Childbearing women's experiences of midwives' workplace distress: Patient and Public Involvement

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Abstract

Background

Some midwives experience work-related psychological distress. This can reduce the quality and safety of maternity services, yet there are few interventions to support midwives.

Aim

Our aim was to explore and voice the perceptions of new mothers in relation to the barriers to receiving high-quality maternity care, the psychological wellbeing of midwives and the development and evaluation of an online intervention designed to support them. GRIPP2 reporting checklists are also used to demonstrate how Patient and Public Involvement (PPI) works in research.

Methods

We used a co-design approach within a discussion group to collect qualitative data from 10 participants. A framework approach was used for analysis.

Findings

Unique findings include midwives crying, becoming emotional and seeking support from service users. Overall, seven PPI outcomes relating to intervention development and data collection were identified.

Conclusion

Maternity service improvement strategies may only be wholly effective once they appreciate an equal focus upon effective midwifery workplace support.

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Conflict of interest statement

The authors have no conflicts of interest to declare.

Introduction

The wellbeing of healthcare staff can be linked with the quality and safety of healthcare services(The Royal College of Physicians 2015, Hall, Johnson et al. 2016). Midwives in particular can experience a range of work-related psychological distress and are more likely than other healthcare staff to report feeling pressured at work(Cumberlege 2016, Pezaro, Clyne et al. 2015). The significance of this issue has been recognised, as midwifery and maternity workforce research is now listed as one of the most prominent global research priorities for the international midwifery community(Soltani, Low et al. 2016).

In light of this, any work-related psychological distress which may be affecting the quality and safety of maternity care must be explored and addressed. Psychological distress can be 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). In the case of defining work-related psychological distress, we propose that the 'specific stressor' would therefore need to be work-related. A recent report from the National Childbirth Trust (NCT) has explored women's experiences of maternity services and recommended that staff burnout be prevented and addressed(Plotkin 2017). However, women's experiences in relation to work-related psychological distress in midwifery

populations specifically has yet to be explored for a deeper understanding of this phenomenon as a research problem in need of an evidence-based solution.

It has been well established that co-designing such research with patients and the public benefits the project, the service user and the organisations involved(Bradwell, Marr 2017, Steen, Manschot et al. 2011). This is because the patient is the key stakeholder in their own care, and their potential contribution to the quality and safety of services in research is widely recognised(Vincent, Coulter 2002). Such patient and public involvement (PPI) can bring value to a research project in terms of providing a qualitative description of context, experiential knowledge and insightful contributions to the research agenda(Staley 2015, Boote, Telford et al. 2002).

Traditionally, the involvement of patients and the public in research has been reported inconsistently within the literature(Brett, Staniszewska et al. 2014, Mockford, Staniszewska et al. 2011). It has been suggested that such poor reporting can result in a weaker understanding of the evidence base, making it more challenging to implement the findings of studies in terms of best PPI practice(Brett, Staniszewska et al. 2017). Consequently, new GRIPP2 reporting checklists for PPI in research have been developed to enhance the quality, transparency, and consistency of the PPI evidence base(Staniszewska, Brett et al. 2017). This has resulted in more recent publications using the GRIPP2 reporting checklists to more consistently and accurately report how their PPI activities have contributed to the design of new research in healthcare (Morgan, Thomson et al. 2016, Andrews, Allen et al. 2015).

Similarly, this article uses the long GRIPP2 reporting checklist to report how PPI activities have been used to co-design a research proposal with new mothers as members of a project steering group. We used the definition of PPI as proposed by INVOLVE: Research carried out 'with' or 'by' members of the public rather than 'to', 'about' or 'for' them(Involve 2012). In line with Steen and colleagues, we defined co-design as creative cooperation during the

process of designing research(Steen, Manschot et al. 2011), in this case a research proposal. The research proposal in question outlines plans to develop and evaluate an online intervention designed to primarily support midwives in work-related psychological distress(Pezaro 2016). The complete evidence and theory-based design of this intervention draws inference from the revised transactional model of occupational stress and coping presented by Goh and colleagues(Goh, Sawang et al. 2010). It has been published in full elsewhere(Pezaro 2018). The aim of this research proposal, guided by the Medical Research Council's (MRC) framework for developing and evaluating complex interventions(Craig, Dieppe et al. 2008), is to address the research problem of work-related psychological distress in midwifery populations. Therefore, these PPI activities also looked to explore the perspectives of new mothers in relation to this topic. To our knowledge, this is the first publication to report these unique areas of enquiry concomitantly.

Principally, this PPI was instigated in light of the fact that the voices of new mothers have yet to be explored or incorporated into such future research planning. Consequently, the aims of this PPI were:

- To establish whether the amelioration of work-related psychological distress in midwifery populations should be a research priority.
- To gain a deeper understanding of this research problem (work-related psychological distress in midwifery populations) from the perspectives of new mothers.
- To establish whether work-related psychological distress in midwifery populations impacts upon the experience of maternity care from the perspectives of new mothers.
- To introduce a research proposal to a PPI project steering group for appraisal.

In order to meet these aims, the PPI questions associated with these activities were:

1. What are the perceptions of new mothers in relation to the barriers to receiving high quality maternity care?
2. What are the perceptions of new mothers in relation to the psychological wellbeing of midwives working in maternity services?
3. What are the perceptions of new mothers in relation to a research proposal outlining the development and evaluation of an online intervention designed to support midwives in work-related psychological distress?

Methods

Design

These PPI activities take a co-design approach, focussing upon qualitative data to explore the perceptions of new mothers in relation to the barriers to receiving high quality maternity care, the psychological wellbeing of midwifery populations and a research proposal outlining the development and evaluation of an online intervention designed to support midwives in work-related psychological distress. The Guidance for Reporting Involvement of Patients and the Public (GRIPP2) long form was used to support the reporting of this work(Staniszewska, Brett et al. 2017). In line with current recommendations, PPI activities were conducted at the earliest conceptual phases of developing a research proposal prior to submitting a funding application, as a preliminary activity to meaningfully inform the direction of planned future research(Involve 2012, Buck, Gamble et al. 2014). Ethical approval was obtained for this PPI work prior to it taking place.

Participants

New mothers, including pregnant women with experience of using the maternity services of the United Kingdom (UK), within the 12 months prior to this PPI, were eligible to participate.

In this case, non-English-speaking mothers were excluded from participation. A self-selecting sample was recruited via Twitter™, academic blogs, 'The academic midwife' Facebook page, and mother and baby groups. Participants received refreshments and £20 in gratitude for their time.

Procedure

All PPI activities were undertaken during a 2-hour face-to-face discussion group in a local community centre and were led by the first author. Firstly, the role of PPI was introduced, and participants were invited to become members of the project steering group should the research proposal be successful in securing research funding. Subsequently, all provided their informed consent to participate in the data collection aspect of this PPI session. This informed consent was required to share the voices of these new mothers more widely via publication.

Subsequently, participants were introduced to and asked to reflect upon a lay summary of proposed research outlining the development and evaluation of an online intervention designed to support midwives in work-related psychological distress, which is standard PPI (Morgan, Thomson et al. 2016). A background to the proposed research was also provided, so as to place the proposal in context with the phenomenon under study. Participants were then invited to complete a feedback form. This feedback form prompted written responses in relation to the appearance and significance of psychological distress in midwifery populations, the potential consequences of work-related psychological distress in maternity services, the value of psychological support in the maternity workplace and the development and evaluation of a confidential and anonymous online intervention designed to support midwives in work-related psychological distress. Participants were also invited to write down their reflections as discussions evolved. These methods were chosen as free-writing can enable participants to reflexively consider new meanings and internal dialogues in relation to

the topic under discussion(Elizabeth 2008). Discussions were digitally recorded and transcribed verbatim. Field notes were also taken by the first author throughout.

At the end of this PPI session, the first author recapped the perspectives expressed by participants during the session in order to clarify the accuracy of interpretation. This permitted participants to revise and clarify any contributions made. The names of any individual midwives and/or maternity services disclosed were omitted from the analysis of results.

Data analysis

All qualitative data were analysed together using the five-stage framework analysis in excel software(Ward, Furber et al. 2013). This type of analysis was chosen due to it being a deductive form of thematic analysis designed to pragmatically answer the PPI questions presented. All data and generated themes were given equal weighting.

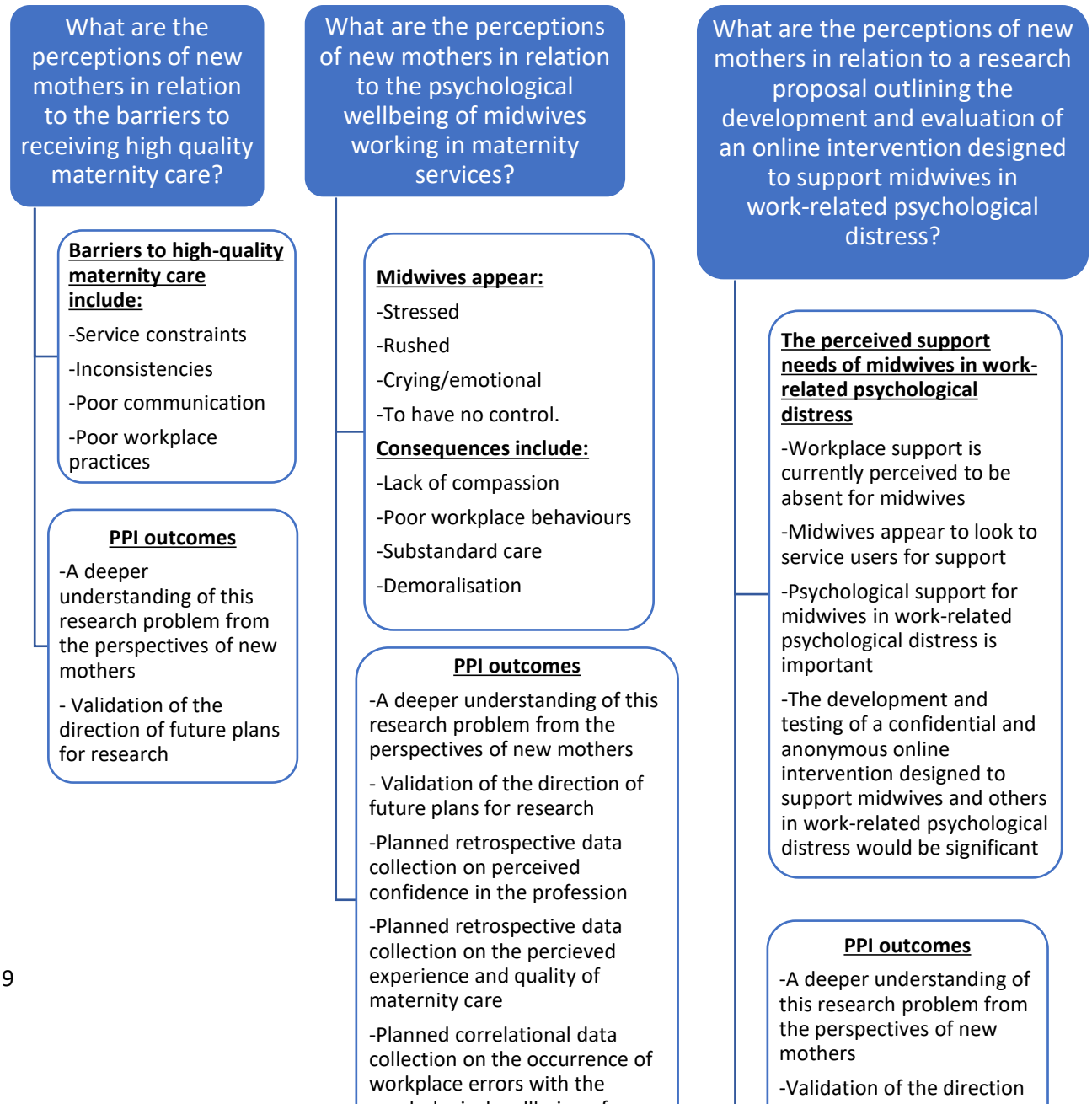
The final framework was developed by identifying recurrent and important themes which corresponded with the perceptions of new mothers regarding the maternity services, the phenomenon of work-related psychological distress in midwifery populations and the proposed research plan to support them via an online intervention. To enhance the rigor and trustworthiness of this analysis, the process of developing and refining these themes was peer reviewed by co-authors(Fernald, Duclos 2005). Furthermore, a reflexive process of writing, peer review and discussion was employed throughout (Greene 2014).

Findings

10 new mothers who met the inclusion criteria were recruited for this PPI. No demographical information was requested due to the fact that these were PPI activities. However, some participants disclosed that they had received a variety of antenatal, intrapartum and postnatal

care from maternity services based within the London, South East and East Midlands areas of England. Figure 1 provides an overview of all results.

Figure 1. Overall findings



Four themes and sixteen subthemes were identified regarding the perceptions of new mothers in line with the framework analysis approach(Ward, Furber et al. 2013). Theme one summarises the perceptions of new mothers in relation to barriers to receiving high-quality care in maternity services, theme two presents the perceptions of new mothers in relation to the psychological wellbeing of midwives working in English maternity services, theme three collates the perceived consequences of work-related psychological distress in midwifery populations and theme four reports on the support needs of midwives in work-related psychological distress from the perspective of new mothers. These results are reported in a way which maximises the number of perspectives heard in the process of improving the quality of women's health research, in line with best practice(Moss, Daru et al. 2017, NIHR 2015).

In summary, these new mothers saw poor workplace practices, poor communication, service constraints and inconsistencies as barriers to them receiving high-quality care. They also observe that midwives appear stressed and rushed on occasion and seem to have no control. Three participants had also seen midwives cry or become emotional. The consequences associated with work-related psychological distress in midwifery populations are perceived by these new mothers to be a lack of compassion from staff, poor workplace behaviours, substandard care and demoralisation within the midwifery profession. Furthermore, midwives appeared to look to service users for support in some cases as there was a perceived lack of

staff support in place. Nevertheless, this group of new mothers believe that the provision of psychological support is important for midwives in the workplace, and that the development and testing of a confidential and anonymous online intervention designed to support midwives and others in work-related psychological distress would be significant.

Theme One: Perceived barriers to receiving high quality care in maternity services

As participants began to reflect upon their own experiences within the maternity services, they began to share what they perceived to be barriers to receiving high-quality maternity care. These barriers included service constraints, inconsistency, poor communication and poor workplace practices.

Subtheme one: "Midwives are not able to do the job they want to do"

Here, participants largely reflected upon their experience of staff shortages, and how this made it more challenging for midwives to provide high quality care. Whilst it was recognised that midwives wanted to deliver high quality care, the working nature of maternity services made this seemingly impossible to achieve.

"Midwives are clearly overworked, there is a huge shortage of them in hospitals leading to units being closed for short periods of time"– Feedback form response.

"I never felt that the midwives involved were to blame and felt bad for them at the time as they were clearly too busy to do what they needed for each patient, but the lack of staffing/resources was very apparent, and I do feel it affected my care and outcome in very significant ways." – Written participant contribution.

Subtheme two: "I had no consistency"

Polar experiences in maternity care were described throughout the maternity services. Some new mothers also reported a lack of continuity in both their carer and maternity care. It was

also suggested that midwives seemed less 'stressed' whilst working away from the labour ward setting.

"I had no consistency, I saw a different face every time" – Discussion group participant 5.

"Midwives share their own opinion – there is no collective voice" – Notes taken from discussion.

Subtheme three: "I never knew her name"

Poor communication was recognised by these participants as a barrier to the delivery of high quality maternity care. However, this poor communication was reported to occur among staff, and between service users and staff.

"It seems to be that there is a lack of sharing best practice, getting together as midwives collectively and speaking about different approaches, research, new understandings, new techniques just what works… just seems that everyone is working in their own little siloes… especially the community midwives" – Discussion group participant 8.

"I did note a lack of communication" – Feedback form response.

Subtheme four: "There is poor management"

Some participants reported that midwives seemed to be poorly managed. There was also seemingly a lack of team work apparent. For these new mothers, such poor workplace practices were perceived to obstruct the delivery of high-quality care.

"I did note a lack of comradery between areas." – Feedback form response.

"More support across the teams needed" – Written participant contribution.

Theme Two: The perceptions of new mothers in relation to the psychological wellbeing of midwives working in maternity services

Whilst reflecting on midwives' psychological wellbeing in the maternity workplace, participants began to report a variety of incidents where midwives openly appeared to experience work-related psychological distress. Participants often described this as the midwife seeming 'stressed' or 'rushed', yet some also alleged that midwives were seen to 'keep calm and carry on'. Midwives were also sometimes seen to appear crying, or to have no control. Only a minority of data analysed from qualitative survey responses reported that some individual midwives did not appear to experience any work-related psychological distress at all.

Subtheme one: "The midwife was clearly stressed"

Participants described how midwives appeared to be 'stressed' in the midwifery workplace whilst caring for them. However, some new mothers expressed how midwives carried on caring for them regardless.

"They hid it well – occasionally cracked" – Feedback form response.

"The midwife was clearly stressed" – Discussion group participant 6.

Subtheme two: "The midwife always seemed to be rushing"

Here, participants described midwives appearing to be 'rushed'. This was often described as midwives 'cramming' in work rather than being able to spend adequate time providing quality maternity care.

"She didn't have enough time, she didn't have enough to go through things properly, it was all a bit rushed and a bit sort of whizzed through" – Discussion group participant 7.

"The midwife always seemed to be rushing between places and didn't really know who was supposed to be coming" – Discussion group participant 1.

Subtheme three: "Midwives cry"

Within this subtheme, midwives were seen by some participants crying or becoming emotional in the maternity workplace. These displays of emotion were attributed to various experiences of work-related psychological distress.

"Midwives can get emotional due to stress" – Notes taken from discussion.

"She said...'labour ward is closed, there is not enough staff' … 'I am with a woman who is 6cm and I can't leave her for more than a couple of minutes'… and then she got emotional" – Discussion group participant 4.

Subtheme four: "No one was in control"

Not only did participants express that at times, midwives appeared to have no control over clinical situations in maternity services, they also perceived midwives to have no control over some of the decisions taken in the maternity workplace.

"She just lost control of the situation" – Discussion group participant 3.

"In my labour experience, the midwife was under lots of stress from the work load, other midwives and how the situation was developing. This led to her losing control of the situation" – Feedback form response.

Theme Three: Perceived consequences of work-related psychological distress in midwifery populations

Whilst exploring their own insights in relation to the psychological wellbeing of midwives, participants began to reflect on what they perceived to be the consequences of work-related psychological distress in midwifery populations. Here, participants largely referred to a perceived lack of compassion, poor workplace behaviours, substandard care and demoralisation within the maternity services.

Subtheme one: "My midwife was not sympathetic"

Participants described how midwives displayed a lack of compassion towards both service users, and each other. From the perspective of new mothers, these displays of compassion fatigue were regarded as a consequence of work-related psychological distress.

"The midwife was clearly stressed, she was really impatient with me" – Discussion group participant 6

"Stressed midwife was quite impatient and mean" – Feedback form response.

Subtheme two: "There is a lack of kindness shown between staff"

Here, participants described how they had witnessed incivilities between midwifery staff. Largely, these episodes included undermining and bullying behaviours. Some midwives were also seen to openly blame other midwives and behave competitively in the workplace. There was also a lack of kindness noted between midwifery staff.

"They both spend a lot of time visiting me …telling me how they do it better than the other midwife" – Discussion group participant 10.

"I can see the senior midwives coming in to perform the procedures which she was failing to do, rolling their eyes" – Discussion group participant 9.

Subtheme three: "Midwives were making mistakes due to stress"

Both specific and nonspecific episodes of substandard care were observed by this group of participants in the midwifery workplace. Here, work-related psychological distress in midwifery populations was linked to increased levels of pain and delays in pain medications. Mistakes were also attributed to high levels of work-related psychological distress. Specific mistakes of note included medication errors and breeches in confidentiality.

"She wasn't keeping up with checking the baby's heart rate which had been made clear in front of us by a senior midwife." – Feedback form response.

"Forgetting basic things e.g. tea and medication" – Written participant contribution.

Subtheme four: "…Instantly makes you lose confidence."

Here, participants described how midwives appeared to be unsupported by others within their profession. Moreover, participants also described how they began to lose faith in the midwife providing their care under work-related psychological distress.

"Inexperienced midwives have no support – lose confidence – they need their hands holding" – Notes taken from discussion.

"This led me not trusting her again." – Feedback form response.

Theme Four: The perceived support needs of midwives in work-related psychological distress

Within this theme, participants reported how support seemed to be absent for midwives in the workplace. In some cases, participants also described how midwives in work-related psychological stress appeared to seek support from service users. Participants also reflected on the importance of psychological support and the significance of a confidential and anonymous online intervention designed to support midwives in work-related psychological distress.

Subtheme one: "There is clearly nowhere for midwives to go"

It was the clear perception of some participants that midwives did not have access to psychological support in the workplace. Here participants expressed both concern that there was seemingly nowhere for midwives to seek help safely, and that the provision of any structured support for midwives was seemingly absent.

"There clearly wasn't anyone for her to go to comfortably" – Discussion group participant 9.

"She didn't have any support from anyone" – Discussion group participant 3.

Subtheme two: "Midwife shared she was struggling"

In some cases, midwives appeared to seek psychological support from those in their care. Some participants reported how this involved the midwife complaining of work-related psychological distress openly. Others reported how midwives actively sought comfort from them during the course of their maternity care.

"They need to be supported from within they can't be reliant on the birthing mothers to hold their hands and pat them on the back…" – Discussion group participant 10.

"The midwife let me know how stressed she was ☹" – Written participant response.

Subtheme three: "it is important that we support their mental and physical health as much as they support ours."

Unanimously, participants highlighted within this theme how important psychological support would be for midwives in work-related psychological distress. Here, participants also noted how such support could be expanded to support a range of healthcare professionals. There was also recognition of how the quality of maternity care may have been improved had midwives been having a 'good day' in the workplace.

"If she was having a good day I would have felt calmer in the situation and probably wouldn't have needed an epidural." – Feedback form response.

"NHS workers have such important job and can be very emotionally taxing" – Feedback form response.

Subtheme four: "Midwives should be able to gain help without their workplace knowing."

Having reviewed a lay summary of proposed research to develop and evaluate an online intervention designed to support midwives in work-related psychological distress, this group of participants were keen to see this planned research progress. Whilst some participants noted that they may personally prefer to seek face-to-face support, they also recognised that midwives may need access to flexible, anonymous and confidential support online. Overall, the proposed development and evaluation of the online intervention was unanimously endorsed by this group of new mothers.

"PTSD must affect a lot of midwives" – Feedback form response.

"Hours could make it difficult to seek counselling but can access online support at all times" – Feedback form response.

PPI Outcomes

The findings of these PPI activities have led to seven PPI outcomes. Firstly, these findings provide a deeper understanding of this research problem from the perspectives of new mothers and validate the direction of plans for research. Additionally, as this group of new mothers have linked the appearance of work-related psychological distress in midwifery populations with a reduced confidence in the midwife, ongoing research will now plan to assess any future changes in these perceptions via post-intervention qualitative research. Similarly, as some participants linked the appearance of work-related psychological distress in midwifery populations with reduced quality and a poorer experience in maternity care, planned future research will also now reassess these perceptions within a post intervention study.

436 Furthermore, this group of new mothers attributed a range of mistakes to the appearance of
437 work-related psychological distress in midwifery populations. Consequently, planned
438 ongoing research will now usefully correlate the occurrence of workplace errors with the
439 psychological wellbeing of midwives. As this group of new mothers have also endorsed the
440 provision of anonymity and confidentiality for users of the proposed online intervention,
441 prototypes of the intervention will be made anonymous and confidential for users. Lastly,
442 future prototypes of the intervention will also be inbuilt with the capability to support other
443 professional groups, as this participant group have suggested that this may be useful for
444 future evaluations, implementation and distribution.

445 **Discussion**

446 The overarching aims of these PPI activities have been met by examining the perspectives of
447 new mothers in relation to the phenomenon of midwives in work-related psychological
448 distress and the development and evaluation of an online intervention designed to support
449 them. This PPI has also established that work-related psychological distress in midwifery
450 populations can impact negatively upon the experience of maternity care from the
451 perspectives of these new mothers. In relation to the research plan shared with this group of
452 new mothers, participants gave their full support to the proposal, and recognised the need for
453 midwives to have access to flexible, anonymous and confidential support online. These
454 particular findings emulate the discoveries of other research, where workers describe how the
455 flexible and anonymous provision of online mental health support in the workplace would
456 facilitate increased rates of engagement (Carolan, de Visser 2017).

457 Whilst the research team had been aware of some of the more sensitive issues raised in our
458 findings beforehand, current understandings have been expanded by some inimitable
459 findings, particularly in relation to trust and confidence in the midwifery profession. As well
460 as addressing the three PPI questions presented here, our findings also lead to seven PPI

outcomes which establish a clear contribution to a larger research project. These more specifically relate to the particulars of intervention development and new long-term plans for retrospective data collection. These outcomes in relation to data collection particularly exceeded our initial expectations and brought new insights to the research team in planning beyond the scope of the original research proposed.

The findings of this PPI corroborate previous research which has established that midwives can sometimes attempt to mask the negative effects of work-related psychological distress(Pezaro, Clyne et al. 2015). However, in contrast to this, a unique finding of this work is that midwives can also sometimes seek support from women utilising the maternity services. Here, findings also echo those of other studies where the consequences of work-related psychological distress were also found to include a lack of compassion(Sorenson, Bolick et al. 2016), poor workplace behaviours(Lombardo, Eyre 2011), reduced quality of care(Krämer, Anna Schneider et al. 2016) and workplace errors(Hall, Johnson et al. 2016). Furthermore, the findings of this PPI emulate those highlighted within the recent national maternity review 'Better Births'(Cumberlege 2016), which likewise established links between poor teamwork, poor professional cultures, poor communication, inconsistency, low morale, poor management, a lack of support and poor maternity care. Following on from the Better Births review, a new A-EQUIP model of supervision will incorporate restorative clinical supervision for midwives in the workplace (Petit, Stephen 2015). However, the impact of this model is yet to be evaluated.

The broader qualitative findings presented here offer a strong rationale for the development and evaluation of the proposed intervention, given the impact that work-related psychological distress seemingly has upon the quality of maternity care. This impact is demonstrated by one particular instance where a participant suggests that she "probably wouldn't have needed an

epidural" had her midwife been having a good day. As such, future research could usefully explore the depth of this relationship between the quality of maternity care and the psychological wellbeing of midwives.

Whilst recent publications highlight maternity staff shortages(Palmer, Brackwell 2014), a paucity of evidence-based support available to midwives(Pezaro, Clyne et al. 2017) and the reality of work-related psychological distress in midwifery populations(Coldridge, Davies 2017), this PPI explores how new mothers perceive the reality of these issues at the point of receiving maternity care. In addition to this, our findings demonstrate that new mothers would be supportive of a confidential and anonymous online intervention to support midwives in work-related psychological distress. This contribution to knowledge is particularly interesting to note, as previous research has highlighted how some professionals may be reluctant to allow the inevitable amnesty which anonymity and confidentiality would permit for midwives seeking support(Pezaro, Clyne 2016). As such, there is now an opportunity to develop, test and evaluate a confidential and anonymous evidence based online intervention to support midwives in work-related psychological distress in line with proposed research plans, and with the validation of maternity service users.

As this PPI was qualitative in nature, the research team initially considered employing the Consolidated Criteria for Reporting Qualitative Research (COREQ)(Tong, Sainsbury et al. 2007). However, the needs, aims and scope of PPI are not the same as for qualitative research alone. For researchers, there is also a dichotomy between simply describing the perceptions of a PPI group within a larger study and publishing these as standalone findings which add new and valuable knowledge to the field. However, it is important to share PPI activity in order to comprehend 'how it works'(Staley 2015). It is also vital to wholly appreciate the perceptions and contributions of PPI groups in order to understand what value these add in

shaping the design of future research. In this case, the valuable perceptions of new mothers have been used to inform future research planning in relation to the development of a confidential and anonymous online intervention for midwives to be evaluated via an initial feasibility study and potentially, a future adequately powered trial. Crucially, this PPI has also been reported so as to maximise the number of perspectives heard.

PPI was particularly valuable to this research, as it enlightened the research team to the profundity of the research problem from the perspective of service users. As such, these insights can now be embedded throughout the entire future research programme. Overall, the amelioration of work-related psychological distress in midwifery populations is perceived to be required by this group of new mothers for the benefit of midwives, maternity care and maternity services. Both national and international strategies and frameworks relating to healthcare services tend to focus on putting the care and safety of patients first(Mallari, Grace et al. 2016). Yet these findings suggest that in order to effectively deliver the best care to new mothers, the care of the midwife must equally be prioritised. Future research could also usefully replicate this PPI as a qualitative study with mothers from other countries across a range of healthcare settings to assess the transferability of these findings.

Strengths and Limitations

Overall, our aim to include the perspectives and experiences of new mothers in future research and decision making worked well and was carried out in accordance with the principles and indicators of successful PPI involvement in National Health Service (NHS) research(2006). In our opinion, the involvement of new mothers to explore their perceptions and in the development of this research proposal was useful and meaningful. Therefore, as guided by the long GRIPP2 checklist(Staniszewska, Brett et al. 2017), the definition of PPI used here was deemed to be appropriate, without need of any changes. However, in inviting new mothers to contribute, the researcher was challenged with trying to engage participants

in meaningful and uninterrupted conversations with infants present. As such, noise levels compromised some audio recordings, leading the researcher to rely on field notes taken during the group discussion at times.

At this early stage of planning future research, this PPI group may have benefitted from more comprehensive research training to support their decision-making processes in this context. The impact of PPI in this case relates to the voice of new mothers being heard in relation to a unique research problem. This has meant that new research plans will be shaped in line with what matters most to new mothers. Additionally, the impact of this PPI also means that the research, midwifery and healthcare communities are now better placed to improve maternity services in light of new knowledge shared in relation to the perspectives of new mothers.

Two authors (SP and EB) are registered academic midwives. GP is a British Psychology Society (BPS) Chartered Psychologist, methodologist, and a researcher in co-creation and patient involvement. In using our multidisciplinary backgrounds to approach this PPI dynamically, we have been able to strengthen the academic discussions apparent within this work. However, potential biases may have arisen from personal experiences of psychological distress in the midwifery workplace and a desire to pursue this line of research further.

Whilst this PPI has provided unique insights into the perspectives of new mothers, it is limited by the recruitment of a small homogenous sample, from which it is challenging to draw generalizable conclusions. Moreover, these participants have been encouraged to discuss and reflect upon the phenomenon under study in order to pragmatically answer precise PPI questions where they may not otherwise have done so. However, a key strength of this PPI is that it has been able to give a voice to new mothers and include this voice within the planning of future research. These voices have also given the research team a far greater understanding of the phenomenon under study, which may be a far more significant

problem for maternity services than initially thought, considering some of the unique findings unearthed here, such as midwives seeking solace in service users. Such discoveries may not have been realised had midwives or potential end users of the proposed online intervention been invited to join in PPI activities instead.

INVOLVE briefings state that there is an important distinction to be made between the perspectives of the public and the perspectives of people who have a professional role in health and social care services(Involve 2012). As midwives are not considered to be patients under this guidance, we have been unable to include midwives within these particular PPI activities. Yet whilst it may be new mothers who may benefit from psychological support in the maternity workplace, it is also the midwives in work-related psychological distress who could directly gain from an increased quality of life. In this sense, we argue that healthcare professionals should not necessarily be excluded from PPI activities simply because they treat patients, especially when they are the direct beneficiary of a certain treatment or intervention. In the context of developing an online intervention designed to support midwives in work-related psychological distress, the midwife could also usefully be considered to be either a patient or a member of the public in line with more recent guidance(Greenhalgh 2017). Nevertheless, this dichotomy lends itself to further academic discussion.

Conclusion

These are the first PPI activities to explore the perspectives of new mothers in relation to the barriers to receiving high quality maternity care, the psychological wellbeing of midwives and the provision and evaluation of online support for midwives in work-related psychological distress concomitantly. Here, we have given a voice to new mothers to ensure that their perspectives are heard by the wider research community and incorporated into future research. We have also been able to identify seven PPI outcomes which provide a deeper understanding of the research problem from the perspective of new mothers.

There has been great value in sensitising the research team to the effect that work-related psychological distress in midwifery populations has upon new mothers and their newborns prior to conducting further research in this area. The experience of childbirth should be a positive one. Yet in the eyes of these new mothers, some positive experiences in English maternity services are clearly obstructed by the phenomenon of midwives in work-related psychological distress. The challenge will be to address this problem via future workforce research and examine whether the perceptions of new mothers change in light of an effectively supported midwifery workforce. There is therefore a need for future workforce research to develop and evaluate an online intervention designed to support midwives in work-related psychological distress considering the PPI findings reported here. Should the results of this research represent broader perspectives, both national and international strategies and frameworks designed to improve maternity care could usefully prioritise the support needs of midwives when prioritising the needs of maternity services users in equal measure.

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ANDREWS, L.M., ALLEN, H., SHEPPARD, Z.A., BAYLIS, G. and WAINWRIGHT, T.W., 2015. More than just ticking a box… how patient and public involvement improved the research design and funding application for a project to evaluate a cycling intervention for hip osteoarthritis. *Research Involvement and Engagement,* **1**(1), pp. 13.

BOOTE, J., BARBER, R. and COOPER, C., 2006. Principles and indicators of successful consumer involvement in NHS research: results of a Delphi study and subgroup analysis. *Health Policy,* **75**(3), pp. 280-297.

BOOTE, J., TELFORD, R. and COOPER, C., 2002. Consumer involvement in health research: a review and research agenda. *Health policy (Amsterdam, Netherlands),* **61**(2), pp. 213-236.

BRADWELL, P. and MARR, S., 2017. making the most of collaboration an international survey of public service co-design. *Annual Review of Policy Design,* **5**(1), pp. 1-27.

BRETT, J., STANISZEWSKA, S., MOCKFORD, C., HERRON-MARX, S., HUGHES, J., TYSALL, C. and SULEMAN, R., 2014. Mapping the impact of patient and public involvement on health and social care research: a systematic review. *Health Expectations,* **17**(5), pp. 637-650.

BRETT, J., STANISZEWSKA, S., SIMERA, I., SEERS, K., MOCKFORD, C., GOODLAD, S., ALTMAN, D., MOHER, D., BARBER, R., DENEGRI, S., ENTWISTLE, A.R., LITTLEJOHNS, P., MORRIS, C., SULEMAN, R., THOMAS, V. and TYSALL, C., 2017. Reaching consensus on reporting patient and public involvement (PPI) in research: methods and lessons learned from the development of reporting guidelines. *BMJ open,* **7**(10), pp. e016948-2017-016948.

BUCK, D., GAMBLE, C., DUDLEY, L., PRESTON, J., HANLEY, B., WILLIAMSON, P.R., YOUNG, B., EPIC PATIENT ADVISORY GROUP and EPIC PATIENT ADVISORY GROUP, 2014. From plans to actions in patient and public involvement: qualitative study of documented plans and the accounts of researchers and patients sampled from a cohort of clinical trials. *BMJ open,* **4**(12), pp. e006400-2014-006400.

CAROLAN, S. and DE VISSER, R.O., 2017. Employees' perspectives on the facilitators and barriers to engaging with digital mental health in the workplace: a qualitative study. *JMIR Mental Health,* .

COLDRIDGE, L. and DAVIES, S., 2017. "Am I too emotional for this job?" An exploration of student midwives' experiences of coping with traumatic events in the labour ward. *Midwifery,* **45**, pp. 1-6.

CRAIG, P., DIEPPE, P., MACINTYRE, S., MICHIE, S., NAZARETH, I., PETTICREW, M. and MEDICAL RESEARCH COUNCIL GUIDANCE, 2008. Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ (Clinical research ed.),* **337**, pp. a1655.

CUMBERLEGE, J., 2016. *BETTER BIRTHS Improving outcomes of maternity services in England: A Five Year Forward View for maternity care.* London: NHS England.

ELIZABETH, V., 2008. Another string to our bow: Participant writing as research method, *Forum qualitative Sozialforschung/Forum: qualitative social research* 2008.

FERNALD, D.H. and DUCLOS, C.W., 2005. Enhance your team-based qualitative research. *Annals of family medicine,* **3**(4), pp. 360-364.

GOH, Y.W., SAWANG, S. and OEI, T.P., 2010. The Revised Transactional Model (RTM) of occupational stress and coping: An improved process approach. *The Australian and New Zealand Journal of Organisational Psychology,* **3**, pp. 13-20.

GREENE, M.J., 2014. On the inside looking in: Methodological insights and challenges in conducting qualitative insider research. *The qualitative report,* **19**(29), pp. 1-13.

GREENHALGH, T., 2017. *How to Implement Evidence-Based Healthcare.* John Wiley & Sons.

HALL, L.H., JOHNSON, J., WATT, I., TSIPA, A. and O'CONNOR, D.B., 2016. Healthcare Staff Wellbeing, Burnout, and Patient Safety: A Systematic Review. *PloS One,* **11**(7), pp. e0159015.

INVOLVE, N., 2012. Briefing notes for researchers: involving the public in NHS, public health and social care research. *INVOLVE Eastleigh, UK,* .

KRÄMER, T., ANNA SCHNEIDER, ERIKA SPIESS, PETER ANGERER and MATTHIAS WEIGL., 2016. Associations between job demands, work-related strain and perceived quality of care: a longitudinal study among hospital physicians
. *International Journal for Quality in Health Care,* **28**(6), pp. 824-829.

LOMBARDO, B. and EYRE, C., 2011. Compassion fatigue: A nurse's primer. *OJIN: The Online Journal of Issues in Nursing,* **16**(1), pp. 3.

MALLARI, M., GRACE, M. and JOSEPH, D., 2016. Ethical Frameworks for Decision-Making in Nursing Practice and Research: An Integrative Review.

MOCKFORD, C., STANISZEWSKA, S., GRIFFITHS, F. and HERRON-MARX, S., 2011. The impact of patient and public involvement on UK NHS health care: a systematic review. *International Journal for Quality in Health Care,* **24**(1), pp. 28-38.

MORGAN, H., THOMSON, G., CROSSLAND, N., DYKES, F. and HODDINOTT, P., 2016. Combining PPI with qualitative research to engage 'harder-to-reach'populations: service user groups as co-applicants on a platform study for a trial. *Research Involvement and Engagement,* **2**(1), pp. 7.

MOSS, N., DARU, J., LANZ, D., THANGARATINAM, S. and KHAN, K.S., 2017. Involving pregnant women, mothers and members of the public to improve the quality of women's health research. *BJOG: An International Journal of Obstetrics & Gynaecology,* **124**(3), pp. 362-365.

NIHR, 2015. *Going the Extra Mile: improving the Nation's health and wellbeing through public involvement in research
*. London: National Institute for Health Research.

PALMER, W. and BRACKWELL, L., 2014. A national audit of maternity services in England. *BJOG: An International Journal of Obstetrics & Gynaecology,* **121**(12), pp. 1458-1461.

PETIT, A. and STEPHEN, R., 2015. Supporting health visitors and fostering resilience: literature review. *Institute of Health Visiting, London,* .

PEZARO, S., 2016. The case for developing an online intervention to support midwives in work-related psychological distress. *British Journal of Midwifery,* **24**(11), pp. 799-805.

PEZARO, S.C., 2018. Securing the Evidence and Theory-based Design of an Online Intervention Designed to Support Midwives in Work-related Psychological Distress. *Journal of the International Society for Telemedicine and eHealth,* **6**(1), pp. 8-1-12).

PEZARO, S. and CLYNE, W., 2016. Achieving Consensus for the Design and Delivery of an Online Intervention to Support Midwives in Work-Related Psychological Distress: Results From a Delphi Study. *JMIR Mental Health,* **3**(3), pp. e32.

PEZARO, S., CLYNE, W. and FULTON, E.A., 2017. A systematic mixed-methods review of interventions, outcomes and experiences for midwives and student midwives in work-related psychological distress. *Midwifery,* .

PEZARO, S., CLYNE, W., TURNER, A., FULTON, E.A. and GERADA, C., 2015. 'Midwives Overboard!' Inside their hearts are breaking, their makeup may be flaking but their smile still stays on. *Women And Birth: Journal Of The Australian College Of Midwives,* **29**(3), pp. 59-66.

PLOTKIN, L., 2017. *Support Overdue: Women's experiences of maternity services.* NCT and the national federation of Women's institutes (NFWI).

RIDNER, S.H., 2004. Psychological distress: concept analysis. *Journal of advanced nursing,* **45**(5), pp. 536-545.

SOLTANI, H., LOW, L.K., DUXBURY, A. and SCHUILING, K.D., 2016. Global midwifery research priorities: an international survey. *International Journal of Childbirth,* **6**(1), pp. 5-18.

SORENSON, C., BOLICK, B., WRIGHT, K. and HAMILTON, R., 2016. Understanding Compassion Fatigue in Healthcare Providers: A Review of Current Literature. *Journal of Nursing Scholarship,* .

STALEY, K., 2015. 'Is it worth doing?'Measuring the impact of patient and public involvement in research. *Research Involvement and Engagement,* **1**(1), pp. 6.

STANISZEWSKA, S., BRETT, J., SIMERA, I., SEERS, K., MOCKFORD, C., GOODLAD, S., ALTMAN, D., MOHER, D., BARBER, R. and DENEGRI, S., 2017. GRIPP2 reporting checklists: tools to improve reporting of patient and public involvement in research. *Research Involvement and Engagement,* **3**(1), pp. 13.

STEEN, M., MANSCHOT, M. and DE KONING, N., 2011. Benefits of co-design in service design projects. *International Journal of Design 5 (2) 2011, 53-60,* .

THE ROYAL COLLEGE OF PHYSICIANS, 2015. Work and wellbeing in the NHS: why staff health matters to patient care.

TONG, A., SAINSBURY, P. and CRAIG, J., 2007. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International journal for quality in health care : journal of the International Society for Quality in Health Care,* **19**(6), pp. 349-357.

VINCENT, C.A. and COULTER, A., 2002. Patient safety: what about the patient? *Quality & safety in health care,* **11**(1), pp. 76-80.

WARD, D.J., FURBER, C., TIERNEY, S. and SWALLOW, V., 2013. Using framework analysis in nursing research: a worked example. *Journal of advanced nursing,* **69**(11), pp. 2423-2431.