Work, Health and Emotional Lives of Midwives in the United Kingdom: The UK WHELM study

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EXECUTIVE SUMMARY

Background: There is growing evidence that high levels of emotional distress in the midwifery workforce contribute to low morale and attrition. There is a chronic shortage of midwives in England partly attributable to difficulties with staff retention. There are similar concerns noted in relation to the midwifery workforce in other high income countries. It is important to find out more about the characteristics of the midwifery workforce and working environment that may contribute to emotional distress and ill health, so that possible solutions can be identified.

With this aim in mind the Royal College of Midwives (RCM) commissioned the Work, Health and Emotional Lives of Midwives (WHELM) study for the United Kingdom (UK). The study builds on the 'Caring for You' campaign https://www.rcm.org.uk/caring-for-you-campaign and contributes to the evidence base on how best to support and sustain the midwifery workforce.

Aim: The aim of the study was to explore the relationship between the emotional wellbeing of UK midwives and their work environment, using a cross sectional research design.

Methods: An on-line survey was distributed via the RCM to all full midwife members in 2017 (n= 31,898). The WHELM survey tool was conceived within the Australian maternity context and to date has been conducted in Australia, New Zealand, Sweden, Canada and Norway. The survey tool consisted of a number of validated measures: The Copenhagen Burnout Inventory (CBI), Depression, Anxiety and Stress Scale (DASS-21), The Perceptions of Empowerment in Midwifery Scale (PEMS: Revised), and the Practice Environment Scale (PES: Midwives). The survey also included items from the RCM 'Why Midwives Leave' study (Ball et al., 2002). Demographic questions were modified for the UK context and pilot tested.

Key Results: Just under 2000 midwives responded to the survey (n=1997). This represents 16% of the RCM membership.

The key results were very concerning and indicate that the UK's midwifery workforce is experiencing significant levels of emotional distress.

High levels of burnout

83% of participants were suffering from personal burnout and 67% were experiencing work-related burnout. Client-related burnout was low at 15.5%. The personal and work related burnout scores were well above population norms as well as higher than the results from other WHELM collaborating countries.

High levels of stress, anxiety and depression.

Over one third of participants scored in the moderate/severe/extreme range for stress (36.7%) anxiety (38%) and depression (33%). This was well above population norms and those of other WHELM countries.

Factors associated with high levels of burnout, depression, anxiety and stress.

- Younger midwives (midwives aged 40 and below)
- Midwives with a disability
- Midwives with less than 30 years' experience
- Clinical midwives, particularly those working rotation in hospital and in integrated hospital/community settings.
- Perceptions of low levels of resource adequacy was the strongest predictor of work-related burnout
- Perceived low levels of management support, professional recognition and opportunities for development also contributed to burnout, depression, anxiety and stress.

High numbers of midwives intending to leave the profession

66.6% of participants stated they had thought about leaving the profession within the last six months. The two top reasons were: 'Dissatisfaction with staffing levels at work' (60%) and 'Dissatisfaction with the quality of care I was able to provide' (52%).

Midwives intending to leave had significantly higher levels of burnout, anxiety, stress and depression than those who had not considered leaving.

Key Recommendations

- Lobby for systems level changes in the resourcing and provision of maternity care throughout the UK.

- Increase pressure on government to address issues of workforce shortages, with a new focus on **retention** of recent graduates rather than merely increasing student numbers.
- Introduce evidence-based interventions for workforce support and ensure that midwives are given 'protected' time to attend.
- Provide proactive support for younger, recently qualified midwives, a group identified as being particularly at risk of emotional compromise. Focus support on their key identified needs, to promote workforce sustainability.
- Provide proactive support for midwives with a disability to support their emotional wellbeing.
- Ensure that all managers receive high quality management and leadership training appropriate for the context and challenges of UK maternity care, and underpinned by a supportive, empowering and collaborative approach to leadership.
- Facilitate a sense of shared leadership amongst midwives at a team level, for example engaging clinical midwives in discussions about how to improve care. Seek opportunities for optimising midwives' sense of agency.
- Update the evidence base relating to midwifery managers' experiences by undertaking research into their emotional wellbeing and needs.

INTRODUCTION

Workforce wellbeing is a key concern for the Royal College of Midwives (RCM), as evident in their *Caring for You* campaign https://www.rcm.org.uk/caring-for-you-campaign. There is growing evidence that high levels of emotional distress contribute to low morale and midwifery attrition (Ball et al., 2002; RCM, 2016a; RCM, 2016b; Sheen et al., 2015; Yoshida & Sandall, 2013). There is a chronic shortage of midwives in England (Warwick, 2017), partly attributable to difficulties with staff retention. In 2016 two membership surveys were conducted by RCM: the *Caring for You Survey* (RCM, 2016a), and the *Why Midwives Leave Survey* (RCM, 2016b). Findings from both surveys identified important concerns in relation to midwives' workplace stress and low morale, but left many questions unanswered.

As a response, RCM commissioned the United Kingdom arm of the 'Work Health and Emotional Lives of Midwives' (WHELM) study to provide stronger scientific evidence about workforce wellbeing and the factors that influence this. The College considered it was important to find out more about the characteristics of midwifery work that may contribute to workplace stress, so that possible solutions can be identified. The key study aim was to explore the relationship between the emotional wellbeing of midwives and the work environment, within the context of UK maternity care. The working hypothesis was that work related variables may be associated with emotional distress in midwives.

The UK WHELM study contributes to a broad programme of RCM work seeking to develop and implement strategies to better support the midwifery workforce, and ultimately improve the quality of care provided to women and families. WHELM studies have already been undertaken in Australia, New Zealand, Sweden, Canada and Norway with additional arms planned for Germany, Lithuania and Ireland. Participating in the WHELM collaboration also provides opportunities for future cross-cultural comparisons, facilitating rich insights into the wellbeing of the international midwifery workforce.

Background

Attending to the emotional wellbeing of individual midwives is increasingly recognised as an important strategy in retaining midwives within the profession and maintaining a healthy midwifery workforce (RCM, 2016a). However, there has been limited research attention

paid to the emotional needs and experiences of midwives as a factor in retention and workplace health.

Midwives care for women and their families during an emotionally demanding time. Although pregnancy and birth is a mostly joyful experience, this is not always the case. Even when caring for women with straightforward pregnancies, midwives may have to support women experiencing anxiety and pain. They also may experience vicarious secondary trauma when caring for women who experience adverse situations such as pregnancy complications and loss of their baby (Leinweber & Rowe, 2010; Rice & Warland, 2013). Midwifery work is intrinsically emotionally demanding, and it has been argued that the extensive 'emotion work' that this creates for midwives is largely unrecognised and undervalued (Hunter, 2010).

The current evidence indicates a range of organisational and professional factors that create workplace adversity for midwives and may compromise their emotional wellbeing. These include shift working, heavy workload, bullying, poor quality support and staff shortages (Ball et al., 2002, Mollart et al., 2013; RCM, 2016a, 2016b). Over a decade ago, an extensive study of why UK midwives leave or stay in practice showed that high levels of stress or workplace adversity in midwifery were widespread and associated with both physical and mental ill-health, increased rates of sickness and poor staff retention, (Ball et al., 2002; Kirkham et al., 2006). The study of why midwives leave has recently been replicated (RCM, 2016b), and shows that the situation has not improved. Moreover, the context of UK maternity care has become more demanding for midwives: the birth rate has risen by nearly 20% since 2002, women accessing maternity services have increasingly complex care needs (RCM, 2016b), and a persistent shortage of midwives exists (estimated by RCM to be a shortage of 3,500 posts in England alone, RCM 2017). The key reasons given by midwives for leaving or intending to leave midwifery in the RCM's 2016 survey were: not happy with staffing levels at work; not satisfied with the quality of care they were able to give; not happy with the workload; not happy with working conditions. Concerns were also expressed about the quality of managerial support, the model of care that midwives were working in, bullying and discrimination (RCM, 2016b).

These concerns suggest that it is not just practical factors such as staff shortages and lack of resources that contribute to low morale and distress, but that there are also other factors at play which are less tangible. Some of the free text responses to this survey (RCM, 2016b) indicated that not being able to give good quality care and '*do the job (they) love*' erodes job satisfaction. Other studies of midwives' emotional wellbeing suggest that many midwives experience a conflict of ideologies resulting from a profound mismatch between the professional ideal of being 'with woman' and providing woman-centred care, and the reality of working in a busy workplace environment where the needs of the institution are perceived to take precedence (Fenwick et al., 2012; Hunter, 2004; Hunter, 2010). This conflict creates a sense of dissonance, which leaves midwives feeling frustrated, angry and emotionally exhausted, creating substantial 'emotion work' or 'emotional labour'. Some time ago, Hunter (2006) argued that the lack of professional acknowledgment of this emotion work leaves individual midwives at risk of internalising any negative emotions as personal dilemmas and failings.

There are, however, studies which have identified factors which impact positively on midwives' emotional wellbeing, in particular relationships, occupational autonomy and social support. The emotional significance of developing meaningful relationships with childbearing women has been identified in numerous studies (Kirkham et al., 2006; McAra-Couper et al., 2014; Sullivan et al., 2011). High levels of occupational autonomy have been found to support the emotional wellbeing of midwives, with lower levels of 'burnout' found amongst midwives working in self-employed practice and in the community (Bakker, Groenewegen, Jabaaij, Sixma, & de Veer, 1996; Wakelin & Skinner, 2007; Yoshida & Sandall, 2012; Dixon et al., 2017). More recently, there has been growing interest in midwifery resilience (Hunter & Warren, 2014) and sustainability (Crowther et al., 2016). These studies highlight the importance of relationships, autonomy and social support, as well as professional identity and love of the job, as buffers against the inevitable stresses of this emotionally demanding work.

AIM

This study explored the relationship between the emotional wellbeing of midwives and the work environment within the UK context of maternity care. The working hypothesis was that work-related variables may be associated with emotional distress (defined as burnout, depression, anxiety and stress) in midwives. The specific objectives of the study were to:

1. Determine the socio-demographic and work-related variables that correlate with high levels of emotional distress in midwives in the UK
2. Determine the level of burnout, depression, anxiety and stress in midwives and describe the predictors of burnout, depression, anxiety and stress
3. Identify intention to leave the profession, and the reasons and factors associated with an intention to leave
4. Describe midwives' perceptions of the workplace (relationships, practice environment and midwifery empowerment) and associations with burnout, depression, anxiety and stress
5. Identify whether an intervention designed to improve emotional wellbeing might be acceptable to midwives, and what form this might take

METHODS

The study employed a cross sectional design replicating the WHELM survey. Initially piloted by researchers at Griffith University, Australia, the survey consisted of personal and work-related characteristics, together with a number of well validated measures as well as questions from the RCM 'Why Midwives Leave' study (Ball et al., 2002).

Target Population

The population was registered midwives working in the UK. Most UK midwives work as employed midwives within NHS maternity services. Work context varies: hospital settings (District General Hospital or Tertiary Referral Centre), standalone or alongside midwifery-led birth centres, primary care (community) or in integrated NHS schemes, moving between community and hospital settings. It is also possible, though less common, for midwives to work in self-employed independent practice or within private healthcare. All qualified midwives were eligible to participate, regardless of work location or role.

Recruitment

All midwife members of the RCM were invited to participate via e-mail. The RCM, a membership organisation that supports and represents midwives in the UK, has a database of members (which includes e-mail contact details) with whom it regularly communicates. The majority of midwives in UK are members of the RCM; estimated to be 90%. The study was also publicised via the RCM website, social media, regular RCM mailshots and an article in the RCM Midwives Journal.

The e-mail to members included a letter of invitation outlining the aims and objectives of the study, the contact details of the project manager should clarification be required, and a live link to the questionnaire platform hosting the survey. As no name-related data was required, consent was implied if the midwife participant completed the questionnaire. E-mail reminders were sent at 2 and 5 weeks.

Data collection

The WHELM survey was adapted for use in the UK context, for example by altering some terminology and by adding questions related to the UK context of midwifery. The modified survey was pilot tested with 14 midwives. Participants were given a specific scenario profile (i.e., role, location, model of care) and asked to complete the survey as though they were that participant midwife. Midwives were asked to check the survey for clarity of meaning, relevance and answerability. No changes were made as a result of the pilot.

The final questionnaire package consisted of a number of sections. Firstly, midwives were asked a number of demographic questions (for example age, marital status, education). Secondly, midwives were asked about work related characteristics such employee status, principal role, model of care. Midwives were then asked to complete a number of well tested and validated measures. These included the: The Copenhagen Burnout Inventory (CBI); Depression, Anxiety and Stress Scale (DASS-21); Practice Environment Scale (PES: Midwives); and the Perceptions of Empowerment in Midwifery Scale (PEMS: Revised) (see Box 1 for a detailed description). Key questions pertaining to participant's intention, or otherwise, to leave the profession were also included. Space to provide free text responses to some questions was also offered. In order to identify possible support strategies,

questions were included asking midwives to indicate whether they would access support strategies if provided and what strategies they would like to see offered.

Data were collected over eight weeks between May to July 2017. The data collection period was extended by two weeks, as there were concerns that participation may have been negatively affected by the NHS cyber-attack in May 2017.

Data Analysis

Statistical analyses

Descriptive analyses were conducted to describe the demographic and work-related characteristics of the sample, and to determine levels of burnout, depression, anxiety and stress in the sample.

Non-parametric statistical analyses were used to compare CBI and DASS scores across groups based on demographic and work characteristics. Some variables were modified by collapsing or excluding categories to ensure that there were sufficient cases for statistical comparison. Only variables with sufficient numbers were reported in the results tables. Mann-Whitney U tests were used for two group comparisons, Kruskal Wallis tests were used for groups with 2+ groups. Given the large number of analyses undertaken a more conservative alpha level ($p<.01$) was used to identify statistically significant comparisons.

Chi-square analyses were conducted to compare the characteristics of midwives who had, versus had not considered leaving the profession. Pearson correlation coefficients were calculated to explore the relationship between scores on the PES: Midwives and PEMS: Revised with the CBI and DASS scales.

Qualitative analayis

Content analysis was used to analyse the free text responses. A coding framework was developed by analysing the responses of the first 200 participants, with two members of the team undertaking independent coding. The resulting coding framework was discussed and agreed, with reference to the quantitative results, and then applied to the remainder of the free text responses.

Ethical Considerations

Ethical approval to conduct the study was granted by Cardiff University School of Healthcare Sciences Research Ethics on 9th May 2017.

RESULTS

The results are presented in an integrated format, with qualitative data extracts illustrating the quantitative data. Participants are identified by their workplace setting: District General Hospital (DGH), Tertiary Referral Unit, Stand alone birth centre, Alongside birth centre, Community – Primary care setting only, University (education and/or research).

The qualitative data extracts have occasionally being edited for clarity, as respondents often discussed a range of issues within one account. Where editing has occurred, the deleted text is indicated by the use of square brackets i.e. [….]

Participant characteristics

The total number of midwives who responded to the survey was 1997. The vast majority were female (n = 1981, 99.4%)[1] with a median age of 47 years (range 21 to 67 years). While 74% (n=1477) noted they had children, nearly 84% (n=1615) recorded 'carer' responsibilities. In addition 12.5% (n=249) identified as having a disability[2]. The majority of midwives (n=1639, 82.9%) worked in England. See Table 1 for additional demographic

[1] Reflecting the national gender mix for midwifery (NMC, 2017), see Table 1.

[2] It is difficult to assess how this compares with UK wide self-reported disability rates for midwives. Latest NMC figures (NMC, 2017) show only 5.0% of midwives noting a disability, although another 16.6% did not answer the question. The Papworth Trust estimates that 16% of UK adults of working age have a disability. However, they caution that those in employment may not disclose disability due to stigma. For example, in the Civil Service in 2013, 8.8% declared a disability, with those at a higher level of responsibility being less likely to declare disability (5%).

http://www.papworthtrust.org.uk/sites/default/files/Disability%20Facts%20and%20Figures%202016.pdf

details (including how some of these characteristics compare with the most recent data available from the Nursing and Midwifery Council, NMC 2017). Participant age tended to be greater than the UK profile, and participants were more likely to be from a White British background and more likely to disclose a disability. Table 2 provides details of self-reported disability categories.

In terms of work characteristics, nearly 57% of participants (n=1128) had an initial undergraduate midwifery qualification. Years of experience ranged from less than one to 55 with 15.1 being the median. Just under 92% worked in some type of clinical capacity with only 8.3% (n=315) choosing a non-clinical category (education, research, management, policy/administration).

Over 88% (n=1765) of participants were employed by the NHS with 66.6% (n=1311) stating they worked in a district general hospital or tertiary referral unit. A further 20% (n=390) stated they only worked in a community primary health care setting. The majority of the remaining participants worked in a Birth Centre (n=189, 9.6%) or the University sector (n=79, 4%). Less than one percent of the sample (n=11) were working in private/independent practice.

Just over a third of the sample 36% (n=719) reported a requirement to provide regular "on call" cover. In the majority of cases this requirement was related to general organisational/community cover as opposed to being "on call for a defined caseload of women". While 63 (3.2%) midwives indicated that they were on call for a defined caseload of women, only 43 (2.1%) midwives reported working in a continuity model where they were the designated named midwife to a defined caseload of women providing care across the childbirth continuum (pregnancy, labour and birth and transition to early parenting). The remaining 20 midwives worked in a modified continuity model where they only provided antenatal and postnatal care. Table 3 provides more detailed information on the work-related characteristics of the cohort.

Midwives' emotional well-being

Midwives were asked to complete a number of validated questionnaires which were designed to measure their emotional well-being. These included the Copenhagen Burnout

Inventory (Kristensen et al., 2005) and the Depression, Anxiety and Stress Scale (Lovibund & Lovibund, 1995).

Levels of burnout, stress, anxiety, and depression

The CBI has three burnout domains / subscales: personal, work-related, client-related (for details of the domains see Box 1). Eighty-three percent of midwives recorded scores of moderate or above on the personal domain with some 67% also registering moderate or above levels of burnout on the work-related domain. In comparison client related burnout was low at 15.5%. In addition over one third of the sample recorded scores in the moderate/severe/extreme range for each of the three DASS subscales (Stress 36.7%; Anxiety 38%; Depression 33%).

Factors associated with burnout, depression, anxiety and stress

Statistical analyses were conducted to identify demographic and work-related factors associated with elevated levels of burnout, depression, anxiety and stress. Younger midwives (midwives aged 40 and below) recorded significantly higher scores on the personal and work burnout subscales scales, and on each of the DASS scales compared with older midwives.

Respondents with a self-reported disability recorded higher scores on all scales, except Client-Burnout. Lack of collegial and managerial acknowledgement and understanding of disability was noted by some of these participants. For example, a midwife working in a stand-alone birth centre noted: *"Lack of understanding about my disability."*

Married or partnered midwives recorded lower depression scores, while midwives with children recorded lower client related burnout and anxiety scores. Personal and work related burnout scores varied across regions, with England (North East) recording the highest scores, and Scotland and North Ireland the lowest (see Table 4 for more detail).

Midwives with more than 30 years' experience recorded lower scores on all the CBI and DASS scales. Likewise midwives whose initial qualification was a certificate of midwifery (an initial midwifery education pathway offered until the early 1980s) recorded lower scores on all measures, except client related burnout, when compared with the other two groups (Diploma and Bachelor).

In terms of workplace setting, the highest burnout scores were recorded for midwives employed by the NHS (that is, 88% of the sample). This group also recorded higher stress, anxiety and depression.

Midwives working in district general hospitals recorded high burnout and anxiety scores, as did midwives who worked night shift, however this group also had high stress scores. When the principal role of midwives was used to compare groups, high levels of burnout were recorded in clinical midwives particularly those working in rotation throughout the hospital and those working in integrated hospital/community settings. Further details are provided in Table 5.

Contextualising the quantitative results

The majority of participants (87%) provided extensive free text comments describing their working conditions and work relationships and the impact these were having on their physical and mental wellbeing. Analysis of the free text data provides valuable insights into the high CBI and DASS scores recorded and presents a more detailed picture of midwives who are experiencing acute levels of emotional distress. The overwhelming impression was that many midwives felt exhausted by their day-to-day work, emotionally and physically drained, dreaded the thought of another day's work and seriously wondered how much longer they could carry on. Many of them thanked the team for conducting the study, and expressed the hope that the findings would lead to change.

The participant responses below are typical of the avalanche that were received:

> *"I don't remember the last time I had any energy and wasn't completely exhausted"* (DGH)
>
> *"I spend my time away from work (days off, sleepless nights) worrying that I may have made a mistake, or missed something because of the time pressures felt"* (DGH)
>
> *"Waking up with flash backs […] wondering where did my fire go"* (DGH)
>
> *"I thought when I trained to become a midwife my dreams had all come true, feeling very sad now facing how traumatic the job can be on my family life*

and health and wonder how much longer the dream will last" (Community – primary care setting)

Participants described having serious concerns about their own mental health and that of their colleagues, describing the *'constant battery to my mental health and anxiety levels'*:

> *"I couldn't sleep due to worrying about going to work. I once slept in my car in the hospital car park because I was so stressed about coming to work. At this point I realised I had to seek some help, I saw my GP and I am now on antidepressants and reduced my contract to zero hours. I still have anxiety at present but I'm trying to work through it as I don't want to end my career this way. To look at me in the workplace you wouldn't know but inside I'm burnt out"* (Tertiary referral unit)

To gain greater insight into the reasons why midwives are experiencing such high levels of burnout, stress, depression and anxiety, the responses to other sections of the survey are presented below in more detail.

Intention to leave the profession

Midwives were asked whether they had considered leaving the midwifery profession over the last six months. Sixty-six percent (n=1318) responded 'yes' to this question. All reasons that midwives gave for considering leaving the profession are provided in Table 6.

Factors associated with intention to leave the profession

Statistical analyses were conducted to compare those midwives who had considered leaving the profession with those that had not. For this set of comparisons those midwives who indicated that their reason for leaving was 'planned retirement' were removed from the sample to prevent bias.

Midwives who had considered leaving the profession showed statistically significant differences across all measures of emotional wellbeing. They recorded much higher levels of burnout across the three CBI domains: personal (75 v 54.1); work (64.2 v 46.4); client (29.1 v 12.5) and also recorded substantially higher levels on all three subscales of the DASS [(depression 16 v 8); anxiety (8 v 4); stress 10 v 2)] (see Table 7).

There were three leading reasons why midwives considered leaving: staffing levels at work, quality of care, and organisation of midwifery care. These are discussed in turn, illustrated with extracts from the free text responses.

Dissatisfaction with staffing levels at work

Sixty percent of participants indicated that they intended to leave as a result of '*dissatisfaction with staffing levels at work*'. There were extensive free text comments about inadequate staffing levels from participants working across all maternity care settings. The data set was dominated by descriptions of organisational failure to provide cover for sick leave and maternity leave or even to provide cover for lunch breaks. The resultant increased workload left many feeling like they were continually '*fire fighting*' and '*plugging gaps'*. Perpetual staff shortages and unsustainable workloads contributed to the midwives' assessment that their working environments were not only unhealthy for themselves but, more importantly, for the woman in their care.

> *"I suffer from stress and anxiety due to workload. Lack of staff and resources mean I am stretched and cannot give the care I want to give to families. I work 12 hour shifts and hardly ever get a break and often work over my hours but never get any time back/extra pay. I have seen services being cut back due to financial restraints meaning women aren't getting as good care as they used to. I feel like there are many instances where the women in my care are not safe due to a shortage of healthcare professionals."* (DGH)

> *"Unsafe workload. Not having breaks on regular basis. Not feeling valued. Not enough equipment to practise safely. Insufficient support staff, meaning I have to perform a lot of non-midwifery duties, impacting on my role."* (Tertiary referral unit)

Quality of care

Not surprisingly the inability to feel satisfied with the '*quality of care*' that midwives could provide to childbearing women was the second most commonly recorded reason for considering leaving (n=682, 52%). Concerns about clinical safety, unnecessary intervention, non-evidenced based practices, over medicalisation, lack of woman-centred care, and a lack

of continuity left midwives feeling '*physically exhausted*' and '*demoralised*', as described by this midwife*: 'The feeling of failure when you've physically exhausted yourself and couldn't possibly do anymore is demoralising'* (DGH). Many of these concerns were linked to the staffing shortages previously described and the resultant lack of time to care. Midwives' perceptions that they were '*failing*' women on almost every level created a deep-seated sense of burden and distress. The comment, '*Above everything, not giving the women and babies the care they deserve is the worst aspect'* (DGH) reflects the words of hundreds in the data set.

For some, the '*sadness*' and '*frustration*' generated by not being able to provide quality of care resulted in midwives moving out of clinical practice. As one midwife said:

> *"I moved from a clinical 'hands-on' midwifery role because I did not feel able to give the quality of care that I would aspire to. I felt in my former clinical role that the working patterns and on-calls contributed to exhaustion and job satisfaction and risked safe practice."* (Community - primary care setting only)

Organisation of midwifery care

Just under half of the respondents identified that they were dissatisfied with the '*organisation of midwifery care*' (n = 621, 52%). Unhappiness with organisational issues included dissatisfaction with: the support afforded for regular breaks; shift patterns; rotation; expectation of flexibility; providing on call cover, and model of care[3].

Further insights into these concerns were provided in the responses to general questions about workplace satisfaction and dissatisfaction. It was clear that midwives frequently faced difficulties in taking regular breaks during the working day, especially those working in a DGH or tertiary referral unit. Indeed, these difficulties appeared to be so commonplace that they were often not noted in the 'negative' comments. Rather, it was when it was possible to take a break that a positive comment was made; for example, sources of satisfaction

[3] 'Model of care' was a possible response in the 'Reasons for considering leaving' survey question. This response appears to have been interpreted in different ways by participants

were: *'Getting reliable breaks so I don't 'burn out''* (DGH) and '*Being able to have a break on shift or even able to urinate when needing to'* (DGH). Likewise for community-based midwives, a positive day was one when there was*: 'Time to complete care and admin within work hours. Not working excess hours, getting lunch break.'* (Community - primary care setting only)

There were also extensive negative comments from hospital-based midwives about shift work, in particular where there was little personal control over shift allocations and where rotas were changed at short notice. This created stresses for personal and family life and compromised wellbeing:

> *"Working environment. Lack of shift pattern (haphazard shift pattern). Rotas not available on time - unable to plan family life and childcare. Short staffing leading to stretched workloads, not providing high quality experience for women and families due to production line of work, burnout, missed breaks etc."* (DGH)

Many midwives commented on a lack of personal autonomy in relation to work patterns and locations, feeling felt that they were moved 'when it suits managers' to 'plug the gaps'. This was experienced as stressful and anxiety producing:

> *"The perception that my role is not essential and the expectation that I can be used to plug gaps elsewhere means I am asked to work clinically in areas I'm very unfamiliar with, but where there is no support and it doesn't feel safe."* (DGH)

> *"Having to work or be on call on my days off to support my team or the unit, being called in to work in the unit when I am on call for homebirths, feeling like my workload is too high and that I cannot control it, feeling like I can't say no to managers' requests because of pressures in the unit."* (DGH)

For community-based midwives, this expectation of 'flexible working' took the form of being required to provide on call cover for birth centres and delivery suites, in addition to covering their own caseload. Community midwives experienced this as '*Being told community work isn't as important as delivery suite*.' They described being frequently called in to cover when

the labour ward was short-staffed. This created anxieties when they were caring for 'higher risk women' than was their usual practice, and also when they felt that care for 'their own women' was compromised: '*Being on call for home births but instead being called to cover high risk women on a labour ward'.* (Community - primary care setting only)

Other reasons for considering leaving

Dissatisfaction with workload accounted for 44% (n=585) of responses, whilst dissatisfaction with working conditions, pay, and shift patterns was recorded at 38% (n=495), 36% (n=468), 32% (n=423) respectively. Fear of litigation accounted for 30% (n=399) of responses, with 'dissatisfaction with line manager support' recorded at 28% (n=373).

Midwives vividly described their personal concerns about the level of responsibility they carried and their feeling of '*being under the microscope*' (DGH). Their accounts suggested that they did not feel well supported by managers in this respect. Some hospital-based participants were also concerned that a widespread culture of litigation fear impacted on the care that women received, with a default to medicalised care to '*err on the safe side'*:

> *"Women receiving complex care instead of midwifery care because of midwives' fear of litigation"* (DGH)

Conversely, community-based midwives described fears related to caring for '*high risk*' women birthing at home without adequate back up and support for the attending midwife. Underpinning these accounts were strongly expressed concerns about high levels of responsibility and accountability without appropriate support.

> *"Every shift we are short staffed and therefore over worked, don't get breaks and leave late. We do not get paid enough for the responsibility we have. It is terrifying sometimes the pressure we have, the fear of litigation, the fear of something awful happening."* (DGH)

Fears about being sued or caught up in litigation cases were thought to be well founded, with midwives describing a failure of the system and their management to support them in adverse clinical situations. The following quote from one community-based midwife is a powerful example and resonates with the many others that were made:

"When something goes wrong, which inevitably will always happen, as sadly not every pregnancy ends well, however good the care, midwives are treated appallingly, it is shocking and devastating to observe good hard working midwives torn apart by the absolutely disgusting way that incidents are dealt with. Babies do and will die, and it is not always somebodies (sic) fault. Trusts persecute individual midwives in order to cover their own back as far as litigation. There is never any support it is a truly horrific witch-hunt. I have met so many broken midwives, who then leave the profession." (Community - primary care setting only)

Perceptions of the workplace

Working relationships

Midwives were asked to rate how satisfied they were with their relationships with other professionals. The results are summarized in Table 10. Satisfaction rates with midwifery colleagues (both hospital and community) were very high across all work settings, with over 90% of midwives reporting moderate or high satisfaction. This was reflected in the free text responses, where positive relationships with midwifery colleagues were frequently mentioned as not only a source of satisfaction and affirmation but also enabling midwives to '*keep going*'.

"The support received by colleagues and trust forged by working in a small unit. A good working relationship with community midwives and feedback we receive from them." (DGH)

"Healthy working relationship with colleagues, camaraderie, being respected as an expert clinician." (Tertiary referral unit)

"I work as part of an excellent community team and we have great relationships and support one another." (Community - primary care setting only)

While some midwives did describe feeling affirmed and supported by their midwifery manager, almost 45% were not satisfied or reported low satisfaction levels with these

relationships. Participants stated that they did not feel valued or respected by managers, that their expertise was not acknowledged and that they were not consulted on important organisational changes. In the most negative accounts, there was mention of bullying or undermining behaviour by managers.

There were extensive comments about these issues, particularly from those working in hospital-based practice. Examples include: "*Managers don't care. Pay lip service only*" (DGH); "*Unrealistic expectations from management*" (DGH); "*Bullying and humiliation often in front of the woman*" (DGH); and "*Not feeling valued (or not being consulted about changes) for your hard work, contribution and efforts by women, colleagues, managers and/or wider team*." (DGH)

While there were a small number of free text comments from community-based and birth centre midwives describing a good relationship with general practitioners, 41.4% of midwives reported a lack of or low satisfaction with these relationships.

Work-life balance

Half of the sample indicated they had moderate or high levels of satisfaction with their work-life balance, and three quarters of the sample rated their satisfaction with the amount of time off as moderate or high. These accounts contrast with the earlier descriptions of lack of personal control over rotas and shift working experienced by other participants. Personal control appeared to be an important factor for those describing a positive work-life balance. For example, in the qualitative data some respondents referred to having taken semi-retirement and/or working part-time, thus reducing the number of shifts and enhancing their work-life balance in this way. In addition, reducing hours was often considered a way to prevent tiredness and therefore subsequently be more able to fulfil their role and responsibilities as a midwife; "*I have taken flexi retirement. Which has resulted in better work / lifestyle balance. Less tired so able to fulfil role easier*" (DGH). Other midwives 'condensed' their hours into longer days so that they had more days off.

Practice environment

Included in the questionnaire was the revised Practice Environment Scale (midwives) (Pallant et al., 2016). Descriptive statistics for each of the PES: Midwives subscales are presented in Table 11. Scores below 2.5 equate to a negative response with scores of 2.5 or above equating to a positive response. Overall midwives were most positive about midwife-doctor relationships with nearly 82% of midwives using a score of 2.5 or above. Although there were some negative comments in the qualitative data about difficult relationships with hospital doctors, the dominant message was that these relationships were positive. For example:

> *"The majority of my amazing colleagues - we try to help each other out where possible. There is not an environment where Drs (particularly the Consultants) display a notion of hierarchy and they aren't dismissive."* (DGH)

The other three domains of the practice environment, however, did not fare as well. Just over 50% of respondents scored 'Quality of management' and 'Opportunities for development' negatively. The lowest scores were recorded for items on the 'Resource Adequacy' subscale, with 75% of midwives giving this domain a score less than 2.5.

Similar to the earlier discussion, there were extensive negative comments that supported the quantitative results especially about the quality of managerial support. Management style was described as *poor, unsupportive*, *micro-managing, autocratic, incompetent, unfair, unilateral, inconsistent* and *punitive.* In addition many midwives perceived their managers to be driven by economic outcomes and reaching targets, with changes made as '*knee-jerk'* reactions to problems. This was especially the case in the experience of midwives working in hospital settings, but was also mentioned by midwives working in birth centres, although their negative experiences appeared to be of wider maternity service management than direct 'line' management within the birth centre. Overall, there was a pervading sense of a lack of managerial *credibility*, *leadership* and *vision* as well as an absence of positive role models and an absence of focus on providing quality woman centred care. The responses below are reflective of many received.

"Micromanagement of everything, constant fear of blame culture, no visibility of senior management, unfairness between colleagues & lack of communication resulting in dictatorship management styles." (DGH)

"Incompetent senior management, morally questionable 'leadership'. Disability discrimination, punitive "health and well-being" policies. Knee jerk reactions to mistakes, lack of information about resolutions. Bullying culture, lack of team spirit." (Tertiary referral unit)

"HOM senior team no vision. General manager too much control / input into clinical care. Focus not on quality care. Focus save money. Complaints bring about more change than women's needs." (Tertiary referral unit)

"Poor management. In not listening to the staff in the MLU and community and valuing the resources that they have in their collective knowledge, skills and care that they give to women and each other. Bullying /aggressive style of management. Over scrutiny in MLU care. Management appear not to care." (Stand alone birth centre)

Management was described as 'out of touch' and lacking skills in communicating with the workforce. There were many criticisms that managers lacked understanding of the challenges of the *'current working environment'* and the *'complexities of current demography'.* Midwives described how, in their perception, managers focused on the short-term resolution of problems, rather than attending to issues of workforce sustainability: *'Constant use of staff to plug gaps in service instead of proper workforce management and development.'* (DGH)

There was a general feeling that managers did not '*have our back*' (DGH), and would not advocate for staff in challenging situations:

"Coordinators not understanding area of your work and pulling staff away. Coordinators not escalating to managers when short staffed." (DGH)

"Poor managers - who seem to care little for midwifery and don't fight for eg facilities for our women." (DGH)

Participants described a lack of support and opportunity for personal development, which was experienced as disheartening and demoralising. This was often attributed to lack of funding or time:

> *"Lack of opportunity for professional development....no money allocated, no time allocated compared to earlier in my career. I feel for younger midwives."* (DGH)

Perceptions of midwifery empowerment

Midwives indicated high levels of empowerment on all subscales of the PEMS: Revised scales (more than 95% positive responses), except items relating to Manager Support, which recorded only 71% positive responses (Table 12).

Predictors of burnout, depression, anxiety and stress.

Pearson correlation coefficients were calculated between each of the PEMS: Revised and PES: Midwives subscales and the measures of burnout and emotional wellbeing (see Table 13 below).

The best predictor of Burnout-Work was the PES-Resource Adequacy subscale (r=-.47) suggesting that midwives who perceive they have low levels of resource adequacy are more likely to experience burnout. Substantial correlations (above r= .35) were also identified for PEM-Manager Support, PES-Quality of Management, PEM-Professional recognition, and PES-Opportunities for development. As previously highlighted the qualitative responses overwhelmingly supported these results. The following comment perhaps sums up the situation well: '*Women's and managers expectations of gold standard care with only 'bronze' standard staffing levels, clerk support, equipment and facilities*.' (DGH)

Scores on the Stress and Depression subscales of the DASS showed significant correlations with two of the subscales of the PEMS Revised: Manager Support, Professional Recognition, suggesting that these aspects of the work environment may impact on emotional wellbeing of midwives.

Midwives also described a lack of professional recognition within the qualitative data. While sometimes this was noted to be between midwifery colleagues and also during interactions with women and their families, it was more commonly mentioned in relation to medical colleagues: '*Lack of respect from Obstetric colleagues at Consultant level. Feeling powerless when witnessing behaviour that is detrimental to junior colleagues*.' (DGH)

This sense of being undervalued and under-recognised as a profession was compounded by a perception that midwifery concerns were not acknowledged at a governmental level. Frequently, the '*pay freeze*' affecting many NHS professionals was cited as evidence of this invisibility:

> *"Lack of appreciation from those who create un-achievable targets i.e. government ministers. Devaluation of income from salary freeze/ increases that are ridiculously behind inflation and behind other public services i.e. politicians."* (Community - primary care setting only)

Aspects of the work environment measured by the PEMS: Revised and PES: Midwives also had a significant impact on midwives' decision to leave the profession. In Table 14 scores on each of the PEMS: Revised and PES: Midwives subscales were compared for midwives who had, versus had not, considered leaving the profession in the past six months. Midwives who had considered leaving the profession recorded more negative scores on each of the PEMS: Revised and PES: Midwives subscales; that is, they had more negative perceptions of their level of empowerment and of their practice environment.

Improving emotional wellbeing at work

Midwives were asked 'if an intervention was made available to you to promote your emotional wellbeing at work would you be interested in accessing that intervention?' Ninety-three percent of the sample (n=1682) answered 'yes' to this question. Responses to additional questions concerning the type of intervention are presented in Table 15. The majority of the midwives would be happy with either an individual or group-based programme, with the large majority (90.3%) preferring face-to-face as opposed to online delivery.

In the free text responses, midwives also identified a number of strategies they suggested were worthy of further consideration. These ranged from '*compulsory leadership training'* to accessing monthly *'clinical supervision'* (as provided in mental health nursing). Access to complementary therapies as well as Pilates, yoga, massage and relaxation (mindfulness) were also commonly mentioned. However perhaps the most important consideration noted was the midwives' request that, whatever was introduced to support their emotional wellbeing, there needed to be an assurance that they would be given '*protected*' time to attend.

The following comment by one participant seems to sum up well what midwives need to improve their emotional wellbeing at work, and suggests the importance of the wider cultural change that is needed:

> *"Training to change culture within midwifery. We are not supportive of each other. 'Suck it up' is common, and isolation for those that make a mistake. Far too punitive. We need courses to teach us how to support each other!! We can't assume this is obvious. Also leadership skills & how to address issues when needed or expected change isn't happening."* (DGH).

SUMMARY AND DISCUSSION

In this final discussion, the original research aim and questions are returned to, and the extent to which these have been answered is considered. Limitations are identified and the results of the study are discussed, with recommendations for practice and policy.

The study aim was to explore the relationship between the emotional wellbeing of UK midwives and their work environment, to inform the RCM's *Caring for You* campaign. A survey was conducted using the WHELM survey tool, conceived within the Australian maternity context and adjusted to ensure relevance to the UK context. The working hypothesis was that work-related variables might be associated with emotional distress (defined as burnout, depression, anxiety and stress) in midwives. We were particularly interested in identifying levels and predictors of burnout, depression, anxiety and stress in midwives, and how these correlated with socio-demographic and work-related variables.

We also wanted to identify midwives' intention to leave the profession and the reasons and factors associated with this, and to explore whether an intervention designed to improve emotional wellbeing might be acceptable to midwives, and what form this might take.

These aims and objectives have been achieved, and important new insights have been obtained into how midwives' work setting impacts on their emotional wellbeing. There was a good response rate: just under 2000 midwives responded to the survey (n=1997), representing 16% of the RCM membership. In addition to responding to the quantitative questions, the participants also provided detailed and often lengthy free text responses to specific questions. It was not possible within the time frame of the study to provide an in depth analysis of the qualitative data. However, further analysis will be undertaken with a view to publishing additional qualitative and quantitative findings papers.

Discussion of the findings

The findings of this study are extremely concerning as they indicate that the UK's midwifery workforce is experiencing high levels of emotional distress. Indeed, the levels of burnout, stress and anxiety are the highest recorded to date within a midwifery population and this is of great concern (for international comparisons, see Creedy et al., 2017; Hildingsson et al., 2013; Dixon et al, 2016). The impact that this is having on the profession is profound with many considering leaving the profession as a result. It is of great concern that many younger, more recent entrants to the profession are considering leaving.

Levels of emotional ill health: who is at risk?

There are worryingly high levels of burnout, stress, anxiety and depression within this sample of UK midwives. Over one third of participants scored in the moderate/severe/extreme range for stress (36.7%) anxiety (38%) and depression (33%). This was well above population norms and those of other WHELM countries. In relation to burnout, 83% of participants were suffering from personal burnout and 67% were experiencing work-related burnout. Once again, the personal and work related burnout scores were well above population norms as well as the results from other WHELM collaborating countries. On a more positive note, client-related burnout was low at 15.5%.

Those most likely to score highly for burnout, stress, anxiety and depression were younger midwives (midwives aged 40 and below); midwives with a disability; midwives with less than 30 years' experience; and clinical midwives, particularly those working rotation in hospital and in integrated hospital/community settings.

Of great concern is the finding that younger midwives (aged 40 years and under) and those with fewer years of clinical experience are at increased risk of emotional compromise than their peers. There have been similar worrying findings in WHELM studies conducted in other countries (see for example Creedy et al., 2017; Hildingsson et al., 2013; Hildingsson and Fenwick, 2015) and other studies outside of the WHELM consortium have also reported similar findings (Mollart et al., 2013). These midwives are the future of the profession and it is crucial that the more recent entrants to the profession feel supported and satisfied by their work.

It is all the more critical to support the newer members of the profession, given the ageing midwifery workforce. The recent State of the Maternity Services Report (RCM 2016c) warns that, in England and Wales, one in three midwives are in their 50s and 60s. The report argues that "More students need to be trained and brought into the health service as a matter of urgency if we are to turn this situation around" (RCM 2016c, p.3). However, without serious attention to addressing the issues raised by this study, whether it will be possible to retain these new recruits is questionable.

In addition the finding that midwives who self-report a disability are at greater risk of burnout, stress, anxiety and depression is worrying. Twelve percent of the participants self-reported some form of physical or mental disability, which represents a sizeable group within the midwifery workforce. It is disappointing that those in most need of workplace support do not appear to be receiving this in ways that promote their emotional wellbeing.

Perhaps not surprisingly midwives working clinically were more at risk of burnout, stress, anxiety and depression than their non-clinical colleagues. This was particularly the case for those working in rotational positions within hospitals and those working in integrated hospital /community settings. The qualitative data provided important insights into why these ways of working created stress and anxiety. In both situations, midwives described how they lacked agency and felt they were being used instrumentally, that is, solely to meet

the needs of the organisation. They described a lack of personal control over many aspects of their work; for example, shift working, rotas, on call. There were no perceived personal benefits (e.g. in terms of broadening experience) or for the care of women, rather all the benefits were perceived as being to the organisation. Interestingly, where some midwives had been able to take control of their working life, for example by working part-time, they described improved work life balance.

The strongest predictor of work-related burnout was a perception of low levels of resource adequacy (staffing levels, equipment). In addition, perceived low levels of management support, professional recognition and opportunities for development also contributed to burnout, depression, anxiety and stress. Once again, the qualitative data provided valuable insights into these negative experiences. The descriptions of being unable to take a break to use the toilet or have refreshments were shocking, even more so as they appeared to have become an accepted part of everyday practice.

The impact of relationships

Poor relationships with managers, poor quality and unsupportive management featured strongly in both the quantitative and qualitative data sets. Midwives described feeling undervalued and unappreciated by all levels of management. Management was also often discussed in relation to other concerns; for example when concerns about staffing and workload were raised, there was disappointment that managers did not acknowledge the validity of these concerns. When participants described anxieties about possible litigation, they indicated that the managers often could not be relied on for support: '*They haven't got our backs*' (DGH). There were similar findings in an Australian study which investigated how an external review of maternity services impacted on midwives (Hood et al, 2010). The impression gained was that, in the WHELM study participants' perception, managers were often out of touch with the day-to-day realities of midwives' working lives, failed to acknowledge the needs and expertise of individual midwives and were over-focused on meeting organisational demands at the expense of ensuring the emotional wellbeing of the workforce. Rather than leading teams of midwives by supporting professional development, involving and advocating for them and arguing for better working conditions, many midwives described managers as disassociated and disconnected.

There were similar findings in a Kings Fund study of safety in maternity services (Smith & Dixon, 2008). Midwives described how poor quality management was a key factor in compromising the safety of women and their babies. Similar to the participants in this study, midwives described managers as problematic when they were remote and business focused, lacked clinical credibility, and failed to communicate effectively with staff.

It is important, however, to balance this critique with a consideration of the challenges faced by managers themselves. The literature suggests that direct line managers are often caught between the needs of the staff they manage and the expectations of their own managers, and also between their commitment to midwifery ideals of woman-centred care and the need to meet organisational requirements (Curtis et al., 2003).

These findings are not new. Dissatisfaction with midwifery management, in particular that managers were unapproachable and out of touch with practice, was a key finding of the original 'Why Midwives Leave' report for RCM (Ball et al., 2002). As a result, a follow up qualitative study 'Why Do Midwives Leave? Talking to Managers' (Curtis et al., 2003) was commissioned. This study provided important insights into the challenges experienced by midwifery managers at various levels of the organisation, highlighting the powerlessness and sense of dissonance that many experienced. It is sobering that relationships between midwives and their managers do not seem to have improved in the past fourteen years, and that the recommendations of the 2003 report (Curtis et al., 2003) do not appear to have been widely implemented.

As difficult relationships with managers and poor quality management are such significant findings of this WHELM study, it is important to examine the midwifery managers again as a separate group and identify their needs, if we are to be able to effect positive changes moving forward.

On a more positive note, relationships with midwifery colleagues were generally described as positive and supportive. Good team working, collegial support and camaraderie were identified as satisfying aspects of work.

Sustainability of the workforce at risk:

Two thirds of participants (66.6%) stated they had thought about leaving the profession within the last six months. The significance of such a disturbing finding for a professional workforce that is already understaffed should not be underplayed. It provides strong evidence that high level policy intervention is urgently needed to address the concerns identified. The two top reasons given for considering leaving were: 'Dissatisfaction with staffing levels at work' (60%) and 'Dissatisfaction with the quality of care I was able to provide' (52%). Midwives intending to leave had significantly higher levels of burnout, anxiety, stress and depression than those who had not considered leaving.

'Dissatisfaction with staffing levels' is similar to the 'low levels of resource adequacy' noted as the strongest predictor of work-related burnout. The free text responses related to 'Dissatisfaction with the quality of care I was able to provide' provided insights into how poor staffing levels impacted onto the quality of care. This is clearly not good for women and their families, but it is also distressing and demoralising for midwives.

The findings of the recently published MBRRACE Perinatal Confidential Enquiry (Draper et al., 2017) strongly reinforce participants' concerns about the impact of staffing shortages on safety and quality of care. Shockingly, the Enquiry identified 'service capacity issues' as affecting '… over a fifth of the deaths reviewed, with more than half of these situations being considered to have contributed to the poor outcome' (Draper et al., 2017, p12). Indeed, the **first** key policy recommendation is that ' Concerns identified in this confidential enquiry about staffing and capacity issues in maternity services [……] need to be addressed' (Draper et al., 2017, p15).

These concerning findings about workforce sustainability should not come as a shock. They are very similar to those of the RCM's 2016 survey of midwives who had left or were considering leaving midwifery. That is, midwives were not happy with staffing levels at work; not satisfied with the quality of care they were able to give; not happy with the workload; not happy with working conditions. Concerns were also expressed about the quality of managerial support, the model of care that midwives were working in, bullying and discrimination (RCM, 2016b). The WHELM study adds to this evidence base, providing a deeper analysis of the organisational and relationship factors impacting on midwives' emotional wellbeing.

Limitations of the study

The study had some limitations, which should be taken into account when considering the findings. Midwives self-selected when deciding to participate in the study, which means some midwives experiencing severe burnout and/or depression or who were extremely dissatisfied may not have participated or conversely they may have been motivated to participate in the study and thus be over represented. In addition, during the process of data collection the NHS suffered a cyber-attack. Disruption to internet services meant that some participants had not fully completed the survey at the time of the attack, and were not able to return to their saved survey once internet services were resumed. Many midwives may have then decided not to recommence the survey.

Measuring outcomes at only one point in time also limits understanding. The cross-sectional design does not permit cause and effect to be concluded, but does highlight prevalence and relationships amongst factors as the basis for future research. However, the use of well-validated tools produced some interesting results that lend themselves to further national and international comparisons. Likewise many of the findings echo those of the RCM's other recent workforce survey (RCM, 2016b), suggesting the credibility of our results.

Conclusion and recommendations:

This research study has investigated UK midwives' emotional wellbeing and how this is affected by the workplace. The findings are **deeply concerning**, indicating that midwives' emotional wellbeing is compromised to such an extent that two thirds of those surveyed were considering leaving the profession. The prospect of an even more heavily depleted workforce has major implications for the quality of UK maternity services, and for the wellbeing of women and their babies. For those midwives who stay in the profession, the evidence from this survey suggests that they run the risk of unacceptably high levels of stress, anxiety and depression. This will not only affect their personal and family lives, but will also significantly impact on the quality of care that they can provide for women and their families.

There are no quick fixes for this situation. Under-investment in the NHS, a chronic shortage of midwifery personnel and the increasing complexity of maternity care will continue to present many challenges (Draper et al., 2017). The WHELM study, however, offers some new insights, adding to the existing evidence base and affording a deeper analysis of how midwives' emotional wellbeing is affected by organisational and relationship factors. Some of these factors will be amenable to organisational change, thus the findings could inform a systems-wide, solution-focused approach to resolve these levels of distress at an individual practitioner level. It is vital that any solutions attend to the wider processes and policy changes that are needed to support new strategies and interventions, thus ensuring their relevance, acceptability and sustainability.

For example, investment in high quality training for midwifery managers and leaders is critical to develop communication and advocacy skills, thus ensuring that clinical midwives feel authentically heard, valued and supported. It is essential that all managers receive training which is appropriate for the context and challenges of UK maternity care, and underpinned by a supportive, empowering and collaborative approach to leadership congruent with best practice (West et al., 2015). Midwifery managers are of course also under considerable strain themselves, which is likely to impact on the way that they interact with midwives 'on the ground'. Research is needed into the experiences of midwifery managers, and in particular the barriers and facilitators that they experience in carrying out their role, in order to inform new approaches to training.

It is also important to embrace new thinking about NHS healthcare management and leadership (Dixon-Woods et al., 2014; West et al., 2015) which focuses on a collective leadership approach whereby leadership is 'everyone's business', rather than the pre-occupation of a small number of designated leaders. This could also have the advantage of facilitating a sense of agency, which the participants in this study described positively, as well as reducing the divisive 'us and them' culture described vividly in the qualitative data.

It is hoped that the RCM will use the robust data provided by this empirical study to strengthen its ongoing campaigns to push for systems level change that will support, nurture and grow a skilled and compassionate midwifery workforce at all levels of the service.

Specific Recommendations:

- Lobby for systems level changes in the resourcing and provision of maternity care throughout the UK.
- Increase pressure on government to address issues of workforce shortages, with a new focus on **retention** of new graduates rather than merely increasing student numbers.
- Introduce evidence-based interventions for workforce wellbeing support (e.g. clinical supervision, mindfulness, complementary therapies) and ensure that midwives are given 'protected' time to attend.
- Provide proactive support for younger, recently qualified midwives, a group identified in this study as being particularly at risk of emotional compromise. Focus this support on the key identified needs of this group, in order to promote workforce sustainability.
- Provide proactive support for midwives with a disability to support their emotional wellbeing.
- Ensure that all managers receive high quality management and leadership training which is appropriate for the context and challenges of UK maternity care, and underpinned by a supportive, empowering and collaborative approach to leadership congruent with best practice (West et al., 2015).
- Facilitate a sense of shared leadership amongst midwives at a team level, for example engaging clinical midwives in purposeful discussions about how to improve care which are then acted upon. Seek opportunities for optimising midwives' sense of agency.
- Update the evidence base relating to midwifery managers' experiences by undertaking research into their emotional wellbeing and needs.

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Table 1 Participant demographic characteristics

Characteristic	Statistic	NMC figures (NMC, 2017)
Sex (n, %)		
Female	1981 (99.4%)	34,439 (99.7%)
Male	8 (.4%)	114 (0.3%)
Other	1 (.1%)	
Prefer not to say	2 (.1%)	
Age		
20-29 yrs	271 (13.7%)	6278 (18.2%)
30-39 yrs	361 (18.3%)	8836 (25.6%)
40-49 yrs	496 (25.1%)	8345 (24.2%)
50-59 yrs	714 (36.1%)	9313 (27.0%)
60 and over	134 (6.8%)	1782 (5.2%)
Missing	21	
Total	1997	34,554
Median	47 yrs	
IQR (25^{th}, 75^{th} percentile)	36, 54 yrs	
Range (years)	21 – 67 yrs	
Marital status (n, %)		
Single	311 (15.6%)	
Married/civil partnership/cohabiting	1480 (74.3%)	
Separated/divorced	180 (9%)	
Widowed	21 (1.1%)	
Ethnicity (n, %)		
Asian/Asian British	16 (.8%)	522 (1.6%)
Black/Black British	40 (2%)	1101 (3.2%)
Mixed	21 (1.1%)	564 (1.7%)

White British	1727 (86.6%)	25,141 (72.8%)
White (other)	162 (8.1%)	1973 (5.7%)
Other	18 (.9%)	124 (0.4%)
Prefer not to say	10 (.5%)	330 (1.0%)
Sexual orientation (n, %)		
Bisexual	34 (1.7%)	154 (0.5%)
Gay/lesbian	30 (1.5%)	193 (0.6%)
Heterosexual	1878 (94.4%)	6658 (77.3%)
Other	4 (.2%)	
Prefer not to say	43 (2.2%)	434 (5%) Unknown - 1440 (126.7%)
Disability (n, %)		
No	1737 (87.5%)	27,098 (78.4%)
Yes	249 (12.5%)	1704 (5.0%) Unknown - 5752 (16.6%)
Children (n, %)		
Yes	1477 (74.1%)	
No	516 (25.9%)	
Carer (n, %)		
No	1615 (83.9%)	
Yes	310 (16.1%)	
Region (n, %)		
England - London England - South, South East, South West England - West Midlands, East Midland, East of England	1248 (63.1%)	
England - North East, North West, Yorkshire and the Humber	391 (19.8%)	
Scotland	180 (9.1%)	

Wales	107 (5.4%)	
Northern Ireland	52 (2.6%)	

Table 2 Participant self-reported disability categories

Disability	Examples	Numbers	Percentages
Long term health condition	Diabetes, cancer, epilepsy, autoimmune disorders	33	14.04%
Cardiovascular	Heart problems, blood disorders	9	3.83%
Musculoskeletal	Arthritis, injuries, soft tissue damage	28	11.91%
Specific learning or spectrum difficulty	ASD, Aspergers, Dyslexia, dyspraxia, ADHD	39	16.60%
Sensory impairment	Blind, deaf, hearing impairments	14	5.96%
Respiratory	Asthma	6	2.55%
Mental health condition	Depression, anxiety, BPD	24	10.21%
Chronic pain or fatigue problem	Fibromyalgia, CFS, non-specific back pain, migraines	19	8.09%
Mobility problem	Mobility not covered by musculoskeletal or chronic pain/fatigue	4	1.70%
Other	Anything that doesn't fit in above	3	1.28%
Multiple conditions (physical only)	If someone has listed a number of conditions, all physical health problems	32	13.62%
Multiple conditions (mental health only)	If someone has listed a number of conditions, all mental health problems	8	3.40%
Multiple conditions (mixed)	If someone has listed a number of conditions, a mix of physical and mental health problems, dyslexia, ASD etc.	16	6.81%
Totals		235	100.00%

Table 3: Participant work-related characteristics

Characteristic	Statistic
Level of qualification (n, %)	
Certificate in Midwifery	484 (24.4%)
Diploma in Midwifery	370 (18.7%)
Bachelor of Midwifery/ BSc Midwifery/ BA Midwifery	1128 (56.9%)
Years of experience	
Median	15.1 years
IQR (25^{th}, 75^{th} percentile)	4, 26 years
Range	Less than 1 to 55 years
Employer (n, %)	
NHS	1765 (88.6%)
Bank or agency midwifery	46 (2.3%
Independent practice and NHS sector and/or private sectors	4 (.2%)
University sector only	55 (2.8%)
University sector and NHS and/or private sectors	41 (2.1%)
Private sector only	16 (.8%)
Both NHS and private sector	23 (1.2%)
Employed by GP practice	1 (.1%)
Independent practice	7 (.4%)
Other	34 (1.7%)
Work location (n, %)	
District general hospital	1048 (53.2%
Tertiary referral unit	263 (13.4%)
Stand alone birth centre	104 (5.3%)
Alongside birth centre	85 (4.3%)
Community - primary care setting only	390 (19.8%)

University	79 (4.0%)
Urban/Rural (n, %)	
Capital	365 (18.3%)
City	689 (34.6%)
Large town	677 (34%)
Small town/rural	262 (13.1%)
Night shift (n, %)	
Yes	1063 (53.4%)
No	929 (46.6%)
On Call (n, %)	
No	1272 (63.9%)
Yes	719 (36.1%)
Type of on call (n, %)	
Caseload within a "Continuity of midwifery care" model (be named midwife to a defined number of women providing care during the continuum of pregnancy, birthing and the early parenting period)	43 (6.1%)
Caseload within a modified Continuity of care; model (be named midwife to a defined number of women providing care during the continuum of pregnancy, birthing and early parenting period but NOT including birthing	20 (2.8%)
Hospital cover (general, not caseload related)	160 (22.6%)
Community cover (on call for wider geographical area, not caseload related)	139 (19.7%)
Hospital and community (general, not caseload related)	229 (32.4%)
Other	116 (16.4%)
Principal role (n, %)	
Clincian (hospital)	911 (45.9%)
Specialist senior midwife NEW	67 (3.4%)
Admin/senior manager	29 (1.5%)

Education/research	114 (5.7%)
Clinician community	320 (16.1%)
Clinician integrated hospital community	135 (6.8%)
Clinician (Caseload)	73 (3.7%)
Labour ward coordinator	117 (5.9%)
Specialist practice midwife	124 (6.2%)
Clinical manager	95 (4.8%)
Clinical/ Non-clinical (n, %)	
Clinical midwife	1516 (75.9%)
Non-clinical midwife	166 (8.3%)
Both clinical and non-clinical midwife	315 (15.8%)
Type of clinical work (n, %)	
Continuity	137 (9.1%)
Modified Continuity	260 (17.2%)
Rotation Hospital Only	532 (35.3%)
Rotation Hospital Community	197 (13.1%)
Non-Labour care only	126 (8.4%)
Labour/birth only	256 (17%)
Type of non-clinical work (n, %)	
Midwifery education	69 (42.9%)
Midwifery management	31 (19.3%)
Midwifery research	17 (10.6%)
Policy/ Administration	44 (27.3%)

Table 4 Statistical analyses conducted to assess the impact of demographic factors on emotional wellbeing

Characteristic	Burnout-Personal	Burnout-Work	Burnout-Client	DASS-Stress	DASS-Anxiety	DASS-Depression
Age Group (years)	Chsq=103.5 p<.001	Chsq=116.1 p<.001	Chsq=13.7 P=.018	Chsq=69.8 p<.001	Chsq=149.9 p<.001	Chsq=39 p<.001
<= 32	70.83	64.29	20.83	16.00	10.00	10.00
33-40	75.00	64.29	25.00	16.00	8.00	10.00
41-47	66.67	57.14	20.83	14.00	6.00	8.00
48-52	62.50	57.14	25.00	14.00	6.00	8.00
53-56	62.50	53.57	20.83	12.00	4.00	6.00
57+	58.33	46.43	18.75	10.00	4.00	6.00
Marital	Chisq=7.01 p=.03	Chisq=4.95 p=.08	Chisq=7.87 p=.02	Chisq=1.81 p=.40	Chisq=2.67 p=.26	Chisq=25.99 p<.001
Single	66.67	57.14	25.00	14.00	8.00	10.00
Married/ cohabiting	66.67	57.14	20.83	14.00	6.00	6.00
Separated/ divorced	70.83	60.71	25.00	14.00	6.00	10.00
Ethnicity	z=.68 p=.50	z=1.16 p=.25	z=.45 p=.65	z=.04 p=.97	z= -.389 p=.70	z= -.13 p=.90
White	66.67	57.14	25.00	14.00	6.00	8.00
Black/Asian/ Minority	70.83	60.71	20.83	12.00	6.00	6.00
Sexual orientation	z=1.06 p=.29	z=.19 p=.85	z=.73 p=.46	z=.28 p=.78	z=1.14 p=.25	z=.055 p=.96

Heterosexual	66.67	57.14	25.00	14.00	6.00	8.00
Not heterosexual	66.67	57.14	16.67	14.00	9.00	7.00
Disability	z=3.96 p<.001	z=4.77 p<.001	z=1.64 p=.10	z=4.32 p<.001	z=3.74 p<.001	z=4.74 p<.001
No	66.67	57.14	20.83	12.00	6.00	8.00
Yes	70.83	64.29	25.00	16.00	8.00	12.00
Children	z=.24 p=.81	z=1.64 p=.10	z=3.47 p=.001	z=2.31 p=.02	z=3.00 p=.003	z=-1.96 p=.05
Yes	66.67	57.14	20.83	14.00	6.00	8.00
No	66.67	57.14	25.00	14.00	8.00	8.00
Carer	-2.230	-1.355	-1.562	-.932	-.964	-1.293
No	66.67	57.14	20.83	14.00	6.00	8.00
Yes	70.83	57.14	25.00	14.00	6.00	8.00
Region	Chsq=14.51 p=.006	Chsq=13.32 p=.01	Chsq=4.54 p=.34	Chsq=11.55 p=.02	Chsq=12.28 p=.02	Chsq=11.36 p=.02
England - London England - South, South East, South West England - West Midlands, East Midland, East of England	66.67	57.14	25.00	14.00	6.00	8.00
England - North East, North West, Yorkshire and the Humber	70.83	57.14	25.00	14.00	6.00	8.00

Scotland	62.50	53.57	20.83	12.00	4.00	6.00
Wales	66.67	57.14	20.83	12.00	6.00	8.00
Northern Ireland	62.50	53.57	20.83	14.00	6.00	6.00

Notes.

a Some variables were modified by collapsing or excluding categories to ensure that there were sufficient cases for statistical comparison. Only variables with sufficient numbers were reported in the table.

b Given the large number of analyses undertaken a more conservative alpha level ($p<.01$) was used to identify statistically significant comparisons (shown in bold)

c Mann-Whitney U tests were used for two group comparisons, Kruskal Wallis tests were used for groups with 2+ groups.

Table 5 Statistical analyses conducted to assess the impact of work-related factors on emotional wellbeing

Characteristic	Burnout-Personal	Burnout-Work	Burnout-Client	DASS-Stress	DASS-Anxiety	DASS-Depression
Level of qualification	Chsq=77.57 p<.001	Chsq=71.47 p<.001	Chsq=3.07 p=.22	Chsq=28.26 p<.001	Chsq=91.65 p<.001	Chsq=22.45 p<.001
Certificate in Midwifery	58.33	50.00	20.83	12.00	4.00	6.00
Diploma in Midwifery	70.83	57.14	20.83	14.00	6.00	8.00
Bachelor of Midwifery/ BSc Midwifery/ BA Midwifery	70.83	60.71	25.00	14.00	8.00	8.00
Years of experience	Chsq=104.49 p<.001	Chsq=99.38 p<.001	Chsq=12.91 p=.02	Chsq=59.09 p<.001	Chsq=168.97 p<.001	Chsq=47.57 p<.001
0 to 1.99yrs	70.83	60.71	20.83	16.00	10.00	10.00
2 to 4.99	75.00	60.71	25.00	16.00	10.00	8.00
5 to 9.99	70.83	60.71	25.00	16.00	8.00	10.00
10 to 19.99	70.83	57.14	25.00	14.00	6.00	8.00
20 to 29.99	62.50	53.57	25.00	12.00	4.00	8.00
30+	58.33	46.43	16.67	10.00	2.00	4.00
Employer	Chsq=55.57 p<.001	Chsq=43.66 p<.001	Chsq=21.12 p=.001	Chsq=14.79 p=.01	Chsq=22.89 p<.001	Chsq=13.47 p=.02
NHS	70.83	57.14	25.00	14.00	6.00	8.00
Bank or agency midwifery	58.33	53.57	20.83	10.00	6.00	4.00
Indep practice/	45.83	39.29	12.50	10.00	2.00	4.00

private/ charitable/ professional						
University sector only	54.17	46.43	8.33	14.00	4.00	6.00
University sector and NHS and/or private sectors	62.50	50.00	12.50	12.00	4.00	6.00
Both NHS and private sector	64.58	50.00	29.17	12.00	6.00	6.00
Work location	Chsq=30.76 p<.001	Chsq=32.73 p<.001	Chsq=18.67 p=.002	Chsq=11.42 p=.04	Chsq=35.26 p<.001	Chsq=8.8 p=.12
District general hospital	70.83	60.71	25.00	14.00	8.00	8.00
Tertiary referral unit	66.67	57.14	25.00	12.00	6.00	6.00
Stand alone birth centre	66.67	57.14	16.67	14.00	8.00	9.00
Alongside birth centre	62.50	53.57	20.83	10.00	4.00	6.00
Community - primary care setting only	66.67	53.57	20.83	14.00	6.00	8.00
University	54.17	46.43	8.33	14.00	4.00	6.00
Urban/Rural	Chsq=7.58 p=.06	Chsq=14.42 p=.002	Chsq=9.90 p=.02	Chsq=9.51 p=.02	Chsq=14.02 p=.003	Chsq=8.42 p=.04
Capital	66.67	53.57	25.00	12.00	6.00	6.00
City	66.67	57.14	20.83	14.00	6.00	8.00
Large town	70.83	60.71	25.00	16.00	8.00	8.00
Small town/rural	66.67	53.57	20.83	12.00	6.00	8.00
Night shift	z=6.41 p<.001	z=6.94 p<.001	z=2.56 p=.01	z=2.50 p=.01	z=7.12 p<.001	z=2.11 p=.04

Yes	70.83	60.71	25.00	14.00	8.00	8.00
No	62.50	53.57	20.83	14.00	4.00	8.00
On Call	z=1.105 p=.27	z=2.422 p=.01	z=1.448 p=.15	z=.567 p=.57	z=3.261 p=.001	z=.883 p=.38
No	66.67	57.14	25.00	14.00	6.00	8.00
Yes	66.67	53.57	20.83	14.00	6.00	8.00
Type of on call	Chsq=4.778 p=.31	Chsq=8.882 p=.06	Chsq=3.317 p=.51	Chsq=1.663 p=.80	Chsq=5.528 p=.24	Chsq=6.122 p=.19
Caseload within a "Continuity of midwifery care" model	62.50	48.21	16.67	13.00	3.00	7.00
Caseload within a modified Continuity of care; model	66.67	50.00	18.75	14.00	7.00	4.00
Hospital cover (general, not caseload related)	66.67	57.14	20.83	13.00	6.00	6.00
Community cover (on call for wider geographical area, not caseload related)	66.67	57.14	25.00	14.00	6.00	10.00
Hospital and community (general, not caseload related)	70.83	57.14	20.83	14.00	6.00	8.00
Other	62.50	53.57	16.67	12.00	4.00	6.00
Principal role	Chsq=52.	Chsq=51.	Chsq=32.74	Chsq=6.7	Chsq=64.	Chsq=9.6

	33 p<.001	24 p<.001	p<.001	1 p=.67	71 p<.001	0 p=.38
Clinician (hospital)	70.83	60.71	25.00	14.00	8.00	8.00
Specialist senior midwife	58.33	50.00	16.67	14.00	6.00	6.00
Admin/senior manager	54.17	50.00	20.83	10.00	2.00	6.00
Education/research	54.17	46.43	12.50	14.00	4.00	7.00
Clinician community	66.67	57.14	20.83	14.00	6.00	8.00
Clinician integrated hospital community	70.83	57.14	20.83	14.00	10.00	8.00
Clinician Caseload	66.67	53.57	20.83	14.00	5.00	7.00
Labour ward coordinator	66.67	57.14	25.00	12.00	4.00	6.00
Specialist practice midwife	62.50	57.14	25.00	12.00	4.00	7.00
Clinical manager	66.67	53.57	16.67	14.00	6.00	8.00
Clinical/ Non-clinical	Chsq=43.34 p<.001	Chsq=30.92 p<.001	Chsq=23.64 p<.001	Chsq=3.32 p=.19	Chsq=29.96 p<.001	Chsq=4.76 p=.09
Clinical midwife	70.83	57.14	25.00	14.00	6.00	8.00
Non-clinical midwife	54.17	46.43	10.42	14.00	4.00	8.00
Both clinical and non-clinical midwife	62.50	53.57	20.83	14.00	6.00	6.00
Type of clinical work	Chsq=12.71 p=.03	Chsq=15.80 p=.007	Chsq=5.91 p=.31	Chsq=14.38 p=.01	Chsq=32.44 p<.001	Chsq=5.97 p=.31
Continuity	70.83	57.14	20.83	12.00	6.00	8.00
Modified	66.67	57.14	25.00	15.00	6.00	10.00

Continuity						
Rotation Hospital Only	70.83	60.71	25.00	14.00	8.00	8.00
Rotation Hospital Community	70.83	60.71	20.83	16.00	10.00	10.00
Non-Labour care only	66.67	53.57	25.00	12.00	6.00	6.00
Labour/birth only	66.67	55.36	20.83	12.00	6.00	6.00
Type of non-clinical work	Chsq=10.18 P=.02	Chsq=7.85 p=.05	Chsq=2.97 p=.40	Chsq=2.91 p=.40	Chsq=1.25 p=.74	Chsq=6.23 p=.10
Midwifery education	50.00	42.86	8.33	12.00	4.00	6.00
Midwifery management	70.83	53.57	16.67	16.00	4.00	11.00
Midwifery research	58.33	53.57	20.83	16.00	4.00	12.00
Policy/ Administration	52.08	46.43	10.42	12.00	2.00	6.00

Notes.

a Some variables were modified by collapsing or excluding categories to ensure that there were sufficient cases for statistical comparison. Only variables with sufficient numbers were reported in the table.

b Given the large number of analyses undertaken a more conservative alpha level ($p<.01$) was used to identify statistically significant comparisons (shown in bold)

c Mann-Whitney U tests were used for two group comparisons, Kruskal Wallis tests were used for groups with 2+ groups.

Table 6: Reasons for leaving the profession

	n=1318	%
Dissatisfaction with the staffing levels at work	791	60%
Dissatisfaction with the quality of care I was able to provide	682	52%
Dissatisfaction with the organisation of midwifery care	621	47%
Dissatisfaction with my workload	585	44%
Dissatisfaction with my working conditions	495	38%
Dissatisfaction with my pay	468	36%
Dissatisfaction with my work patterns (shift pattern)	423	32%
Fear of litigation	399	30%
Dissatisfaction with the support I was getting from my line manager	373	28%
Dissatisfaction with my working hours	362	27%
Dissatisfaction with the model of care I was delivering	346	26%
Dissatisfaction with my role as a midwife	344	26%
Not being consulted over changes at work	293	22%
Dissatisfaction with rotating to different areas of midwifery	220	17%
Dissatisfaction with the opportunities to progress in the organisation	215	16%
Feeling bullied within your current organisation by a manager	211	16%
Dissatisfaction that my responsibilities did not match the banding of my job role	193	15%
Planned retirement	174	13%
Your ill health	174	13%
Family commitments	157	12%
Dissatisfaction with the banding of my job role	154	12%
Dissatisfaction with the support I was getting from my colleagues	148	11%
Dissatisfaction with the level of training and development I received	140	11%
Dissatisfaction with my pension	128	10%
Being denied a request to work flexibly	126	10%
Feeling bullied within your current organisation by a colleague	124	9%
Dissatisfaction with my terms and conditions of employment	119	9%
Experiencing discrimination from a manager	112	8%
Planned career change	79	6%

Experiencing discrimination from a colleague	62	5%
Being denied a request to change my working area	59	4%
Planned location move	44	3%
Promotion opportunity in other organization	31	2%
Planning to move into independent practice	17	1%

Note. Ordered from most frequently endorsed to least endorsed.

Table 7: Comparison by intention to leave across the CBI and DASS

Scale	Yes, considered leaving profession (Md)	No, had not considered leaving the profession (Md)	Statistic
CBI: Burnout-Personal	75.0	54.17	z=18.36 p<.001
CBI: Burnout-Work	64.29	46.43	z=18.89 p<.001
CBI: Burnout-Client	29.17	12.5	z=12.77 p<.001
DASS-Stress	16	8	z=16.0 p<.001
DASS-Anxiety	8	4	z=13.29 p<.001
DASS-Depression	10	2	z=17.18 p<.001

Significant differences p<.01 are shown in bold

Table 8 Comparison of the demographic characteristics of midwives who had, and who had not, considered leaving the profession in the past 6 months

Characteristic	Yes, considered leaving the profession	No, have not considered leaving profession	Statistic
Age Group (years)			Chsq=8.79 p=.12
<= 32	224 (61%)	143 (39%)	
33-40	210 (67.3%)	102 (32.7%)	
41-47	226 (65.9%)	117 (34.1%)	
48-52	204 (61.8%)	126 (38.2%)	
53-56	157 (59.9%)	105 (40.1%)	
57+	108 (56.5%)	83 (43.5%)	
Marital			Chisq=4.63 p=.10
Single	183 (64.2%)	102 (35.8%)	
Married/ cohabiting	838 (61.8%)	519 (38.2%)	
Separated/ divorced			
Ethnicity			Chsq=.86 p=.35
White	1075 (62.4%)	647 (37.6%)	
Black/Asian/ Minority	50 (68.5%)	23 (31.5%)	
Sexual orientation			Chsq=.003 p=.95
Heterosexual	1075 (62.7%)	640 (37.3%)	
Not heterosexual	40 (61.5%)	25 (38.5%)	
Disability			Chsq=8.88 p=.003

No	972 (61.3%)	613 (38.7%)	
Yes	163 (71.8%)	64 (28.2%)	
Children			Chsq=.38 p=.54
Yes	848 (63.2%)	493 (36.8%)	
No	294 (61.5%)	184 (38.5%)	
Carer			Chsq=6.97 p=.008
No	911 (61.6%)	568 (38.4%)	
Yes	193 (70.2%)	82 (29.8%)	
Region			Chsq=6.17 p=.19
England - London South, Sth East, Sth West West Midlands, East Midland, East of England	723 (62.4%)	435 (37.6%)	
England - Nth East, Nth West, Yorkshire and the Humber	237 (67.3%)	115 (32.7%)	
Scotland	91 (57.2%)	68 (42.8%)	
Wales	58 (61.1%)	37 (38.9%)	
Northern Ireland	23 (56.1%)	18 (43.9%)	

Significant differences p<.01 are shown in bold

Table 9 Comparison of the work-related characteristics of midwives who had, and who had not, considered leaving the profession in the past 6 months

Characteristic	Yes, considered leaving the profession	No, have not considered leaving profession	Statistic
Initial qualification			Chsq=4.40 p=.11
Certificate in Midwifery	214 (59.1 %)	148 (40.9%)	
Diploma in Midwifery	211 (60.8%)	136 (39.2%)	
Bachelor of Midwifery/ BSc Midwifery/ BA Midwifery	713 (64.7%)	389 (35.3%)	
Years of experience			Chsq=11.35 p=.05
0 to 1.99yrs	162 (60%)	108 (40%)	
2 to 4.99	173 (64.8%)	94 (35.2%)	
5 to 9.99	180 (65.5%)	95 (34.5%)	
10 to 19.99	278 (66.8%)	138 (33.2%)	
20 to 29.99	230 (61.5%)	144 (38.5%)	
30+	120 (54.8%)	99 (45.2%)	
Employer			Chsq=15.81 p=.007
NHS	1037 (63.9%)	587 (36.1%)	
Bank or agency midwifery	26 (59.1%)	18 (40.9%)	
Indep practice/ private/ charitable/ professional	19 (45.2%)	23 (54.8%)	
University sector only	26 (54.2%)	22 (45.8%)	
University sector and NHS and/or private sectors	16 (43.2%)	21 (56.8%)	
Both NHS and private sector	16 (76.2%)	5 (23.8%)	
Work location			Chsq=20.09 p=.001
District general hospital	618 (64%)	347 (36%)	

Tertiary referral unit	133 (53.3%)	114 (46.2%)	
Stand alone birth centre	60 (65.9%)	31 (34.1)	
Alongside birth centre	50 (63.3%)	29 (36.7%)	
Community - primary care setting only	239 (69.1%)	107 (30.9%)	
University	34 (50%)	34 (50%)	
Urban/Rural			Chsq=22.03 p<.001
Capital	190 (55.6%)	152 (44.4%)	
City	379 (59.5%)	258 (40.5%)	
Large town	409 (67.3%)	199 (32.7%)	
Small town/rural	164 (70.7%)	68 (29.3%)	
Night shift			Chsq=1.92 p=.17
Yes	647 (64.2%)	361 (35.8%)	
No	494 (60.9%)	317 (39.1%)	
On Call			Chsq=3.01 p=.08
No	712 (61.2%)	451 (38.8%)	
Yes	428 (65.4%)	226 (34.6%)	
Type of on call			Chsq=15.86 p=.007
Caseload within a "Continuity of midwifery care" model	30 (73.2%)	11 (26.8%)	
Caseload within a modified Continuity of care model	14 (77.8%)	4 (22.2%)	
Hospital cover (general, not caseload related)	83 (56.8%)	63 (43.2%)	
Community cover (on call for wider geographical area, not caseload related)	85 (69.1%)	38 (30.9%)	
Hospital and community (general, not caseload related)	148 (71.8%)	58 (28.2%)	
Other	61 (56%)	48 (44%)	

Principal role			Chsq=35.99 p<.001
Clinician (hospital)	549 (64%)	309 (36%)	
Specialist senior midwife	30 (50%)	30 (50%)	
Admin/senior manager	7 (26.9%)	19 (73.1%)	
Education/research	54 (51.9%)	50 (48.1%)	
Clinician community	197 (69.4%)	87 (30.6%)	
Clinician integrated hospital community	82 (68.3%)	38 (31.7%)	
Clinician Caseload	46 (68.7%)	21 (31.3%)	
Labour ward coordinator	57 (56.4%)	44 (43.6%)	
Specialist practice midwife	68 (64.2%)	38 (35.8%)	
Clinical manager	47 (55.3%)	38 (44.7%)	
Clinical/ Non-clinical			Chsq=22.72 p<.001
Clinical midwife	917 (65.5%)	482 (34.5%)	
Non-clinical midwife	71 (48.3%)	76 (51.7%)	
Both clinical and non-clinical midwife	156 (56.3%)	121 (43.7%)	
Type of clinical work			Chsq=13.58 p=.02
Continuity	94 (77%)	28 (23%)	
Modified Continuity	163 (69.7%)	71 (30.3%)	
Rotation Hospital Only	319 (62.5%)	191 (37.5%)	
Rotation Hospital Community	123 (65.8%)	64 (34.2%)	
Non-Labour care only	74 (67.9%)	35 (32.1%)	
Labour/birth only	139 (60.7%)	90 (39.3%)	
Type of non-clinical work			Chsq=.46 p=.93
Midwifery education	26 (44.8%)	32 (55.2%)	
Midwifery management	13 (48.1%)	14 (51.9%)	
Midwifery research	9 (52.9%)	8 (47.1%)	
Policy/ Administration	20 (50%)	20 (50%)	

Significant differences p<.01 are shown in bold

Table 10 Satisfaction with relationships, work life balance and amount of time off

	Not satisfied	Low satisfaction	Moderate satisfaction	High satisfaction
Satisfaction with relationship with:				
Hospital midwifery colleagues	50 (2.6%)	133 (7.0%)	779 (40.8%)	945 (49.6%)
Community midwifery colleagues	32 (1.9%)	131 (7.7%)	729 (42.7%)	816 (47.8%)
Midwifery managers	280 (14.6%)	573 (30%)	793 (41.5%)	266 (13.9%)
Obstetricians	73 (4.0%)	291 (16%)	987 (54.1%)	473 (25.9%)
General practitioners	138 (10.9%)	387 (30.5%)	576 (45.5%)	166 (13.1%)
Paediatricians	75 (4.4%)	259 (15.2%)	968 (56.8%)	401 (23.5%)
Neonatal intensive care unit/special care staff	65 (4%)	237 (14.4%)	873 (53.1%)	468 (28.5%)
Hospital nursing colleagues	52 (5.5%)	127 (13.4%)	456 (48%)	315 (33.2%)
Worklife balance	352 (18.3%)	575 (29.9%)	767 (39.8%)	232 (12%)
Amount of time off	134 (7%)	336 (17.5%)	1034 (53.7%)	421 (21.9%)

Table 11 Descriptive statistics for Practice Environment Scale

	Mean (SD)	Median (IQR)	Midwives with scores below 2.5 (disagreement) n (%)	Midwives with scores 2.5 or above (agreement) n (%)
Practice Environment Scale				
Quality of management	2.30 (.65)	2.33 (1.83, 2.83)	817 (54.6%)	678 (45.4%)
Midwife-doctor relations	2.91 (.56)	3 (2.67, 3.0)	275 (18.1%)	1246 (81.9%)
Resource adequacy	2.01 (.57)	2 (1.5, 2.25)	1144 (75.2%)	378 (24.8%)
Opportunities for development	2.46 (.55)	2.43 (2.14, 2.86)	766 (51.8%)	713 (48.2%)

Scores on each of the PES: Midwives subscales have been adjusted by the number of items in the scale so that scores range from 1 (negative responses) to 5 (positive responses).

Table 12 Descriptive statistics for Perceptions of Empowerment Scales (Revised)

	Mean (SD)	Median (IQR)	Midwives with scores below 2.5 (disagreement) n (%)	Midwives with scores 2.5 or above (agreement) n (%)
Perceptions of empowerment scale				
Autonomy/empowerment	3.92 (.66)	4 (3.5, 4.25)	36 (2.3%)	1552 (97.7%)
Manager support	3.09 (.95)	3 (2.4, 3.8)	457 (28.6%)	1143 (71.4%)
Professional recognition	3.7 (.65)	3.8 (3.4, 4.2)	77 (4.8%)	1522 (95.2%)
Skills and resources	3.78 (.59)	3.8 (3.4, 4.2)	41 (2.6%)	1555 (97.4%)

Scores on each of the PEMS: Revised and PES: Midwives subscales have been adjusted by the number of items in the scale so that scores range from 1 (negative responses) to 5 (positive responses).

Table 13 Correlations between PES: Midwives and PEMS: Revised subscales with CBI and DASS scales

	Burnout personal	Burnout Work	Burnout Client	DASS-Stress	DASS-Anxiety	DASS-Depress
Practice Environment Scale						
Quality of management	-.32	-.38	-.22	-.31	-.27	-.35
Midwife-doctor relations	-.20	-.23	-.23	-.23	-.21	-.25
Resource adequacy	-.40	-.47	-.27	-.34	-.32	-.31
Opportunities for development	-.33	-.39	-.25	-.31	-.28	-.34
Perceptions of empowerment scale						
Autonomy/empowerment	-.22	-.28	-.30	-.26	-.25	-.29
Manager support	-.33	-.40	-.20	-.37	-.30	-.37
Professional recognition	-.33	-.39	-.30	-.38	-.34	-.39
Skills and resources	-.27	-.33	-.31	-.30	-.31	-.31

All correlations are significant at $p<.05$.

Table 14: Comparisons by intention to leave the profession in the last 6 months

	Yes, considered leaving profession (Md)	No, have not considered leaving profession (Md)	Statistic
Practice Environment Scale			
Quality of management	2.17	2.67	z=12.60 p<.001
Midwife-doctor relations	3.0	3.0	z=7.47 p<.001
Resource adequacy	2.0	2.25	z=11.82 p<.001
Opportunities for development	2.4	2.71	z=11.62 p<.001
Perceptions of empowerment scale			
Autonomy/empowerment	4.0	4.0	z=7.82 p<.001
Manager support	2.8	3.6	z=12.83 p<.001
Professional recognition	3.6	4.0	z=11.20 p<.001
Skills and resources	3.8	4.0	z=8.88 p<.001

Scores on each of the PEMS: Revised and PES: Midwives subscales have been adjusted by the number of items in the scale so that scores range from 1 (negative responses) to 5 (positive responses).

Table 15 Responses to questions concerning interventions to promote wellbeing

Question	n (%)
Would you be interested in accessing an intervention to promote emotional wellbeing at work?	
Yes	1682 (93.1%)
No	125 (6.9%)
What type of intervention would you prefer?	
Individual	383 (22.9%)
Group-based program	171 (10.2%)
Either	1119 (66.9%)
Which of the following modes would be acceptable to you?	
Face to face	1519 (90.3%)
By telephone	452 (26.9%)
Videoconference	177 (10.5%)
Skype or web based program	249 (14.8%)
Mobile phone app	511 (30.4%)
Computer based self-directed program	566 (33.6%)

Box 1: Summary of measures

Copenhagen Burnout Inventory (CBI) (Kristensen et al., 2005)	Three subscales; • Personal (6 items) - How often do you feel tired? • Work – related (7 items) - Does your work frustrate you? • Client – related (6 items) - Do you find it hard to work with women? All items use a 5-point scale with scores being adjusted so that the possible score range for all three subscales range from 0 (low burnout) to 100 (severe burnout) Burnout Scores; • 50-74 moderate • 75 – 99 high • 100 > severe
The Depression, Anxiety and Stress Scale - 21 (DASS-21) (Lovibund & Lovibund, 1995)	Three subscales; • Anxiety (7 items) I was aware of dryness of my mouth • Depression (7 items) - I felt down-hearted and blue • Stress (7 items) - I found myself getting agitated Scoring; Scores classified into a number of clinical categories (normal, mild, moderate, severe, extremely severe)
Perceptions of Empowerment in Midwifery Scale - Rrevised (Pallant et al., 2015)	Four subscales; • Autonomy/Empowerment - I have autonomy in my practice (4 items) • Manager Support - *I am valued by my manager* (5 items) • Professional Recognition - (5 items) I am recognized as a professional by the medical profession. • Skills and Resources - I am adequately educated to perform my role). (5 items) Scoring; 5-point scale (strongly disagree to strongly agree) Higher scores indicate stronger feelings of empowerment

Practice Environment Scale – Midwives (Pallant et al., 2016)	Four subscales; • Quality of Management – Midwife managers consult with staff on daily problems and procedures (6 items) • Midwife-Doctor Relations - Doctors and midwives have good working relations (3 items) • Resource Adequacy - Enough midwives to provide quality patient care (4 items) • Opportunities for Development – *Opportunities for advancement* (7 items) Scoring; 4 point scale (1 = strongly disagree, 4 = strongly agree) Subscale scores are calculated by adding the scores from each of the items and dividing by the number of items, resulting in scores with a possible range of 1–4. The subscales can be used as continuous variables or be divided into unfavourable / disagreement (mean <2.5) and favourable / agreement (mean >2.5). Higher scores indicate higher satisfaction with the work environment.