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Supporting the emotional wellbeing of midwives in a pandemic

Guidance for RCM

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Key messages:

- 1. The welfare of midwives is <u>essential</u> both for personal wellbeing and for the provision of quality care.
- 2. This is not just an issue during a pandemic. Midwife welfare MUST be taken seriously by all, now, and into the future.
- 3. Significant levels of stress, burnout and PTSD are common in health care workers' responses to pandemics, with possible long-term consequences.
- 4. Staff want to continue providing high quality care but will also be very concerned about their own personal/family safety and wellbeing. Fear, uncertainty and moral distress are common.
- 5. Midwives' individual demographic characteristics and personal circumstances must be acknowledged, especially as some may increase vulnerability to Covid-19.
- 6. Trusting, open and non-judgemental relationships between managers and staff are essential for responding effectively to staff concerns, during and after the pandemic.
- 7. Optimise wellbeing through ensuring that midwives have access to: adequate PPE, drinks and regular breaks, appropriate working hours, psychological support.
- 8. Provide opportunities for positive experiences e.g. team get-togethers, whether socially distanced or virtual.

- 9. Be aware of potential long-term impact. Support individuals and teams to process after the pandemic, with skilled facilitation.
- 10. Be aware that students and returners may have additional experiences (positive and negative) and specific support needs.

Overview

The welfare of midwifery staff is essential, both for their own individual and family health and wellbeing, and because midwives who feel well supported are more able to provide sustained and empathic care for childbearing women and their newborns.

Stress, burnout and PTSD are commonly reported in studies of health care workers in other pandemics and major national/global emergencies (Koh *et al.*, 2005; Tam *et al.*, 2004). Absenteeism of staff has been reported which is not just linked to the need to self-isolate, but also related to perceived personal threat and fears for family safety (Chaffee, 2009; Devnani, 2009; Gavin *et al.*, 2020; McNeill *et al.*, 2020). This is likely to be even more important for a predominantly female workforce such as midwifery, where staff may have significant other family concerns and caring responsibilities that are affected by the pandemic e.g childcare, care of elders (Devnani, 2009; Gavin *et al.*, 2020; McMullan *et al.*, 2016; Seale *et al.*, 2009). Indeed, evidence from the current pandemic indicates that existing inequalities have been exacerbated, with women undertaking a disproportionate amount of childcare and home schooling in comparison to their male partners (Adams-Prassi *et al.*, 2020). The only study to date reporting on the psychological impact of Covid-19 on healthcare workers found that female staff reported greater levels of psychological distress than males across a range of measures (Lai *et al.*, 2020).

The existing health and wellbeing of individual staff and teams, and the quality of their team working and communication are likely to affect how both individuals and teams respond to a sudden and sustained crisis such as the COVID-19 pandemic (Manley 2008). In 2019 the WHELM study reported high levels of stress, anxiety, depression and burnout in the UK midwifery workforce (Hunter *et al.*, 2019). The factors associated with these findings are likely to have been exacerbated by the pandemic. They included high workload, staffing shortages, and not being able to give quality care. Adverse psychological effects were seen most often in younger and more recently qualified midwives and those with a self-reported disability.

The WHELM study also identified what worked to protect midwives' mental health. This included supportive relationships with colleagues, love of the work, and the capacity to give good quality care (Cull *et al.*, 2020).

Given the challenges midwives are experiencing as a result of the pandemic (Renfrew *et al.*, 2020), it is more important than ever to acknowledge and build in these positive factors, to support the physical and mental health of midwives during the crisis. Evidence from other pandemics shows that trusting relationships between employer and employee are vital for strengthening the effectiveness of emergency responses (Ryan *et al.*, 2019), and for reducing the adverse effects of the inevitable

degree of uncertainty in such situations (Kelly *et al.*, 2020). This is an important area to strengthen for the future.

Initial maternity service responses to this pandemic have focussed, understandably, mainly on practices and interventions aimed at minimising contagion: infection control, PPE, reducing the numbers of companions and visitors, place of birth, and providing virtual contact. Less attention has been given to other key aspects of quality care, such as continuity, the values of individualised and tailored care, and the philosophy of optimising normal processes and keeping mothers and babies together; yet the evidence shows that these aspects are fundamentally important in ensuring safe, quality care for women and babies (Sandall *et al.*, 2016; Renfrew *et al.*, 2014). Giving priority to practices – important as they are – by implication signals that other aspects of care are currently less important. This may add to the dilemmas currently faced by midwives, who are familiar with this evidence and whose care normally incorporates these elements together with the specific practices and interventions each woman and baby needs.

Critically, lessons should be learned for the future organisation of maternity care, to ensure that the wellbeing of midwives is taken seriously and protected, both for the everyday benefit of midwives and their families, and the women, parents and newborns they care for. There is an opportunity to enhance midwives' sense of wellbeing in their work during and after COVID-19, and, in the process, to enhance their capacity, and that of the profession as a whole, to adapt positively to future large-scale crises.

Aim

This document aims to summarise:

- 1. Midwives' views, experiences and feelings during the Covid-19 pandemic.
- 2. Immediate strategies to optimise wellbeing
- 3. How to ensure sustained wellbeing for midwives following a pandemic

The guidance is relevant to all midwives, but also highlights the particular issues which may be experienced by student midwives and midwives returning to practice. It includes positive as well as negative factors.

Background

This guidance was derived from a wider rapid analytic scoping review (Renfrew *et al.*, 2020) prepared for RCM, which considered the evidence on how best to optimise maternity services and maternal and newborn outcomes in a pandemic. Given the importance of ensuring the emotional wellbeing of midwives so that they can provide the best quality care for women and their newborns, the aspects of the rapid review relating to emotional wellbeing are explored further in this guidance.

Anecdotal reports in social media, news reports, and as communicated to the RCM in a survey of members in April 2020 indicate how midwives are currently feeling as they work with the consequences of the pandemic. Similar experiences have also been described in commentaries describing the wellbeing of other health care

workers during the current pandemic, or in research conducted during and after other pandemics. Where available, these more robust sources of evidence are identified.

1) Midwives' views, experiences, and feelings in the Covid-19 pandemic In an unpublished survey of RCM members undertaken in April 2020, 57.19% of respondents said their mental health was worse as a result of the pandemic. A very small percentage (2.7%) said that their mental health had improved (RCM, 2020, personal communication).

It is important to note that staff are likely to experience a range of emotions in the course of a day, and from day to day, both negative and positive. Such conflicting feelings can be especially difficult to manage. There are many factors that may influence how midwives may be feeling. Different staff have different demographic characteristics that will impact on their experiences and concerns e.g. ethnicity, age, health status, relationship status, number and type of dependents as well as varying levels of social/psychological capital and family and financial resources. Some of these factors also appear to increase the risk of becoming infected with Covid-19 and becoming seriously ill (Kirby, 2020; Jordan and Adab, 2020). Employment situations will also vary according to level of seniority and the potential for autonomy, as well as how stressful the work is, the level of exposure to the virus and access to well fitting PPE (Cook *et al.*, 2020). All of these factors will impact on emotional responses.

Potential feelings about work and working conditions

- High level of uncertainty, fuelled by rapidly changing guidelines and unfamiliar ways of working (Kelly et al., 2020; Walton et al., 2020).
- Fear of infection, their own safety.
- Under pressure to conform to institutional changes which midwives may not agree with or cannot see the justification for.
- Sense of powerlessness which may contribute to moral distress.
- Stress from new ways of working e.g. teleworking, wearing full PPE, adapting to service changes, possible redeployment (Walton et al., 2020).
- Anger at lack of resources, inadequate remuneration, working conditions.
- Exhausted long shifts.
- Frustrated/angry about lack of PPE.
- Concerns about wearing PPE, including appropriately fitting PPE (Topping, 2020) and the discomfort of wearing full PPE.

Feelings about women and babies

- Moral distress if not able to provide optimal care or practice according to professional ideals (Greenberg *et al.* 2020; Walton *et al.*, 2020).
- Fears for women and babies in their care.
- Concern regarding how best to prepare women and partners and manage their anxieties and fears, including not being able to answer questions because of lack of information (Wilson et al., 2020).

• Concerns that wearing PPE may interfere with forming and maintaining relationships with women and their partners.

Feelings about their own family life

- Fears for safety of their own family, including fear of possible transmission to family and also fears of becoming personally ill and unable to care for children (Maunder et al., 2006; McMullan et al., 2016).
- Concerns about home life: how to shop for food and other essential supplies, how best to care for dependants, challenges of home-schooling, concerns about how family members are coping (Gavin et al., 2020), including socially distanced relatives.

Feelings about own safety and wellbeing

- Fears for personal safety (especially some staff who may be at greater risk of infection e.g. BAME staff, pregnant staff and not having access to appropriate PPE) (Gavin et al., 2020; Kirby, 2020; RCM, 2020).
- Concerns that strategies felt to be necessary for staff safety have not been put in place.
- Anxieties about potential for social stigma public fears of contagion (Bai *et al.*, 2004; Maunder *et al.*, 2006).
- Experience of social isolation and physical distancing usual support mechanisms may not be available (Gavin *et al.*, 2020).

In addition, midwives will also be experiencing the universal sense of grief and loss shared across communities at the current time: restrictions and disruption to normal life, loss of connection, loss of sense of safety, fear of economic loss, (Berinato, 2020; Walton *et al.*, 2020).

However, there are also some (mainly anecdotal) accounts of **positive effects** of working in the unusual and intense situation of COVID-19, including:

- Increased sense of comradeship with the staff team.
- Creative freedom to try new ways of providing care.
- Pride in being part of a front line midwifery/wider NHS team.
- Increased self esteem stepping up to the challenge, public recognition of the value of their work (RCM 2020 Personal communication).
- Determination to continue to provide high quality care to women and their newborn.
- More time to spend with women in postnatal wards.

Additionally - How students may be feeling:

- Mixed emotions excitement, anxiety, fear, confusion, guilt (The Covid-19 Cohorts, 2020).
- Need extra care and support in both university and clinical placements.
- Concerned if this extra support is not readily available, as access to lecturers and clinical mentors may be reduced or virtual.

- Not what they were preparing for uncertainty (Kelly et al., 2020).
- Huge change in programme and focus, and in method of support from educators (i.e. virtual contact).
- May have conflicting feelings about whether or not to volunteer for practice, depending on personal circumstances.
- Pressure to volunteer for practice be a 'hero/angel' (British Psychological Society, 2020).
- Concern about their future i.e. when and how they may graduate, how the changes will affect their practice into the future, are they learning the right things?
- Their own safety, and the safety of their family.
- Guilt if they are not in a position to 'opt in' to clinical practice.

And, more positively:

- Excitement at being able to make a real difference.
- Pride in contributing to the NHS effort at the front line.
- Recognition of their potential to contribute to care and to enhance the experiences of women and families.

How returners may be feeling:

- Anxiety about having up to date knowledge, competence.
- Lacking in confidence.
- Complete change in perspective from retirement to front-line work.
- Particular fears for personal safety, as may be from older/vulnerable group, thus concerns regarding their own and their family's safety.

More positively:

- Pleasure at being able to give hands-on care to women and newborns again.
- Satisfaction at contributing to the NHS effort.
- Feel valuable to society, sense of purpose renewed.

2) Immediate strategies to support <u>all</u> midwives during a pandemic

Based on the information summarised above, evidence from the UK WHELM study (Hunter et al, 2019) and current best practice, we recommend the following strategies.

Strategies for how work is organised and sustaining quality midwifery care

- It is critically important to find out <u>what matters to midwives</u> (including students, returners and managers) as soon as possible. This should include identifying positive experiences and interventions, so that all employers and universities can learn from best practice.
- Do not move midwives to other areas of the service. Maternity care and midwifery are essential NHS services (International Confederation of Midwives, 2014; 2020; World Health Organisation, 2020a).
- Keep services as stable as possible, minimise unnecessary changes.

- To avoid moral distress, avoid putting staff in unfamiliar situations. For example, do not shut down continuity of care models, or community provision of antenatal, intrapartum, or postnatal care unless this is absolutely and demonstrably necessary – if these services are shut down, re-open them without delay when this becomes viable.
- Midwives who are themselves in high-risk categories for complications of COVID-19 (or who live with family members in that category) should be reassigned to work that reduces risk of exposure if that is their wish (World Health Organisation, 2020b).

Strategies for working conditions

- Pay particular attention to the needs of staff with protected characteristics and /or particular vulnerabilities e.g. BAME staff, pregnant staff, chronic ill health or disability.
- Ensure that it is possible for midwives to maintain appropriate working hours with regular breaks for food and exercise for all staff. All midwives have the right to expect that employers and managers will provide comprehensive occupational safety and health measures to optimise their wellbeing including PPE, appropriate working hours and breaks, and psychological support (Koh et al., 2005; McNeill et al., 2020; Nacoti et al., 2020, World Health Organisation, 2020b).
- Ensure that social distancing is possible in staff rooms, offices, canteens
- Make sure that, if staff cannot take a break at their scheduled time because
 of the needs of women and babies, they can do so when the need is less
 acute.
- Ensure a member of the team is mandated to (and has time to) check in on staff regularly to make sure they are well hydrated (especially if wearing PPE) and have enough to eat.
- Encourage self-awareness, remind staff not to neglect self care (Greenberg et al., 2020).
- Provide a regular drinks round, so that staff can have a drink even if they are
 otherwise too busy to stop. Set up staff rooms near to clinical wards, with
 food and drink available.
- Consider instituting 'ten at ten' a specific ten minutes every day when all staff can meet for tea and cake.

Strategies for supporting psychological wellbeing

- The evidence from previous epidemics and pandemics indicates that supporting staff mental health is crucial in both the short and longer term.
 "Prevention and mitigation is far more important than cure" (Walton et al., 2020 p.3).
- Psychological support is essential for optimising staff wellbeing. This should be available and accessible for all, for example via 24 hour on-line provision of emotional support (Maunder et al., 2006; Walton et al., 2020). Sharing concerns with a relative stranger can have advantages (Walton et al., 2020).

- Camaraderie is important (Walton *et al.*, 2020). Encourage social connectedness via virtual informal staff support groups (British Psychological Society, 2020).
- A lead with responsibility for staff psychological wellbeing in each unit is recommended. Staff need to feel supported, listened to and cared for by their employers in challenging times (Dashraath *et al.*, 2020, Garde *et al.*, 2019, Nacoti *et al.*, 2020).
- If emotional support resources are limited, those perceived as being at most risk of fear and of actual risk of infection should be a priority e.g. the RCM survey of members indicated that community-based staff may have particular concerns about possible exposure to coronavirus when visiting women's homes (RCM, 2020. Personal communication).

Strategies for management of staff

- Build trust through sensitive, frank and non-judgemental conversations between managers and clinical staff that enable staff to explore their fears and concerns. These conversations should be based on openness, reflexivity and accountability (Ryan et al., 2019).
- Managers need to listen to staff and communicate clearly and honestly (Walton et al., 2020).
- Discuss perceptions of risk openly, reassure re. risk level. Assure staff that it is okay not to be okay (British Psychological Society, 2020)
- Recognise the job satisfaction that midwives get from their relationships with women and their families and from giving quality care, and look for opportunities to optimise these experiences (Hunter *et al.*, 2019; Bloxsome *et al.*, 2020).
- Look for opportunities for staff empowerment and leadership (Walton et al. 2020) e.g. encourage staff to suggest innovative ways optimise relationships with women.

Strategies for supporting midwives' home lives

- Consider whether additional practical support can be provided for midwives
 e.g. ensuring childcare facilities are available, help with transport, support
 with shopping.
- Consider how midwives who are supporting relatives who are shielding/at greater risk can be supported.

In addition students may need:

- Proactive attention to their feelings. Regular time built into the programme for group and individual catch-ups.
- Awareness that students have very different personal circumstances and not all will respond in the same way e.g. some may not be in a position to opt into extended clinical placement scheme.
- Open discussion about concerns and fears, to include both clinical placements and theoretical learning.
- Ensure that there is continued focus on learning needs and how best to support these.

• Direction to sources of support e.g. student finance, student health and welfare services.

Returners may need:

- Sensitive support, ideally from one or two named individuals, focusing on clinical skills and knowledge and identifying any learning needs.
- Opportunities to contribute in ways that are not face to face, e.g. virtual working and communication.
- Regular opportunities to discuss experiences, feelings and concerns.
- Support from other returners e.g. peer support group (Walton et al., 2020).

3) Ensuring sustained wellbeing for midwives following a pandemic

- Learn lessons from what has worked well in other regions and countries.
 Ensure that the lessons learned are spread. Link up those sites which report coping more effectively and who have been able to maintain staff morale, with sites that have experienced more difficulties.
- It will not be possible to return to 'business as usual', given the impact of the pandemic on personal and professional lives. Make time to 'reflect on and learn' from the experiences to create a meaningful rather than traumatic narrative (Greenberg et al., 2020 p2). Consider using Schwartz rounds to facilitate this https://www.theschwartzcenter.org/programs/schwartz-rounds
- Be alert to the potential for long-term psychological impact such as PTSD and burnout (Koh et al. 2005). Trauma experts warn that there are long-term risks to staff mental health, which should be actively monitored for months if not years (Schraer, 2020).
- Some staff may also continue to experience a sense of moral distress, as they reflect on whether they did all they should have for women and newborns during the pandemic (Gavin *et al.* 2020). Ensure all staff know that they may have these feelings, that they are to be expected, and that they can talk to someone of their choice about them. Provide opportunities for those conversations to happen.
- Actively monitor staff to ensure that those who experience emotional and mental health challenges are encouraged to seek help (psychological support) without exposing them to fear of being judged. There is evidence that those staff who are experiencing the most serious emotional and mental health challenges may avoid meetings with colleagues and managers, so be alert to this (Greenberg et al., 2020).
- Collect stories of positive experiences, personal growth, creative solutions and share them. There is potential for increased esteem and sense of personal resilience (post-traumatic growth) after coming through a highly challenging situation (Brooks *et al.*, 2020; Wilson *et al.*, 2020). This can be a time when new leaders emerge (Wilson *et al.*, 2020).
- Ensure that new practices that worked to enhance care and staff wellbeing, including new ways of providing good quality maternity care, are embedded into the service going forward.

In addition, students may need:

- Time to discuss and process their experiences, both as a group and as individuals.
- A thorough evaluation of what they have learnt during the pandemic and identification of any gaps in knowledge and skills

Returners may need:

- Time to discuss and process their experiences, and what they mean for the future
- Opportunities to continue to contribute to NHS work (or to stay in touch with the teams they have been working with) if they wish, even if this is not in front line work.

References

Adams-Prassi A., et al. (2020) Inequality in the impact of the coronavirus shock: Evidence from real time surveys. *IZA Institute of Labor Economics, Discussion Paper Series*. April 2020. IZA DP 13183

https://www.iza.org/publications/dp/13183/inequality-in-the-impact-of-the-coronavirus-shock-evidence-from-real-time-surveys (accessed 17th May 2020)

Bai Y.M. *et al.*, (2004) Survey of stress reactions among health care workers involved in the SARS outbreak. *Psychiatric Services*. 55(9): 1055-1057

Berinato S. (2020) That discomfort you're feeling is grief. *Harvard Business Review*. March 23rd 2020 https://hbr.org/2020/03/that-discomfort-youre-feeling-is-grief

Bloxsome D. *et al.*, (2020) "I love being a midwife: It's who I am": A Glaserian grounded theory study of why midwives stay in midwifery. *J Clin Nurs*. 2020 Jan;29(1-2):208-220. doi: 10.1111/jocn.15078

British Psychological Society BPS (2020) *The psychological needs of healthcare staff as a result of the Coronavirus pandemic*. Leicester. Available at: https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News - Files/Psychological needs of healthcare staff.pdf.

Brooks S. et al. (2020) Psychological resilience and post-traumatic growth in disaster exposed organisations: Overview of the literature. BMJ Mil Health 166: 52-6

Chaffee, M. (2009) "Willingness of health care personnel to work in a disaster: an integrative review of the literature.," *Disaster medicine and public health preparedness*, 3(1), pp. 42–56. doi: 10.1097/DMP.0b013e31818e8934.

Cook T. *et al.* (2020) Exclusive: deaths of NHS staff from covid-19 analysed. Health Service Journal. April 23rd 2020 https://www.hsj.co.uk/exclusive-deaths-of-nhs-staff-from-covid-19-analysed/7027471.article

Cull J. *et al* (2020) "Overwhelmed and out of my depth": Responses from early career midwives in the United Kingdom to the Work Health and Emotional Lives of Midwives Study. *Women and Birth* (published online) https://doi.org/10.1016/j.wombi.2020.01.003

Dashraath, P. et al. (2020) "Coronavirus Disease 2019 (COVID-19) Pandemic and Pregnancy," American Journal of Obstetrics and Gynecology SL. doi: 10.1016/j.ajog.2020.03.021.

Devnani, M. (2012) "Factors associated with the willingness of health care personnel to work during an influenza public health emergency: An integrative review," *Prehospital and Disaster Medicine*, pp. 551–566. doi: 10.1017/S1049023X12001331.

Garde, D. L. *et al.* (2019) "Care of Pregnant Women: Experience from a Maternity-Specific Ebola Isolation Unit in Sierra Leone," *Journal of Midwifery and Women's Health*. 64(4), pp. 493–499. doi: 10.1111/jmwh.12997.

Gavin B., et al (2020) Caring for the Psychological Well-being of Healthcare Professionals in the Covid-19 Pandemic Crisis. Irish Medical Journal, 113 (4) p51

Greenberg N., Docherty M., Wessely S. (2020) Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *BMJ*: 368 m1211 doi: 10.1136/bmj.m1211

Hunter B. *et al.* (2019) Midwives in the United Kingdom: Levels of burnout, depression, anxiety and stress and associated predictors. *Midwifery* Vol. 79, 102526 https://doi.org/10.1016/j.midw.2019.08.008

International Confederation of Midwives (2014) Role of the midwife in disaster/emergency preparedness. The Hague.

International Confederation of Midwives (2020) *Women's rights in childbirth must be upheld during the coronavirus epidemic*. The Hague. Available at: https://www.internationalmidwives.org/assets/files/news-files/2020/03/icm-statement-upholding-womens-rights-during-covid19-5e83ae2ebfe59.pdf.

Jordan R.E., Adab P. (2020) Who is most likely to be infected with SARS-CoV-2? *The Lancet Infectious Diseases*. https://doi.org/10.1016/ S1473-3099(20)30395-9

Kelly, A. H. *et al.* (2020) Uncertainty in times of medical emergency: Knowledge gaps and structural ignorance during the Brazilian Zika crisis. *Social Science and Medicine*. Elsevier Ltd, 246, p. 112787. doi: 10.1016/j.socscimed.2020.112787.

Kirby, T. (2020) 'Evidence mounts on the disproportionate effect of COVID-19 on ethnic minorities', *The Lancet Respiratory Medicine*. Elsevier, 0(0). doi: 10.1016/S2213-2600(20)30228-9.

Koh, D. *et al.* (2005) Risk perception and impact of severe acute respiratory syndrome (SARS) on work and personal lives of healthcare workers in Singapore: What can we learn? *Medical Care*, 43(7), pp. 676–682. doi: 10.1097/01.mlr.0000167181.36730.cc.

Lai J., et al. (2020) Factors associated with mental health outcomes among healthcare workers exposed to coronavirus disease 2019. *JAMA Network Open*. 2020 March. 3 (3) e203976 doi: 10.1001/jamanetworkopen.2020.3976

Manley K. (2008) The way things are done around here; Developing a culture of effectiveness: A pre-requisite to individual and team effectiveness in critical care. *Australian Critical Care* 2008; **21**(2): 83-5.

Maunder R.G. *et al.* (2006) Long-term psychological and occupational effects of providing hospital healthcare during SARS outbreak. *Emerging Infectious Diseases* 12 (12): 1924

McMullan C. *et al.* (2016) Preparing to respond: Irish nurses' perceptions of preparedness for an influenza pandemic. *International Emergency Nursing* 1: 26 p3

McNeill, C. et al. (2020) "Characterization of nurses' duty to care and willingness to report," *Nursing Ethics*. SAGE Publications Ltd, 27(2), pp. 348–359. doi: 10.1177/0969733019846645.

Nacoti, M. et al. (2020) "At the Epicenter of the Covid-19 Pandemic and Humanitarian Crises in Italy: Changing Perspectives on Preparation and Mitigation." *NEJM Catalyst: Innovations in care Delivery.* doi: 10.1056/CAT.20.0080.

Renfrew MJ, et al. (2014) Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. Lancet 2014. http://dx.doi.org/10.1016/S0140-6736(14)60789-3.

Renfrew, M. J. et al. (2020) Optimising maternity services and maternal and newborn outcomes in a pandemic A rapid analytic scoping review. Available at: https://www.rcm.org.uk/media/3869/rapid-review-optimising-maternity-services-for-rcm-v4-8-april.pdf (Accessed: 30 April 2020).

Royal College of Midwives (RCM) (2020) Advice for Pregnant Healthcare Workers. https://www.rcm.org.uk/advice-for-pregnant-healthcare-workers (accessed 19th May 2020)

Ryan, M. J. et al. (2019) "Technologies of trust in epidemic response: Openness, reflexivity and accountability during the 2014-2016 Ebola outbreak in West Africa,"

BMJ Global Health. BMJ Publishing Group, 4(1), p. e001272. doi: 10.1136/bmjgh-2018-001272.

Sandall, J. et al. (2016) 'Midwife-led continuity models versus other models of care for childbearing women', *Cochrane Database of Systematic Reviews*. John Wiley and Sons Ltd. doi: 10.1002/14651858.CD004667.pub5

Schraer R. (2020) Coronavirus: Mental health of NHS staff at long-term risk. BBC News online 15th May 2020 https://www.bbc.co.uk/news/health-52528619 (Accessed 18th May 2020)

Seale, H. et al. (2009) "Will they just pack up and leave? Attitudes and intended behaviour of hospital health care workers during an influenza pandemic," BMC Health Services Research. BioMed Central, 9(1), p. 30. doi: 10.1186/1472-6963-9-30.

Tam, C.W. et al (2004) Severe acute respiratory syndrome (SARS) in Hong Kong in 2003: Stress and psychological impact among frontline healthcare workers. *Psychological Medicine*. 2004 Oct; 34 (7): 1197-1204

The Covid 19 cohorts (2020) *All4maternity Blog*. https://www.all4maternity.com/new-beginnings. Accessed 18/05/20 Topping, A. (2020) Sexism on the Covid-19 Frontline: 'PPE is made for a 6ft 3 in Rugby player'. *The Guardian online*, 24th April 2020. https://www.theguardian.com/world/2020/apr/24/sexism-on-the-covid-19-frontline-ppe-is-made-for-a-6ft-3in-rugby-player

Walton M., Murray E., Christian M.D. (2020) Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic. *European Heart Journal: Acute Cardiovascular Care* 0(0) 1-7 doi: 10.1177/2048872620922795

Wilson A.N. *et al.* (2020) Caring for the carers: Ensuring the provision of quality maternity care during a global pandemic. Women and Birth http://dx.doi.org/10.1016/j.wombi.2020.03.011

World Health Organisation (2020a) "Operational guidance for maintaining essential health services during an outbreak," (March), pp. 1–14.

World Health Organisation (2020b) *Rights, roles and responsibilities of health workers during Covid-19, including key considerations for occupational safety and health*. https://www.who.int/docs/default-source/coronaviruse/who-rights-roles-respon-hw-covid-19.pdf?sfvrsn=bcabd401_0 (Accessed 19th May 2020)