
[A supportive prof. friend would be better] [1] than most of these modalities or complement them!	1
As above, no. 11 ((Yet again; [be careful about this approach. Is the message that you have to learn to relax more/better in order to handle with your work?))] [2]	2
NO	0
No	0
[Offer A pick in mix of options to avoid one term] [3]: Breathing techniques Soothing music Mindfulness Etc.	3
[It is important to be able to identify those users who are more severely distressed] [4] and [encourage them to seek professional help rather than have them self-manage] [5]	4, 5
I suffered from PTSD and severe reaction to stress [difficult to access both areas of relevance] [3, 6]	3, 6
[links and signposts to mindfulness websites etc.][3]	3

	Theme	Number of times Categorised
	Mindfulness - A supportive professional friend would be better	1
	Resources - May send unwanted messages	1
	Resources – Must offer a variety of options	3
	Midwives – Must be risk assessed	1
	Midwives – Must be encouraged to seek professional help	1
	Resources – Must be accessible	1

12: An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of Cognitive Behavioural Therapy (CBT) tutorials and multimedia resources.

12.1 The inclusion of Cognitive behavioural Therapy (CBT) tutorials and multimedia resources

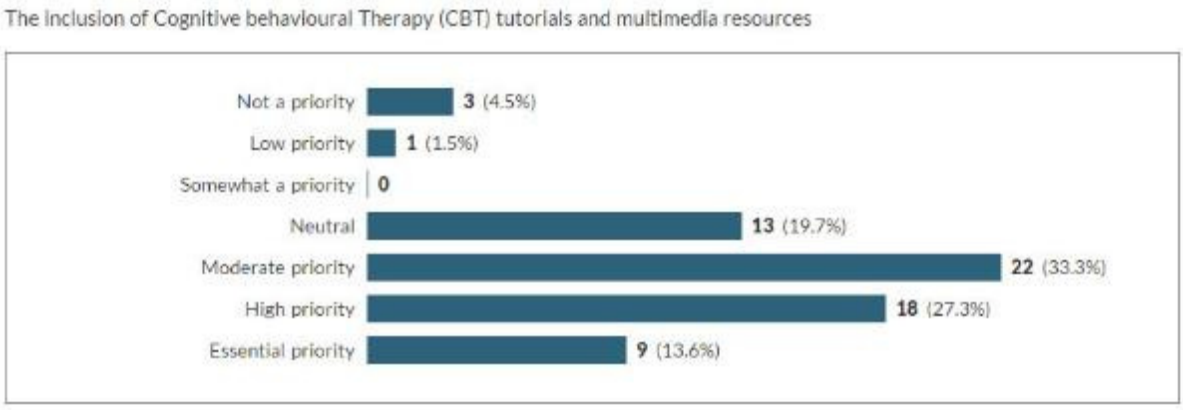
Rank value	Option	Count
1	Not a priority	3
2	Low priority	1
3	Somewhat a priority	0
4	Neutral	13
5	Moderate priority	22
6	High priority	18
7	Essential priority	9

Mean rank	5.12
Variance	1.86
Standard Deviation	1.37
Lower Quartile	4.25
Upper Quartile	6.0

Consensus Achieved = Yes (Moderate priority/High priority) 60.6%

Minimum score = Somewhat a priority 0 (0%)

Maximum score = Moderate Priority 22 (33.3%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes assigned to
There is recent psychological [evidence that the effectiveness of this technique is declining] [5]	5

The [self-help would be very useful] [1], especially to those so [don't feel able to access outside services] [9] or [where there is no provision of services] [9]	1, 9, 9
Same reasons as above. [(A supportive prof. friend would be better than most of these modalities or complement them!)] [3] Most [info will only be shared in a "safe" environment.] [10]	3, 10
[this is the most appropriate technique for dealing with anxiety] [1] and [can be empowering][1]	1, 1
As above, not a medium I would use.[2]	2
Again like mindfulness [some midwives would wish to learn more about this intervention][1]	1
this therapy is [helpful for some][1] but again a [wide range of choices will help][3] individualise the support required	1, 3
For again the reasons stated above ([due to stigma][11] [midwives may not be ready to seek face to face help and support] [10] however [seek help using the highlighted resources)][1]	11, 10, 1
As above (question 10) (This is a [good idea to relieve stress] [1], however [time constraints/family commitment/outside pressures may have a negative impact on uptake and engagement.)] [12]However, I am unsure if individuals would [need outside support] [4] with this to ensure effectiveness.	1, 12, 4
To [assess the level of reasoning] [1]	1
[need to be very simple and safe to use][7]	7
These tools have been [found to be beneficial][1] through research, so they [would be beneficial with this work too][1]	1, 1
See above (Mindfulness is the new buzz word and [midwives may glaze over this as a fad)][13]	13
need to undertake primary research to [compare which technique to use][2]- [putting too much in may weaken the effect and cause confusion]8	8, 2
[Could be great] [1], and the presence of CBT itself [could act as a great reminder] [1] that what they do is very challenging and worthy of this kind of support.	1, 1
[CBT is useful][1] for those in distress	1
The inclusion of psychological techniques [may be beneficial to some][1], [dependent on the degree of distress][14] being experienced	1, 14
[How would midwives know which therapy route to follow?][8]	8
Personally feel it [could be more useful than some of the other resources] [1].	1
[Needs to be supported][4] for professional to utilise fully	4
I wonder if this is [more appropriate to do with a psychologist personally] [4], as safer for the midwife. By putting it on the platform to give tutorials of how to do it [could result in a vulnerable midwife self-managing more serious issues] [2] when [professional support would be better for her] [4]. I guess the psychologists would be better served to answer this. I think a brief overview on what CBT or EMDR is and the research around its benefits [would be beneficial] [1]...	4, 2, 4, 1
This is [not an area I know much about][6]	6
again [better than relaxation alone][1]	1
Only concern is that if CBT is required then the individual [should undergone proper and robust assessment and support] [4]	4

Have [been advised to use online CBT training] [1]		1
Think this is the realm of therapy and [needs to be "real"] [4.]		4
[CBT needs expert input][4], raising awareness of CBT would be good however		4
As above (Need to be [balanced with evidence base] [14] on interventions and [impact on targeted intervention] [15].)		14, 15
Possibly helpful, but is it even possible to [design a "one size fits all" CBT algorithm?][17]		17
[Not sure of what CBT is] [6]		6
As above (May not necessarily be appropriate to an individual)[2]		2
Again [another useful tool] [1] to know about but [should be a part of training or ongoing continuing professional development] [4] before a critical incidence where it could be a useful tool to deal with what's happening.		1, 4
If they are requiring therapy they really [need some professional help] [4]		4
Think therapy is [best provided face to face] [4]		4
	Theme	**Number of times Categorised**
	CBT tutorials - A helpful inclusion	18
	CBT tutorials – An unhelpful inclusion	3
	Resources - Need a variety of options to suit all	2
	Intervention - Users may need additional support	9
	CBT tutorials - reduced evidence base	1
	CBT tutorials – Unclear meaning	2
	CBT tutorials - Needs to be easy and safe to use	1
	Resources - too many interventions may weaken the effect	2
	Midwives – May not access other CBT support	2
	Midwives – Need safety to disclose	2
	Midwives – face stigma	1
	Midwives – other pressures may inhibit use	1
	Midwives – May not be convinced of positive effect	1
	Effectiveness – Dependent on evidence and context	2
	Midwives – may need a targeted intervention	1

Do you have any additional comments you would like to share?

Comment	**Themes assigned to**
it's about [offering as many options as possible] [1] as not all users will want the same kind of support	1
Having sought CBT, myself you have to commit to set sessions and this is [not always possible with shift patterns] [2] and midwives may [not be happy with employers knowing they are having treatment due to stigma] 3.	2, 3
NO	0
I'm [not familiar with CBT tutorials for self-use] [10], they [need to be professional and simple to use] [4.]	10, 4
I'm a [fan of Dialectical Behavioural Therapy (DBT)] [5] and it [would be good to incorporate into this set of tools too] [5]	5, 5

[Has online CBT been shown to be effective?] [6]		6
It is [important to be able to identify those users who are more severely distressed] [7] and [encourage them to seek professional help] [8] rather than have them self-manage		7, 8
I had some EMDR following worked related PTSD and this [worked very well] [11] at helping re fame it in my mind and stop the flash backs and night mares I was having 3 years after the traumatic birth of an IUD term induction and v near death of my independent clients. While being a NZ 24-7 on call independent midwife. I [needed to be able to see research evidence] [9] that it was a useful tool before I would let myself have it. [Knowing that it was recommended on the NICE PTSD guideline really helped me trust it was worth trying] [9]. It [worked fab] [11] thank goodness, and I no longer hold these images and distress in my everyday life.		11, 9, 9, 11
	Theme	**Number of times Categorised**
	Resources - Need to offer as many options as possible	1
	Midwives – May be impractical	1
	Midwives - Face stigma	1
	CBT tutorials - need to be professional and simple to use	1
	Resources - Consider Dialectical Behavioural Therapy (DBT)	2
	(CBT) tutorials - Question evidence base	1
	Midwives – Need risk assessment	1
	Midwives – Need encouragement to seek help	1
	Therapies - Evidence base instils confidence	2
	CBT – Unfamiliar with the therapy	1
	EMDR – Works well	2

13: An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of information designed to inform midwives where they can access alternative help and support

13.1 The inclusion of information designed to inform midwives where they can access alternative help and support

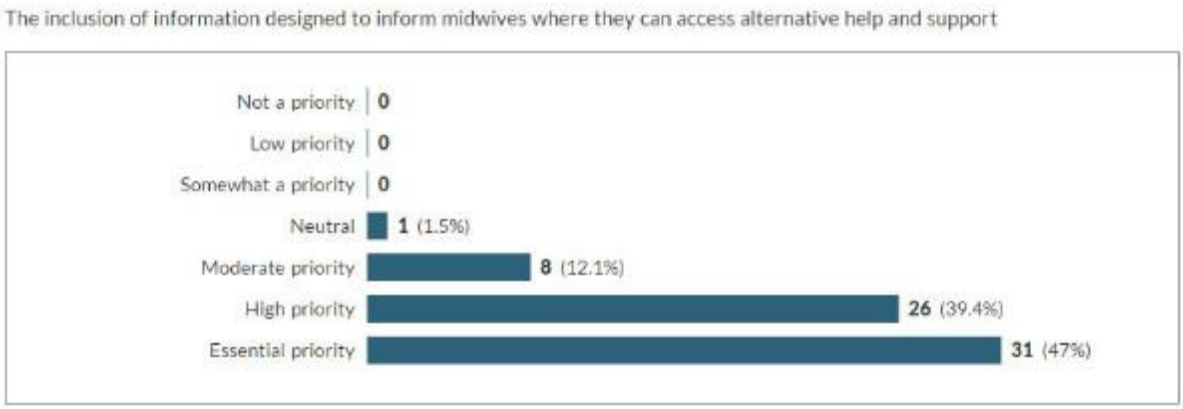
Rank value	Option	Count
1	Not a priority	0
2	Low priority	0
3	Somewhat a priority	0
4	Neutral	1
5	Moderate priority	8
6	High priority	26
7	Essential priority	31

Mean rank	6.32
Variance	0.55
Standard Deviation	0.74
Lower Quartile	6.0
Upper Quartile	7.0

Consensus Achieved = Yes (High priority/Essential priority) 86.4%

Minimum score = Not a priority/Low priority/Somewhat a priority 0 (0%)

Maximum score = Essential Priority 31 (47%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes assigned to
I suspect that in difficult circumstances the unfortunate and costly [reality that we need to talk to other people] [4] will be the main need	4
[Yes] [1], [if they don't have a close colleague who is an unbiased listener] [4].	1, 4
it's [a 'must have'][1]	1
[Giving choice] [2]	2
as previous question (like mindfulness [some midwives would wish to learn more about this intervention)] [1]	1
again [choice is imperative] 2	2
[Don't know what is meant by alternative help and support] [5.]	5
[Very important] [1] as [some individuals naturally will need more support than others] [2].	1, 2
[A lot of us appreciate and use] [1] alternative or complementary therapies (assuming that's what you mean here).	1
[Need to be real and local][7] and [shown to be effective] [3]	7, 3
[should be directive to other sources of support][1] but [not so much that they cannot see the wood for the trees] [8], [concentration may be an issue if they are very stressed] [9]	1, 8, 9
[Seems like a very sensible idea] [1]. [Sometimes you need the humanity of taking in person to someone] [4].	1, 4
I believe [many midwives would prefer this option 1st.] [1] However is they flag up serious symptoms. Then [recommended professional service][2] should also be recommended	1, 2
[Supported by evidence] [3]	3
[Essential in aiding your recovery] [1]. If it is signposted for you rather than having to trawl through the web	1
[Very important] [1] to know where to go and access.	1

This [acknowledges that it's OK to ask for help and that it is out there] [1.]		1
[Very important] [1] to continue support.		1
[Could be the prompt a midwife is looking for] [1].		1
They [can find the support that suits them] [1]		1
The reality is however [there are few resources available] [6]		6
During a period of psychological distress, a [midwife may isolate her/himself due to depression] [9], may leave the profession – [personal professional assistance may be required] [2] to deal with whatever is happening in their life as a consequence. [A link to local alternative help and support would be essential] [1.]		1, 9, 2
Again if they are accessing this resource [they are looking for help and support][1]		1
The relational dimension is [very important to offer psychological support.] [1]		1
Online support [will not suit all staff] [2] – [some may respond better to alternative methods of support] [2] so online [should be part of what is on offer][1]		2, 2, 1
	Theme	**Number of times Categorised**
	Signposted to help and support – A helpful inclusion	18
	Help and support – Need a variety of options available	6
	Help and support – Must be evidence based	2
	Help and support – Face to face support preferable	3
	Alternative help and support – Unclear meaning	1
	Help and support - few resources actually available	1
	Therapies – Must be real and local	1
	Therapies – Too many = Confusion	1
	Midwives – Impaired functioning when distressed	2

Do you have any additional comments you would like to share?

Comment		**Themes associated with**
The ["other" supports are still needed] [1] as a "Failsafe"		1
NO		0
[I really like EFT (Emotional Freedom Technique)] [2] as a way of defusing troublesome emotions and the emotions associated with distressing experiences. [I find it very effective] [2], both for myself and when working with others		2, 2
Perhaps [set up a local peer group][3] having gone through an unexpected event at work to go to cinema a coffee morning to [informally debrief] [3] and listen to each other		3, 3
it is important for midwives to know what they can access within their own trust [Could there be links to employee support in Trusts - Occupational Health depts.?][4]		4
	Theme	**Number of times Categorised**
	Help and support – Need a variety of options available	1
	Therapies - EFT (Emotional Freedom Technique) can be useful	2
	Therapies – Suggest peer group debriefing	2
	Therapies – Suggest links to local occupational Health resources	1

14: An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of information designed to inform midwives as to where they can access legal help and advice.

14.1 The inclusion of information designed to inform midwives as to where they can access legal help and advice.

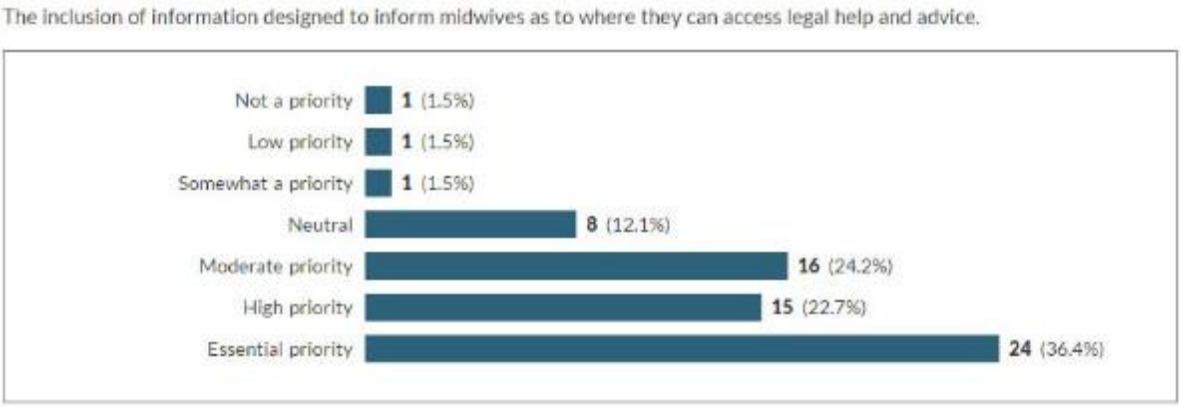
Rank value	Option	Count
1	Not a priority	1
2	Low priority	1
3	Somewhat a priority	1
4	Neutral	8
5	Moderate priority	16
6	High priority	15
7	Essential priority	24

Mean rank	5.7
Variance	1.76
Standard Deviation	1.33
Lower Quartile	5.0
Upper Quartile	7.0

Consensus Achieved = No

Minimum score = Not a priority/Low priority/Somewhat a priority 1 (1.5%)

Maximum score = Essential Priority 24 (36.4%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes assigned to
If the environment is that problematic [an advocate is always helpful] [1]	1
[Essential] [1] as we live in a litigious and unforgiving world.	1

[Many are unaware of the options] [1] and stress situations make accessing help difficult at times.		1
this is an [essential part of the intervention] [1] - a [link to where unbiased confidential advice can be sought] [1]		1, 1
[Not sure about this one] [3] I am [not keen on encouraging legal advice] [2], [unions would give this is required] [4].		2, 3, 4
As above. ([Very important] [1] as some individuals naturally will need more support than others.)		1
it can [help midwives to feel safe][1]		1
[Yes][1,] Legal issues are very important and [should be part of the tool kit] [1]		1, 1
[Many midwives don't know the difference between the NMC and RCM or INMO] [1]		1
[Maybe] [3] but again in context- the [mere suggestion that they might want to access legal support may add further stress to midwives] [2] who hadn't previously considered that option		3, 2
If offering holistic support to midwives, [this is crucial] [1,] and obstetrics/midwifery comes with the highest level of litigation in NHS.		1
again- [not sure that is its prime purpose] [7]- they [can access legal advice through work] [4]		7, 4
[Not sure if this would be appropriate or not] [3]		3
[? evidence base] [5]		5
Most if not all [would belong to RCM or other union] [4]		4
think this is [an issue that causes much psych distress][1]		1
This isn't something midwives will automatically have prior knowledge of so [will be quite useful] [1].		1
Depends whether this is a target of the work. [Focus should be on support and prevention in first instance] [7]. [Individual may not be in a position to use this to help and support them at the time of use] [2].		7, 2
Midwives who are fearful in a litigious society [may need the reassurance of legal advice] [1].		1
They [need to know their rights] [1] i.e. employment law, the employer's duty of care etc.		1
As above (The reality is however there are [few resources available)][6]		6
[Each legal jurisdiction in different countries will be different] [8]. If this is to be generic an accessible by midwives from all over the world, then there would be may different avenues for obtaining legal access and advice. [Every working midwife should know what is available] [1] locally for her through her midwifery association, union or insurance. So there would be a lot of work setting up the local links for every country where this information/support is available.		8, 1
Yes [this is essential][1] for some problems		1
[Can find this out from RCM] [4]		4
Needs careful thought - legal route [might add to stress and have negative outcomes] [2]. How could this be contextualised?		2
	Theme	**Number of times referenced in free text**
	Legal help and advice - A helpful inclusion	17
	Legal help and advice - An unhelpful inclusion	4

	Legal help and advice – conflicted opinion	3
	Legal help and advice - Unnecessary	4
	Legal help and advice – Question evidence base for this	1
	Legal help and advice - Few resources available	1
	Legal help and advice - Not a priority	1
	Legal Help and advice – Varies globally	1

Do you have any additional comments you would like to share?

Comment		**Theme assigned to**
A lot of consumers [don't know any other way to express their grief and anger] [1].		1
complaints, investigations and litigation are [some of midwives' biggest fears] [1]		1
NO		0
Whether the person has been bullied, is a bully or has been involved in an adverse outcome, a legal consultation [can be very helpful and even essential] [1]		1
Midwives [need a listening ear after an event] [1] They also [need assistance how to writing statements for legal system] [1]		1, 1
[Start with Unions - RCM, Unison] [1]		1
[Professional body support too][1], [a direct line to someone trained to deal with these issues confidentially and without judgement (one their side)] [2]		1, 2
	Theme	**Number of times Categorised**
	Legal help and advice - A helpful inclusion	7
	Legal help and advice - Consider providing personal legal advice	1

15: An online intervention designed to support midwives in work-related psychological distress should prioritise giving platform users the ability to share extended personal experiences for other platform users to read

15.1 Giving platform users the ability to share extended personal experiences for other platform users to read

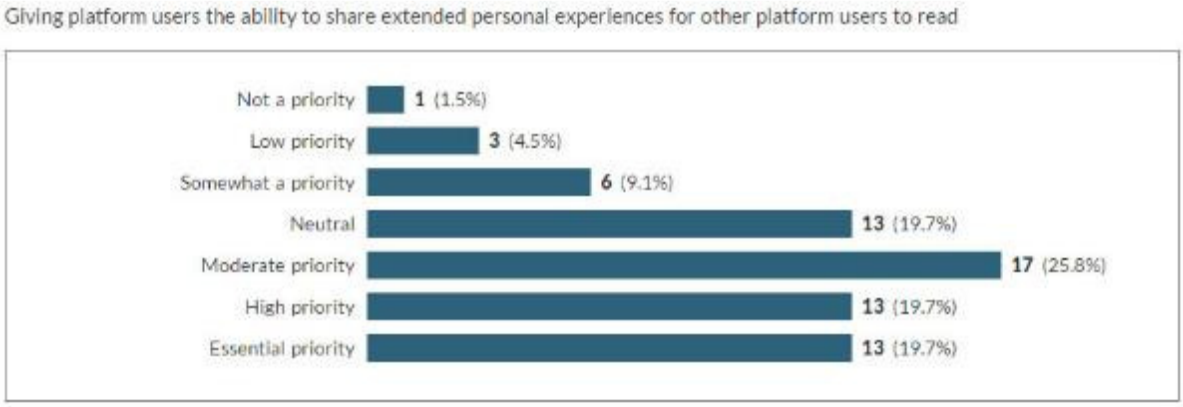
Rank value	Option	Count
1	Not a priority	1
2	Low priority	3
3	Somewhat a priority	6
4	Neutral	13
5	Moderate priority	17
6	High priority	13
7	Essential priority	13

Mean rank	5.02
Variance	2.2
Standard Deviation	1.48
Lower Quartile	4.0
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Not a priority 1 (1.5%)

Maximum score = Moderate Priority 17 (25.8%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes assigned to
This is a complicated thing to produce and [likely to be fake unless it is real stuff written by real people] [7] and the context is a little tense to be relying on this.	7
[This could ventilate some stress] [1]. You [might not feel so isolated] [1].	1, 1

Peer debriefing and peer support has [got to be one of the most useful aspects of improving psychological work based stress] [1]. Adding to stress/distress is often a sense of isolation it brings therefore [peer support is essential] [1] in my opinion	1, 1
[Might be helpful] [1] to facilitate reflection but [could be counterproductive] [2] if responses are negative – [would require careful moderation] [5]	1, 2, 5
then [people will realise they are not alone] [1]...but only useful if tis on resolution and positive outcome also given	1
This is an [option that could help many] [1], often peer support is [all that is needed] [1].	1, 1
discussing with others is [cathartic and a way of feeling understood] [1] A confidential forum [allows discussion to take place without feeling judged] [1]	1
[Peer support is a valuable tool] [1] but I have seen situations where issues have been shared online become increasingly tense as people are [concerned about confidentiality] [6] and worried about sharing too much information	1, 6
as long as this is anonymous yes [good to hear others experiences] [1]	1
This [may help others] [1] to realise that they are not alone and may [encourage them to have self-belief] [1] to [engage with support systems] [1] and [realise that things will get better over time] [1.]	1, 1, 1, 1
[Collaborative effort is Paramount] [1]	1
writing and sharing is a [very powerful][1] and [helpful tool][1] in treating psychological distress	1, 1
It is [important] [1] to be able to share stories to [help with others supporting] [1] and to [help the person involved feel heard] [1] and [not alone] [1] and also that often just verbalising issues albeit online is a [huge step] [1] to help process it and [prevent people internalising it and making it worse] [1].	1, 1, 1, 1, 1, 1
Other people's stories [can be very helpful] [1]. I [wouldn't make it mandatory for people to share their stories though] [3]; it would be [good to have a repository] [1] of stories for those who would like to read and share their own	1, 3
Blogging needs to be brief and [can be difficult when legalities are underway][4]	4
this has the [risk of inadvertent sharing] [7] – [breach of confidentiality][6] – [information being accessible to legal teams etc.][6]	7, 6, 6
[We learn from stories] [1], and [identifying with others is very powerful] [1]. This is the reason why healthcare blogs are so popular, if this can be harnessed, it [might turn the online intervention into something extremely popular for midwives] [1].	1, 1, 1
[stories are a good vehicle for some] [1]	1
[May help to share experiences] [1].	1
[Not sure this would be helpful] [4] [unless moderated?][5]	4, 5
This [could help] [1] or [hinder] [2] someone else's journey through stress. A bit like woman's birth stories. [Positive ones can be uplifting] [1], traumatic ones [can trigger more fear in the reader] [2]. I think with caution and platform [manager to be able to vet the content of] [5], and also to [ensure all parties remain unidentifiable] [5]. Especially around woman's confidentiality.	5, 5, 2, 1, 2, 1
Some midwives [will find this useful] [1] as a reflection and therapeutic. They [will need to be mindful of their codes of conduct when they do this].[9]	1, 9
creating a community of users [would be important] [1] to allow staff not to feel alone and share experiences	1

Experience "lived" has [so much to give to the "reader"] [1]. It [helps them to feel they are "not alone"] [1] and [could aid their psych distress] [1.]		1, 1, 1
[This is so important] [1]. [It's good to read that it isn't just you] [1] and [it's good to share] [1.]		1, 1, 1
This needs care, and [would need to be carefully anonymised][10]		10
Because those who are really asking for help [may not want to read others' lengthy stories that may trigger things for them][2]		2
[Possibly] [4], but it [would need to be monitored] [5.]		4, 5
[Depends if this will be helpful and have an effective impact on users] [4.]		4
[this may conflict with confidentiality] [6]		6
[May be beneficial to read how others have sought assistance and improved their long term health] [1]		1
[May help a midwife feel less alone] [1].		1
[Not sure] [4] [Need a moderator] [5]		4, 5
This [would counter the isolation] [1] most midwives feel with this stress		1
[Not sure how this can be achieved while maintaining confidentiality and anonymity] [6]		6
[Yes][1], [would have to be moderated] [5]		1, 5
This is [tricky ethically] [8]		8
[Not sure of the value of just sharing experiences without the opportunity for other to feedback?] [4]		4
Think this is going to be a [critical element of the intervention] [1]. [First step in reaching inner acceptance] [1].		1, 1
[the value of peer support] [1] - requires focus & encouraging this via the online platform [will be helpful] [1]		1, 1
	Theme	**Number of times Categorised**
	extended personal experiences = A helpful inclusion	48
	extended personal experiences – An unhelpful inclusion	4
	extended personal experiences - Must be optional	1
	extended personal experiences – conflicted opinion	6
	extended personal experiences – Requires moderation	7
	extended personal experiences = Must protect confidentiality	5
	extended personal experiences – Could be misused	2
	extended personal experiences - ethically problematic	1
	Midwives – if conducted within professional codes	1
	extended personal experiences - Requires anonymity	1

Do you have any additional comments you would like to share?

Comment	**Themes assigned to**
there is [little time to discuss feelings and experiences at work] [1]	1
[As long as they could do so anonymously if required] [1, 2]	1, 2
NO	0
No	0

[Be mindful of identifying people and situations][2, 3]		2, 3
This would obviously need to be done very carefully taking into consideration that then [both anonymity and confidentiality could be breached] [2, 3]		2, 3
Everyone's experiences are different in the midwifery setting so [I don't feel it would be useful] [5]. I haven't found anywhere the same or a close situation to mine.		5
[Should be encouraged to reflect] 1 in a [professional manner] 4		1, 4
[Love midwifery story sharing] [1]		1
	Theme	**Number of times Categorised**
	extended personal experiences = A helpful inclusion	4
	extended personal experiences = Must protect anonymity	3
	extended personal experiences = Must protect confidentiality	2
	extended personal experiences = Must remain professional	1
	extended personal experiences = An unhelpful inclusion	1

16: An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of a web based peer to peer discussion chat room

16.1 The inclusion of a web based peer to peer discussion chat room

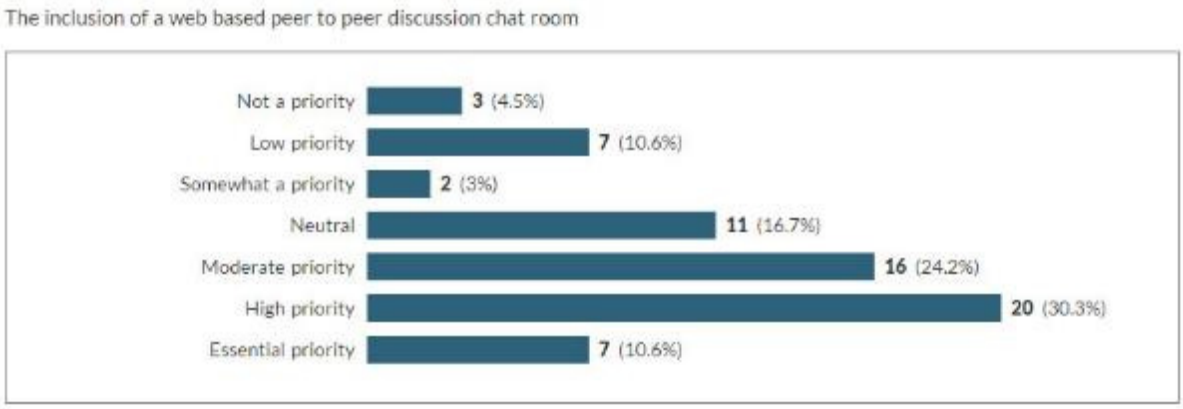
Rank value	Option	Count
1	Not a priority	3
2	Low priority	7
3	Somewhat a priority	2
4	Neutral	11
5	Moderate priority	16
6	High priority	20
7	Essential priority	7

Mean rank	4.79
Variance	2.65
Standard Deviation	1.63
Lower Quartile	4.0
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Somewhat a priority 2 (3%)

Maximum score = High Priority 20 (30.3%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes assigned to
[Do they have time for such things?][6]	6

[Could work for some folk][1]	1
As above (Peer debriefing and peer support has [got to be one of the most useful aspects of improving psychological work based stress] [1]. Adding to stress/distress is often a sense of isolation it brings therefore [peer support is essential in my opinion] [1])	1
As above – [I worry this may be counterproductive] [2]. Also, [would require high volume site traffic to be viable and sustainable] [7].	2, 7
not sure about this as [could bring difficulties and reporting if infiltrated] [5]	5
as above (This is an option that could help many, [often peer support is all that is needed] [1])	1
As previous question (discussing with others is [cathartic and a way of feeling understood] [1] A confidential forum [allows discussion to take place without feeling judged)] [1]	1, 1
Again issues as above re. [over-cautiousness in regards to confidentiality] [4]	4
[as long as this is monitored][3] [yes][1]	3, 1
[Dependant on whether it was peers seeking support from others in same situation] [9]	9
This is essentially [a good idea] [1], but if someone is feeling particularly down, angry or isolated [it may be a platform for inappropriate discussion/actions] [5]. However, talking through something with someone [may help individuals realise that they are not alone] [1] and that [people do care] [1].	1, 5, 1, 1
It [facilitate online interactions] [1]	1
[good] [1] for those who use web on regular basis	1
This chat room [could be very beneficial] [1]; you would [have to have it monitored/facilitated though] [3]	1, 3
Having walked in shoes is [very important] [1] but [peer supporters may need training] [8] also to give appropriate advice	1, 8
synchronous engagement [opportunity essential] [1]	1
Feedback there and then [could be fantastic] [1], and [chat could offer this to members] [1] - however, [how do you guarantee these conversations are constructive?] [5] Online because expressions and body language can't be seen [misunderstandings are common] [2]. There's also a tendency to get [angry that you can see on online forums] [2], so the [ethos of the intervention would have to be carefully made and maintained] [10].	1, 1, 5, 2, 2, 10
I think many might [find this helpful] [1]	1
As Q 15. (May [help to share experiences.)] [1]	1
[Moderation required] [3]	3
Again the same as above. I feel [this would open midwives giving each other well meaning advice] [1] when [seeking specialist psychological services would be safer and or more appropriate] [2].	1, 2
Some midwives will find this [useful as a reflection] [1] and [therapeutic] [1]. They will [need to be mindful of their codes of conduct when they do this] [11]	1, 1, 11
In my opinion this group of [midwives need access to professional help and support] [2]	2
[I would not enjoy this][2]	2
Would be [good to communicate] [1] with others offering and receiving support from other midwives going or gone through this type of situation.	1
This could be very [difficult to moderate?] [3]. [The culture of the profession could mean "bullying" tactics could be used in such a forum?] [5].	3, 5

This [would be really useful] [1] if there was [any way of guaranteeing] [3] it would not [fall foul of trolls] [5] when people are already emotionally vulnerable.		1, 3, 5
Not sure about this, [may need more expert skills than a peer can offer] [2]		2
I've [not seen these chat rooms as being particularly helpful][2]		2
I think [many people would want this] [1]		1
This [could be very powerful] [1] and [useful] [1] but may [need to be facilitated] [3] by a neutral voice.		1, 1, 3
[Need a moderator] [3]		3
Think this [could be deconstructive] [2]		2
If this is a worldwide available resource, then [midwives need to be able to have that peer to peer discussions available] [1] at a [local level] [12] as regulations and work circumstances can be very different. What applies in one place may not apply in another.		1, 12
Would [have to be moderated] [3]. [Can name names, situations etc.] [4] [could be difficult legally] [5]		3, 4, 5
As above (This is [tricky ethically.)][5]		5
[would have to be sure confidentiality/anonymity can be maintained] [3, 4]		3, 4
Again, think this will be a [critical element of the intervention] [1].		1
[Will this be used?] [6] Worth investigating further		6
	Theme	**Number of times Categorised**
	Peer to peer discussion - A helpful inclusion	28
	Peer to peer discussion - An unhelpful inclusion	8
	Peer to peer discussion - Needs moderation	9
	Peer to peer discussion - Could risk confidentiality/anonymity	3
	Peer to peer discussion - Risk of unethical use	6
	Peer to peer chatroom - May not be used	2
	Peer to peer chatroom - Requires high volume site traffic	1
	Peer to peer chatroom - May require trained supporters	1
	Effectiveness – Depends upon help seeking behaviour	1
	Peer to peer chatroom - Requires rules and standards	1
	Professional – Legal/Regulatory obligations	1
	Midwives - May need local chat rooms	1

Do you have any additional comments you would like to share?

Comment	**Themes associated**
NO	0
As per comment 15. My thoughts on this that it would be best to construct it separately so that others [who choose not to participate] [3] in the online intervention still [have access to peer support] [1] and those who are participating in the online intervention [don't risk their anonymity being breached] [6]	3, 1, 6
People are very [social media dependent] [1]. However, it raises [issues of confidentiality and risk] [6] of exposure to non-supportive agencies.	1, 6

Have been in contact with other midwives who have had mental health issues and they [have share support through contact] [1]		1
[need a method to ensure against lurkers] [4]		4
[Limit time for peer to peer chat] [4] and [have moderator/lead] [4, 7]. I would worry people suffered more distress if chat not moderated.		4, 4, 7
There are however [circumstances that may be generic which cause psychological distress that could be discussed] [4] - the solutions [locally though may be different] [8].		4, 8
[Not sure that many midwives would access this] [2]		2
[Needs careful governance] [4] to [prevent abuse/ misuse] [5] and [ensure safeguarding is considered] [4].		4, 5, 4
	Theme	**Number of times Categorised**
	Peer to peer discussion - A helpful inclusion	3
	Peer to peer discussion - An unhelpful inclusion	1
	Peer to peer discussion - Should be an optional choice	1
	Peer to peer discussion - Requires moderation	6
	Peer to peer discussion - Risk of misuse	1
	Peer to peer discussion - May risk anonymity/confidentiality	2
	Peer to peer discussion - Requires guidance	1
	Peer to peer discussion - May be local variations	1

17: An online intervention designed to support midwives in work-related psychological distress should prioritise giving platform users the ability to communicate any work or home based subjects of distress

17.1 Giving platform users the ability to communicate any work or home based subjects of distress

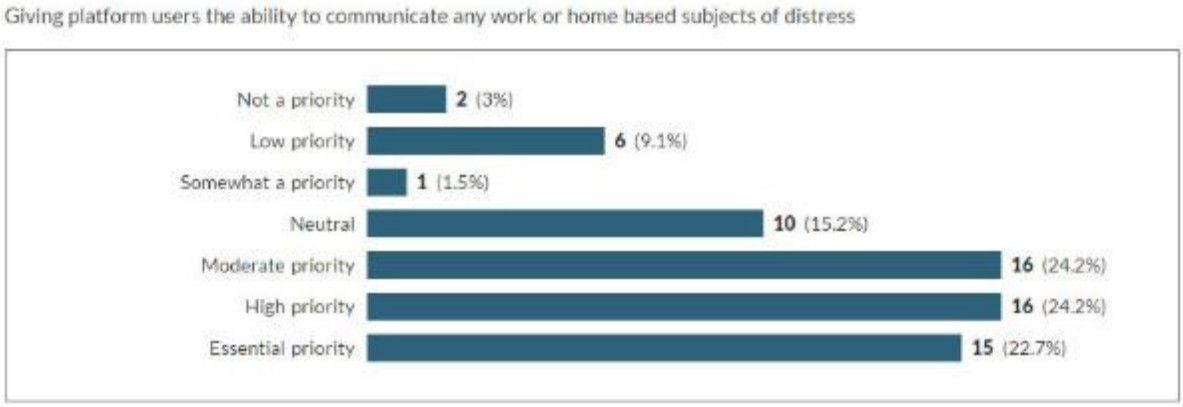
Rank value	Option	Count
1	Not a priority	2
2	Low priority	6
3	Somewhat a priority	1
4	Neutral	10
5	Moderate priority	16
6	High priority	16
7	Essential priority	15

Mean rank	5.12
Variance	2.65
Standard Deviation	1.63
Lower Quartile	4.0
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Somewhat a priority 1 (1.5%)

Maximum score = Moderate Priority/High Priority 16 (24.2%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes assigned to**
[I don't think this is controllable] [5] if genuine help is offered	5
As above. [(Could work for some folk)][1]	1
Home stress and work are often [heavily influenced by one another][2]	2
[relevant to the whole person][1] but [other mechanisms for this] [4]	1, 4
[Home stress can impact on work and the other way] [2].	2
this is [essential] [1] as issues at [home impact greatly on performance in the workplace][2]	1, 2
I think [work based] [3] would keep things more professional maybe with links to home based subjects. [Personally I like to keep the two separate][4]	3, 4
[Important] 1 in one way to discuss individuals concerns/worries/stresses, however the [issue surrounding anonymity of workplace and colleagues] [6] may not be easy to assure.	1, 6
We know that [trouble at home can mean trouble at work and vice versa] [2], therefore whatever the source of distress, the [intervention could be useful] [1].	2, 1
[I think to be useful][1] they [need interaction][1] and [guided discussion of some sort][7]	7, 1, 1
If offering holistic support, [this is essential] [1]. [Work and life are not separate] [2], in my opinion.	1, 2
[depends on how this is done] [9]	9
[Often such things are inextricably linked] [2]	2
I think it [should only focus on work based distress] [3].	3
distress cannot be boxed and [work and life situations are inextricably linked] [2]. However, the focus seems to be on work-based distress so this would need to be thought through carefully.	2
They are [often linked] [2]. Holistic in your approach.	2
might need to choose for it to be [work related mainly??] [3]	3
This appears a different source of distress, therefore [I question its inclusion] [3]	3
think this is a "holistic" approach to the stress that [some would welcome] [1] but others like to compartmentalise their lives so [would not want the cross over] [4].	1, 4

They will be topics that are [not suitable for sharing] [3]		3
This would seem to be the [object of something like this] [1]		1
Probably easiest to [keep it Midwifery related] [3] although [this does include the stresses related to work / home life balance] [2.]		3, 2
[Depends what the outcome of this would achieve?][9]		9
[Working and personal stress have an impact on each other] [2]		2
[Focus must be on work-place causes of distress] [3.]		3
Again [online moderator important] [7]		7
The [need for support at all times is critical] [8]		8
The [two may be intertwined] 2 and interlinked so there [needs to be an avenue to discuss both] [1.]		1, 2
[May not have time at work to access the platform] [4]. [More private at home] [9.]		9, 4
The two elements [cannot be separated] [2] in professional life.		2
think it would be better if this had a [work focus][3] but obviously [life/work are inextricably linked] [2]		2, 3
Much of the peer support/ exchange is [likely to focus on this] [1].		1
	Theme	**Number of times Categorised**
	Discussions re: work or home based subjects of distress – A helpful inclusion	12
	Discussions re: work or home based subjects of distress - intertwined	12
	Discussions – unhelpful inclusion	8
	Discussions - Should be kept separate	4
	Discussions - uncontrollable	1
	Discussions – May risk anonymity/confidentiality	1
	Discussions – Require moderation	2
	Discussions – Require support	1
	Priority – Depends upon the context	3

Do you have any additional comments you would like to share?

Comment		**Themes assigned to**
It's [good to have somewhere] [1] to go with your dark thoughts?		1
NO		0
No		0
Whilst I appreciate that there [could easily be a spill over from work to home] [5]. I would think that it would [make the intervention a little messy] [3] to include home related stress impact on the midwife		5, 3
I'd be [concerned] [2] if someone became [more distressed] without proper support when sharing		2, 2
What facility will there be for peer moderation? [Likely to be important][4]		4
	Theme	**Number of times Categorised**

	Discussions re: work or home based subjects of distress – A helpful inclusion	1
	Discussions re: work or home based subjects of distress – An unhelpful inclusion	2
	Discussions re: work or home based subjects of distress – chaotic	1
	Discussions – Require moderation	1
	Discussions re: work or home based subjects of distress – Intertwined	1

18: An online intervention designed to support midwives in work-related psychological distress should prioritise an interface which does not resemble NHS, employer or other generic healthcare platforms

18.1 An interface which does not resemble NHS, employer or other generic healthcare platforms

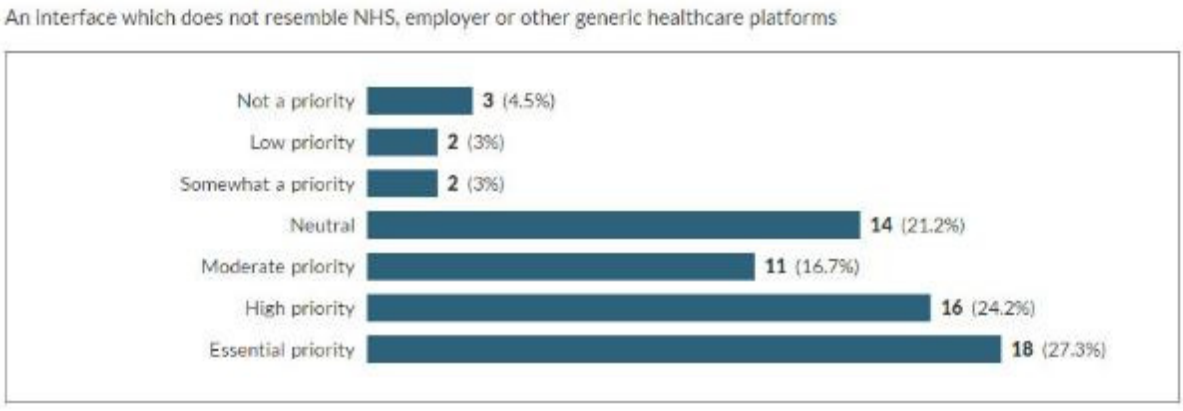
Rank value	Option	Count
1	Not a priority	3
2	Low priority	2
3	Somewhat a priority	2
4	Neutral	14
5	Moderate priority	11
6	High priority	16
7	Essential priority	18

Mean rank	5.24
Variance	2.61
Standard Deviation	1.61
Lower Quartile	4.0
Upper Quartile	7.0

Consensus Achieved = No

Minimum score = Low Priority/Somewhat a priority 2 (3%)

Maximum score = Essential Priority 18 (27.3%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes assigned to**
I [don't know what the question intends to convey][7]	7
[Morally and ethically essential] [1].	1
[So there is no conflict of interest] [1] / [risk of being chastised by the public or NMC] [1] for the issues raised	1, 1
[won't use if think employer can access] [1]	1
Many [would not access if they felt that the employer had access] [1]	1
I feel that the platform [needs to feel very much removed from the workplace] [1]	1
In a way I think [a link to NHS or other professional organisation may provide reassurance] [2] that it is a 'safe' place to access support online and [healthcare workers may be more likely to feel comfortable][2] disclosing personal information online	2, 2
[user friendly is important] [6]	6
[I'm not entirely sure of this, since I have no knowledge of what platforms currently exist so cannot give an accurate answer] [8].	8
If this is to be online and available to global midwives the [specifics of one country is not necessarily valid?][3, 4]	3, 4
Having the appearance/reality of a site totally independent of any employer [would be reassuring][1]	1
An Irish evaluation and ICM focus group identified a [clear need to keep this external] [1]	1
for reasons in 1-2 (I believe some midwives would be [fearful] [9] of people finding out they were finding it difficult to cope and would therefore [seek anonymity] [1] to feel safe to access support)	1, 9
the interface [could be NHS based] [2] and I don't think this would be a 'deal breaker' meaning it wouldn't be used...but [midwives might feel more comfortable sharing sensitive information if their employed didn't clearly set up the intervention!] [1] I have come across [great anxiety in midwives] [9] using the internet in this way, so anything to make them comfortable is a [good idea] 1.	2, 1, 9, 1
not sure [why this would be important] [7]	7
The platform would be more credible if the it [did not appear to be directly linked to an authority] [1].	1
if they were [clear it was independent][1] then this [would matter less] [3, 5]	1, 3, 5
[Good] [1] to promote generic use	1
[As long as][1] it [easy to use and visually appealing] [6]	1, 6
agree [should look and feel very different to work and employer based interfaces] [1]	1
As long as it has the required information and is easy to use, [does it matter?][3]	3
to not be faced as an NHS or healthcare platform [would be better] [1] for my use of it - needs to be more like social media?	1
[To make it feel 'safe'.] [1]	1
[avoid potential triggers] [1]	1
This would be [useful to separate] [1] the nature of the interface as support not official.	1
[Main focus in that it is effective] [6]	6
A midwife feeling workplace related psychological distress is likely to feel powerless within "the system". A tool that feels nothing g like the workplace culture [may be a welcome environment] [1].	1
[As long as] [1] [it is user friendly and easily accessible, not a chore to access or sign up to] [6]	1, 6

The disillusion can be from these sources making people [reticent to engage with a process that interfaces with that source] [1]	1
[Will be able to be used by midwives all over the world] [1] not just in the UK as this is an area that affects midwives worldwide.	1
[Needs to be supported by NHS and look professional] [10] but a [degree of separation may encourage midwives to access the platform] [1]. [A degree of separation could help with confidentiality and honesty] [1.]	10, 1, 1
[Should feel like it belongs to the user community] [1.]	1
[a high quality visually engaging platform is likely to encourage users to access, use & promote the resource] [6]	6

	Theme	**Number of times referenced in free text**
	Resemblance – Should be authority neutral	26
	Resemblance – Should be authority based	3
	Resemblance – Not important	3
	Resemblance - Variants on a global scale	1
	This would not matter if the intervention was clearly independent.	1
	Priority – user friendliness	5
	Question – relevance unclear	2
	Question – Cannot answer	1
	Midwives – Fearful of detection	2
	Intervention – Needs support of authorities	1

Do you have any additional comments you would like to share?

Comment	**Themes assigned to**
it [needs to appear visually as a safe supportive place to visit][1]	1
NO	0
This aspect is where the [confidentiality and anonymity is also important] [2]	2
[NHS too formal and too harsh?] [3]. The other platforms seem real and like reality? It seems like real [people are behind them not an employer] [3.]	3, 3
[Information however must be fed back] [4] so that issues can be addressed	4

	Theme	**Number of times categorised**
	Prioritise – visually safe space	1
	Intervention –confidentiality and anonymity important	1
	Resemblance – Should be authority neutral	2
	Intervention - Consider analysing feedback	1

19: An online intervention designed to support midwives in work-related psychological distress should prioritise a simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage

19.1 A simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage

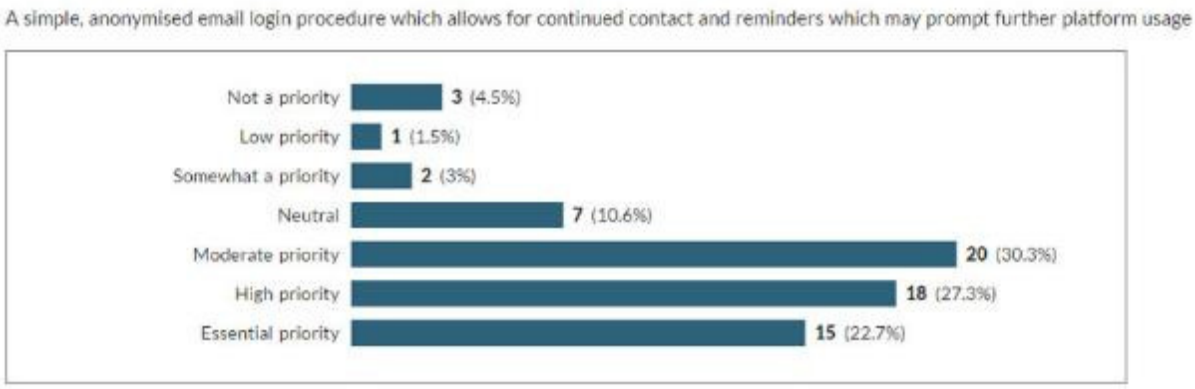
Rank value	Option	Count
1	Not a priority	3
2	Low priority	1
3	Somewhat a priority	2
4	Neutral	7
5	Moderate priority	20
6	High priority	18
7	Essential priority	15

Mean rank	5.33
Variance	2.16
Standard Deviation	1.47
Lower Quartile	5.0
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Low Priority 1 (1.5%)

Maximum score = Moderate Priority 20 (30.3%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes assigned to

[I don't know what the alternatives are] [6]	6
[As long as] [1] the user has the [option] [3] to opt out of reminders or set how frequently they would like them so that they don't [become irritating] [2.]	1, 3, 2
If you are going to do it [need to get it right] [1] and [user friendly] [4].	1, 4
an [essential priority] [1] to encourage regular usage and [notify the user that there has been activity they may wish to contribute to][5]	1, 5
This is a [really good idea] [1], could provide the [opportunity for the person to monitor their psychological wellbeing on an ongoing basis] [1]	1, 1
[Good idea] [1] in principle however the timing of reminders [may annoy/disengage individuals] [2] if they are too frequent.	1, 2
[Reassuring login system] [1]	1
if [too complicated][2] would not be used	2
I'm not sure about reminders to use, it [could come across as spammy?] [2] It [would have to be very supportive in tone] [1, 4.] [An easy log in and easy to use interface] [4] [couldn't be more essential] [1], as many midwives are from a generation which find technology difficult. Also, I find in my experience as a midwifery writer online who also provides an online training programme, that many people using the internet become very impatient and have a short attention span - google and other distractions are only a click away, so [if it's not near instantly engaging, you'll miss out on users] [4.]	2, 1, 4, 4, 1, 4
[probably useful][1]	1
These could be read by others. So [not ideal] [2]. No need and a lows the midwife to look at the platform without some longer term reminder. This [would annoy me and become part of my junk mail] [2.]	2, 2
keep it [simple and easy to use] [4]	4
[Ongoing support is usually required] [5] as the period of stress begins to reduce	5
[Easy access is key for use] [4]	4
this [would be useful] [1] but [not too bombard] [2] the user as the frequency of use may be a sign of recovery or lessen of need?	1, 8
will the users then be [reluctant to reveal thins] [2] as they feel they are being followed up?	2
[sounds good] [1.] This could create anonymity.	1
If this is what users would find useful [yes] [1.] Possible [better to focus on local support].[7]	1, 7
[some provision] [5] for follow up and potential evaluation is important	5
[Ease of use is essential] [4]	4
[If the distress is that severe, the midwife will remember to engage with the resource] [2].	2
[Good idea] [1]	1
[Allows for support] [1] but person also needs to move on and feel recovered	1
Busy midwives have so much already coming into their email inboxes – [could stress them out] [2] more with more email so a bit uncertain about this one.	2
[People may want privacy] [2]. If a midwife is under distress [more e-mails will not help] [2.] Let them access support as needed and required.	2, 2
I think prompts are [counterproductive] [2] to foregrounding choice and autonomy.	8
I think it's a [high priority][1] but [may compromise anonymity if linked to email address] [2]	1, 2
[Agree][1] with need for simple anonymise log in but [not sure reminders to prompt further usage are good idea] [8] - when you are under pressure to get through your emails in limited time the [last thing you want is more reminder emails adding to the load][2]	1, 8, 2

Reminders may have [positive] [5] or [negative] [8] effect. Would work better to [use alerts to new resources/ self-help] [1.]		5, 8, 1
[Easy access is essential] [1, 4] to support continued engagement – [access from a mobile phone as well as tablet & computer needed] 4		1, 4, 4
	Theme	**Number of times referenced in free text**
	Anonymised email login procedure - A helpful inclusion	19
	Anonymised email login procedure - An unhelpful inclusion	13
	Anonymised email login procedure – must be optional	1
	Priorities – A user-friendly intervention	9
	Prompting – A helpful inclusion	4
	Anonymised email login procedure – Unsure of alternatives	1
	Midwives – May require alternative support	1
	Prompting – An unhelpful inclusion	4

Do you have any additional comments you would like to share?

Comment		**Themes assigned to**
[as long as confidentiality is upheld][1]		1
NO		0
	Theme	**Number of times referenced in free text**
1	Confidentiality must be upheld	1

20: An online intervention designed to support midwives in work-related psychological distress should prioritise an automated moderating system where 'key words' would automatically initiate a moderated response

20.1 An automated moderating system where 'key words' would automatically initiate a moderated response

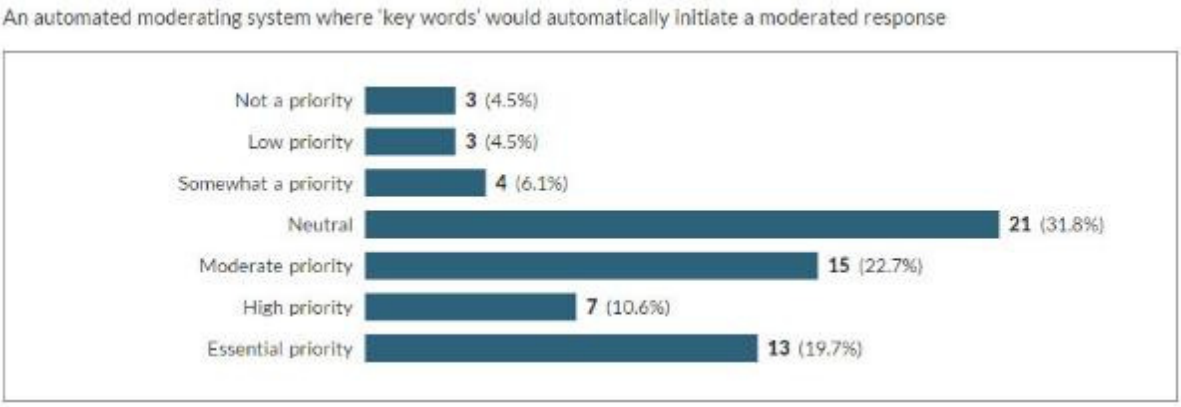
Rank value	Option	Count
1	Not a priority	3
2	Low priority	3
3	Somewhat a priority	4
4	Neutral	21
5	Moderate priority	15
6	High priority	7
7	Essential priority	13

Mean rank	4.74
Variance	2.52
Standard Deviation	1.59
Lower Quartile	4.0
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Not a Priority/Low Priority 3 (4.5%)

Maximum score = Neutral 21 (31.8%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes assigned to**
We know that intelligent systems that make users feel more is known about them than they know about the sender generates paranoia- [not likely to be helpful] [2.]	2
[Not sure how well this would work] [4] as language is such an individual thing?	4
[don't know]4	4
There definitely [needs to be some moderation] [3] to keep the users' safe	3
[not sure what this question means][9]	9
Many forget that electronic communication is stored and their [words may come to haunt them] [2]	2
The platform [needs to be regulated] [3] to avoid inappropriate posts and language	3
All posts/responses [should be moderated] [3] as an [automated system wouldn't be reliable] [6] enough in this situation	3, 6
[Yes][1] I agree that key words ensure safety	1
This [question needs expansion] [9] before I can provide an answer.	9
I think it [can simplify for some] [1], but [can be considered not serious enough for others] 6	1, 6
? Automatically initiate a moderated response – [how can a response be moderated and automatic?] [9]	9
[Unsure of this process][9]	9
[not sure what you mean by this][9]	9
This [could be very effective] [1] if done well - it would [need to be supportive in tone] [5]. I would also [make it clear it was an automated response] [7], and explain the reasons. Users [can become offended] [2] if they think they're talking to a real moderator and then find it's automated.	1, 5, 7, 2
[vital that key words like "suicide" are picked up] [1, 10]	1, 10
Emerging evidence that [references to suicide] [10] and self-harm such as graphic images, sensationalism, accounts of methods [can promote further self-harm and suicide] [2]. (Contagion.) Emerging evidence that young people in particular may be more vulnerable to this effect.	2, 3, 10

[Moderation vital] [3] to offer to support to the person in distress and also to ensure safety of others in the chat.	
[Don't really understand what This means][9.]	9
In my experience automated responses [do not work well] [2] and are [not always appropriate] [6]. Systems that detract from a caring, human response [may not be helpful] [2] and [may even be counterproductive] [2.] It would really [depend on how sensitive/cleaver the automated system was] [6.]	2, 6, 2, 2
[need to know more about this] [9] and if possible – [sounds sensible][1] if [triggers such as suicide][10] or other are noted but [need more info please] [9]	9, 1, 9, 10
[Seems impersonal somehow][2]	2
this [makes the interface less human] [2]	2
A space where so many people could potentially share their most traumatic experiences [needs to feel safe] [1]. They also [need to be able to post without expecting judgement, criticism or trolling] [3.]	1, 3
I am [not clear what is meant here] [9] -do you mean that a keyword would be flagged up and trigger a personal response? [yes support this] [1]	9
[Possibly] [4] – [not sure how this would work] [6]	4, 6
[not sure what this means] [9]	9
[Nott sure how automated response would help] [4] with someone's psychological distress. Would [have to be a very sophisticated system] [6.]	4, 6
[Not sure how this would work?] [6]	6
[not clear that this is effective] [4]	4
May make an [efficient response][1] and [save time][1] and [prevent the user from giving up][1]	1, 1, 1
[I would like to know an alert would be raised] [9] if a platform [user mentioned words related to suicide] [10].	9, 10
[Great] [1]	1
[Allows for support] [1] but person also needs to move on and feel recovered	1
There [needs to be a mechanism] [1] to [identify those requiring] 8 a higher level of support due to higher distress level.	1, 8
[Could be interesting] [1], however [honesty maybe withheld if midwives feel they are being monitored] [2]	1, 2
[would feel a bit 'big brother'] [2] if you introduced this - people [may feel their anonymity could be under threat] [2]	2, 2
[Maintain user safety] [1]	1
Participants likely to [value real interactions over automated ones] [2]. High [risk of inappropriate intervention] [2, 6]	2, 2, 6
the [system needs to offer a high degree of safeguarding] [6, 1, 8]	6, 1, 8

	Theme	**Number of times referenced in free text**
	'key words' initiating a moderated response – A helpful inclusion	14
	'key words' initiating a moderated response – an unhelpful inclusion	13
	'key words' initiating a moderated response – Moderation is required	5
	'key words' initiating a moderated response – conflicted	5

	'key words' initiating a moderated response –must be supportive in nature	1
	'key words' initiating a moderated response – May not be adequate	8
	'key words' initiating a moderated response – Confusing	1
	Midwives – Need to be risk assessed	2
	Question – Need to know more	11
	Midwives – Must be protected from suicide	3

Do you have any additional comments you would like to share?

Comment		**Themes assigned to**
What system could [account for individual expression and regional differences in idiom?] [1]		1
NO		0
If you mean the question would be sent to a moderator if key words were entered, then [yes, that would be a high priority] [2] - the question confused me in that instance		2
Need to be careful about how many words you list in this function, [the moderator could be inundated!] [3]		3
however, can see the [need for this moderation] [4]		4
	Theme	**Number of times Categorised**
	'key words' initiating a moderated response – Must be sophisticated	1
	'key words' initiating a moderated response – A helpful inclusion	1
	'key words' initiating a moderated response – Moderation = high maintenance	1
	'key words' initiating a moderated response – Moderation required	1

21: An online intervention designed to support midwives in work-related psychological distress should prioritise mobile device compatibility for platform users

21.1 Mobile device compatibility for platform users

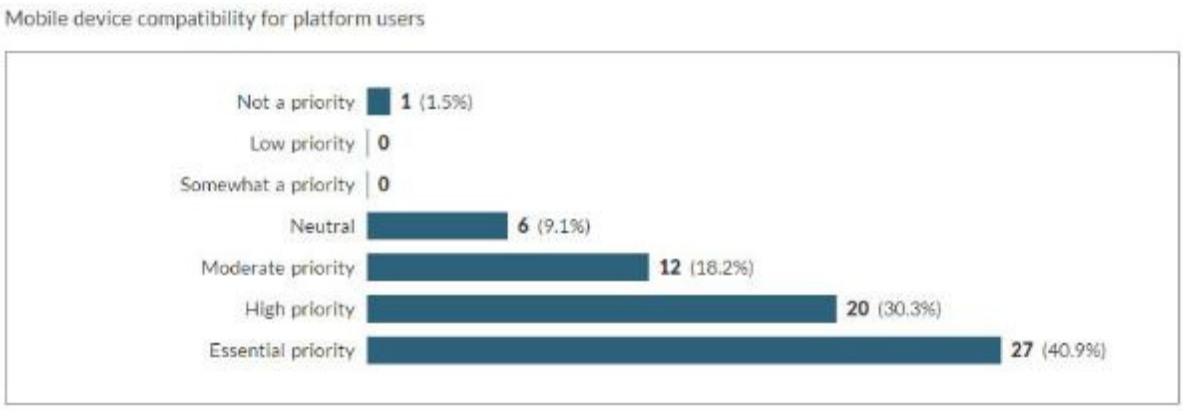
Rank value	Option	Count
1	Not a priority	1
2	Low priority	0
3	Somewhat a priority	0
4	Neutral	6
5	Moderate priority	12
6	High priority	20
7	Essential priority	27

Mean rank	5.97
Variance	1.33
Standard Deviation	1.15
Lower Quartile	5.0
Upper Quartile	7.0

Consensus Achieved = Yes (High Priority/Essential Priority) 71.2%

Minimum score = Low Priority/Somewhat a priority 0 (0%)

Maximum score = Essential Priority 27 (40.9%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes assigned to
If you build it, it [needs to work] [3]	3

Personally I use my mobile for all online activities as I rarely have access to a laptop or pc due to the nature of my role. [Mobile compatibility is essential] [1.]	1
well if its work based stuff you [need your own "terminal"] [1.]	1
[Essential] [1] in this time as many people use their phones/tablets etc.	1
An app would be of [great benefit] [1] to many who are unable to access a PC	1
[Yes] [1] anything to improve uptake and usage should be considered	1
[Yes] [1] will improve access anywhere at anytime	1
Being able to have support immediately to hand can be a [big benefit] [1] to some	1
[Very important] [1] as individuals can access support and advice anywhere and whenever/wherever if access to a pc/laptop/tablet is limited/restricted.	1
it will [offer more use] [1] of the online intervention	1
[Available to more people] [1] and allowing online access from mobile devices is [important for this] [1.]	1, 1
That sounds like a really [good idea] [1], as long as the [phone number wasn't able to be identified] [5]	1, 5
Midwives are on the go so [mobile use is important] [1]	1
it's the [way of the world] [1]	1
90% of my traffic is from mobile devices, my market research suggests a huge amount of [midwives use the internet in this way] [1] above all others.	1
[Important][1] for gen x, y and z	1
[If I cannot use this on the go on my smart phone I'm unlikely to use it] [1]. My phone is my main personal research tool. In fact, it's [my main everything tool] [1] as is often the case with today's society. I can now do all my clinical notes directly onto my phone in a secure app that has all my details for each client at my fingertips. This [makes being on call 24-7 much easier] [1.] As all I need on the go is my phone. So regarding my own personal wellbeing all tools [need to be phone usable for me][1].	1, 1, 1, 1
how we live and communicate their days and any [platform needs to feed into this] [1]	1
[most people have smart phones with them at all times] [1 -] again make it [easy and accessible] [3]	1, 3
I suppose in today's electronic times it [would be useful] [1] for access it wherever even at work or when not at home.	1
think in terms of access then [mobile is very current][1.]	1
[To know that you can access this support wherever you need to] [1.]	1
[Definitely] [1] so that it is [easily accessible] [3]	1, 3
[Increase accessibility and usage] [1, 3.]	1, 3
[Good] [1] to [access from anywhere] [3]	1, 3
[Most likely to be used] [1] in a mobile environment.	1
[Another good idea] [1] - most access personal mobile phones more regularly than, especially, a work computer	1
Most midwives on call develop an aversion to mobile devices I think therefore this [would become another source of pressure] [2]	2
[Modern midwives have their smart phones and use them constantly] [1].	1
[Easy access is essential] [1,3]	1, 3
[Most are on smart phones now][1]	1

staff are [often not able to get confidential access pcs easily] [1] -at work or home		1
[Should be platform neutral] [4]		4
Professionals [may wish to access whist mobile] [1] i.e. in work, during travel etc.		1
	Theme	**Number of times Categorised**
	Mobile device compatibility – High priority	35
	Mobile device compatibility - Unhelpful	1
	Mobile device compatibility – Must work	6
	mobile device compatibility – Neutrality important	1
	mobile device compatibility – Must be secure	1

Do you have any additional comments you would like to share?

Comment		Themes assigned to
NO		0
I think that the users need to have a real sense of [follow-up support] [1]; I am concerned that the platform may raise issues that the [users are unsupported] [1] in dealing with. There are [no guarantees that they will seek other support] [2] and this [makes the venture risky] [3].		1, 1, 2, 3
	Theme	**Number of times categorised**
	Midwives – Require support	2
	Midwives – may not seek alternative support	1
	Intervention - Risky	1

If there are any new questions that you would like to be put forward during the second round of questioning, please list them below.	**Action taken**
There is nothing about the nature of 'trauma' that is referred to and nothing about why and how people would be asking for help via this mechanism. While an intervention may already have been chosen, there is more than tool design involved in making something like this work.	Psychological distress defined in Round 2 survey introduction
How to cherish any human sounding board you may have!	0
NONE	0
Could friends/family have access/be signposted to support services? Would this platform be available 24/7?	24/7 support refined into question for next round. Friends and family access refined into question for next round
How does the 'system' follow up those who are identified as being at risk?	following up and 'identification of those at risk refined into question for next round
Obtain permission for midwives using the online supports to evaluate and trend	obtaining permission from users to evaluate and trend concerns in order to

concerns to highlight same at national level	highlight them at a national level refined into question for next round
Do you think that a quick assessment using a scale such as the Kessler psychological distress scale (K10) should be administered so that if the midwife is experiencing significant distress this attracts an immediate moderator response?	The implementation of an initial simple user assessment using a psychological distress scale to prompt the user to access the most suitable support available refined into question for next round.
would like to know more about ideas and especially moderator etc. Also sorry to say while I like the logo / cartoon idea I don't like the images of the midwives - too sexualised to be acceptable / recognisable.	Moderator role put forward in 2 questions for next round. Proactive/reactive moderation questions posed.
This is an excellent idea; however, will it allow midwives to access this support in the work environment? I was thinking about fire walls which may not allow access	24/7 support refined into question for next round.
A very clear aim of what you are trying to set up would be helpful. what types of psychological distress? What is the need for this?	Psychological distress defined in Round 2 survey introduction
I feel concerned that the extreme seriousness of this for some practitioners	0

is still not fully understood, for a high percentage it can be life threatening	
NONE	0
A question about the role of the moderator and confidentiality	Moderator role put forward in 2 questions for next round. Proactive/reactive moderation questions posed.
How much do you know of the diversity of the user community, both in terms of perceived need and user experience? How might intervention address these diverse needs effectively without putting some off? Safeguarding and peer moderation to ensure appropriate use/ signposting needs consideration.	Moderator role put forward in 2 questions for next round. Proactive/reactive moderation questions posed.

Appendix 13: Delphi Study analysis report for round 2

1: All participants gave their full consent so that the researcher could verify that participants fitted the inclusion criteria, had understood the participant information in full, had given their consent for their anonymised quotes and results to be used for publication, and had given their full consent to participation.

2: An online intervention designed to support midwives in work-related psychological distress should prioritise amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case.

2.1 Amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case

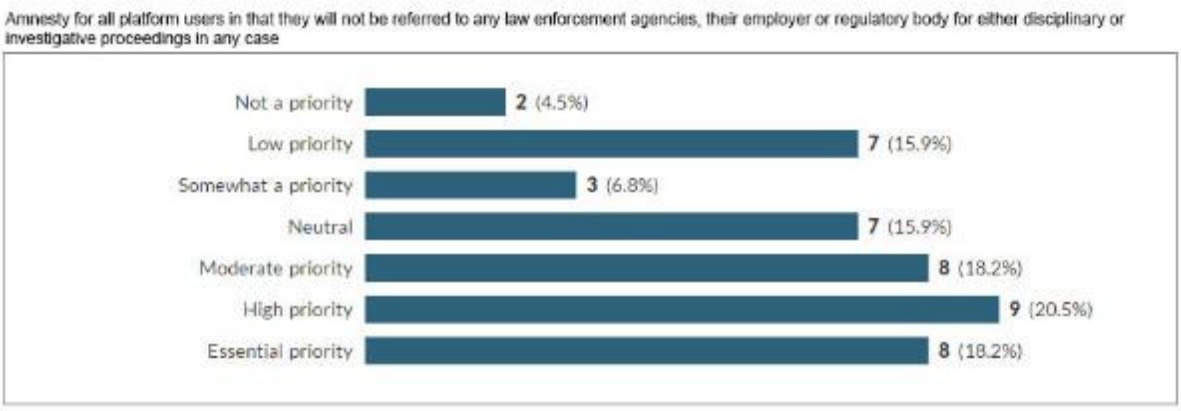
Rank value	Option	Count
1	Not a priority	2
2	Low priority	7
3	Somewhat a priority	3
4	Neutral	7
5	Moderate priority	8
6	High priority	9
7	Essential priority	8

Mean rank	4.61
Variance	3.37
Standard Deviation	1.84
Lower Quartile	3.0
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Not a priority 2 (4.5%)

Maximum score = High Priority 9 (20.5%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
I'm not neutral but [don't know how else to answer][6]-there are [always boundaries that must not be crossed][4]-without knowing what could be disclosed on such a site it is not possible to make an assessment on this criterion.	6,4
so the midwife will not [feel frightened to discuss][2] the event and [express her feelings][1]	2,1
People [need to feel safe][1] that what they share is able to be shared in a forum that remains confidential; [fear of reprisal][2] may [stop someone speaking][1] about something that is impacting their sense of wellbeing - they may feel guilty, but not be guilty of any wrongdoing	1,2,1
It is [difficult to require an amnesty][6] as it may be something that [requires further investigation][4]	6,4
People are [not going to be fully revealing][1] if they believe they will [suffer as a result!][2]	1,2
this is [a difficult one][6] as it depends on the situation and hard to see how it could be otherwise e.g. [if gross misconduct / ongoing harm][4]. For others it may be appropriate to wave legal aspect as [gives opportunity for change][5]	6,4,5
any organisation that collects information which is seen to breach the law would have [difficult in not reporting these exceptional situations][4].	4
it is [dependent on the situation][4]	4
I am still [not sure][6] that this can be legally done. For example, if the midwife is dealing with a woman who confesses child abuse to her then she would be [legally obliged to report][4] this and it may therefore be better to say, don't say anything that may be illegal requiring us to refer the matter on	6,4
This will [protect their personal privacy.][7]	7
Although platform users [should be able to freely discuss][1] their concerns, it [should not be hiding criminal activity.][4]	1,4
[Encourage access and honesty][1]	1
Clearly if the registrant felt that they would be referred to any agency they [would not seek help from an online platform][1]	1
unless users are [honest open and transparent][1], such intervention is useless. [Only way to seek honesty][1] is by protecting them	1,1
If you're going to provide a safe and supportive online space - [midwives need to be assured][1] that they will [not face any legal recriminations as a result of speaking freely and openly][1]	1,1
[It almost suggests that there may be grounds for this route to be considered][3]	3
[Freedom for practitioner to reflect][1] and [provide a safe space][1]	1,1

Midwives have [few other places they can offload][8] this kind of concern; it's likely some [midwives won't ask for help unless they have this assurance][1].	1,8
I think that the [fear of disciplinary action][2] may [prevent people from participating][1] but it [may be the thing they need][1] to address issues and take action themselves.	2,1,1
As a platform for help, [people should be free to share][1] their thoughts and feelings without [fear of it going through to their work place][2], friends etc. (as this maybe the source of their issues). However, [if a law is being broken then it is unethical to not report it.][4]	1,2,4
You could have someone admit to severe and damaging ongoing abuse of patients or illegal practice; [where would you stand][6] when you read this and know that it was ongoing and that people were continuing to be put at risk?	4
if as a midwife you have done something illegal or questionable in the legal sense, you really [are very unlikely to post on a platform like this]1. However, if you do then this can add to the case either against you or for you. But [if you have engaged in criminal activity, this needs to be referred to the regulatory body.][4]	4,1
To allow users the [opportunity to get help][5] and support without [feel of reprisal][2]	2,5
In order to meet the aims of the platform ensuring confidentiality is essential to provide a [safe space in which to debrief][1]. [Fear of reprisal, recrimination or sanctions][2] would [be counterproductive][5].	1,2,5
I think this requires [careful consideration][6] in order to [uphold law and prevent further harm][4]	6,4
[Amnesty is important to an extent][1], however, users must be aware that any disclosure which breaks the law (not the Code) [must be referred to law enforcement agencies][4].	1,4
This should be like a counsellor and have the same confidentiality [so that midwives will use it][5]. If they [fear being reported][2] to any agency they [may be reluctant to use the service][1].	5,2,1
[I think this is important][1] but if absolutely not possible an online intervention could still be useful (this is why I have not scored 'essential priority'. But I do think that it [needs to be free from fear of reprisals][1, 2]. It could achieve this by being anonymous - no names and no places mentioned.	1,1,2
[if they will be fair][0]	0
[I am not sure about the balance][6] between public protection and allowing staff to have a safe place to disclose their concerns.	6
[Midwives need support][8] in decision making and supporting women, much of this is online now due to increased workload, no cohesion in teams, poor leadership	8
In counselling, the notion of [confidentiality is conditional][4] and the conditions of confidentiality are carefully explained	4
Needs to be [considered on an individual basis][4], especially [if negligence or criminal activity is evident][4]	4,4

Anonymity is a luxury we [cannot afford to offer in cases of serious misconduct][4], or where there is [any possibility of harm to the user or another person][4]. At its most serious, workplace stress may lead to such things. Whilst [anonymity may well benefit user engagement][1], this must [only be guaranteed where no serious risk is present.][4]		4,4,1,4
[Without amnesty people may not use the site][5] and therefore a situation may get worse, however, [issues which require action or follow up][4] for reasons of safety may be revealed. It's a [catch 22 situations][6]		5,4,6
Likely to be [important in encouraging participation][5].		5
Because it [needs clear discussion][1]		1
I think it [depends on context][6] would we be collecting identifying data - [how could we refer] [6]- who would be responding - would there be real time response - therefore I chose this response as in the absence of the front end information required this seemed the most appropriate		6,6
I feel [unclear as to how to implement this] [6]. It defeats the object of being [a safe supportive tool][5] if a user [felt inhibited that they may be reported][2]. Whilst also recognizing [a duty for anybody to address unsafe practice.][4]		6,2,5,4
[otherwise no one will use the platform][1, 5]		1,5
There [needs to be exoneration][1, 5] but where public safety is at risk there [must also be a professional accountability][4]		1,5,4
	Theme	**Number of times categorised**
1.	Amnesty – Required for open and honest disclosure	27
2.	Midwives - Fear retribution	10
3.	Amnesty – Cannot be given in any circumstances	1
4.	Amnesty - Cannot be given in all cases	21
5.	Amnesty - Required for change/Help seeking	9
6.	Amnesty - Conflicted in opinion	10
7.	Amnesty - required for privacy	1
8.	Midwives - Have little support	2

Do you have any additional comments you would like to share?

Comment	**Themes Assigned to**
This situation is a [tricky one][6] because if the person truly has done something illegal or out of line professionally, the [moderator may feel compromised][5] if an amnesty is in place. However, the moderator can always refer to professional codes of conduct and ask the kind of questions that can [encourage the person's sense of professional responsibility & self-disclosure][8] to their employer/regulatory authority etc.	6,5,8

The [balance between protecting staff and protecting the public needs to be explored more][6]		6
It is essential that they will be [exceptional occasions when reporting is required][3] at the outset of any tool/resource		3
The [ability to discuss concerns without reprisal from employers is essential][1], [but what would be done if there were vulnerable adults or children identified][6] (other than the platform user).		1,6
sometimes you can't see a situation clearly when you are in the middle of it so [need a non-biased medium is helpful][1]		1
It would be a case of the [extreme potential spoiling what would actually be helpful][6]; [a space where you could be utterly honest and unburden][1] without [fear of reprimand][2].		1,2,6
I am [not sure I understand the gist of this question][9] which may be why you didn't receive consensus on it originally.		9
[A clear set of Terms and Conditions must be read and agreed][4] prior to use which gives clear rules regarding disclosure of illegal activities.		4
no		0
The amnesty may have to be [conditional upon certain criteria][3] which are [carefully explained and adhered to][4] and in line with professional codes of conduct		3,4
However, there [might be circumstances when there is a duty to refer][3] e.g. over a safeguarding concern. Suspect there [cannot be a guaranteed amnesty in all circumstances][3].		3,3
[I am not comfortable][6] that people could be discussing something where they have clearly been involved in a situation that could put future people they are caring for at risk. It would also [add stress to those who are online with this person][7] of carrying this burden of responsibility.		6,7
If practitioners are obviously so distressed that their judgement/health is impaired to a point they could cause harm to self or others there [needs to be some mechanism that enables protection][8] - I [don't think it's about reporting them][8] to the regulator - but there needs to be a [safe supported way][8] that enables the practitioner to develop self-awareness and feel safe to seek help		8,8,8
	Theme	**Number of times categorised**
1.	Amnesty - A helpful inclusion	3
2.	Midwives - Fear retribution	1
3.	Amnesty - Cannot be given in all cases	4
4.	Intervention - Requires disclaimer policies	2
5.	Amnesty - Difficult to moderate	1
6.	Amnesty - Conflicted in opinion	5
7.	Amnesty - An unhelpful inclusion	1

8.	Amnesty can enable resolution of situations	4
9.	Question - Meaning unclear	1

3: An online intervention designed to support midwives in work-related psychological distress should prioritise prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.

3.1 Prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.

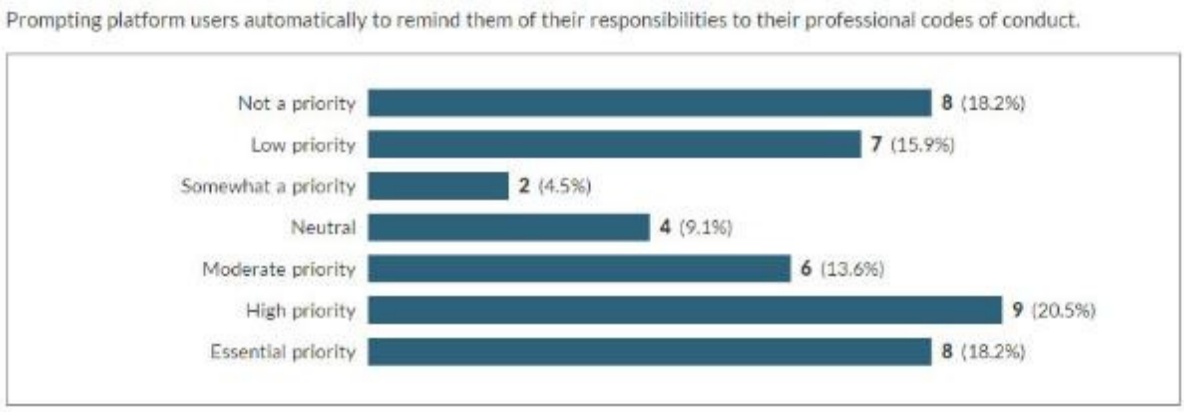
Rank value	Option	Count
1	Not a priority	8
2	Low priority	7
3	Somewhat a priority	2
4	Neutral	4
5	Moderate priority	6
6	High priority	9
7	Essential priority	8

Mean rank	4.18
Variance	4.88
Standard Deviation	2.21
Lower Quartile	2.0
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Somewhat a priority 2 (4.5%)

Maximum score = High Priority 9 (20.5%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
[Professional codes do not currently give enough attention to self-care of the carer] [7]- [reference to the duty of care to self would be more viable][8].	7,8
it is [important that the midwife will know her responsibilities and professional codes at all time][1]	1
[People need reminding and refreshing about their professional responsibilities and accountabilities][1]	1
[An important aspect of support][1]	1
[Mandatory][1, 3]	1,3
[we would be complicit if didn't point this out to them][1, 3]	1,3
[It is an ethical & legal requirement][3] in keeping with the NMC Code of Conduct	3
there is still [an obligation to adhere to their professional codes of conduct][3]	3
I still see this as [a low priority][2], it [doesn't mean it isn't important][1] juts that it's a low priority compared with other things you are wanting to do with this platform	2,1
[As professionals they already know and practice following the codes][4].	4
This sounds like the NMC and [would make me reluctant to discuss concerns openly][2].	2
[We must adhere to our code at all times][3]	3
This [may prompt the midwife to seek help from a peer or their supervisor][1]	1
To [ensure that they have a good self-awareness][1]	1
If the aim is to support midwives in work-related psychological distress, [reminding them professional codes of conduct will be counterproductive][2]	2
[Could be perceived as a bit big brother][2]	2
It [may be prompt required for someone to take 'time out' and not struggle on and run the risk of making mistakes][1.]	1
[Identifies self-accountability][1] [honours safety][3]	1,3
This is a [good idea][1] - so midwives can be reminded of specific responsibilities, but it would have to be done very carefully, worded very carefully [so midwives in psychological distress don't feel even worse/shame][2]. I've [yet to meet a midwife who doesn't know their responsibilities][5] - [I've met many in need of psychological support.][9]	1,2,9,5
[Midwives already know their professional codes of conduct][4] for their own country and I suspect these are different around the world.	4
[A reminder is always helpful.][1]	1
Sounds like a [guilt- inducing feature][2]. If my self-confidence were already low and I didn't feel like I'd been able to perform to my best, an automatic reminder of where I	2,2

should be and would probably highlight those inadequacies to me and [lower my self-esteem further][2].	
we [all need reminders from time to time of our professional responsibilities][1]	1
Users should be [aware of their responsibilities to the code and shouldn't need reminding][4]	4
Again I feel that actions such as this [will create fear amongst midwives][2] and thus make the service inoperable as it [may seem as a reprimanding reminder][2].	2,2
Just have link to Code? [Constant reminders might become obtrusive][2]	2
I [don't think that midwives in psychological distress need reminding of the Code during the use of a support platform][2].	2
Again - if this in place of face to face counselling - it should be [confidential and non-judgemental][2]. [Once the crisis has been dealt with then any professional issues can be dealt][8] with - e.g. a requirement to report certain things that may have been done which were not in compliance with professional codes of conduct.	2,8
[Yes, it is still the case that they need to be mindful of this.][1]	1
[since it will be act of professionalism][1]	1
[because patient safety is imperative][1, 3]	1,3
[A good idea][1], we are all so busy + have little time to refer to code etc. and the code has changed and possibly will again due to changes in Supervisor of Midwives	1
If the priority is to address their work-related psychological distress, this is [best not diluted by automatic reminders that shift the focus][2]	2
All [registered health professionals have a duty of care to their patients and this should be at the forefront of their minds prior to engaging in any form of patient contact][6], [especially if they have concerns regarding their emotional and mental wellbeing][6].	6,6
[This is what we all signed up to][3] and [serves to protect the professional as well as the patient][3].	3,3
[Helpful to remind people of professional duties][1].	1
same reasons as above - [prompts should be to seek help][8] - where to get help and then perhaps say why but [prompts to regulation could make people feel worse][2]	8,2
This [should not be the function of this platform][5, 8]	5,8
[This is about the midwife not her professional responsibilities][5]	5

	Theme	**Number of times categorised**
1.	Prompting professional codes - A helpful inclusion	18
2.	Prompting professional codes - An unhelpful inclusion	14
3.	Prompting professional codes - Ethically essential	9
4.	Midwives - Already aware of codes - Not required	3

5.	Prompting professional codes - Not the purpose of the intervention	3
6.	Midwives - Duty of care should be priority	2
7.	Codes - Inadequate	1
8.	Prompting professional codes - Alternative approach required	4
9.	Midwives - Need support	1

Do you have any additional comments you would like to share?

Comment	**Themes Assigned to**
[Providing a reminder about professional codes of conduct is essential][1] and ensures integrity for the platform provider; [just because someone is emotionally upset doesn't mean they should lose their professional integrity][5]	1,5
[Midwives in psychological distress are already highly aware of their responsibilities] [3] - that's often why they are the ones who have the distress in the first place	3
I do however think that [it would be valuable to always have a link to these visible][4]. An [automatic prompt sounds very 'in your face'.][2]	4,2
[if as a midwife you are suffering such distress that you need reminding of your professional code of conduct, maybe you need some time off and shouldn't be working?][6]	6
Again, [a reminder of the code should be included within the Terms and conditions][4]	4
The word automatically worries me. I think [automated reminders can turn out to be more irritating than helpful or appropriate.][2]	2
no	0
Sometimes, [a reminder of the Code can be enough to make sense of a situation][1], or [bring clarity of thought to a complex situation].[1]	1,1
[Needs to be done carefully, so is not intrusive][7]	7
[If prompts were there they should be also reminding people of their rights to a safe workplace rights to be resourced- treated with respect etc.][4]	4

	Theme	**Number of times categorised**
1.	Prompting professional codes - A helpful inclusion	3
2.	Prompting professional codes - An unhelpful inclusion	2
3.	Midwives - Already aware of codes - Not required	1
4.	Prompting professional codes - Alternative approach required	3

5.	Midwives - Should remain professional even in distress	1
6.	Midwives - If needing reminders, should not be working	1
7.	Prompting professional codes - Requires sensitivity	1

4: An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of information designed to inform midwives as to where they can access legal help and advice.

4.1 The inclusion of information designed to inform midwives as to where they can access legal help and advice.

Rank value	Option	Count
1	Not a priority	0
2	Low priority	3
3	Somewhat a priority	2
4	Neutral	3
5	Moderate priority	7
6	High priority	17
7	Essential priority	12

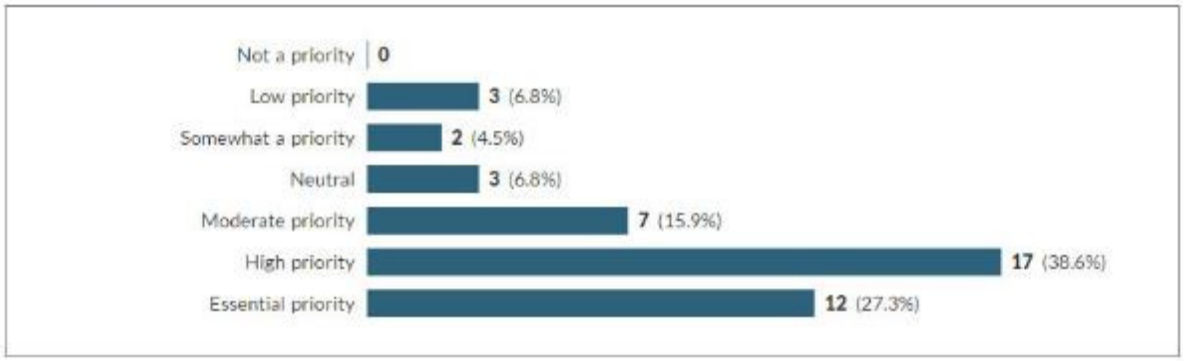
Mean rank	5.57
Variance	2.02
Standard Deviation	1.42
Lower Quartile	5.0
Upper Quartile	7.0

Consensus Achieved = yes (High/Essential Priority) 65.9%

Minimum score = Not a priority 0 (0%)

Maximum score = High Priority 17 (38.6%)

The inclusion of information designed to inform midwives as to where they can access legal help and advice.



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
Depends what the issue is-legal attention [may help with a dispute][1] but also [elongate conflict][2]- which cannot be in the interest if anyone-so far these questions all raise my concerns about trying to automate what are subtle and difficult decisions in the provision of help to those in psychological distress.	1,2
[Essential to provide that information and links][1] because an [emotionally distressed midwife may not have the presence of mind to even think about such resources][7], [nor know where to access them][7]	1,7,7
[In times of distress they may not think about this avenue][1, 7]	7,1
[This should be part of their professional preparation!][1]	1
if stressed/distressed [need to give positive practical advice which may include lawyers][1]	1
[It's really important this is accessible at the time of need][1]	1
it would be [useful to have recommendations][1] rather than having to source this themselves	1
[I would not think users of your platform would need this][2] i.e. they [can gain this info elsewhere][2]	2,2
This will [ensure that they are protected][1] and [get additional benefit from the intervention][1].	1,1
This information may or may not be required, but when needed, finding it could be an extra source of worry. The [platform could make a real difference by making this easy][1].	1
[Any help and advice is welcome][1] and [will encourage timely assistance][1]	1,1
[Signposting is an essential priority and means for help][1]	1
[May be needed][1] if they had not recognised the risks beforehand and continued to work	1
[All types of supports available need to be freely available][1, 3]	1,3

[A very good idea][1] so midwives under pressure have access to this information. Perhaps [include alternatives][3] other to the RCM, as some midwives feel the [legal support is not good enough in some instances?][7]		1,3,7
This [would be reminding them to seek guidance][1] from their countries College of Midwives or local support body.		1
The platform may bring us many issues for the midwife and [immediate support could help][1]. Additionally, it [could be quite empowering for the midwife.][1]		1,1
This isn't information that people automatically know off the top of their heads and [can help manage worry].[1]		1
I'm [not sure what this question is asking][4]		4
[providing a one stop shop to get all information in one place][3]		3
This [may be useful][1] depending on the circumstances.		1
Information regarding further advice and legal support I think [would be useful][1]		1
Once the initial crisis is dealt with then will be the time to get legal help and advice. [Getting advice may alleviate some of the psychological distress.][1]		1
This is [essential practical information][1]		1
[better][1]		1
Again [for the benefit of offering support to midwives][1]. [Autonomous practice can be lonely practice][7].		1,7
It is an item that [may be included as part of the general information][3] regarding any amnesty, professional codes of conduct and ethics.		3
A nurse or [midwife who fears for her registration][6] due to workplace stress related issues [would find comfort in this][1].		6,1
[Might be relevant for some][1]		1
again I believe this [could cause additional distress][2] as they may not have even though t that they may need legal support / advice		2
It [should be a specific area not one that is prompted][3]		3
They [may find this information useful][1]		1
Midwives in this situation [often do not know or are incapable of assessing how to put support in place][7]		7
	Theme	**Number of times categorised**
1.	Information, legal help and advice - A helpful inclusion	29
2.	Information, legal help and advice - An unhelpful inclusion	4
3.	Intervention - A range of options should be made available	5
4.	Question - Meaning unclear	1
5.	Midwives - Should remain professional even in distress (Theme removed following a process of secondary analysis).	0
6.	Midwives - Fear retribution	1
7.	Midwives - Need support	6

Do you have any additional comments you would like to share?

Comment	**Themes Assigned to**
Many [midwives think it is 'their fault'][5] when they are distressed by work related events or issues; having a reminder about legal help and advice [may help someone take action to address the issues][1], which not only is important to do so, but [in itself can be healing][1]	5,1,1
[Unions & professional guilds usually offer at least preliminary advice][3].	3
is there a link between midwives demonstrating psychological distress because of adverse incidents and therefore they may need legal representation? Is this what the questions are getting at? [I just don't get the point...sorry.][4]	4
no	0
Likely that [there are other sources of assistance beyond legal][3]. [Should be full signposting to relevant agencies and support groups][1].	3,1

	Theme	**Number of times categorised**
1.	Information, legal help and advice - A helpful inclusion	3
2.	Information, legal help and advice - An unhelpful inclusion (Theme removed following a process of secondary analysis).	0
3.	Information, legal help and advice - Can be found elsewhere	2
4.	Question - Meaning unclear	1
5.	Midwives - Blame themselves	1

5: An online intervention designed to support midwives in work-related psychological distress should prioritise giving platform users the ability to share extended personal experiences for other platform users to read.

5.1 Giving platform users the ability to share extended personal experiences for other platform users to read.

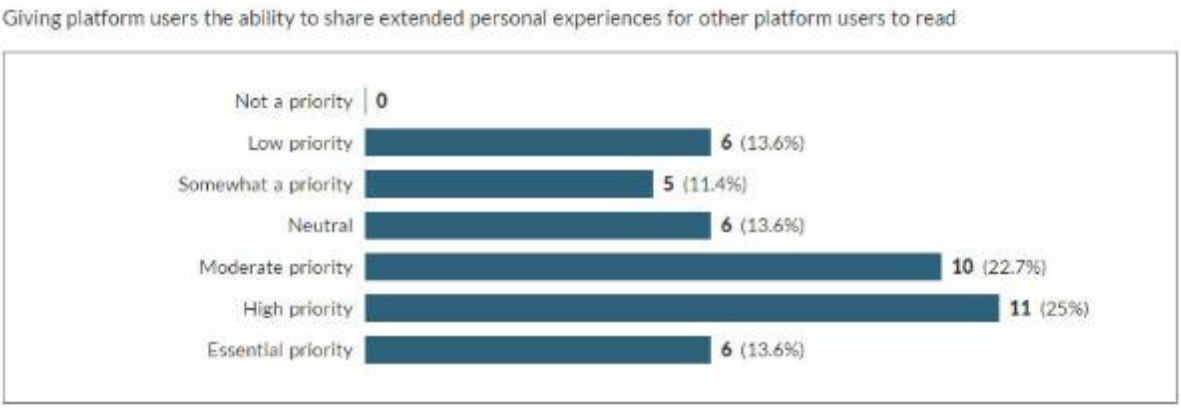
Rank value	Option	Count
1	Not a priority	0
2	Low priority	6
3	Somewhat a priority	5
4	Neutral	6
5	Moderate priority	10
6	High priority	11
7	Essential priority	6

Mean rank	4.75
Variance	2.55
Standard Deviation	1.6
Lower Quartile	3.75
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Not a priority 0 (0%)

Maximum score = High Priority 11 (25%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
While sharing stories [can provide support][1] I know of no evidence that just having stories free floating can help without [effective system moderation][3]. I would be concerned that the act of writing would generate an expectation in the writer for a response which may not be forthcoming and so [compound a feeling of aloneness][2].	1,3,2
[sharing can help all users][1] as well as the midwife and [encourage support and assistance][1]	1,1
People's stories [can help each other][1]	1

This would need to be [carefully moderated][3]	3
[The "reality" of scenarios][1]	1
[can be helpful][1] but can also be too long and [potentially identify others][2] especially if smaller unit. Those [others cannot speak for themselves as unaware][2]	1,2,2
Users should be able to [choose to share their information][4]	4
it might be [helpful for others][1] who are feeling isolated in their experience	1
[needs to be done carefully][3] with respect to confidentiality and identifying info shared	3
This [could be really helpful][1] for people in a new distress situation.	1
[May or May not be beneficial][5], if accessing the tool then have already made a choice to seek assistance	5
The [midwife would not feel so isolated][1]	1
[Not all midwives maybe ready to share][4] their concerns or situation when first accessing the online intervention	4
support group is [useful way to reduce stress][1]. Like my 4-year-old says, [sharing is good!][1]	1,1
[Not all are happy to share][4]	4
Sharing experience is [personal choice][4] and [can help others][1]	1,4
Being listened to and feelings/experiences validated is an [essential part of getting support][1].	1
This is a [major key to healing][1]. Sharing stories and being able to talk about the situations in a safe environment is [essential to help each other][1]. Those further down the track of healing [can help those recently wounded][1]. It also [reiterates that this is a difficult job][1] sometimes and some of the things we face as midwives are horrible and [knowing we are not alone is important][1]	1,1,1,1,1
Could be a [good idea][1] to share confidentially, [could have issues if they are identified by friends][3]. Will [need to be moderated][3].	1,3,3
[Sharing helps]1, both the discloser and those who read it and are struggling with their own demons. It [allows them to feel that they are not alone][1] and can [draw strength from others' experiences][1].	1,1,1
because in my experience [peer support is helpful][1].	1
[Do people want to read other people's experiences?][5] They are usually different.	5
To me that would be the [whole purpose of the forum][1], unless I have misunderstood the project! Of course [confidentiality needs to be maintained][3] but aside from that then yes [to share personal experiences is part of the debriefing process][1] and [may assist others in similar situations][1].	1,3,1,1
I think this [would be helpful][1] to midwife and others reading the account	1
I think that a forum type facility for users to either read or become involved in [would be beneficial][1] for a large majority of users.	1
Sharing the stories [can be invaluable][1] but [not immediately][2] - so less of a priority	1,2

Some ability to do this [would be useful][1] but it would [need to be moderated tightly][3] because it may risk identify the midwife, team members and/or service users which would be unacceptable.		1,3
it [broaden their knowledge][1]		1
sharing [can be helpful][1]		1
Shared experiences [can benefit all][1].		1
While the experience of others may provide some insights into your own situation, [each case is individual and should be managed as such][4]		4
This would be a [useful tool][1], although anonymity and confidentiality must be assured for all parties involved.		1
Reading that someone else has been through the same difficulties that you are experiencing [can help alleviate feelings of isolation][1]. However, the platform cannot be a stress dumping ground as it needs to remain constructive.		1
[Sometimes a form of reflection is needed to allow a person to see a way forward][1]		1
Highly likely that [people will want to tell their stories][1] and others will want to listen. In other fields - e.g. whistle-blowers, patient leaders like James Titcombe, [this has been important][1]		1,1
Context and purpose of the space would need to be set first - Would there be a facilitated response in real time - Extended personal experiences [creates the potential for boundary slip][6] and [potential breach of confidentiality][6] - It [adds the potential for individuals to dominate the space][6]		6,6,6
[Many will not be interested in sharing][2, 4]		2,4
While this [can be a learning opportunity for the future][1] the priority should be on the individual midwife in the present		1
	Theme	**Number of times categorised**
1.	Sharing extended personal experiences - A helpful inclusion	39
2.	Sharing extended personal experiences- An unhelpful inclusion	5
3.	Sharing extended personal experiences - Moderation required	7
4.	Sharing extended personal experiences - Should be optional	6
5.	Sharing extended personal experiences - Undecided	2
6.	Sharing extended personal experiences - Risky	3

Do you have any additional comments you would like to share?

Comment	**Themes Assigned to**
[Writing is therapeutic for the writer][1]	1
[In Australia you can see the reports of some professional challenges on the registering bodies web site. Not all involve "psychology".][4]	4

I get very little support from friends and family that are not midwives. ALL my support comes from other midwives who have become my trusted friends over time. This is because they actually understand the pressures we work in under and we all generally have a "there but for the grace of God go I" approach. [This kind of connection could be achieved online in a secure forum.][1]	1
This [would have to be monitored][3] by admin staff to ensure confidentiality and appropriate behaviour	3
no	0
There may [need to be moderation][3] of what is made freely available because some comments are not always appropriate or beneficial.	3
[Context important here][4] - lessons can be learned from other on-line support fora	4
could also be resource intensive - [monitoring / responding][3]	3
This may be [difficult to manage][3] as other users' experiences may be very emotionally charged and not necessarily accurate. This may [not always be useful for other users][2.]	3,2

	Theme	**Number of times categorised**
1.	Sharing extended personal experiences - A helpful inclusion	2
2.	Sharing extended personal experiences- An unhelpful inclusion	1
3.	Sharing extended personal experiences - Moderation required	4
4.	Sharing extended personal experiences - effect may be context dependant	2

6: An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of a web based peer to peer discussion chat room.

6.1 The inclusion of a web based peer to peer discussion chat room

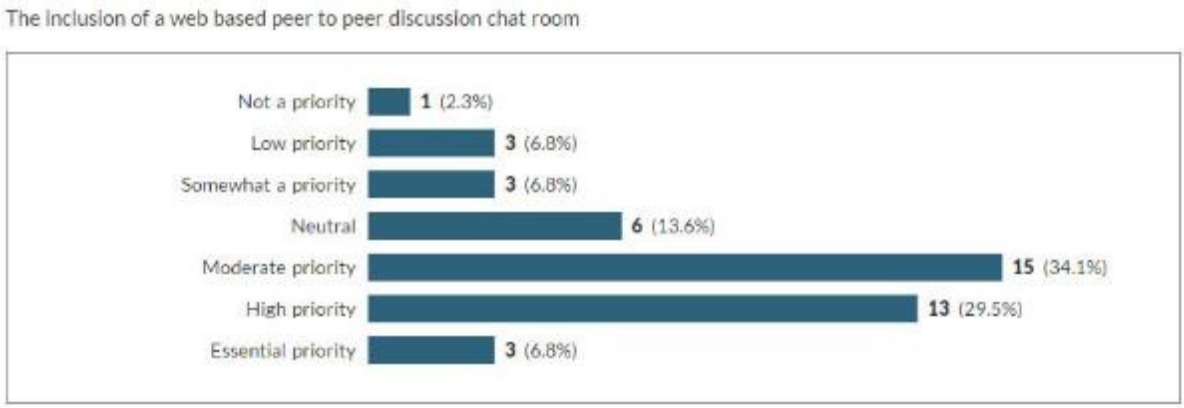
Rank value	Option	Count
1	Not a priority	1
2	Low priority	3
3	Somewhat a priority	3
4	Neutral	6
5	Moderate priority	15
6	High priority	13
7	Essential priority	3

Mean rank	4.86
Variance	1.94
Standard Deviation	1.39
Lower Quartile	4.0
Upper Quartile	6.0

Consensus Achieved = Yes (Moderate/High priority) 63.6%

Minimum score = Not a priority 1 (2.3%)

Maximum score = Moderate priority 15 (34.1%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
[Does the working day allow for this?][4] [How would it be used?][4] Concern that the relative absence of filters that communicating online generates [may lead to unintended harm][2]- would there be other ways of connecting people up that are [less haphazard?][5]	2,4,4,5
Sharing experiences and getting feedback from peers who have experienced similar situations is [very helpful][1]	1
This [may be useful][1] - a form of social networking	1
a [problem shared is a problem Halved?][1]	1
peer support can be both [good][1] and [bad][2]… [can fuel/get things out of proportion][2] and/or can [help gain perspective and practical advice][1]	1,2,1,2
Would be a [good thing to do][1] if funding & supportive [moderation is available][3]	1,3
it [would help the individual][1] to express what they are experiencing in a safe place and [to hear others reactions and opinions][1]	1,1
as above would need to be done carefully with [rules of engagement clearly specified][3]	3
This will [enable professional growth][1] and [networking for support][1]	1,1
[Some may find this helpful][1] but I [don't know that I necessarily would.][2]	1,2
[I would not access a chat room][2]	2
This would be [a real bonus][1] if someone was experiencing problems	1
I think peer-to-peer support [could be helpful][1]	1

This can be a [powerful tool][1] for some staff	1
We need to be aware we are not alone	0
We are all in this profession together	0
Sounds like a [great idea for support][1] in real time. I would suggest the 'ethos' of the chat room, i.e. supportive, being posted as a reminder before every chat starts. Perhaps will be [hard to police in terms of unsupportive comments?][3] But most [chats I think will be very supportive][1] and helpful as long as solid ethos of support is set.	1,3,1
Again, having the ability to share stories [makes people feel they are not alone][1] and will [hopefully aid others to seek help if needed.][1]	1,1
as above (Could be a [good idea][1] to share confidentially, [could have issues if they are identified by friends][5]. [Will need to be moderated][3].) and again [needs to be moderated][3].	1,5,3,3
[It is important][1] to be able to reach out and support others and share things with them.	1
Because it sounds like [a great idea][1]	1
For some people they [might find it helpful][1] to discuss with other people but [I'm unsure as to its real benefit][4]	1,4
Chat rooms [are more private and can be disabled][1], [reducing the fear][1] of the public accessing the conversations which would not be appropriate.	1,1
I think there is [potential here][5] for [misinformation][2] and creation of further [anxiety][2]	5,2,2
Peer to peer chat for midwives is [beneficial][1] even to those without psychological distress. No one else truly understands the stresses of the role.	1
Many midwives are already doing peer to peer review via electronic means. Setting up another one [would be helpful][1] but maybe not as essential.	1
See comment for question 5 (Some ability to do this [would be useful][1] but it would [need to be moderated tightly][3] because it may [risk][5] identify the midwife, team members and/or service users which would be unacceptable.). I think this relates to this question too.	1,3,5
[yes][1] it will boost their sense of belonging	1
this could be [beneficial][1]- though not the answer for everyone.	1
Look at the success of Tweetchats	0
The notion of peer debriefing is popular and this [would provide that][1] with some anonymity	1
Unsure about this as [anonymity and confidentiality may be breached][5], however speaking to people with similar issues may be [helpful to some][1].	5,1
I like the fact that it's [online and enables a freedom of speech][1] that may not be felt in a face to face situation. Peer chat rooms still leave open the real time interaction which [can lead to things being said without time for moderation and reflection][5]. This [exposes users to unhelpful interactions][2] on the platform.	1,5,2
In my view this is likely to be a [defining characteristic][1] of the intervention, facilitating peer support	1

there are sources of help. I suspect [someone who goes on here would be asking for help from experts rather than peers but I may be wrong][6, 4]		2,4
again [without full context would be difficult to know if this was needed][4]- and [how it would be resourced. moderated et][3, 4]		4,3,4
[many will not be interested][2] in this function -		2
From my experience midwives in the acute phase are very reluctant to go public or even recognise what is happening for them - I also think [this format can lead to mis information][2, 5]		2,5
	Theme	**Number of times categorised**
1.	Discussion chat room - A helpful inclusion	33
2.	Discussion chat room- An unhelpful inclusion	11
3.	Discussion chat room - Moderation required	7
4.	Discussion chat room - More information required	6
5.	Discussion chat room - Risky	7

Do you have any additional comments you would like to share?

Comment		**Themes Assigned to**
Peers could detect patterns of workplace related stress and see it is the result of certain pressures in the workplace and [take action to address those pressures]1; [research and community action to change those conditions could come from such sharing of experiences][1]		1,1
Perhaps [could screen for any issues to do with self-harm/suicide and give help numbers?][4]		4
Online moderated forum [sounds great][1] but would [need real time monitoring][3] 24 hrs a day to ensure appropriate support given and that the service not abused.		1,3
no		0
Raises question of [moderation][3] and rules to prevent misuse, abuse etc.		3
[may be useful][1]. [Difficult to monitor][2,3.]		1,2,3
	Theme	**Number of times categorised**
1.	Discussion chat room - A helpful inclusion	4
2.	Discussion chat room- Challenging to facilitate	1
3.	Discussion chat room - Moderation required	3
4.	Discussion chat room - Consider additional features	1

7: An online intervention designed to support midwives in work-related psychological distress should prioritise giving platform users the ability to communicate any work or home based subjects of distress.

7.1 Giving platform users the ability to communicate any work or home based subjects of distress.

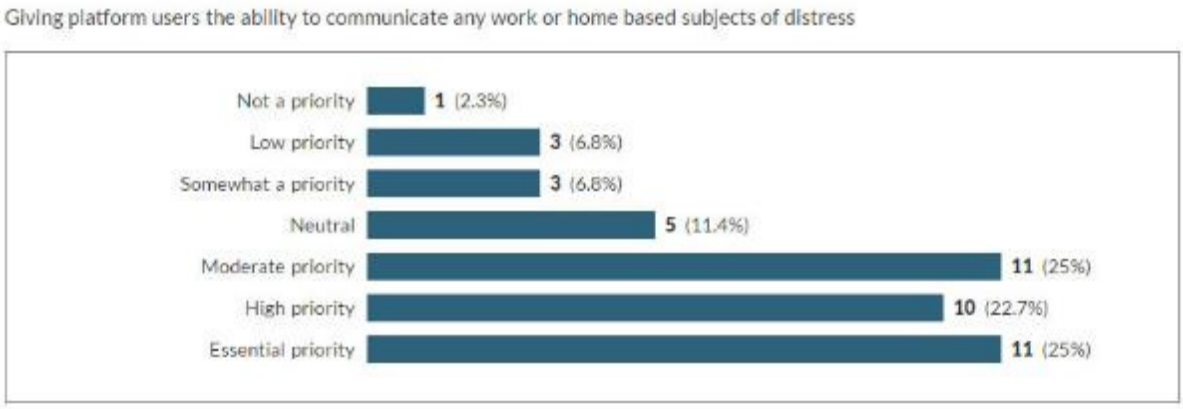
Rank value	Option	Count
1	Not a priority	1
2	Low priority	3
3	Somewhat a priority	3
4	Neutral	5
5	Moderate priority	11
6	High priority	10
7	Essential priority	11

Mean rank	5.18
Variance	2.56
Standard Deviation	1.6
Lower Quartile	4.0
Upper Quartile	6.25

Consensus Achieved = No

Minimum score = Not a priority 1 (2.3%)

Maximum score = Moderate/Essential priority 11/11 (25%/25%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
We don't operate in boxes but [have integrated lives][4]-and support mechanism would need to work with the reality of that.	4

Psychological stress, [no matter its source][3], impacts work and performance	3
[Home based issues will also arise][3]	3
[some folk are not too discriminating!][3]	3
it [is part of bigger picture][1] but [not the reason for the resource][2]	2,1
this is an [essential component][1] in feeling supported	1
Again [rules of engagement][6] would need to be clear as this could degenerate quickly into home related distress, separation, divorce [rather than work related peer support][2]	6,2
Because [these aspects are the source of distress][4]	4
[Home based stress may intensify the situation][2.]	2
Work and personal lives are [entwined][4] and influence wellbeing	4
[Users need to feel that they can talk freely and openly about any cause of distress in their life][1] - people are not [automatons who can separate their work/professional lives][4] although they ultimately have a duty of care to their patients.	1,4
Again [this may be the only opportunity to share their concerns and problems][1]	1
[Unsure re; home based][7]	7
For holistic support, this [sounds very sensible][1].	1
[Home based distress is part of our lives][3] however as this is specific to midwifery I feel it [should be kept at predominantly midwifery related issues][2]. Reality is that [home issues can exaggerate work issues][4].	3,2,4
Lack of time at work and lack of privacy [could be an issue at work][8].	8
[To create a feeling of community][1] and [acknowledge that stresses can come from all different areas of life][1].	1,1
not sure about the home based subjects of distress, [would prefer it if only work based distress][2]	2
[Communication is key to asking for help and support][1]	1
[Work and home stress often come together][4] and affect each other, therefore [to isolate one or the other would be perhaps difficult]3.	4,3
Although midwives may be experiencing stress at home, [I think it should be used mainly for work related stress][2], otherwise the subject could become diluted.	2
[Work and home life are intertwined][4] so it is [important to be able to deal with either][1].	4,1
Midwives in distress [need to be able to communicate their distress][1] as long as no names/places mentioned.	1
is just to [express their feelings][1]	1
it is [hard to separate][3] out the sources of stress- work based from home- the end [results of stress are the same and impact on work][4].	3,4

[The context that we live and work in is salient][10]	10
Frequently when any [psychological distress occurs it does not do so in isolation][4], therefore, for [completeness the intervention has to have a holistic view][1]	1,4
[May be of use][1], however [frustrations may arise][2] at not having immediate or helpful answers/advice/solutions to such problems. [Concerns would also be evident if platform users disclosed domestic or other forms of abuse][6].	2,1,6
[One can impact on the other very easily][4]. [Someone suffering undue workplace stress will be affected at home, and vice versa][4].	4,4
[This platform is for work stress][2] but [home stressors can impinge on work and vice versa][4]	2,4
Participants [need to be able to describe how they feel][1] and [likely that several factors will be combining for them][4].	1,4
[issues at home maybe causing the work related stress][4]	4
[Potential blurring of boundaries][3] and [potential for breach of confidentiality][5]	5,3
I would [prioritize work based distress][2]	2
There [has to be a forum for communicating the level of distress on all aspects][1]	1

	Theme	**Number of times categorised**
1.	Communicating any work or home based subjects of distress - A helpful inclusion	15
2.	Communicating any work or home based subjects of distress - An unhelpful inclusion	9
3.	Communicating any work or home based subjects of distress -Inevitable	7
4.	Communicating any work or home based subjects of distress - Both subjects intertwined	14
5.	Communicating any work or home based subjects of distress - Risk of breaching confidentiality	1
6.	Communicating any work or home based subjects of distress - Requires moderation	2
7.	Communicating any work or home based subjects of distress - Undecided	1
8.	Communicating any work or home based subjects of distress - Difficult to engage whilst at work	1

Do you have any additional comments you would like to share?

Comment	**Themes Assigned to**
Gender based violence or coercive relationships may be the root cause or [contributory to stress at work][2].	2
[Maybe links to other support forums][3] could be added to the platform i.e. Relate, CAB, Mk Act etc.	3

no		0
The platform still [needs to be delivered from a workplace][1] perspective, [acknowledging the impact of home life][2].		1,2
	Theme	**Number of times categorised**
1.	Communicating any work or home based subjects of distress - discussions need to remain workplace based	1
2.	Communicating any work or home based subjects of distress - Both subjects intertwined	2
3.	Communicating any work or home based subjects of distress - Consider links to outside agencies	1

8: An online intervention designed to support midwives in work-related psychological distress should prioritise an interface which does not resemble NHS, employer or other generic healthcare platforms.

8.1 An interface which does not resemble NHS, employer or other generic healthcare platforms.

Rank value	Option	Count
1	Not a priority	1
2	Low priority	1
3	Somewhat a priority	3
4	Neutral	11
5	Moderate priority	7
6	High priority	8
7	Essential priority	13

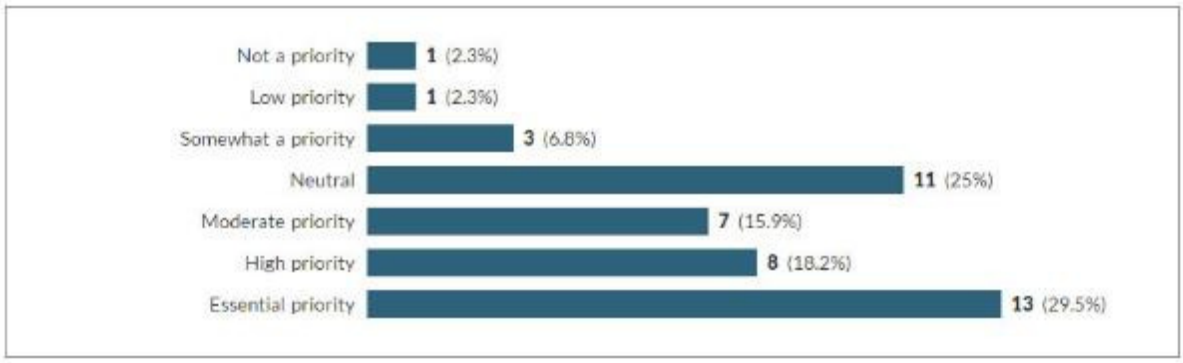
Mean rank	5.23
Variance	2.4
Standard Deviation	1.55
Lower Quartile	4.0
Upper Quartile	7.0

Consensus Achieved = No

Minimum score = Not a priority 1 (2.3%)

Maximum score = Essential priority 13 (29.5%)

An interface which does not resemble NHS, employer or other generic healthcare platforms



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
[I have strong opinions in both directions][5]-it [needs to feel legitimate][4] and to feel safe-this item appears to be operating from the idea that looking different means it will be seen as safe-but it is more complicated than this-need to consider the impact of something looking that [looks authorised] [4] and giving permission to self-care as potentially beneficial	5,4,4
[Needs to be independent][1] as if it is perceived as healthcare organisation related, [may inhibit sharing experiences through fear of being identified][6]	1,6
[I am not sure] [5]	5
It [won't be used if it could be viewed as quasi-governmental][1, 6].	1,6
I can see how some would [mistrust a similar platform] 6 and [suspect their views were being monitored by their organisation][6]	6,6
there [are pros & cons][5] to this - it needs to be [professional & credible to be used][4].	5,4
it [needs to appear neutral][1] - otherwise it [may create barriers to communication][6]	1,6
just [needs to look professional][4] and [be user friendly][3]	4,3
I would be much more comfortable with [a neutral interface][1].	1
It needs to be [professional][4] [easy][3] and [secure][3]. I would say [ease is the highest priority][3]	4,3,3,3
To be seen as a safe and confidential space, I think [it's important to distinguish as separate from their employer][1], the NHS, or their professional body.	1
[Non biased approach is better][1]	1
I think [midwives will be reluctant to share information if support site appears to be NHS based][6], as for most midwives this is their employer. If NHS logo/interface is used, careful reminders of amnesty/support would be a good idea, [otherwise many midwives won't open up][6], in my opinion.	6,6
This [needs to be completely separate][1] and not confused with any health platform as it may trigger symptoms in people who are vulnerable.	1

It would [need to look professional][4].		4
The people accessing this service are likely to have existing troubled relationships with their workplace. They [need to feel that this is a completely separate, safe space][1]. [A clean break][1].		1,1
[this would give the perception that it was completely safe and away from the workplace][1]. Many midwives suffer distress from bullying in the workplace so to create an online safe environment it would make sense if the space [did not look anything like an NHS online place][1]		1,1
As long as it is [user friendly][3]		3
To reduce [concerns about bringing the profession into disrepute][2].		2
Any resemblance to NHS etc. [could deter people from using the platform][6], however, I do feel it [needs to resemble a clean professional image][4].		6,4
It [should be midwife specific, independent, non-judgemental][1]		1
[Yes really important for this to be a different place][1] - not like work		1
[is bad][1]		1
[An opportunity to be creative and forward thinking][6]		6
[This would assist in promoting it as a stand-alone or separate service that is confidential and can be trusted][4, 1]		1,4
Sometimes, being part of an unwieldy structure, such as the NHS, is part of the problem. [Resemblance of the same will be detrimental.][1]		1
[To encourage use][1, 6].		1,6
[Perception of impartiality and neutrality likely to be important][1].		1
Many [Midwives may worry about security of data and linkage to an NHS platform may dissuade them from using the site][1, 6]		1,6
an [inviting interface might be encouraging][3]		3
The midwife needs to feel this is a confidential non-judgemental [format quite separate from her professional bodies][1]		1
	Theme	**Number of times categorised**
1.	Online intervention interface - Should not resemble NHS, employer or other generic healthcare platforms	20
2.	Midwives - Fear bringing the profession into disrepute	1
3.	Online intervention interface - Should prioritise usability	6
4.	Online intervention interface - Should look professional	8
5.	Conflicted opinion	3
6.	Midwives - May not engage if they fear organisational involvement	11

Do you have any additional comments you would like to share?

Comment		Themes Assigned to
[External to employer is key][1]		1
[A safe haven][2]		2
no		0
The [interface needs to appear to be for midwives only][3]		3
[Perceptions of NHS and other 'brands' should be researched with potential participants][4]		4
	Theme	**Number of times categorised**
1.	Online intervention interface - Should not resemble NHS, employer or other generic healthcare platforms	1
2.	Intervention - Should be a safe haven	1
3.	Intervention - Must appear to be for midwives only	1
4.	Online intervention interface - Options should be researched	1

9: An online intervention designed to support midwives in work-related psychological distress should prioritise a simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage.

9.1 A simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage.

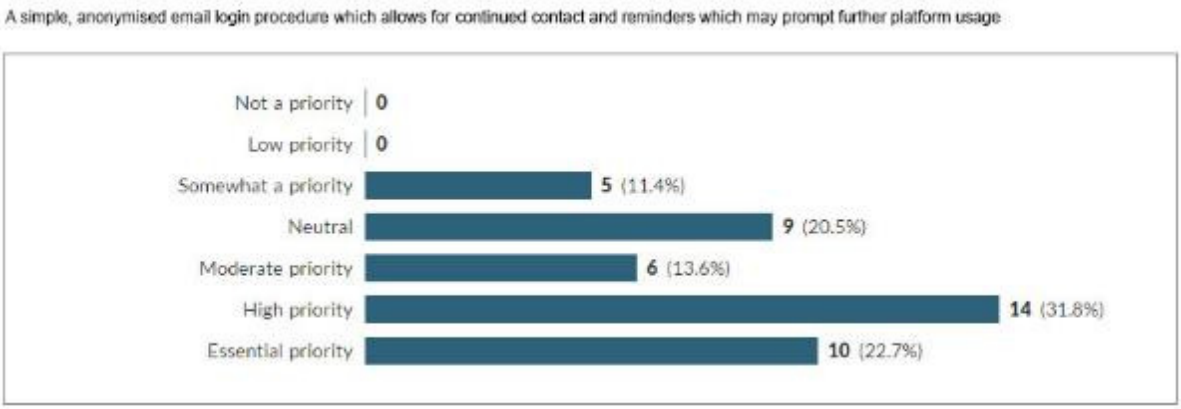
Rank value	Option	Count
1	Not a priority	0
2	Low priority	0
3	Somewhat a priority	5
4	Neutral	9
5	Moderate priority	6
6	High priority	14
7	Essential priority	10

Mean rank	5.34
Variance	1.77
Standard Deviation	1.33
Lower Quartile	4.0
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Not a priority/Low Priority 0 (0%)

Maximum score = High priority 14 (31.8%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes Assigned to

[Needs to be easy to use] [7]-but do need to consider the privacy question -how it could be accessed during the working day and what might make people feel uncomfortable. Also concerned that sending lots of prompts could encourage the 'always on' issue and so [undermine the very help it is trying to provide][2].	7,2
[Needs to be easy]7 and [anonymous][6]	7,6
[maybe cannot be anonymous?][3]	3
[no brainer][1].	1
[anonymised email helpful][1] and in extreme cases [could be located to identify individual ie potential for grievous harm etc.][5]	1,5
Keeping [access simple][7] is essential yet [security is also key][8]	7,8
[important in terms of being user friendly][1]	1
[this could be useful][1]	1
The platform must be [easy to use and feel inviting][7].	7
It [needs to be as simple as possible][7] - I run an online education product, and even if you have very intelligent people on your hands, online they become very impatient and find it difficult to use a complex entry form. Also, many midwives are from an older generation, some of which will really [benefit from things being simple online][7].	7,7
Encourages [easy access][1] and [engagement][1]	1,1
[Receiving e-mails could be an issue with confidentiality][3, 8].	3,8
[Makes sense.][1]	1
[Easy access][1]	1
[Ease of use][7], and [anonymity is essential][6] in my opinion.	7,6
[Makes it easy to log in][1]	1
I think this [should be completely optional][9]… [some users may only want one-way contact and fear that their use would be discoverable.][2]	9,2
Would [need to be a choice or option][9] for this to occur. [Some midwives may not want continued contact][2] while [others may value it][1].	9,1,2
I am [unsure about this][4]. [Yes to anonymised email login][1] but I [unsure about reminders and prompts][4].	4,4,1
It's about care continuity	0
again [for support and connection][1]	1
While a degree of [anonymity may be beneficial][1], there [may be a time where a situation escalates to one of self-harm and there is a want to intervene][5]	1,5
This [facility is essential][1] due to the sensitive nature of the platform	1
To [facilitate useful engagement][1], even when the user feels like withdrawing from the platform due to their stress level.	1
Apps, [quick log in facilities all encourage use][1].	1
[Important for the intervention to have contact details][5], even if participants appear anonymously	5
[Easy access is the key][1, 7]- [some MW may not want their email address logged][2]	1,7,2
[to increase usability][1]	1
Midwives may be incapable of putting in follow up if they are very distressed	0

	Theme	Number of times categorised
1.	Anonymised email login procedure - A helpful inclusion	18
2.	Anonymised email login procedure - An unhelpful inclusion	4
3.	Anonymised email login procedure - Anonymity may not be possible	2
4.	Undecided	2
5.	Anonymised email login procedure - Can be used to intervene	3
6.	Anonymity - Essential	2
7.	Anonymised email login procedure - Ease of use a priority	8
8.	Anonymised email login procedure - Security a priority	2
9.	Anonymised email login procedure - Should be optional	2

Do you have any additional comments you would like to share?

Comment	Themes Assigned to
no	0
[May be safeguarding issues in being able to identify participants][1]. Plus [full anonymity may pose risks to participants][1] - [intervention could be used/ abused by people posing as midwives][1].	1,1,1
[Anonymity could provide a very supportive platform.][2]	2

	Theme	Number of times categorised
1.	Anonymised email login procedure - Risky	3
2.	Anonymity - A helpful inclusion	1

10: An online intervention designed to support midwives in work-related psychological distress should prioritise an automated moderating system where 'key words' would automatically initiate a moderated response.

10.1 An automated moderating system where 'key words' would automatically initiate a moderated response

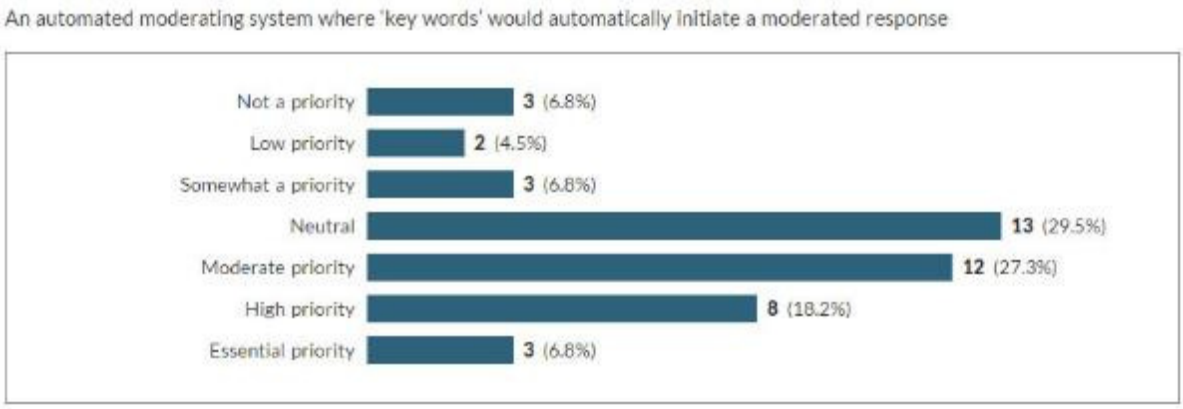
Rank value	Option	Count
1	Not a priority	3
2	Low priority	2
3	Somewhat a priority	3
4	Neutral	13
5	Moderate priority	12
6	High priority	8
7	Essential priority	3

Mean rank	4.48
Variance	2.25
Standard Deviation	1.5
Lower Quartile	4.0
Upper Quartile	5.25

Consensus Achieved = No

Minimum score = Low Priority 2 (4.5%)

Maximum score = Neutral 13 (29.5%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
Feels scary to me to think that certain words would drive a technological knee jerk reaction-if you get my drift.... Also it [signals control is not in the user's hands][2] -some research indicating that companies who appear to know more about a 'customer' than the 'customer' knows about the entity behind the IT interface [leads to suspicion and mistrust] [2....so] tricky if we are expecting someone to use this via feeling distressed.	2,2,2
[Useful][1] as certain types of experience can be responded to in a generic way	1
[I do not feel this would be supportive at all][2]	2
[good idea][1]	1

[not sure what is implied here][3]		3
would [make best use of resources][1]		1
[to prevent offensive words and spam messages being posted to the community][1]		1
[You would need to be careful that you didn't have the Microsoft word annoying paperclip pop up!][7] [The midwife might be talking about a mother expressing suicidal thoughts!!!!][7]		7,7
[Don't know enough about this to answer fully][3]. [It might work well or be a little impersonal].[4]		3,4
[May make more refined and user friendly][1]		1
This [suggests that it is robotic and not a personal response][2].		2
[Not sure if this would be perceived as surveillance][2] but [could be helpful][1]. [Tricky one!][4]		2,1,4
As mentioned before, [for suicide/self-harm support phone numbers][1]. Would [have to be phrased very carefully to make sure it comes across as supportive, rather than 'lecturing'.][7]		1,7
[Safety feature][1] and [necessary][1]		1,1
[Could be a good idea][1], [could also be annoying!][2]		1,2
This [needs to be a safe space][6] and trolling could utterly destroy that.		6
[This might be more important but difficult for me to imagine what this actually is][3, 4]...again, the [question for me is not that clear.][3]		3,4,3
[Possibly necessary][1] to filter something like swearing or naming NHS trusts etc.		1
[Could be helpful][1]		1
I understand the idea behind this but [don't think that this is always going to be appropriate][2, 7]. [Automated responses do not exude care and compassion which would be needed in some circumstances][2].		2
[Uncertain what this would look like or if it is needed][3, 4.]		3,4
I can see how this [might be helpful][1] but I think [moderated is the important work here][5].		1,5
yes, [o]		0
[Moderation and facilitation very important][5]		5
A 'one-size-fits-all' is [not appropriate][2, 7] because some peoples distress may be escalating, as identified by 'key words', and therefore a [moderated response is more appropriate][5] and may better facilitate the best follow-up		2,7,5
[Don't understand the concept of the question][3].		3
This [would have to be at an extreme level though][1], [with trigger words such as suicide leading to a moderator intervention.][7, 8]		1,7,8
In [cases where risk or harm to any party is identified][1,] or [where someone may need extra support][1]		1,1
[Not sure if this would work][4]. [Volunteer moderators likely to target better and give more appropriate responses.][8]		4,8
[Not really sure what is meant by this question][3]		3
[Not really sure what this suggests][3]		3
As I have encountered midwives who were potentially suicidal [I feel there needs to be. Safety net system in place][7]		7
	Theme	**Number of times categorised**
1.	An automated moderating system - A helpful inclusion	16

2.	An automated moderating system - An unhelpful inclusion	9
3.	An automated moderating system - Meaning unclear	8
4.	Undecided	5
5.	Moderation - Should be a priority	3
6.	Intervention - Must be a safe space	1
7.	An automated moderating system - Must be appropriate	6
8.	Moderation - Should be a human response	2

Do you have any additional comments you would like to share?

Comment		**Themes Assigned to**
no		0
Also [needs facility for any participant to flag concern][1] about a post - might be important in safeguarding		1
	Theme	**Number of times categorised**
1.	An automated moderating system - Should allow users to flag concerns	1

11: An online intervention designed to support midwives in work-related psychological distress should prioritise an interface which resembles and works in a similar way to current popular and fast pace social media channels: e.g. Facebook

11.1 An interface which resembles and works in a similar way to current and fast pace popular social media channels: e.g. Facebook

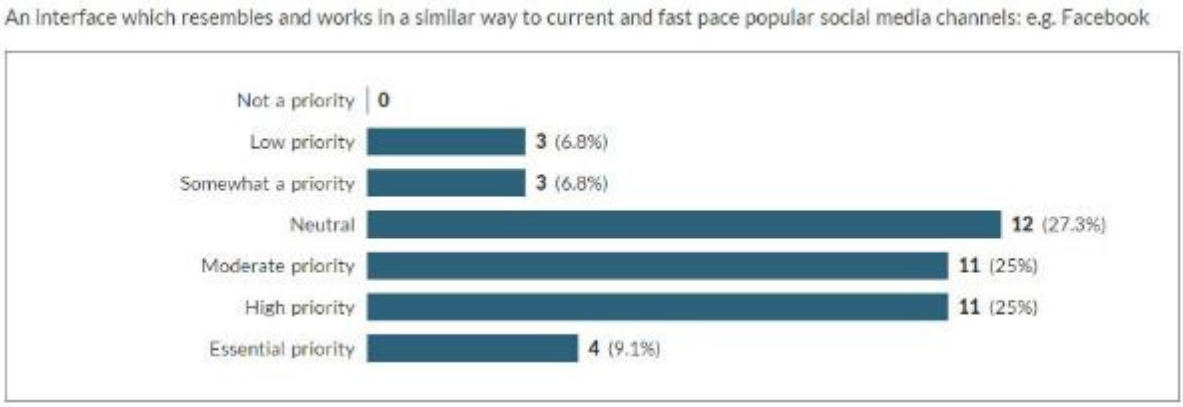
Rank value	Option	Count
1	Not a priority	0
2	Low priority	3
3	Somewhat a priority	3
4	Neutral	12
5	Moderate priority	11
6	High priority	11
7	Essential priority	4

Mean rank	4.82
Variance	1.74
Standard Deviation	1.32
Lower Quartile	4.0
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Not a Priority 0 (0%)

Maximum score = Neutral 12 (27.3%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
[This puts the attention control in the user's hands][1]	1
[User friendly and familiar to most midwives][1]	1
[people are used to this interface][1]	1
[Not sure that's the model][4]	4
they [could similarly fear views being aired on social media] [2] but the [format is user friendly][1]	2,1
May [aim accessibility][3]	3
[for user friendliness][1]	1
[not necessarily important][2]	2
I am [not a Facebook/social media fan][2] but I know that [others are.][1]	1,2
[There are different reasons for accessing this tool than social media such as Facebook][2]	2
it is the [ease of use which is essential][3] [not its similarity with other media as not everyone would be as familiar][2]	3,2
[Not all are familiar with those media channels][2]	2
[Popular modem][1]	1
Facebook is easy to use and many midwives use it, so [easy transition for midwives wanting support.][1]	1
[Easy to use and connect with][1]	1
[This could work][1] and [relate well with the younger generation.][1]	1,1
It sounds like [quite a good idea][1]	1

Facebook has pros and cons... the thought of a similar look I am [not sure][4] is the way forwards...though [FB def. better than twitter!][1]		4,1
[Needs to be independent of to avoid confusion][2]		2
[It is a tried and tested well used, well-loved platform for quick and easy communication.][1]		1
[Not sure][4] this would add value as content so different		4
[Most people are familiar with this type of interface][1]. It needs to be clean and [simple to use][3] to make it as easy as possible for the user.		1,3
Not all midwives use social media so [not certain][4] that this is necessary. Also there are many forms of social media and how do you choose which one to use. [Some may have a distrust of social media][2].		4,2
A system design that is familiar, [easy to use and user-friendly is required][3] - [so yes].[1]		1,3
I do not use Facebook but its [design looks user friendly][1]		1
This would reflect the modern means of communication and therefore [be 'approachable'][1].		1
[No all users may be familiar with social media][2], however a [user friendly platform is essential][3].		3,2
[Ease of use][3] and familiarity for most users will encourage engagement. However, I would not wish it to be as fast paced as Twitter, for example, as threads get lost and interactions are historical within hours.		3
[Not necessarily FB][2, 4] but a [user friendly format is essential][3]		2,4,3
[Interventions that are intuitive][3] - because familiar - are more likely to be used.		3
it [needs to be easy to use][3]		3
I think there is emerging work on the use of FB as a social tool that would [support a different interface]2. People connect FB with social connection - often have a FB identity linked to their personal lives and families- where FB has been used in education student have struggled to manage their student identity within FB as different from their personal identity with blurring across the 2 - leading to [risk of inappropriate non-professional behaviour within the FB environment][2]		2,2
[usability is important][3] but the [platform should be unique][2] and therefore have clear links and identity to being a support platform [to prevent confusion and blending of platforms][2] and purpose		3,2,2
[not sure what format is best, can't recommend][4]		4
[Because]1 [distressed people need ease of usage][3]		1,3
	Theme	**Number of times categorised**
1.	An interface which resembles and works in a similar way to current popular and fast pace social media channels - Helpful	19
2.	An interface which resembles and works in a similar way to current popular and fast pace social media channels - unhelpful	14
3.	Usability should be the priority	11

4.	An interface which resembles and works in a similar way to current popular and fast pace social media channels - Undecided	6

Do you have any additional comments you would like to share?

Comment		**Themes Assigned to**
[Familiarity would make it more appealing and midwives more likely to engage][1]		1
[I think work and personal Facebook should be kept very separate][3]		3
Consideration would also need to be given to [ensuring that the interface was still user friendly][4] to those who may not be familiar with using the more modern means of communication		4
Popular anonymised discussion fora [may be better exemplars than social media like Facebook][2]		2
	Theme	**Number of times categorised**
1.	An interface which resembles and works in a similar way to current popular and fast pace social media channels - Helpful	1
2.	An interface which resembles and works in a similar way to current popular and fast pace social media channels - unhelpful	1
3.	Question - Misunderstood	1
4.	Usability should be the priority	1

12: An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of midwives from around the world

12.1 The inclusion of midwives from around the world

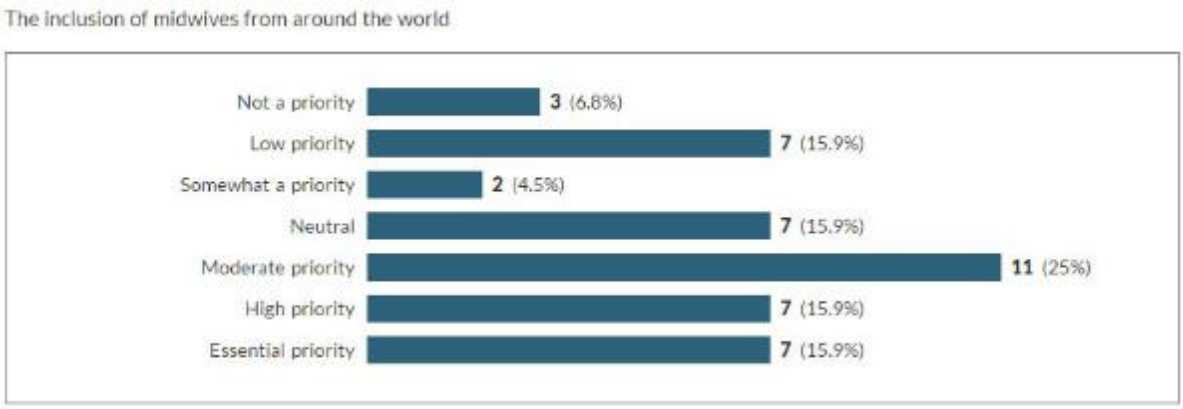
Rank value	Option	Count
1	Not a priority	3
2	Low priority	7
3	Somewhat a priority	2
4	Neutral	7
5	Moderate priority	11
6	High priority	7
7	Essential priority	7

Mean rank	4.48
Variance	3.39
Standard Deviation	1.84
Lower Quartile	3.0
Upper Quartile	6.0

Consensus Achieved = No

Minimum score = Not a Priority 3 (6.8%)

Maximum score = Moderate priority 11 (25%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
[Don't have a point of view][3]	3
The issues are similar all over the world; [sharing with international colleagues would help]1 people realise they are not alone	1
[not always possible really][4]	4
its [always useful][1] to review how other cultures might see the problem.	1
I think to be meaningful it [has to begin small][2] and expand...difficult to get context if in other countries	2

[Would be valuable][1] to be global	1
[could be useful][1] but [UK midwives less likely to be able to relate][2] to situations that non UK midwives are experiencing	1,2
Needs to be done carefully as [different countries have different laws etc.][4]. If you did this then the way it looked and the reminders about professional conduct and codes would be even less important	4
The platform [should be open to all midwives.][1]	1
I have [no preference][3] to including midwives from around the world	3
[What happens around the globe is very different][2] in terms of work-related distress and remember not all cultures accept psychological distress	2
[problems n systems are different][2, 4] in different parts	2,4
[Undecided about this][3] as there may be very context specific issues which affect midwives from different countries...or not	3
different working conditions and circumstances [may not translate][2] when discussing the effects of the role	2
[Global village gives perspectives][1]	1
[Yes - good idea][1], but perhaps [concentrate on getting support for UK midwives right first][2], as midwives from different countries may have very different practice styles/formats and therefore [different needs][2, 4].	1,2,2,4
[Midwives no matter where they work, come across similar issues causes psychological distress][1]	1
Access to support is limited overseas. [You may need to consider the format (i.e. videos as slow internet overseas is an issue)][4]	4
That's really interesting! I would imagine that it [might make things more difficult][4] to support each other with in that you don't know how the disciplinary/ legal services function in different countries but it could be [a brilliant platform for learning and reaching out.][1]	4,1
[UK based midwives have different issues to MWs in France, Africa, USA] [2]	2
By providing a tool for all [we can support one another][1]	1
[We can learn a lot from each other.][1]	1
Think it [should be UK only][2] as practice varies so much	2
[I wouldn't necessarily rate this either way][3], hence 'Neutral'. it [should be available for all to use][1] if they want it but I wouldn't say it is essential.	3,1
[We can learn from each other][1] - and [all midwives need to be able to access this][1] as it is a worldwide issue. We are an international midwifery family - and facing similar issues no matter where we work.	1,1
[Lovely idea][1] but the role, systems and culture of midwives' work is [not the same in every country]2 and for this reason it would be [more appropriate for different countries to adopt their own systems.][2]	1,2,2
[Global insights very valuable][1]	1
While the role of a midwife may be similar around the world, there are many cultural differences that are [better addressed by cultural specific programs][2]	2
It is [more important to assist health professionals in this country in the first instance.][2]	2

[Users from different countries may have specific requirements of the platform][2]. Plus, [legal issues will vary from country to country and will become a minefield.][4]	2,4
On reflection, this is [probably a good idea][1] but it [generates additional complexities e.g. over safeguarding][4]	1,4
once you open these things it will be targeting globally	0
this could be [difficult to achieve][4]	4
[depends on local context and culture][3], [cost, resources, facilitation etc.][4]	3,4
[Not sure][3] if this would be preferable to a format that is appropriate to a specific culture/country	3
Most midwives feel they are the only one and very isolated, [to know it is a global phenomenon would be reassuring][1]	1

	Theme	**Number of times categorised**
1.	The inclusion of midwives from around the world - Helpful	18
2.	The inclusion of midwives from around the world - unhelpful	14
3.	The inclusion of midwives from around the world - Undecided	6
4.	The inclusion of midwives from around the world - Challenging to facilitate	10

Do you have any additional comments you would like to share?

Comment	**Themes Assigned to**
Such a resource is [valuable to all][1] - [other countries may not have the infrastructure/resources to develop such a resource][3]; would be a [good global village health promoting action][1]	1,3,1
[Global perspectives are always valuable][1] and [can offer valuable learning or support opportunities.][1]	1,1
[Happy to affiliate][1] our GlobalVillageMidwives to this online support modem	1
Maybe not so much support as [learning and networking?][1]	1
In developing this platform for a specific group of midwives, a [future goal may be to adapt it][2] for other specific groups once this project is functioning and any difficulties have been eliminated	2
I would suggest developing the Platform for one country and then [enabling it to be adapted if necessary][2] to roll out to other countries. Maybe countries with similar requirements and regulations could be grouped to enable an international interaction.	2

	Theme	**Number of times categorised**
1.	The inclusion of midwives from around the world - Helpful	6

2.	The inclusion of midwives from around the world - Could be made fit for purpose	2
3.	The inclusion of midwives from around the world - Challenging to facilitate	1

13: An online intervention designed to support midwives in work-related psychological distress should prioritise proactive moderation (i.e., users are able to block unwanted content and online postings are 'pre-approved')

13.1 Proactive moderation (i.e, users are able to block unwanted content and online postings are 'pre approved')

Rank value	Option	Count
1	Not a priority	1
2	Low priority	2
3	Somewhat a priority	2
4	Neutral	3
5	Moderate priority	9
6	High priority	15
7	Essential priority	12

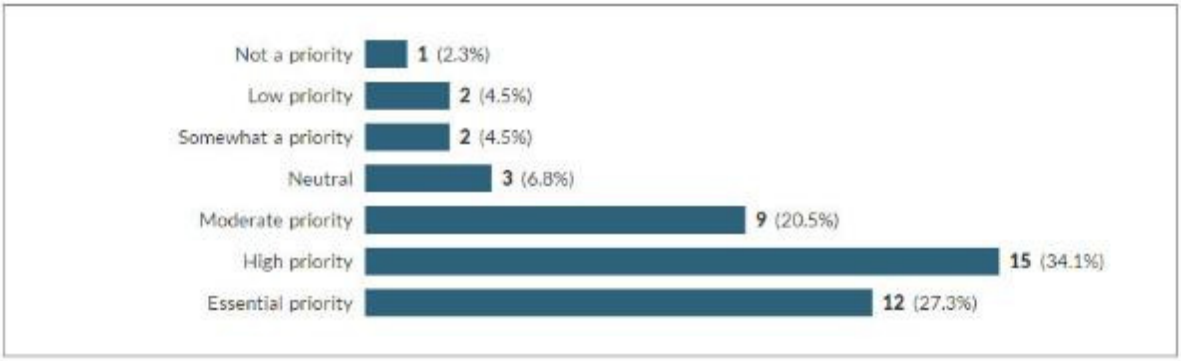
Mean rank	5.5
Variance	2.2
Standard Deviation	1.48
Lower Quartile	5.0
Upper Quartile	7.0

Consensus Achieved = Yes (High/Essential priority) 61.4%

Minimum score = Not a Priority 1 (2.3%)

Maximum score = High priority 15 (34.1%)

Proactive moderation (i.e, users are able to block unwanted content and online postings are 'pre approved')



Thematic analysis of open text responses

Why did you choose this rating of priority?

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Comment	Themes Assigned to
Careful moderation appears to [increase the positive identity impacts][1] from belonging to a network, particularly when online-but must be noted that careful moderation involves mostly support and responding to what people post-not blocking things-which is likely to be an NHS style- [so being clear about the nature of moderation is important][4]	1,4
[Saves unwanted and inappropriate content being shared][1]; [ensures integrity in the system][1]	1,1
[needs moderation][1]	1
[Probably necessary][1] but a massive job for someone.	1
[within reason][1]… [depends on what is envisaged would be block able][4]	1,4
Midwives already have a code of practice so this [may not this necessary][2]	2
the [user shouldn't have to be exposed too offensive [5]	5
[pre-approval is always a worry][2]. This means the person posting has to wait until the moderator approves the post before she gets help and also [unwanted content is in the eye of the beholder!][4]	4
Platform users are likely to be highly sensitive and [do not want to be accessing material that will not be helpful][4].	4
Ensure the [site is not misused or deviates from purpose][5]	5
[Needs a control centre][5]	5
[I don't really understand what's meant by 'pre-approved posting'?][3] But used [should have the ability to moderate somewhat themselves][4], otherwise [trolling and spam may be missed][5].	3,4,5
[This is important][1] to prevent abuse of the intervention and abuse within it	1
[Yes][1], and this would personalise the platform.	1
[Pre-approval would slow things down a lot][2] and might make things [feel a little patronising or stressful][2] when you want to reach out to someone immediately who you feel may need that. However, there should be [no space for abusive, cruel or bullying content][5]. That would not make it a safe space. Proactive moderation, [yes][1], [pre-approval, no][2, 4].	2,2,5,1,2,4
[No advertising from formula companies for a start][4]...nor Bounty. Ethical considerations v important.	4
[Not necessary][2]	2
[To reduce spam or solicitation from unwanted parties][1].	1
[This is essential][1] so that any illegal activities are identified before being made public and the user incriminates themselves. [A private discussion could then be had between the moderators and the user if necessary][4]. It will [also prevent any unwanted and inappropriate content being posted][1].	1,4,1
[Think it is important][1]	1
This is [common sense to me][1]. It [must be moderated][5] by a person/people [who understand the issues][4]. There is potential for massive breeches in confidentiality etc. so it [has to be moderated][5].	1,5,4,5
[on line forums could be harmful if not "policed"][1, 5]	1,5
I think [good moderation is important for all][1, 5]	1,5
This would [provide a level of control][1] to the user and [allow them to determine some of the content][1].	1,1
[Need more detail as to what is meant by pre-approved][3] to answer question fully.	3

Users [should be able to 'block' other users if they are feeling exposed, i.e. to their supervisors at work][4]. However, I [do not like the idea of moderator approval being required][2] before posts can be made as this [delays the interaction and places a further level of burden on the moderators][2].		4,2,2
Surely that U.S. [A form of censorship?][2]		2
[Important measures in protecting participants][1]. Other online fora have these in place. Lessons to learn from those.		1
it is difficult to answer questions as specific as this when the [proposed intervention and context is undecided][4]		4
[For safety][1]		1
[Need to feel they retain some control][1]		1
	Theme	**Number of times categorised**
1.	Proactive moderation - Helpful	21
2.	Proactive moderation - Unhelpful	8
3.	Proactive moderation - Meaning unclear	2
4.	Proactive moderation - Must be tailored to suit context	11
5.	Moderation - essential	9

Do you have any additional comments you would like to share?

Comment		**Themes Assigned to**
Sometimes trolling behaviour or mentally unstable users may cause additional distress [if there was no block button][1] or [previewing of postings][1]		1,1
Moderation of postings [would be recommended][1] to eliminate the occasional 'rant' inappropriate statement that may be posted		1
We must respect that people accessing the Platform will be professionally trained and registered and therefore [should be less likely to post anything inappropriate][3].		3
Might [not need to pre-approve postings][2] - ability for users to flag content to moderators [might be enough][2].		2,2
moderated discussion could be highly resource intensive - it would be easier therefore to answer questions like this in context- I think people may appreciate an on line chat facility which needs to be in real time [rather than pre-approved posting][2] with responses as the moment could often be lost by the time the person comes back to the site		2
	Theme	**Number of times categorised**
1.	Proactive moderation - Helpful	3
2.	Proactive moderation - Unhelpful	3
3.	Midwives - Able to self-moderate	1

14: An online intervention designed to support midwives in work-related psychological distress should prioritise reactive moderation (i.e., users are able to report inappropriate content to a system moderator for removal)

14.1 Prioritise reactive moderation (i.e, users are able to report inappropriate content to a system moderator for removal)

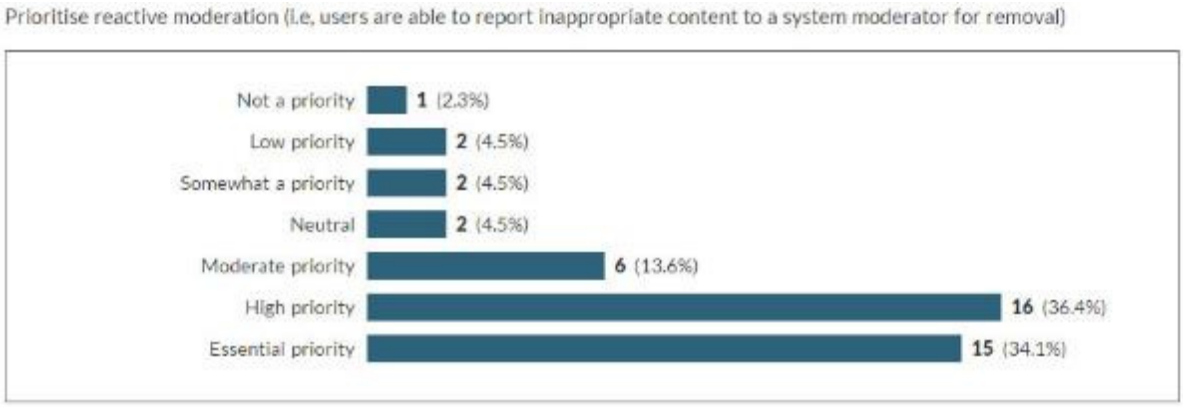
Rank value	Option	Count
1	Not a priority	1
2	Low priority	2
3	Somewhat a priority	2
4	Neutral	2
5	Moderate priority	6
6	High priority	16
7	Essential priority	15

Mean rank	5.68
Variance	2.26
Standard Deviation	1.5
Lower Quartile	5.0
Upper Quartile	7.0

Consensus Achieved = Yes (High/Essential priority) 70.5%

Minimum score = Not a Priority 1 (2.3%)

Maximum score = High priority 16 (36.4%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes Assigned to

The issue of blocking is an important concern-symbolic impact-and issues around authority and also online hazing. These question for me are not so much about priority but [represent serious design challenges][3] for the provision of psychologically savvy online support-worth checking out the recent research about online CBT and its limitations	3
[Essential][1] to eliminate trolling or inappropriate use of system	1
an [important aspect][1]	1
it's hard to imagine why users would do this [but][1]....	1
if breach of confidentiality [yes][1]	1
as above (the [user shouldn't have to be exposed to offensive postings][1])	1
if you had details rules of engagement then I suppose this [might work][1] but again inappropriate is [in the eye of the beholder][3] so this would need to be done carefully	1,3
[Feeling unable to report inappropriate material adds to a low sense of self-esteem][1].	1
Yes, I think there [needs to be some recourse for reporting inappropriate content][1]	1
[Some are unable to distinguish between what is appropriate and what is not][3]	3
This [ensures professionalism][1] and [quality control /standards][1]	1,1
I think having a few moderators with increased power to remove posts etc. is a [good idea][1] as in my experience running a group of about 7000 users, it [works well in keeping posts supportive][1].	1,1
[Moderators may not see everything][3] and there [needs to be a way to remove posts if they are inappropriate][1]	3,1
This is an [essential feature][1]. Users will be in an emotionally vulnerable state and [need a robust form of protection from trolls and bullies][1].	1,1
[I don't feel that it is necessary][2] [but Maybe][1] users would post inappropriately in the heat of the moment when looking for advice	2,1
This [works well][1] on other forums.	1
I think proactive (Q13) is [better than reactive moderation][2]. Sometimes things are posted and it could be hours/days before it is removed and potential [damage is already done][2].	2,2
Would [prefer to have a proactive approach][2] rather than reactive.	2
[Yes this is needed][1] in addition to proactive moderation	1
Some [comments may be inappropriate and cause distress][1], making the user feel powerless and perhaps unwilling to continue.	1
[Extremely important][1] to reduce additional stress.	1
This [would provide a safety net][1] which protects against not having pre-moderation for posts, as per question 14.	1
[Definitely][1]. [Important protective feature]1. [Needs clear and transparent criteria][3]	1,1,3
[If the site doesn't work for the individual it will not be used][3]	3

	Theme	Number of times categorised
1.	Reactive moderation - Helpful	23
2.	Reactive moderation - Unhelpful	4
3.	Reactive moderation - Design challenges	6

Do you have any additional comments you would like to share?

Comment		Themes Assigned to
same as previous question (moderated discussion could be [highly resource intensive][3] - it would be easier therefore to answer questions like this in context- I think people may appreciate an on line chat facility which [needs to be in real time][1] rather than pre-approved posting with responses as the [moment could often be lost by the time the person comes back to the site][2])		3,1,2
	Theme	**Number of times categorised**
1.	Reactive moderation - Helpful	1
2.	Reactive moderation - Unhelpful	1
3.	Reactive moderation - Design challenges	1

15: An online intervention designed to support midwives in work-related psychological distress should prioritise 24/7 availability of the platform

15.1 24/7 availability of the platform

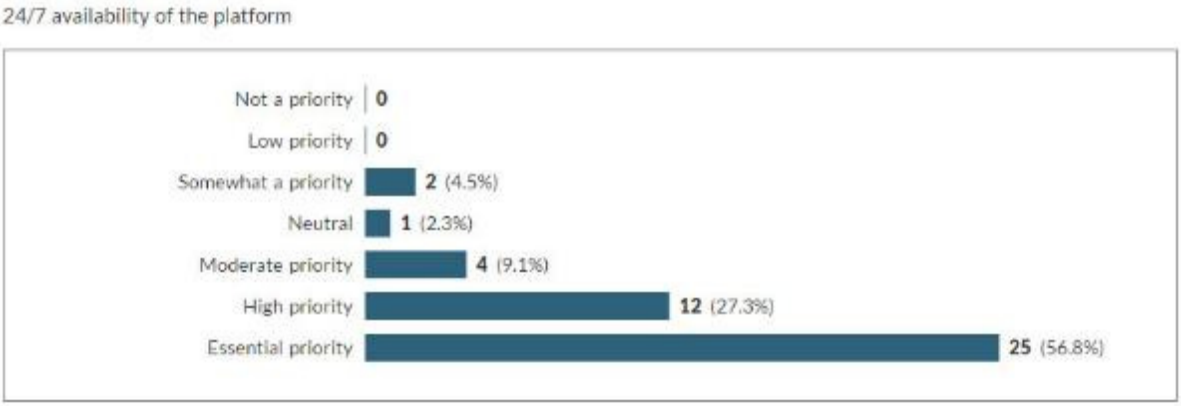
Rank value	Option	Count
1	Not a priority	0
2	Low priority	0
3	Somewhat a priority	2
4	Neutral	1
5	Moderate priority	4
6	High priority	12
7	Essential priority	25

Mean rank	6.3
Variance	1.07
Standard Deviation	1.04
Lower Quartile	6.0
Upper Quartile	7.0

Consensus Achieved = Yes (High/Essential priority) 84.1%

Minimum score = Not a Priority/Low priority 0 (0%)

Maximum score = Essential priority 25 (56.8%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
[I don't know enough][2] about the working patterns of midwives to comment	2

Many midwives work night duty; distress often keeps people awake at night; having a resource to communicate with 24/7 [may be lifesaving][1]	1
24-hour access is [essential][1]	1
[well if its global?][1]	1
they [may seize the moment if 24/7][1] and [otherwise not bother once crisis has past][1]	1,1
[so that there is support whatever the time of day or night][1]	1
Why would it close??!! Especially if you are planning to make it open internationally it [needs to be available 24/7][1]	1
Insomnia and night time worry are common and the platform needs to reflect awareness of this and [be available][1] to support.	1
We work across the 24hr period, [would be good][1] to access service when needed and not have to wait until shift pattern allows convenient action	1
with midwives working 24/7 this is [essential][1]	1
[many problems are worse in the hours of darkness][1]	1
Our work involves 24/7 care [We need to self-care 24/7][1]	1
[Care given by midwives is 24/7 so a support tool would have to be also.][1]	1
Time zones obviously vary and if it is a global intervention it [needs to be available 24/7][1]	1
[Shift work!][1]	1
Because when you are psychologically distressed, sleep may not come easily and [the time when you need support the most may be at a particularly unsociable hour][1].	1
It is [imperative][1] to be accessible	1
It is [essential that it is 24/7!][1] Slightly [useless otherwise][1] as midwives like the general public access online mediums all times of the day, plus by the inclusion of international midwives it would [need to be to allow for time differences][1].	1,1,1
[People expect 24/7 availability][1] of any websites	1
This is [essential][1] for users who work in healthcare due to the 24hr service. 3am in the middle of a night shift can be a lonely place if you are needing support!	1
If it was available internationally to all midwives who live in different time zones it would be more [valuable to have it available 24/7][1]	1
This would be [ideal.][1]	1
this is [crucial][1] if staff can access support when they need it	1
[We work all hours, 24/7][1], public holidays too	1
[Midwives provide 24-hour service; they need the same][1]. Also, distress needs to be addressed as it arises	1
[Essential][1] due to differing shift patterns and the individuality/unpredictability of when someone may require/seek help	1

[Stress and emotional responses happen 24/7, and waiting for the support Platform to open during certain hours may add to the stress being felt][1].	1
[Needs to be available whenever][1] people want to participate and fit all shift patterns	1
[midwives work 24/7][1] plus [if it's going to be global][1]...	1
people need help when they log in and that [can be any time][1] - [particularly important if making worldwide][1]	1
[Needs to be available at all times][1] as the lows come at all times	1

	Theme	**Number of times categorised**
1.	24/7 availability - Helpful	35
2.	24/7 availability - Undecided	1

Do you have any additional comments you would like to share?

Comment	**Themes Assigned to**
if global [this will be essential][1]	1
the biggest thing [midwives lack is time][3] - over worked stressed midwives feel over whelmed - they often know about the availability of counselling. relaxation strategies, can seek current web based support interventions like those offered on mindfulness web sites - they can have wellness apps on their phones, daily inspirational messages etc. - what they consistently say is there is [no time][3] - there is also the trust issues and [need for confidentiality][2]- so if they have that window of opportunity when they are looking for support [24-hour access should be available][1]	3,3,2,1

	Theme	**Number of times categorised**
1.	24/7 availability - Helpful	2
2.	Midwives - Need confidentiality	1
3.	Midwives - Have no time	2

16: An online intervention designed to support midwives in work-related psychological distress should prioritise the implementation of an initial simple user assessment using a psychological distress scale to prompt the user to access the most suitable support available

16.1 The implementation of an initial simple user assessment using a psychological distress scale to prompt the user to access the most suitable support available

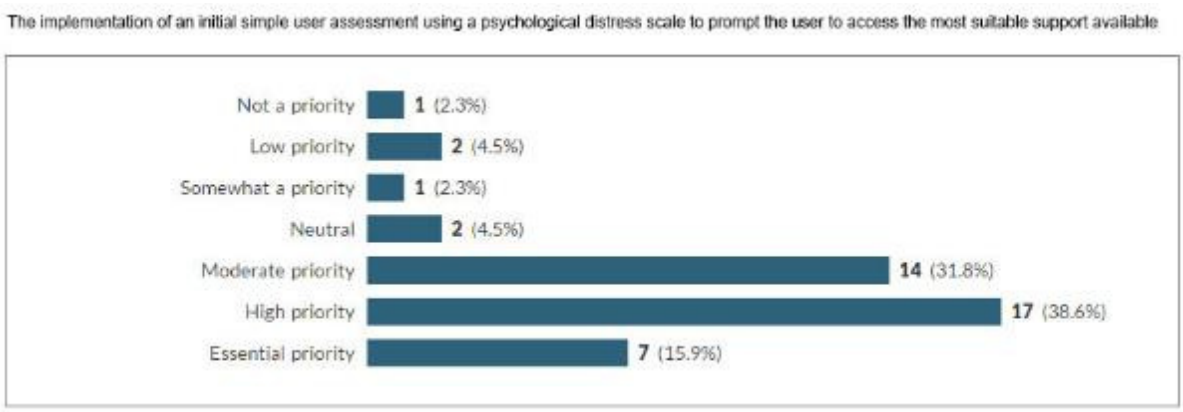
Rank value	Option	Count
1	Not a priority	1
2	Low priority	2
3	Somewhat a priority	1
4	Neutral	2
5	Moderate priority	14
6	High priority	17
7	Essential priority	7

Mean rank	5.39
Variance	1.78
Standard Deviation	1.34
Lower Quartile	5.0
Upper Quartile	6.0

Consensus Achieved = Yes (Moderate/High priority) 70.4%

Minimum score = Not a Priority/Somewhat priority 1/1 (2.3%/2.3%)

Maximum score = High priority 25 (38.6%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
This is [likely to be helpful][1] -and they are freely available online anyway-but [generally they don't say what help you need but just indicate that help is needed?][3]	1,3
[Enables triage][1]	1
definitely formalizing the input.	

[not sure who benefits by this...who is monitoring?][3] [what is trigger for contact...what if 24/7 use then who man's][3] (e.g. sever distress leaves monitor distressed when later reads post) … [what is done with individual or accumulated information?][3]	3,3,3
[to enable the user to obtain the most appropriate source of support][1]	1
[Yes this is a good idea][1], but [how often would you administer it though??][3] [Once, on enrolment would be too little, every day on log in too much![3]	1,3,3
Again this [could be impersonal][2], [I am not sure][4]	2,4
It's [good to recognise and advise the appropriate pathway of continued care as quickly as possible][1]	1
If one exists that [would be excellent,][1]	1
I think it's [best to have this as an option][5]	5
[Accessibility is important] [3]	3
[Sounds like strong support.][1]	1
This [could alert moderators to high risk people who need support immediately][1]	1
[Yes - quick and simple][1]	1
A tool as this [can help the user to address their own state properly][1] and [may prompt them to seek help][1] which they hadn't realised that they were a candidate for before.	1,1
seems like [a sensible idea][1]	1
All [directed help is useful][1] as initially you don't know where to start looking for help	1
[High priority][1] as very distressed may need urgent face to face support	1
Tools such as PHQ9 and GAD7 for self-assessment [would be a beneficial tool][1] to have online with clear links to external support such as IAPT etc.	1
This [may be able to guide the midwife on who/what may fulfil her needs at the time.][1]	1
This is a [simple safety feature][1] which [could really help to increase midwives' self-awareness][1] and [signpost them to appropriate support.][1]	1,1,1
Seems a [good idea][1]	1
This [provides the user with an insight into the level of distress they are managing - a reality check][1]. Some may be resistant to other supports if they do not have this awareness	1
[Although reliability and validity of answers cannot always be assured.][3]	3
[Important][1], as some people will not realise the severity of the stress and anxiety they may be feeling. This [may encourage users to seek help from a GP where required.][1]	1,1
[Might be helpful][1] if scale is appropriate. [May need to be tested][3]	1,3
that appears to be [a good idea][1]	1
[not enough context really][3] to [make an informed decision on this one][4]	3,4
[Depends on the goals of the platform][3, 4] - not all users will be enthusiastic about filling out a form	3,4
I found most midwives underplay what is happening to them and [would probably not self-evaluate well therefore][2]	2

	Theme	Number of times categorised
1.	Simple user assessment - Helpful	25
2.	Simple user assessment - unhelpful	2
3.	Simple user assessment - Context for use required	11
4.	Simple user assessment - Undecided	3
5.	Simple user assessment - Should be optional	1

Do you have any additional comments you would like to share?

Comment		Themes Assigned to
[which scale - which aspect of distress] [1] [prompt to what] [1] [at this point no decision made as to whether there is a chat facility, real time support peer support, legal advice etc.][1]		1,1,1
	Theme	**Number of times categorised**
1.	Simple user assessment - Context for use required	3

17: An online intervention designed to support midwives in work-related psychological distress should prioritise the gathering of anonymised data and concerns from users, only with explicit permission, so that trends and concerns may be highlighted at a national level.

17.1 The gathering of anonymised data and concerns from users, only with explicit permission, so that trends and concerns may be highlighted at a national level.

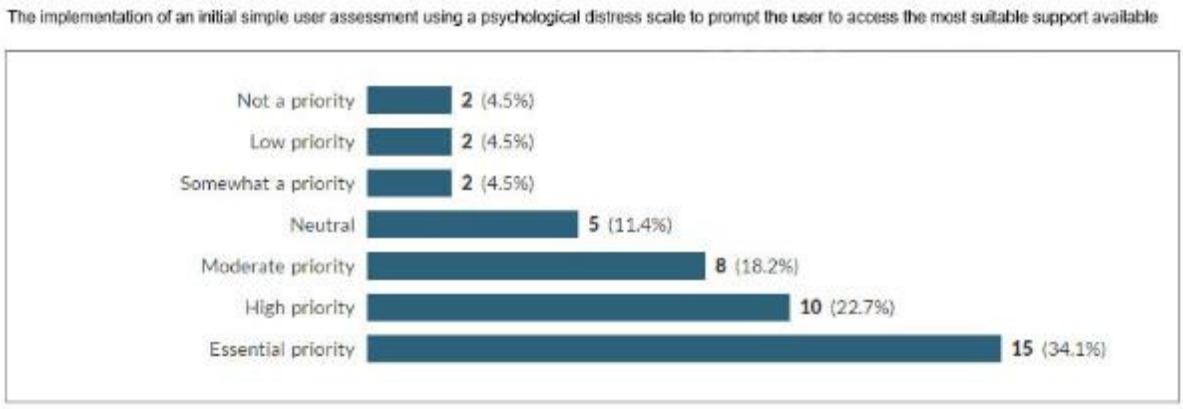
Rank value	Option	Count
1	Not a priority	2
2	Low priority	2
3	Somewhat a priority	2
4	Neutral	5
5	Moderate priority	8
6	High priority	10
7	Essential priority	15

Mean rank	5.39
Variance	2.87
Standard Deviation	1.7
Lower Quartile	4.75
Upper Quartile	7.0

Consensus Achieved = No

Minimum score = Not/Low/Somewhat a priority 2/2/2 (4.5%/4.5%/4.5%)

Maximum score = Essential priority 15 (34.1%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
[Uncomfortable about mixing research with intervention][1]. Hard to know what sample is so [likely to be written off as unrepresentative][2]. [Service use figures make sense][1] but anything that treats the visits as a sample [I would be concerned about][2].	1,2,1,2
[Critical that trends are identified][1] and strategies developed to address those trends at a national level	1
this [might be useful][1, 4]	1
[Not sure there's a problem][1, 4] if its "anonymised" unless it been in the press in an identifying way.	1,4
if anonymised there is [potential for mischief][2] so [can't always be sure each post is a bonafide case][2]	2,2
this [needs to be clarified][1] when first logging in	1
[to raise awareness][1] of the present lack of support for midwives and how this may impact on their health	1
Hmm well if you collect data by convenience (only those who provide permission) rather than everyone then [you will not be able to determine trends!!!][2]	2
[Providing that it is anonymous][3], [data should be available at every level to highlight trends and concerns.][1]	3,1
To highlight the extent of the problems [would be excellent][1]	1
[Yes, this would be beneficial][1] to generate evidence to inform service provision, organisational change, supportive structures etc.	1
[Vital][1] for mapping future change, education research	1

[Good idea][1] to collect evidence for pushing for better support for midwives. But would have to be [guaranteed anonymously gathered][3], as otherwise midwives may not want to open up.	1,3
[Essential to highlight the potential degree of distress in our industry][1]	1
This [could put some people off][2] if they knew their information, issues and comments are used for research	2
[Please- anything that helps][1] the state we're in to be widely recognised [would be so welcome.][1]	1,1
[we need more data][1]. [absolutely fundamental][1].	1,1
[Useful to monitor the trends][1] and looking into ways to reduce	1
I [don't think this should be necessarily a goal][2], but through a democratic decision the forum users could decide this at a later date depending on the issues raised.	2
[May be biased][2] - [would be good to compare answers with those given by non-distressed midwives][1]	2,1
[Statistical data to facilitate change in staff support systems in the NHS is essential][1]	1
Again - this [should be international][1] so that ICM could see what was affecting midwives and where, and are they similar issues and how could they support/deal with it.	1
[This would be very useful][1]	1
[Very important][1], [this will offer valuable information][1] and [can be shared in a bid to make improvements][1]	1,1,1
This management of the data will be providing a basis for the most targeted measures [to minimise future distress][1]	1
[Extremely vital][1] given the increased pressures on the NHS as a whole.	1
[It's a nice idea]1, but I think in practice, the permission may be varied, hence the results of [any national trend finding will be skewed.][2]	1,2
[Anonymised stories themselves can inform policy making][1]. [Data gathering likely to put off participants.][2]	1,2
[any data collection should be part of an ethics supported study][5] and [separate informed consent should be obtained on each occasion][5]	5,5
This is a wide spread problem and there is a lack of openness about it that [such information would dispel][1]	1

	Theme	**Number of times categorised**
1.	The gathering of anonymised data and concerns - Helpful	30
2.	The gathering of anonymised data and concerns - Unhelpful	10
3.	Midwives - Require anonymity	2
4.	The gathering of anonymised data and concerns - Undecided	1
5.	The gathering of anonymised data and concerns - Requires ethical consideration	2

Do you have any additional comments you would like to share?

Comment		Themes Assigned to
[this may then drive services forward to implement change][1]		1
[if anonymised do you need consent?][4]		4
[confidentiality is vital][3] - [anonymised data is important][1] but [reporting would be biased as we would only be reporting distress data with no denominator][2]		3,1,2
	Theme	**Number of times categorised**
1.	The gathering of anonymised data and concerns - Helpful	2
2.	The gathering of anonymised data and concerns - Unhelpful	1
3.	Midwives - Require confidentiality	1
4.	The gathering of anonymised data and concerns - Requires ethical consideration	1

18: An online intervention designed to support midwives in work-related psychological distress should prioritise access for a midwife's friends and family members

18.1 Access for a midwife's friends and family members

Rank value	Option	Count
1	Not a priority	17
2	Low priority	8
3	Somewhat a priority	1
4	Neutral	9
5	Moderate priority	8
6	High priority	1
7	Essential priority	0

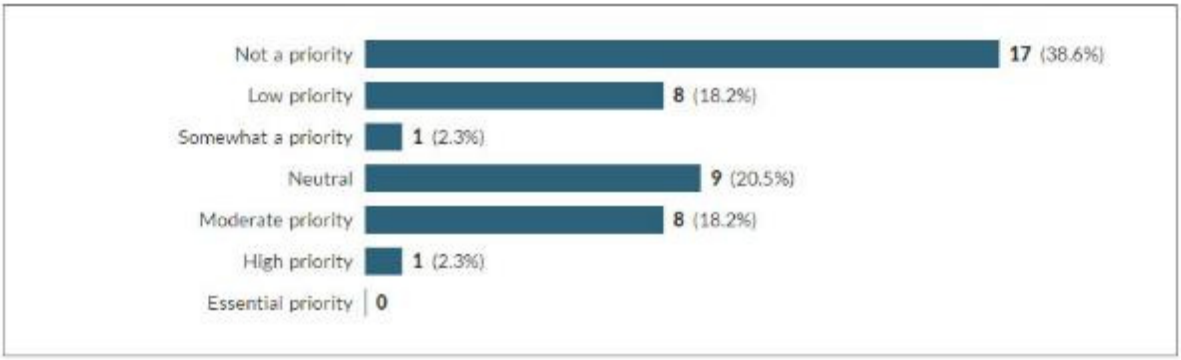
Mean rank	2.68
Variance	2.76
Standard Deviation	1.66
Lower Quartile	1.0
Upper Quartile	4.0

Consensus Achieved = No

Minimum score = Essential priority 0 (0%)

Maximum score = Not a priority 17 (38.6%)

Access for a midwife's friends and family members



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	**Themes Assigned to**
Link to purpose...and [if it's online it would be likely that anyone could access] [4] - and [if identifiers are required it won't get used anyway][4]	4,4
[just if she gives her consent][4]	4
[Not sure about this one][3] as [anonymity would be compromised][4]	4,3
[It is for the midwife][2]	2
[that's not anonymous!][4]	4
[to what end?][6]	6
[not sure how this would be beneficial][2, 3]	2,3
[could be useful][1] but I would [need to know more about how this would work][6] before being able to prioritise it. e.g. [family members would not be bound by the same code of ethics and professional conduct so this would need to be thought through][4].	1,6,4
This [might be useful][1] for some midwives but it also [could be overrun by too many extra people.][2]	1,2
[Unsure about this][3] [don't have enough information.][6]	3,6
[I can't see how this would work exactly][3] [in terms of keeping things anonymous][4], [but perhaps][1].	3,4,1
Friends and family need to be able to support a midwife but this [could be limited access][5]	5
[Maybe good][1] if a serious issue comes up.	1
There [could be a friends and family section][5] where they could ask for support with coping with their midwife and how best to help/ raise concerns. But this should be an add on rather than a main feature and separate from Midwife- only areas.	5
[nope...only for midwives please.][2]	2
[Should be only for Midwives][2] and private to avoid fears of incrimination as well as being a forum to speak honestly	2
[Absolutely not!][2] Would reduce the level of openness and honesty as some distress maybe attributed to friends and family.	2
[Not sure how helpful this would be][3]	3

[I'm not sure if I would class this as a priority or not][3]. The home page could include good help and support links and contact numbers of agencies that could offer help. I would [worry about the confidentiality of the midwife][4].		3,4
[I see this as being midwife specific.][2]		2
[I don't think it can be all things to all people][2] - it may be [better concentrate on being a good resource for midwives][2]. [Maybe just some signposting for friends and family?][5]		2,2,5
[I'm not sure of the benefit of this][3]		3
While family and friends provide important support, [the needs of the midwife should remain paramount.][2]		2
Maybe an option overtime, but [feel priority should be given to health professionals in the first instance][2] and following audit and evaluation of platform.		2
This [would be a support tool for the midwife][2], and being amongst other midwives will be key to its success. [Friends and family would need to seek support from other sources.][2]		2,2
[Likely to be conflicts here if stress at home is part of the distress being experienced][2, 4]		2,4
[There could be a separate area for friends?][5]		5
[should be just about midwives][2]		2
I think this [should be for reporting midwives only][2]		2
[This would need to be done very carefully if put in place][4]		4
	Theme	**Number of times categorised**
1.	Access for a midwife's friends and family - Helpful	4
2.	Access for a midwife's friends and family - Unhelpful	16
3.	Access for a midwife's friends and family - Undecided	7
4.	Access for a midwife's friends and family - Ethical considerations must be recognised	10
5.	Access for a midwife's friends and family - Could require a separate, designated area	4
6.	Access for a midwife's friends and family - Need more information	3

Do you have any additional comments you would like to share?

Comment		**Themes Assigned to**
[Maybe this would work if there was a separate forum for family and friends of distressed midwives?][1]		1
[This needs to be a space for midwives, with midwives][2].		2
[Advice on the services etc. available for access by family and friends could be provided][1]		1
	Theme	**Number of times categorised**
1.	Access for a midwife's friends and family - Could require a separate, designated area	2

2.	Access for a midwife's friends and family - Unhelpful	1

19: An online intervention designed to support midwives in work-related psychological distress should prioritise the following up and identification of those at risk

19.1 Following up and identification of those at risk

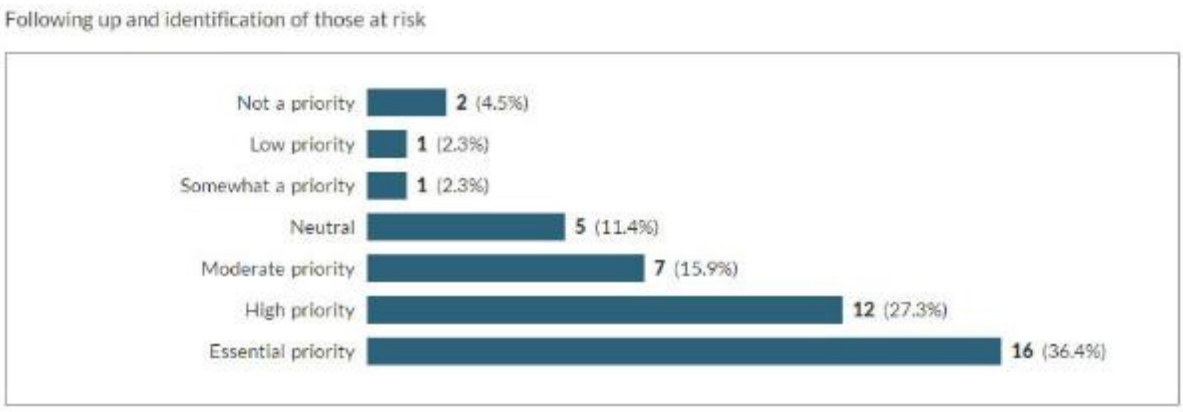
Rank value	Option	Count
1	Not a priority	2
2	Low priority	1
3	Somewhat a priority	1
4	Neutral	5
5	Moderate priority	7
6	High priority	12
7	Essential priority	16

Mean rank	5.59
Variance	2.51
Standard Deviation	1.59
Lower Quartile	5.0
Upper Quartile	7.0

Consensus Achieved = Yes (High/Essential priority) 63.7%

Minimum score = Low/Somewhat a priority 1/1 (2.3%/2.3%)

Maximum score = Essential priority 16 (36.4%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes Assigned to
[It is a failing in duty of care to encourage someone to open up and access distress and not have adequate support in place to manage the fallout from this.][1]	1
[just if she is willing][1] and [gives her consent][3]	1,3
If suicidal behaviour is conveyed through the postings, [that person needs following up][1]	1
identification of [high risk issues needs attention][1]	1
[Obviously.][1]	1
I think [this is difficult to do][3]...and with [anonymised system what would you do][3] (unless only anonymised posts but system logs accurate user information). I [don't think we can take responsibility for all posts][2] but can [display general warning to contact GP or A&E if sever distress and worrying about self-harm][1]	2,3,3,1
[not sure][4] - there would be signposts to sources of support	4
it would be [difficult to assess][3] who would require follow up	3
Yes, but [depends what you mean by "risk"][4] and [this would need to be explicitly stated at the start.][4]	4,4
[A serious psychological problem cannot be ignored.][1]	1
Encouraging follow up [can prevent slipping through][1] as too busy to continue to engage. Easy to prioritise work before own well being	1
[I'm undecided about this][4]	4
[ethical][1]	1
Suicide and self-destructive behaviours have been identified in healthcare professionals, [this seems a very sensible idea.][1]	1
Safety is imperative and if there were major concerns [it is important this is addressed][1]	1
[How are you going to do this if it's anonymous?][3] It's a [nice idea…][1]	3,1
think that is [too much to ask from an online forum][2], [but signposting midwives in the right direction is a must.][1]	2,1
If it will help to direct, you to getting help then this [would not be required][2]	2
The [forum would have to be completely transparent that user may be followed and identified as 'at risk'][3], this could [only occur with explicit consent prior to their signing up][3]. This [feels like potential 'policing'][2], also [clarity of what 'at risk' means is required][3]. [Very ambiguous][4].	3,3,2,3,4
[As long as][1] [the user has given their consent to be followed up when signing in to the platform][3]… [some users may not want any contact][2] and may be using the platform to off load and debrief in a safe, [one-way environment.][2]	1,3,2,2
Feel it [would be of benefit][1] to midwives using the program	1
Like Samaritans it [should be available for and led by the person in distress.][3]	3
[otherwise it is just a collection of concerns][1]	1
The [system would be incomplete][1] if there were midwives accessing the service and then not having the support if they are at risk	1
[Essential][1], especially if serious risk of harm is identified	1

As per previous answer, any strong and serious risk to the user or another person, such as suicide ideation or talk of harming someone, [would need to be followed up.][1]		1
[Essential priority][1] where there are safeguarding concerns. Otherwise, [need sensible position on duty of care.][3]		1,3
I feel [torn on this question][4] as i think providing a platform for [anonymity is important][3] but I also think we have a [moral obligation][3] to [provide real time support to those identified to be at risk][1]		4,3,3,1
Self-evaluation of the seriousness of the situation is [not always reliable][2, 3]		2,3
	Theme	**Number of times categorised**
1.	The following up and identification of those at risk - Helpful	21
2.	The following up and identification of those at risk - Unhelpful	7
3.	The following up and identification of those at risk - Challenging	14
4.	The following up and identification of those at risk - Undecided	6

Do you have any additional comments you would like to share?

Comment		**Themes Assigned to**
I [worry about the limits of what an it interface can offer][3] [combined with the impact of anything that encourages self-examination][2] -it's bad enough when checking online for e.g. mole patterns on skin.		3,2
Following up those at risk [may help them to feel cared about][1] - [an essential ingredient][1] for mental and emotional health and wellbeing		1,1
I must say that if I was wanting to have a general debrief about a horrid shift, or situation that was distressing me I think [I would not participate or withdraw][2] if I was constantly been told I was "at risk" and asked if I wanted to be referred! Whilst there is no doubt that being in distress makes you vulnerable I also think [we can go too far][3] when [most of the responsibility for this identification and referral lies with the person themselves][3]		2,3,3
	Theme	**Number of times categorised**
1.	The following up and identification of those at risk - Helpful	2
2.	The following up and identification of those at risk - Unhelpful	2
3.	The following up and identification of those at risk - Beyond the scope of this project	3

20: An online intervention designed to support midwives in work-related psychological distress should prioritise the provision of a general statement about

professional codes of conduct and the need for users to keep in mind their responsibilities in relation to them

20.1 The provision of a general statement about professional codes of conduct and the need for users to keep in mind their responsibilities in relation to them.

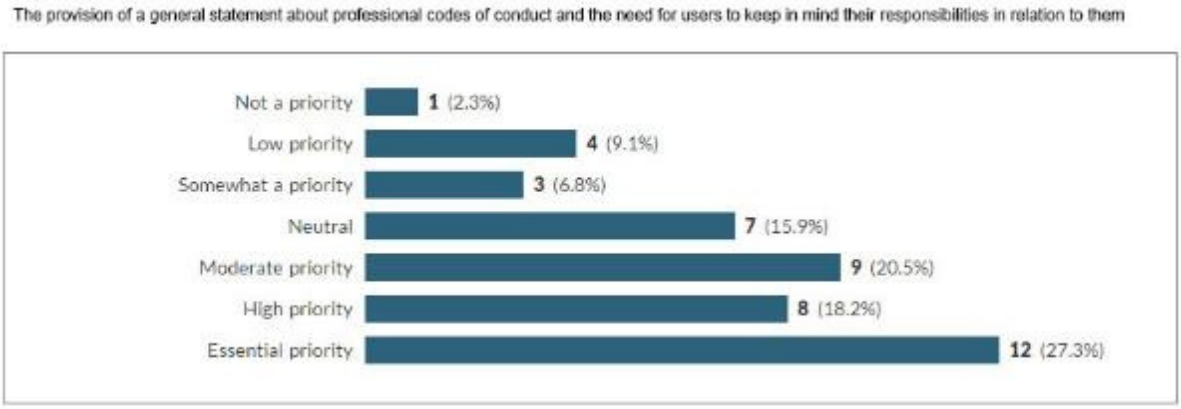
Rank value	Option	Count
1	Not a priority	1
2	Low priority	4
3	Somewhat a priority	3
4	Neutral	7
5	Moderate priority	9
6	High priority	8
7	Essential priority	12

Mean rank	5.07
Variance	2.88
Standard Deviation	1.7
Lower Quartile	4.0
Upper Quartile	7.0

Consensus Achieved = No

Minimum score = Not a priority 1 (2.3%)

Maximum score = Essential priority 12 (27.3%)



Thematic analysis of open text responses

Why did you choose this rating of priority?

Comment	Themes Assigned to

Already answered this one? [Self-care not well developed in professional codes][3]	2
as per previous answer re [stating professional conduct and accountabilities][1]	1
[important to remind midwives][1]	1
[Yes][1], well we are discussing situations where something has patently gone awry?	1
is this not asked previously?	0
[if it is intended just for midwives][1]	1
[Well yes][1] but as I said above if you are planning to include family and friends then you won't be able to get them to keep these "in mind" if they are not [applicable] [4]	1,4
A similar question was asked earlier, [beware of sounding too much like the NMC.][2]	2
[We are aware of the code][5] but reminder in a time of distress [can only be beneficial][1]	1,5
I would [rather see a platform user responsibility and code of conduct][6] which may include a professional responsibilities statement	6
[Need to create awareness of our code][1]	1
[Important for baseline of use][1]	1
Midwifery is not always black & white. [Professional conduct reminder yes][1]. [We are always mindful of them][5] - this [could be considered patronising.][2]	1,5,2
I think that this is important, but also hypocritical if you are stating that midwives have professional responsibilities but then potentially have a space where we can read about severe misconduct/ worrying attitudes/ illegal practices but not do a thing about it if we felt it was necessary.	5
[All should be aware] [5] of the [responsibilities of the code][1]	5,1
[Just include link to Code on NMC website][2]	2
I think this was covered in an earlier question. I answered that [there should be a reminder of the Code]1 within a [set of clear Terms and Conditions when signing up to use the platform][6].	1,6
If this is international there would be [many codes of conduct depending on where you live][4]. ICM has general statements then there could be links to individual country licensing bodies.	4
[Yes][1] I don't have a problem with this. There is still a need to be mindful of these.	1
[This is fundamental][1] to our work and practice	1
[This statement is required][1] not just for the benefit of midwives, but also for those in their care	1
The weight of these responsibilities [may be partially responsible for the workplace stress][2]. Therefore, a reminder of such heavy responsibility [may be counter-productive][2], if not phrased and used very carefully.	2,2
[Unlikely to be very effective][2]	2
See previous comments (prompts should be to seek help - where to get help and then perhaps say why [but prompts to regulation could make people feel worse][2])	2
Needs to be supportive of the individual midwife but [keeping her professionally safe is also important][1]	1

	Theme	**Number of times categorised**
1.	A general statement about professional codes of conduct - Helpful	15

2.	A general statement about professional codes of conduct - Unhelpful	8
3.	A general statement about professional codes of conduct -Better to focus on self-care (Theme removed following a process of secondary analysis).	0
4.	A general statement about professional codes of conduct - Must be applicable	2
5.	Midwives - Already aware of codes	4
6.	Online community - Should develop its own codes of conduct	2

Do you have any additional comments you would like to share?

Comment		**Themes Assigned to**
[I wonder at why you are trying to force consensus by repeating the questions until we all agree][1]. I am also not necessarily sure that you can say you haven't gotten consensus on the repeat questions just because there is a broad response such as thing as agreeing to disagree and also [some of the questions you have repeated to try to get "consensus" I really don't see the point of][1]. EG how the platform looks is completely irrelevant to me and always will be [I am much more interested in what it will do and how it will support our distressed colleagues than how it looks][1]. As technology changes it will inevitably change too so how it looks today will not be how it looks in 5 years [surely you don't plan to go back to the panel in 5 years and say please can we all agree to change the way it looks !!][1]		1,1,1,1
Comment removed for confidentiality reasons.		0
Aspects like this make the project seem weak- [it can't be completely anonymous and free of consequence, yet responsible and accountable at the same time][1]. Those things don't marry up.		1
if used [should be used in the positive][2] - [reminding midwives of the obligations of other too re treating people with respect][2] - [to empower the midwives to know she can speak out against work based injustice, lack of support etc.][2]		2,2,2
	Theme	Number of times categorised
1.	Achieving consensus - Frustrated by survey questions	5
2.	A general statement about professional codes of conduct - Requires sensitivity	3

Appendix 14: Delphi Study - Results of Thematic Analysis

Item	Round	Theme	Count	%
An online intervention designed to support midwives in work-related psychological distress should prioritize confidentiality for all platform users and service users in all matters of discussion.	1 - Ethical inclusions	Confidentiality – Required for open and honest disclosure	23	27%
		Confidentiality – Essential criterion for provision of support	10	12%
		Midwives – Need to feel safe	10	12%
		Confidentiality – for third parties	9	11%
		Midwives - Fear retribution	6	7%
		Confidentiality – Decided by user	5	6%
		Confidentiality – Context dependent	4	5%
		Confidentiality – Needed to avoid public identification	3	4%
		Confidentiality – High priority	2	2%
		Midwives - May need further support/ intervention	2	2%
		Midwives – Feel shame if not managing	2	2%
		Confidentiality - Needed to protect the reputation of the profession	2	2%
		Professional – Legal/Regulatory obligations	1	1%
		Midwives – Fear consequences	1	1%
		Confidentiality – Not possible online	1	1%
		Midwives – Need reassurance	1	1%
		Confidentiality - required to promote disclosure	1	1%
		Confidentiality – Not possible online	1	1%
		Midwives – Have little existing provision	1	1%
		Total	**85**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise anonymity for all platform users and service users in all matters of discussion.	1 - Ethical inclusions	Anonymity – Required for open and honest disclosure	18	21%
		Anonymity – Needed for support	10	11%
		Anonymity - Decided by user	6	7%
		Midwives – Fear retribution	6	7%
		Anonymity – for third parties	5	6%

		Anonymity - could be misused/cause distress	4	5%
		Feeling safe/safety - Required	4	5%
		Professional – Legal/Regulatory obligations	4	5%
		Anonymity – May prevent further intervention	3	3%
		Midwives – Support is highest priority	3	3%
		Anonymity – Not possible online	3	3%
		Anonymity – Use of pseudonyms	2	2%
		Anonymity - Required for open disclosure	2	2%
		Practicalities – Additional support may be required	2	2%
		Practicalities – Legal obligations over raising concerns	2	2%
		Anonymity – Needed to feel safe	2	2%
		Anonymity is synonymous with confidentiality	2	2%
		Anonymity – Optionality required	1	1%
		Anonymity – Requires policy	1	1%
		Practicalities – User verification	1	1%
		Midwives – Fearful of disclosure	1	1%
		Anonymity – Needed to seek support	1	1%
		Midwives – Support is a high priority	1	1%
		Anonymity – Unsure of relevance	1	1%
		Midwives – Need assurances	1	1%
		Midwives – Feel shame if not managing	1	1%
		Total	**87**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise amnesty for all platform users in that they will not be referred to any law enforcement agencies, their	1 - Ethical inclusions	Amnesty – Important/Helpful	19	14%
		Amnesty – Legal and ethical obligations – duty of care	18	13%
		Midwives – Fear speaking openly/retribution	15	11%
		Amnesty - Cannot be supported	14	10%
		Amnesty - Conflicted in opinion	13	10%

employer or regulatory body for either disciplinary or investigative proceedings in any case.		Amnesty – Required to facilitate support	13	10%
		Practicalities – Intervention may be required	10	7%
		Practicalities – There is a duty to report concerns	5	4%
		Amnesty – Required for recovery	5	4%
		Amnesty – may not be possible	4	3%
		Amnesty – May cause distress to others	3	2%
		Amnesty – Conflicted in opinion	3	2%
		Practicalities – Further intervention by management required	2	1%
		Midwives – Ideally should self-report concerns	2	1%
		Amnesty – Automatic if confidentiality/anonymity is afforded	2	1%
		Intervention – Disclaimers may be required	1	1%
		Midwife – Needs support	1	1%
		It would be preferable if the individual were encouraged to self-report.	1	1%
		Intervention – Consider emulating the principles of comparable interventions.	1	1%
		Intervention – Warnings may be required	1	1%
		Midwives – Have little existing provision	1	1%
		Midwives – Need support	1	1%
		Midwives – Should self-report	1	1%
		Total	**136**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise prompting platform users automatically to	1 - Ethical inclusions	Prompting – Helpful inclusion	18	22%
		Prompting – Unhelpful inclusion	14	17%
		Professional codes – adherence a professional responsibility	14	17%
		Midwives – Will already be aware	11	14%

remind them of their responsibilities to their professional codes of conduct.		Prompting - May be harmful	8	10%
		Prompting – Should be done sensitively	6	7%
		Prompting – Need unclear	3	4%
		Conflicted opinion	2	2%
		Prompts – Not supportive	2	2%
		Prompts – adherence to code a pre-condition of use	1	1%
		Prompts – Sensitivity needed	1	1%
		Codes of conduct – important to highlight	1	1%
		Total	**81**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise prompting platform users automatically to seek help, by signposting them to appropriate support	1 - Ethical inclusions	Signposting to support – A useful inclusion	36	46%
		Signposting to support – Help seeking may be low	9	11%
		Signposting to support – A helpful inclusion	4	5%
		Practicalities – Dependent on the nature of support	4	5%
		Conflicted opinion	4	5%
		Safety is important	3	4%
		Signposting to support – Clarity on method required	3	4%
		Midwives – In control of their own help seeking behaviours	3	4%
		Signposting to support – intervention itself is sufficient	2	3%
		Automatic signposting - Clarity on method required	2	3%
		Prompts - unsuitable	2	3%
		Signposting to support – Support must be high quality	2	3%
		Signposting to support - Could lead to users pathologising symptoms	1	1%
		Prompting - Consider alternative delivery	1	1%

		Consider using third sector groups and organisations	1	1%
		Practicalities – Needs a personalised tailored response	1	1%
		Intervention – if evidence-based	1	1%
		Total	**79**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of web based videos, multimedia resources and tutorials which explore topics around psychological distress	1 - Inclusions of therapeutic support	Multimedia tutorials – Helpful inclusion	32	40%
		Multimedia – Variety in content presentation useful	13	16%
		Multimedia resources – Helpful inclusion	8	10%
		Multimedia resources – Unhelpful inclusion	5	6%
		Multimedia resources – Require a variety of options	5	6%
		Multimedia resources – Conflicted opinion	4	5%
		Multimedia resources – Evidence based/high quality resources required	3	4%
		Midwives – Greater need for alternative support	3	4%
		Multimedia resources – Benefit dependent upon the nature of resource	3	4%
		Multimedia resources – Benefit dependent upon the nature of distress	1	1%
		Midwives – Feel like failures	1	1%
		Midwives – Material needs to be matched to user needs	1	1%
		Multimedia resources - Unhelpful	1	1%
		Ability - depends upon the content	1	1%
		Total	**81**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-		Informative Multimedia – Helpful inclusion	37	46%

related psychological distress should prioritise the inclusion of informative multimedia designed to assist midwives to recognise the signs and symptoms of psychological distress	1 - Inclusions of therapeutic support	Midwives – Do not always recognise own distress	13	16%
		Conflicted – Depends upon objectives/content	7	9%
		Informative Multimedia - could lead to inappropriate self-diagnosis	3	4%
		Informative multimedia - helpful inclusion	3	4%
		Informative Multimedia – Unhelpful inclusion	3	4%
		Multimedia – Need a variety of resources	2	2%
		Multimedia - Not required	2	2%
		Midwives – Help Seeking is important	2	2%
		Informative Multimedia – Unhelpful inclusion	1	1%
		Multimedia - Resources must be high quality/evidence based	1	1%
		Multimedia - Needs to be unique	1	1%
		Midwives – Support is important	1	1%
		Organisational – Distress is a normal response to organisational issues	1	1%
		Informative Multimedia – resource should be clear and simple.	1	1%
		Informative multimedia – To be used in initial engagement	1	1%
		Informative media – Requires a variety of options	1	1%
		Midwives – Do not always recognise own distress	1	1%
		Total	**81**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of multimedia resources which disseminate self-care techniques	1 - Inclusions of therapeutic support	Multimedia self-help resources – Helpful inclusion	28	41%
		Need a variety of resources	6	9%
		Midwives – additional support may be needed	6	9%
		Midwives - do not prioritise self-care	5	7%

		Multimedia self-help resources – Needs to be useful	3	4%
		Multimedia self-help resources – Helpful inclusion	2	3%
		Resource – Must be multiple options available	2	3%
		Multimedia self-help resources – Unhelpful inclusion	2	3%
		Multimedia self-help resources - ease of use important	2	3%
		Neutral	2	3%
		Midwives – Need support and understanding	2	3%
		Midwives – Do not always recognise own distress	2	3%
		Multimedia self-help resources – unhelpful inclusion	1	1%
		Midwives – Need assessment	1	1%
		Midwives – Must be accountable	1	1%
		Midwives – Provision of coaching	1	1%
		Midwives - Meaning of self-care unclear	1	1%
		Resources - Should be simple	1	1%
		Resources - Peer support is useful	1	1%
		Total	**69**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of multimedia resources which disseminate relaxation techniques	1 - Inclusions of therapeutic support	Relaxation techniques - A helpful inclusion	18	31%
		Relaxation techniques - An unhelpful inclusion	8	14%
		Relaxation techniques – Requires a range of options	4	7%
		Resources – Need a variety of options	4	7%
		Relaxation techniques - A helpful inclusion	3	5%
		Relaxation is a self-care technique	2	3%
		Resources - Must be easy to use	2	3%
		Outside pressures – May inhibit use	2	3%

		Midwives – often feel guilty	2	3%
		Relaxation techniques – May convey the wrong message	1	2%
		Resources - could/should explain theory behind relaxation	1	2%
		Midwives – Can apply their own knowledge	1	2%
		Resources - Need to simple and comprehensive	1	2%
		Relaxation - Limited evidence base	1	2%
		Techniques - Consider mindfulness	1	2%
		Organisational - distress can have organisational cause	1	2%
		Resources – Could emulate comparable alternatives	1	2%
		Resources must be safe to use	1	2%
		Midwives – shortage of support and understanding	1	2%
		Relaxation techniques– benefit dependent on technique used	1	2%
		Need to generate viral content	1	2%
		Midwives – May need additional support	1	2%
		Total	**58**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of mindfulness tutorials and multimedia resources	1 - Inclusions of therapeutic support	Mindfulness - A helpful inclusion	26	44%
		Resources – Must offer a variety of options	3	5%
		Resource – Need a variety of options available	3	5%
		Mindfulness – Meaning unclear	3	5%
		Mindfulness - An unhelpful inclusion	2	3%
		Mindfulness – Neutral opinion	2	3%
		Mindfulness – Degree of evidence	2	3%
		Mindfulness - Midwives may be skeptical	2	3%
		Mindfulness – Conflicted opinion	2	3%

		Midwives – Do not always recognise own distress	2	3%
		Resources - May send unwanted messages	1	2%
		Midwives – Must be risk assessed	1	2%
		Midwives – Must be encouraged to seek professional help	1	2%
		Resources – Must be accessible	1	2%
		Midwives - should know this technique already	1	2%
		Midwives – Face stigma	1	2%
		Midwives - May not want face to face support	1	2%
		Resources - need to be simple and safe to use	1	2%
		Midwives – other pressures may inhibit use	1	2%
		relaxation - synonymous with mindfulness	1	2%
		Effectiveness - dependent on the degree of distress	1	2%
		Mindfulness - A supportive professional friend would be better	1	2%
		Total	**59**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of Cognitive Behavioral Therapy (CBT) tutorials and multimedia resources.	1 - Inclusions of therapeutic support	CBT tutorials - A helpful inclusion	18	29%
		Intervention - Users may need additional support	9	15%
		CBT tutorials – An unhelpful inclusion	3	5%
		Resources - Need a variety of options to suit all	2	3%
		CBT tutorials – Unclear meaning	2	3%
		Resources - too many interventions may weaken the effect	2	3%
		Midwives – May not access other CBT support	2	3%
		Midwives – Need safety to disclose	2	3%

		Effectiveness – Dependent on evidence and context	2	3%
		Resources - Consider Dialectical Behavioral Therapy (DBT)	2	3%
		Therapies - Evidence base instils confidence	2	3%
		Eye Movement Desensitization and Reprocessing (EMDR) – Works well	2	3%
		CBT tutorials - reduced evidence base	1	2%
		CBT tutorials - Needs to be easy and safe to use	1	2%
		Midwives – face stigma	1	2%
		Midwives – other pressures may inhibit use	1	2%
		Midwives – May not be convinced of positive effect	1	2%
		Midwives – may need a targeted intervention	1	2%
		Resources - Need to offer as many options as possible	1	2%
		Midwives – May be impractical	1	2%
		Midwives - Face stigma	1	2%
		CBT tutorials - need to be professional and simple to use	1	2%
		(CBT) tutorials - Question evidence base	1	2%
		Midwives – Need risk assessment	1	2%
		Midwives – Need encouragement to seek help	1	2%
		CBT – Unfamiliar with the therapy	1	2%
		Total	**62**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of information designed to inform	1 - Inclusions of therapeutic support	Signposted to help and support – A helpful inclusion	18	44%
		Help and support – Need a variety of options available	6	15%
		Help and support – Face to face support preferable	3	7%

midwives where they can access alternative help and support		Help and support – Must be evidence based	2	5%
		Midwives – Impaired functioning when distressed	2	5%
		Therapies - EFT (Emotional Freedom Technique) can be useful	2	5%
		Therapies – Suggest peer group debriefing	2	5%
		Alternative help and support – Unclear meaning	1	2%
		Help and support - few resources actually available	1	2%
		Therapies – Must be real and local	1	2%
		Therapies – Too many = Confusion	1	2%
		Help and support – Need a variety of options available	1	2%
		Therapies – Suggest links to local occupational Health resources	1	2%
		Total	**41**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of information designed to inform midwives as to where they can access legal help and advice.	1 - Inclusions of therapeutic support	Legal help and advice - A helpful inclusion	24	60%
		Legal help and advice - An unhelpful inclusion	4	10%
		Legal help and advice - Unnecessary	4	10%
		Legal help and advice – conflicted opinion	3	8%
		Legal help and advice – Question evidence base for this	1	3%
		Legal help and advice - Few resources available	1	3%
		Legal help and advice - Not a priority	1	3%
		Legal Help and advice – Varies globally	1	3%
		Legal help and advice - Consider providing personal legal advice	1	3%
		Total	**40**	
Item	**Round**	**Theme**	**Count**	**%**

An online intervention designed to support midwives in work-related psychological distress should prioritise giving platform users the ability to share extended personal experiences for other platform users to read	1 - Inclusions of therapeutic support	extended personal experiences - A helpful inclusion	52	60%
		extended personal experiences – Requires moderation	7	8%
		extended personal experiences - Must protect confidentiality	7	8%
		extended personal experiences – conflicted opinion	6	7%
		extended personal experiences – An unhelpful inclusion	5	6%
		extended personal experiences - Must protect anonymity	3	3%
		extended personal experiences – Could be misused	2	2%
		extended personal experiences - Must be optional	1	1%
		extended personal experiences - ethically problematic	1	1%
		Midwives – if conducted within professional codes	1	1%
		extended personal experiences - Requires anonymity	1	1%
		extended personal experiences - Must remain professional	1	1%
		Total	**87**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of a web based peer to peer discussion chat room	1 - Inclusions of therapeutic support	Peer to peer discussion - A helpful inclusion	31	40%
		Peer to peer discussion - Needs moderation	15	19%
		Peer to peer discussion - An unhelpful inclusion	9	12%
		Peer to peer discussion - Risk of unethical use	7	9%
		Peer to peer discussion - Could risk confidentiality/anonymity	3	4%
		Peer to peer chatroom - May not be used	2	3%

		Peer to peer chatroom - Requires rules and standards	2	3%
		Peer to peer discussion - May risk anonymity/confidentiality	2	3%
		Peer to peer chatroom - Requires high volume site traffic	1	1%
		Peer to peer chatroom - May require trained supporters	1	1%
		Effectiveness – Depends upon help seeking behaviour	1	1%
		Professional – Legal/Regulatory obligations	1	1%
		Midwives - May need local chat rooms	1	1%
		Peer to peer discussion - Should be an optional choice	1	1%
		Peer to peer discussion - May be local variations	1	1%
		Total	**78**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise giving platform users the ability to communicate any work or home-based subjects of distress	1 - Inclusions of therapeutic support	Discussions re: work or home-based subjects of distress – A helpful inclusion	13	26%
		Discussions re: work or home-based subjects of distress - intertwined	13	26%
		Discussions – unhelpful inclusion	8	16%
		Discussions - Should be kept separate	4	8%
		Priority – Depends upon the context	3	6%
		Discussions – Require moderation	2	4%
		Discussions re: work or home-based subjects of distress – An unhelpful inclusion	2	4%
		Discussions - uncontrollable	1	2%
		Discussions – May risk anonymity/confidentiality	1	2%
		Discussions – Require support	1	2%
		Discussions re: work or home-based subjects of distress – chaotic	1	2%
		Discussions – Require moderation	1	2%

		Total	**50**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise an interface which does not resemble NHS, employer or other generic healthcare platforms	1 - Intervention design and practical inclusions	Resemblance – Should be authority neutral	28	56%
		Priority – user friendliness	5	10%
		Resemblance – Should be authority based	3	6%
		Resemblance – Not important	3	6%
		Question – relevance unclear	2	4%
		Midwives – Fearful of detection	2	4%
		Resemblance - Variants on a global scale	1	2%
		This would not matter if the intervention was clearly independent.	1	2%
		Question – Cannot answer	1	2%
		Intervention – Needs support of authorities	1	2%
		Prioritise – visually safe space	1	2%
		Intervention –confidentiality and anonymity important	1	2%
		Intervention - Consider analysing feedback	1	2%
		Total	**50**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise a simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage	1 - Intervention design and practical inclusions	Anonymised email login procedure - A helpful inclusion	19	36%
		Anonymised email login procedure - An unhelpful inclusion	13	25%
		Priorities – A user-friendly intervention	9	17%
		Prompting – A helpful inclusion	4	8%
		Prompting – An unhelpful inclusion	4	8%
		Anonymised email login procedure – must be optional	1	2%
		Anonymised email login procedure – Unsure of alternatives	1	2%
		Midwives – May require alternative support	1	2%
		Confidentiality must be upheld	1	2%

		Total	**53**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise an automated moderating system where 'key words' would automatically initiate a moderated response	1 - Intervention design and practical inclusions	'key words' initiating a moderated response – A helpful inclusion	15	22%
		'key words' initiating a moderated response – an unhelpful inclusion	13	19%
		Question – Need to know more	11	16%
		'key words' initiating a moderated response – May not be adequate	8	12%
		'key words' initiating a moderated response – Moderation is required	6	9%
		'key words' initiating a moderated response – conflicted	5	7%
		Midwives – Must be protected from suicide	3	4%
		Midwives – Need to be risk assessed	2	3%
		'key words' initiating a moderated response –must be supportive in nature	1	1%
		'key words' initiating a moderated response – Confusing	1	1%
		'key words' initiating a moderated response – Must be sophisticated	1	1%
		'key words' initiating a moderated response – Moderation = high maintenance	1	1%
		Total	**67**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise mobile device compatibility for platform users	1 - Intervention design and practical inclusions	Mobile device compatibility – High priority	35	73%
		Mobile device compatibility – Must work	6	13%
		Midwives – Require support	2	4%
		Mobile device compatibility - Unhelpful	1	2%
		mobile device compatibility – Neutrality important	1	2%

		mobile device compatibility – Must be secure	1	2%
		Midwives – may not seek alternative support	1	2%
		Intervention - Risky	1	2%
		Total	**48**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise amnesty for all platform users in that they will not be referred to any law enforcement agencies, their employer or regulatory body for either disciplinary or investigative proceedings in any case.	2 - Items which did not achieve a consensus of opinion within the first round of questioning.	Amnesty – Required for open and honest disclosure	27	26%
		Amnesty - Cannot be given in all cases	25	24%
		Midwives - Fear retribution	11	11%
		Amnesty - Conflicted in opinion	10	10%
		Amnesty - Required for change/Help seeking	9	9%
		Amnesty - Conflicted in opinion	5	5%
		Amnesty can enable resolution of situations	4	4%
		Amnesty - A helpful inclusion	3	3%
		Midwives - Have little support	2	2%
		Intervention - Requires disclaimer policies	2	2%
		Amnesty – Cannot be given in any circumstances	1	1%
		Amnesty - required for privacy	1	1%
		Amnesty - Difficult to moderate	1	1%
		Amnesty - An unhelpful inclusion	1	1%
		Question - Meaning unclear	1	1%
		Total	**103**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise prompting platform users automatically to remind them of their responsibilities to their professional codes of conduct.	2 - Items which did not achieve a consensus of opinion within the first round of questioning.	Prompting professional codes - A helpful inclusion	21	31%
		Prompting professional codes - An unhelpful inclusion	16	24%
		Prompting professional codes - Ethically essential	9	13%
		Prompting professional codes - Alternative approach required	7	10%

		Midwives - Already aware of codes - Not required	4	6%
		Prompting professional codes - Not the purpose of the intervention	3	4%
		Midwives - Duty of care should be priority	2	3%
		Codes - Inadequate	1	1%
		Midwives - Need support	1	1%
		Midwives - Should remain professional even in distress	1	1%
		Midwives - If needing reminders, should not be working	1	1%
		Prompting professional codes - Requires sensitivity	1	1%
		Total	**67**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of information designed to inform midwives as to where they can access legal help and advice.	2 - Items which did not achieve a consensus of opinion within the first round of questioning.	Information, legal help and advice - A helpful inclusion	32	60%
		Midwives - Need support	6	11%
		Intervention - A range of options should be made available	5	9%
		Information, legal help and advice - An unhelpful inclusion	4	8%
		Question - Meaning unclear	2	4%
		Information, legal help and advice - Can be found elsewhere	2	4%
		Midwives - Fear retribution	1	2%
		Midwives - Blame themselves	1	2%
		Total	**53**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise giving platform users the ability to share extended personal experiences for other platform users to read.	2 - Items which did not achieve a consensus of opinion within the first round of questioning.	Sharing extended personal experiences - A helpful inclusion	41	58%
		Sharing extended personal experiences - Moderation required	11	15%
		Sharing extended personal experiences- An unhelpful inclusion	6	8%
		Sharing extended personal experiences - Should be optional	6	8%

		Sharing extended personal experiences - Risky	3	4%
		Sharing extended personal experiences - Undecided	2	3%
		Sharing extended personal experiences - effect may be context dependent	2	3%
		Total	**71**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of a web based peer to peer discussion chat room.	2 - Items which did not achieve a consensus of opinion within the first round of questioning.	Discussion chat room - A helpful inclusion	37	51%
		Discussion chat room- An unhelpful inclusion	11	15%
		Discussion chat room - Moderation required	10	14%
		Discussion chat room - Risky	7	10%
		Discussion chat room - More information required	6	8%
		Discussion chat room- Challenging to facilitate	1	1%
		Discussion chat room - Consider additional features	1	1%
		Total	**73**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise giving platform users the ability to communicate any work or home based subjects of distress.	2 - Items which did not achieve a consensus of opinion within the first round of questioning.	Communicating any work or home based subjects of distress - A helpful inclusion	15	28%
		Communicating any work or home based subjects of distress - Both subjects intertwined	16	30%
		Communicating any work or home based subjects of distress - An unhelpful inclusion	9	17%
		Communicating any work or home based subjects of distress -Inevitable	7	13%
		Communicating any work or home based subjects of distress - Requires moderation	2	4%

		Communicating any work or home based subjects of distress - Risk of breaching confidentiality	1	2%
		Communicating any work or home based subjects of distress - Undecided	1	2%
		Communicating any work or home based subjects of distress - Difficult to engage whilst at work	1	2%
		Communicating any work or home based subjects of distress - discussions need to remain workplace based	1	2%
		Communicating any work or home based subjects of distress - Consider links to outside agencies	1	2%
		Total	**54**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise an interface which does not resemble NHS, employer or other generic healthcare platforms.	2 - Items which did not achieve a consensus of opinion within the first round of questioning.	Online intervention interface - Should not resemble NHS, employer or other generic healthcare platforms	20	38%
		Midwives - May not engage if they fear organisational involvement	11	21%
		Online intervention interface - Should look professional	8	15%
		Online intervention interface - Should prioritise usability	6	11%
		Conflicted opinion	3	6%
		Midwives - Fear bringing the profession into disrepute	1	2%
		Online intervention interface - Should not resemble NHS, employer or other generic healthcare platforms	1	2%
		Intervention - Should be a safe haven	1	2%
		Intervention - Must appear to be for midwives only	1	2%
		Online intervention interface - Options should be researched	1	2%
		Total	**53**	
Item	**Round**	**Theme**	**Count**	**%**

An online intervention designed to support midwives in work-related psychological distress should prioritise a simple, anonymised email login procedure which allows for continued contact and reminders which may prompt further platform usage.	2 - Items which did not achieve a consensus of opinion within the first round of questioning.	Anonymised email login procedure - A helpful inclusion	19	40%
		Anonymised email login procedure - Ease of use a priority	8	17%
		Anonymised email login procedure - An unhelpful inclusion	4	9%
		Anonymised email login procedure - Can be used to intervene	3	6%
		Anonymised email login procedure - Risky	3	6%
		Anonymised email login procedure - Anonymity may not be possible	2	4%
		Undecided	2	4%
		Anonymity - Essential	2	4%
		Anonymised email login procedure - Security a priority	2	4%
		Anonymised email login procedure - Should be optional	2	4%
		Total	**47**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise an automated moderating system where 'key words' would automatically initiate a moderated response.	2 - Items which did not achieve a consensus of opinion within the first round of questioning.	An automated moderating system - A helpful inclusion	16	31%
		An automated moderating system - An unhelpful inclusion	9	18%
		An automated moderating system - Meaning unclear	8	16%
		An automated moderating system - Must be appropriate	6	12%
		Undecided	5	10%
		Moderation - Should be a priority	3	6%
		Moderation - Should be a human response	2	4%
		Intervention - Must be a safe space	1	2%
		An automated moderating system - Should allow users to flag concerns	1	2%
		Total	**51**	
Item	**Round**	**Theme**	**Count**	**%**

An online intervention designed to support midwives in work-related psychological distress should prioritise an interface which resembles and works in a similar way to current popular and fast pace social media channels: e.g. Facebook	2 - New items for consideration	An interface which resembles and works in a similar way to current popular and fast pace social media channels - Helpful	20	37%
		An interface which resembles and works in a similar way to current popular and fast pace social media channels - unhelpful	15	28%
		Usability should be the priority	11	20%
		An interface which resembles and works in a similar way to current popular and fast pace social media channels - Undecided	6	11%
		Question - Misunderstood	1	2%
		Usability should be the priority	1	2%
		Total	**54**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the inclusion of midwives from around the world	2 - New items for consideration	The inclusion of midwives from around the world - Helpful	24	42%
		The inclusion of midwives from around the world - unhelpful	14	25%
		The inclusion of midwives from around the world - Challenging to facilitate	10	18%
		The inclusion of midwives from around the world - Undecided	6	11%
		The inclusion of midwives from around the world - Could be made fit for purpose	2	4%
		The inclusion of midwives from around the world - Challenging to facilitate	1	2%
		Total	**57**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise proactive moderation (i.e, users are able	2 - New items for consideration	Proactive moderation - Helpful	24	41%
		Proactive moderation - Unhelpful	11	19%
		Proactive moderation - Must be tailored to suit context	11	19%
		Moderation - essential	9	16%

to block unwanted content and online postings are 'pre-approved')		Proactive moderation - Meaning unclear	2	3%
		Midwives - Able to self-moderate	1	2%
		Total	**58**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise reactive moderation (i.e., users are able to report inappropriate content to a system moderator for removal)	2 - New items for consideration	Reactive moderation - Helpful	24	67%
		Reactive moderation - Design challenges	7	19%
		Reactive moderation - Unhelpful	5	14%
		Total	**36**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise 24/7 availability of the platform	2 - New items for consideration	24/7 availability - Helpful	37	90%
		Midwives - Have no time	2	5%
		24/7 availability - Undecided	1	2%
		Midwives - Need confidentiality	1	2%
		Total	**41**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the implementation of an initial simple user assessment using a psychological distress scale to prompt the user to access the most suitable support available	2 - New items for consideration	Simple user assessment - Helpful	25	56%
		Simple user assessment - Context for use required	14	31%
		Simple user assessment - Undecided	3	7%
		Simple user assessment - unhelpful	2	4%
		Simple user assessment - Should be optional	1	2%
		Total	**45**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the gathering of	2 - New items for consideration	The gathering of anonymised data and concerns - Helpful	32	64%
		The gathering of anonymised data and concerns - Unhelpful	11	22%

anonymised data and concerns from users, only with explicit permission, so that trends and concerns may be highlighted at a national level.		The gathering of anonymised data and concerns - Requires ethical consideration	3	6%
		Midwives - Require anonymity	2	4%
		The gathering of anonymised data and concerns - Undecided	1	2%
		Midwives - Require confidentiality	1	2%
		Total	**50**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise access for a midwife's friends and family members	2 - New items for consideration	Access for a midwife's friends and family - Unhelpful	17	36%
		Access for a midwife's friends and family - Ethical considerations must be recognized	10	21%
		Access for a midwife's friends and family - Undecided	7	15%
		Access for a midwife's friends and family - Could require a separate, designated area	6	13%
		Access for a midwife's friends and family - Helpful	4	9%
		Access for a midwife's friends and family - Need more information	3	6%
		Total	**47**	
Item	**Round**	**Theme**	**Count**	**%**
An online intervention designed to support midwives in work-related psychological distress should prioritise the following up and identification of those at risk	2 - New items for consideration	The following up and identification of those at risk - Helpful	23	42%
		The following up and identification of those at risk - Challenging	14	25%
		The following up and identification of those at risk - Unhelpful	9	16%
		The following up and identification of those at risk - Undecided	6	11%
		The following up and identification of those at risk - Beyond the scope of this project	3	5%
		Total	**55**	
Item	**Round**	**Theme**	**Count**	**%**

An online intervention designed to support midwives in work-related psychological distress should prioritise the provision of a general statement about professional codes of conduct and the need for users to keep in mind their responsibilities in relation to them	2 - New items for consideration	A general statement about professional codes of conduct - Helpful	15	38%
		A general statement about professional codes of conduct - Unhelpful	8	21%
		Achieving consensus - Frustrated by survey questions	5	13%
		Midwives - Already aware of codes	4	10%
		A general statement about professional codes of conduct - Requires sensitivity	3	8%
		A general statement about professional codes of conduct - Must be applicable	2	5%
		Online community - Should develop its own codes of conduct	2	5%
		Total	**39**	

Appendix 15: New Guidance from the Royal College of Midwives on workplace stress

Appendix 16: ‘Midwives Overboard!’ Inside their hearts are breaking, their makeup may be flaking but their smile still stays on

Appendix 17: Confidentiality, anonymity and amnesty for midwives in distress seeking online support – Ethical?

Appendix 18: Achieving Consensus in the Development of an Online Intervention Designed to Effectively Support Midwives in Work-Related Psychological Distress: Protocol for a Delphi Study

Appendix 19: Achieving Consensus for the Design and Delivery of an Online Intervention to Support Midwives in Work-Related Psychological Distress: Results from a Delphi Study

Appendix 20: Royal College of midwives' publication

Appendix 21: Nursing times publication