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# **Relationships between working conditions and emotional wellbeing in midwives**

## **Abstract**

**Background:** Emotional distress in midwives contributes to high attrition. To safeguard midwives' wellbeing, there is a need to identify the impact of workplace variables.

**Aim:** To review the existing evidence on the relationships between working conditions and emotional wellbeing in midwives, and construct an analytic framework for understanding these relationships.

**Methods:** Systematic search and selection procedures using a range of databases. Results of included studies were synthesised into a thematic literature review of qualitative and quantitative research.

**Findings:** Various types of poor emotional wellbeing in midwives correlate with a variety of interrelated working conditions, including low staffing/high workload, low support from colleagues, lack of continuity of carer, challenging clinical situations and low clinical autonomy. Staffing levels seem to be able to modify the effects of many other variables, and the impact of challenging clinical situations is affected by several other variables.

**Discussion:** These workplace variables can be categorised as modifiable and non-modifiable risk indicators.

**Conclusion:** While certain conditions that correlate with midwives' wellbeing are non-modifiable, several crucial variables, such as staffing levels and continuity of carer, are within the control of organisational leadership. Future research and interventions should focus on these modifiable risks. Research design should maximise the chance of establishing causation, while any innovations in this area should anticipate the interrelatedness of these risk factors to avoid unintended negative consequences.

**Keywords:** Midwifery; Occupational Health; Emotional Wellbeing; Burnout, Professional; Psychosocial Workplace Risks.

## Statement of Significance

**Issue:** The importance of midwives' emotional wellbeing to on-going recruitment and retention crises is increasingly recognised.

**What is Already Known:** Previous research on midwifery has revealed problematic organisational cultures as a source of emotional problems and emphasised the benefits of midwives caring for themselves and each other.

**What this Paper Adds:** This review confirms that many of the risks to midwives' emotional wellbeing are not intrinsic to midwifery, but are modifiable, such as low staffing/high workload and lack of continuity of carer. It also explains some interrelationships between certain working conditions. Efforts to safeguard midwives' wellbeing should prioritise improvements to staffing.

## Introduction

The work-related wellbeing and burnout of healthcare workers is inextricably linked with patient safety outcomes;<sup>1</sup> poor emotional health in midwives is likely to compromise high quality, respectful, safe care for women<sup>a</sup> and their babies. Concerns have arisen in a wide range of contexts regarding the prevalence of stress and burnout within midwifery,<sup>2-4</sup> and how this affects quality of care<sup>5-7</sup> and workforce turnover.<sup>8-10</sup> Moreover, there are growing calls<sup>11</sup> to change fundamental aspects of midwifery working conditions, in line with evidence on improved outcomes for women and babies, namely, (re)introducing continuity of carer.<sup>12</sup> Questions have been raised about how to make such working conditions sustainable and non-harmful for midwives.<sup>13</sup>

Systematic reviews and meta-analyses based on extensive observational research have established connections between emotional wellbeing and working conditions in other professions, which may be applicable to midwifery. Excessive work demands are associated with burnout and its key component,

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<sup>a</sup> Not all midwives, and not all gestational parents, are women; to reflect the fact that the vast majority are, female nouns and pronouns will be used throughout to refer to both these groups.

emotional exhaustion.<sup>14</sup> Developing depressive symptoms is associated with high job strain (defined as high demands plus low job control), low job control alone, and bullying.<sup>15</sup> These risk factors, in addition to high demands alone, effort-reward imbalance, low organisational justice, role stress, being unsupported, experiencing conflict, long hours and job insecurity are associated with anxiety, stress and depression.<sup>16</sup> Workplace discrimination against marginalised groups is known to have detrimental effects on mental health, according to meta-research on various populations<sup>17</sup> and on nurses.<sup>18</sup>

These reviews included employees across a range of professions, including non-midwifery healthcare. A systematic review of research in oncological and haematological settings found that staff shortages were not only an effect, but also a cause of nurses' stress and burnout.<sup>19</sup> A systematic review focusing on emergency nursing<sup>20</sup> (somewhat similar to midwifery in terms of clinical acuity and unpredictable workflow) identified many of the same factors as associated with burnout, particularly high job demands, low job control, organisational factors and low support. They also identified witnessing traumatic events as a factor, again relevant for midwives. Conflicts with patients and families,<sup>20</sup> with or without verbal or physical violence,<sup>21</sup> is a known stressor for nurses which may be similar in midwives' clinical practice.

Research on nurses have also identified interpersonal psychosocial risks. Nurses' status within medical hierarchies enables overt, covert and institutionalised power structures to be enacted on them. Such power structures can dominate not only clinical decision-making but also the way nurses think about themselves and their position, legitimising how they are treated in a supposedly 'natural' hierarchy, with negative emotional effects.<sup>22</sup> Similarly, other researchers have found that nurses' levels of psychological distress is impacted by various aspects of organisational justice, including whether employers breach or fulfil the psychological contracts they have with nurses.<sup>23</sup>

There is also growing, but mixed, evidence on interventions to mitigate these problems in healthcare and other professions. A systematic review of systematic reviews found some interventions which reduce stress, especially cognitive-behavioural interventions and organisational interventions such as

reduced work demands, redesigns of work, improved communication and training on conflict-management skills.<sup>24</sup> Recent reviews found that cognitive behavioural therapy may be helpful,<sup>25, 26</sup> that enhancing employee job control may prevent common mental health problems,<sup>26</sup> and that relaxation techniques and improving work schedules may reduce stress,<sup>25</sup> but other organisational interventions, such as communication skills training, have no effect.<sup>25</sup>

These findings, based on populations in non-midwifery healthcare professions and other workplaces, may or may not be applicable to midwifery; there is a need to assess this by a close examination of the literature on midwives, as intended in this review. Non-midwives may have a “perception of midwifery being an inherently pleasurable pursuit,”<sup>27</sup> or see it not as a job but a vocation for women who are seen as intrinsically caring.<sup>28</sup> There are also unusual, but not unique, aspects of midwifery work that may affect emotional wellbeing, such as continuity of carer vs fragmented care, specific emotional challenges (e.g. termination of pregnancies, or where the needs of the foetus and woman diverge), conflicts between woman-centred and institution-centred care, or working with women who decline medically-advised interventions. A review has suggested that certain aspects of midwifery make midwives particularly vulnerable to **post-traumatic stress disorder** (PTSD), such as the empathic identification which can be involved in the woman-midwife relationship.<sup>29</sup> Meta-research focusing on midwifery has identified stressors such as dysfunctional organisational cultures and punitive approaches to discipline; these authors emphasise the importance of midwives’ caring for themselves and each other as a response to workplace emotional risks.<sup>30</sup> A systematic review of midwifery-specific interventions included formal mindfulness programmes, clinical supervision, and a combined resilience workshop and mentoring programme, concluding that there is currently insufficient evidence to recommend these interventions.<sup>31</sup>

This paper aims to review the qualitative and quantitative evidence on the relationships between working conditions and emotional wellbeing in midwives, with no restrictions on geographical context or type of midwifery work. As the focus of midwifery research moves from observation to intervention, there is also a need for thorough conceptual understandings of the interconnected

relationships between various working conditions and midwives' emotional wellbeing, which this paper will attempt.

## **Methods**

This paper provides a robust literature review, rather than a systematic review. Robustness is ensured by systematic approaches to searching and selection of literature, and inclusion and discussion of all eligible papers.

### **Search and selection strategy**

Searching and selection were performed by the first author (a midwife) with support and confirmation from the second author (a midwife academic). Automated searches were performed on the Medline, PsychInfo, Cumulative Index of Nurse and Allied Health Literature (CINAHL), Applied Social Science Index and Abstracts (ASSIA), Social Sciences Citation Index (SSCI), Midwife Information and Resource Service (MIDIRS), OpenGrey and GreyLit databases following search terms: (Midwi\*) AND (Burnout OR resilian\* OR emotion\* work OR retention).

Where possible, searches were restricted such that papers were required to have the above terms in their abstracts. Searches were performed in English only, with no date restrictions applied. The citation lists of all included articles, and any related articles or reviews that were discovered during searching, were hand-searched. A small number of papers were also found based on advice from the second author, an established researcher on this topic and assessed and included if appropriate.

Papers were included if they reported original research exploring the relationship between midwives' emotional wellbeing and their working conditions. Emotional wellbeing was defined widely, including all aspects of mental health as well as outcomes such as frustration. Exclusion criteria included: studies on non-midwifery populations, not investigating wellbeing directly (e.g. measuring only retention), reviews, theoretical or opinion pieces. Studies combining data on midwives and midwifery

students were included. Studies researching additional workplace programmes (e.g. mindfulness classes) were excluded.

### **Data extraction and synthesis**

Data extraction and evaluation were performed by the first author (a midwife) with support and confirmation from the second author (a midwife academic). No formal tools were used for these processes as a full systematic review was outside the scope of this project. No studies were excluded from the review due to risk of bias; where methods may have reduced the generalisability of results this is mentioned in the review.

Initially, relevant themes and results from the studies were extracted and synthesised into a thematic review. Themes arising from only one or two studies, but with results encouraging further investigation, were included as minor themes. Unless stated, all statistical results quoted from included studies are significant, i.e.  $p < 0.05$ .

Within each theme, variables correlating with midwives' wellbeing were identified. The evidence regarding interactions between these variables were then used to develop models to enable clearer understanding and communication of how these variable are interdependent. The resulting diagrams can be seen at the end of the Results section.

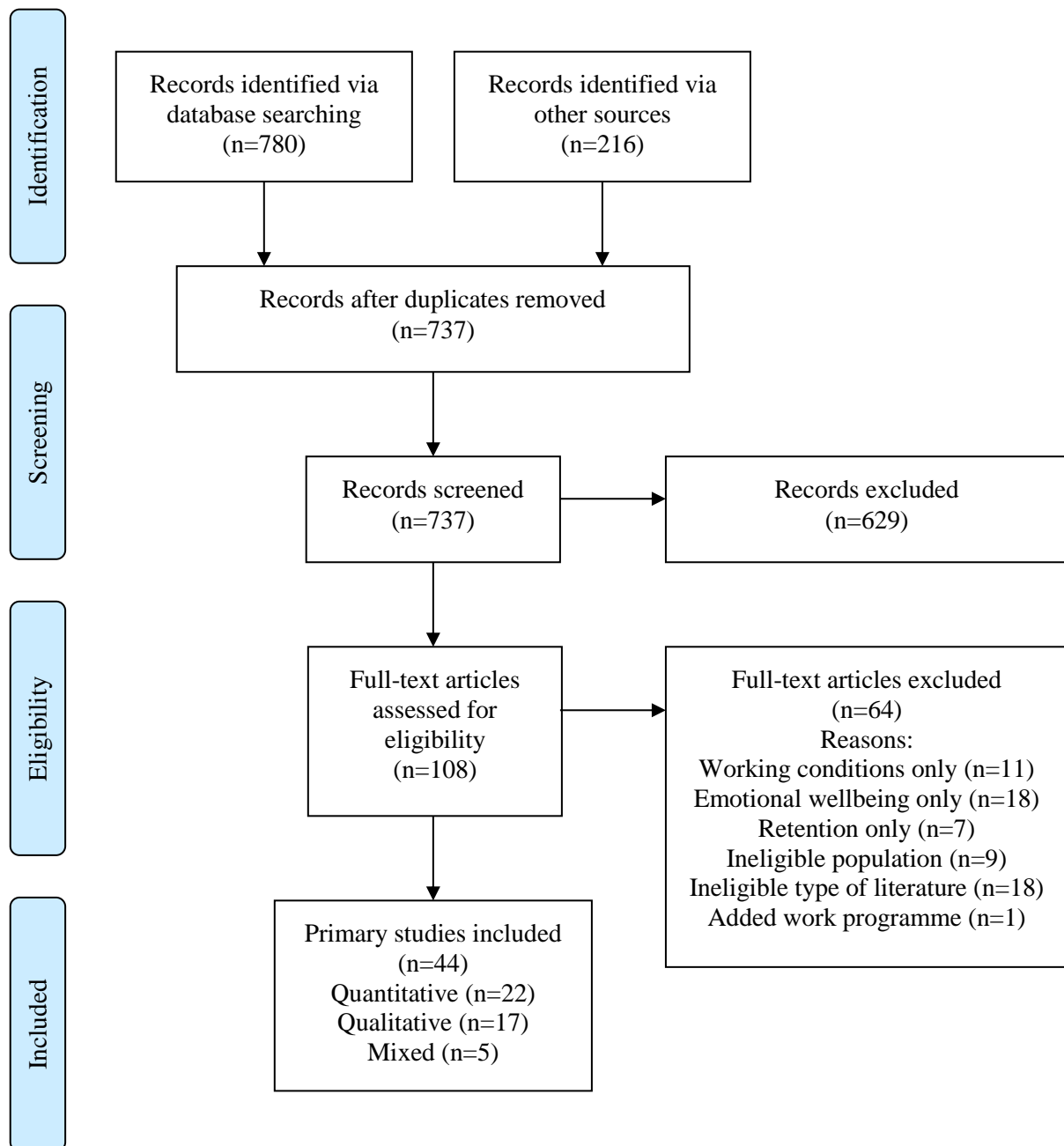
## **Results**

44 papers were included, of which 22 presented quantitative data, 17 presented qualitative data, and 4 presented both qualitative and quantitative data which were eligible for inclusion.

### **Characteristics of included studies**

Paper identification, screening and exclusion is described in Figure 1 (adapted from PRISMA).<sup>32</sup>

Tables specifying the characteristics of included studies can be found as supplementary materials to



**Figure 1: Paper selection**

the online version of this article, and should be referred to for further details.

### *Contexts*

Nearly all included papers (n=41) were from 13 different high-income countries. One study, from the World Health Organisation (WHO), involved midwives in 93 countries across a range of incomes,<sup>33</sup> and just two studies were from one low-income country.<sup>34, 35</sup>



### *Study designs and sample sizes*

All quantitative research presented observational data, largely using self-report questionnaires. All used cross-sectional surveys, and two added a longitudinal element.<sup>27, 36</sup> Sample sizes ranged from 31 to 1361, with 12 papers having fewer than 200 participants.<sup>27, 36-46</sup>

The qualitative research largely used semi-structured interviews, with some using focus groups instead of or alongside other methods (n=7)<sup>47-53</sup> and with some using written surveys with qualitative elements (n=4).<sup>9, 28, 54, 55</sup> Two studies used action research.<sup>48, 49</sup> Sample sizes ranged from 8 to 2719, with five having more than 70 participants.<sup>10, 28, 33, 54, 55</sup>

### *Measures of emotional wellbeing*

The quantitative research used a variety of formal measures of several different aspects of emotional wellbeing, most commonly measuring burnout,<sup>27, 36-38, 41, 42, 45, 46, 56-63</sup> stress<sup>27, 37, 39, 43, 64</sup> and coping.<sup>34, 57</sup> Other scales measured a combination of psychological symptoms or psychological, physical and social functioning.<sup>44, 58, 65</sup> Several studies devised their own questionnaires, rather than formal psychometric measures.<sup>10, 33, 54, 66</sup>

### *Measures of working conditions*

Aspects of working conditions were largely self-reported by midwives. Sometimes this was done with validated scales;<sup>36, 41, 57</sup> many studies also measured aspects of work that are already numerical, e.g. hours per week, area of work, pay, or extent of exposure to certain clinical situations. As with measures of wellbeing, several studies used their own questionnaires,<sup>10, 33, 42, 43, 45, 54</sup> or simply asked midwives which job factors caused them the most stress or satisfaction.<sup>62</sup>

## **Themes identified: Aspects of working conditions connected to midwives' emotional wellbeing**

### *Staffing and workload*

The evidence that follows is clear that there is a strong connection between high workload and emotional distress in midwives.<sup>27, 33, 37, 39, 43, 44, 54, 61, 64, 66</sup> The qualitative literature reveals possible

mechanisms for this and connections with other workplace variables. Since midwives usually work in groups sharing responsibilities, unless in a single-handed practice, the issues of workload and staffing are indistinguishable.

Staffing/workload was a strong theme in the quantitative data. It was identified as a cause of high levels of stress by 78%<sup>44</sup> and 65%<sup>43</sup> of midwives in two studies. In another study, after logistic regression analyses, 'Lack of staff and resources and a stressful work environment' was a powerful explanation for the variance in midwives' burnout.<sup>61</sup> Moderate correlations were found between burnout and stress related to workload, when measured by diaries of stressful events<sup>27</sup> or by questionnaire.<sup>37</sup> 'Quantitative job overload', i.e. excessive work being expected, was strongly correlated with high levels of fatigue and anxiety, and weakly correlated with hostility and depression.<sup>64</sup> Excessive workload was also a factor in creating exhaustion and distress in the multi-national WHO survey.<sup>33</sup> 56% of respondents to a Royal College of Midwives (RCM) survey of agreed or strongly agreed that 'I feel overwhelmed by how much work I have to do',<sup>54</sup> and in an older study of UK midwifery leavers, 70% agreed that 'I often felt stressed by the demands of my job'.<sup>66</sup> Only one study, again from the UK, varied slightly from this theme, in that only 38% of its participants cited workload as the major origin of their stress.<sup>39</sup>

In the qualitative data, poor staffing was a major theme identified in the RCM's survey of midwifery leavers and potential leavers, with anxiety, stress and burnout being attributed to conditions such as workloads reaching double their previously accepted level.<sup>10</sup> In a study that focused on the increased emotional demands of a new psychosocial screening tool, the sheer amount of work also significantly contributed to participants' stress and feeling unable to cope.<sup>53</sup> Overwhelming workload was a major theme in a study of newly qualified midwives, who described staffing problems as making conditions 'diabolical'.<sup>67</sup> Workload also made a significant emotional impact in the aftermath of witnessing traumatic births; one midwife described blaming herself for an incident, wondering if being distracted by worrying about being able to get a toilet break worsened her care.<sup>68</sup>

Other participants suggested mechanisms for how understaffing might affect emotional wellbeing. In a sample of midwifery leavers, most agreed that understaffing frequently undermined care quality (76%), compromised patient safety (73%) and caused work to be disrupted (68%).<sup>66</sup> This was echoed by other midwives who described the negative emotional effects of having to be task-orientated rather than women-orientated due to excessive workload.<sup>47</sup> Similarly, a study into resilience identified that excessive workload may, in affecting midwives' ability to provide adequate care, challenged their professional ideals and aims which in turn challenged their resilience.<sup>52</sup>

In such examples, employed midwives have no control over excessive workload, but midwives working as Lead Maternity Carers in New Zealand described how self-employment gives autonomy, allowing midwives to prevent excessive workload, reducing emotional risks.<sup>49, 69</sup>

#### *Relationships with colleagues: support, conflict, and bullying*

The following evidence shows that midwives' emotional wellbeing is connected to the quality of their relationships with their colleagues,<sup>27, 33, 37, 38, 39, 42, 61, 62, 64</sup> and that support from senior colleagues is highly impactful.<sup>37, 38, 42, 58, 62</sup> The qualitative data suggest some connections between this and other variables.

Burnout was correlated with low support from senior colleagues,<sup>37, 38, 42, 58</sup> peers,<sup>37, 38, 42</sup> and medical colleagues.<sup>37, 38</sup> Associations were found between burnout and experiencing stress from conflict with managers,<sup>62</sup> or lack of support at work.<sup>27</sup> In another study, after regression analyses, conflict with peers and managers was an important explanation for the variance in the two of the three burnout subscales.<sup>61</sup> Interpersonal conflict, presumably at least partly with colleagues, was strongly correlated with the hostility aspect of stress, and weakly correlated with fatigue, anxiety and depression.<sup>64</sup> Disrespect from colleagues and low levels of professional support were both factors in midwives' emotional distress identified by the WHO's global survey.<sup>33</sup> A small number of midwives in two studies cited conflict with colleagues or lack of support as a major origin of stress (13%<sup>39</sup> and 14%<sup>62</sup>). However, 12% in one of those studies named colleague contact as one of the most satisfying parts of

their job,<sup>62</sup> and in another study, newly qualified midwives named positive peer relationships as a supportive factor in their wellbeing.<sup>67</sup> These variable results suggest there is a wide range in levels of support offered by midwives' managers and peers.

The qualitative studies support these findings and add midwives' insights into possible causative mechanisms. Midwives in an action research study felt unsupported due to a lack of consistency in management, which led to feelings of isolation and fear.<sup>48</sup> Others linked bullying to workplace hierarchies and described it causing stress, whereas support from peers and managers had a positive emotional impact.<sup>47</sup> Three studies give examples of how damaging it is to be unsupported in situations of added pressure, namely, witnessing traumatic birth,<sup>68</sup> participating in external investigations,<sup>70</sup> or dealing with traumatic disclosures from women.<sup>53</sup>

Qualitative data also add depth here, via examples of how midwives are not passive recipients of support, neglect or mistreatment from their colleagues. A study on resilience discovered some of the interpersonal strategies that midwives used to make themselves and others more resilient, such as avoiding colleagues who tended to have a negative emotional impact on them, or investing emotionally in colleagues, thereby mutually improving wellbeing.<sup>52</sup> Similarly, an action research study found that midwives use a variety of coping strategies, some of them maladaptive, such as 'pseudo-cohesion'.<sup>48</sup> This was maintaining a false idea of a cohesive team relationship that must not be disrupted, which masked unsupportive behaviour and was used as a justification to avoid or delay raising concerns with each other. A similar finding, also from action research, saw midwives learning that not raising concerns immediately could cause resentment and worsen conflict, whereas prompt and honest communication improved solidarity.<sup>49</sup>

The connection between social support at work and midwives' emotional wellbeing may be mediated by related variables. For example, in one study, a factor independently associated with burnout, after multiple regression analyses, was 'manager's approachability about flexible working',<sup>46</sup> which conflates the level of support with the practical implications for flexible hours. Managers' decisions in

other relevant aspects of work (e.g. models of midwifery care, improving staffing or on-going training) may be equally intertwined with their level of support in general.

Similarly, workplace conflict may be associated with midwives' wellbeing via a number of mediating factors. For example, high workload and organisational change can put pressure on the relationships between midwives, causing conflicts, especially over allocating work,<sup>48</sup> and an ethnographic study found that conflicts between junior and senior midwives was often underscored by ideological divisions. Another possible mechanism was strong hierarchies that made newly qualified midwives feel like 'low life', unequal to longer-serving midwives.<sup>67</sup> There are also connections between conflict and lack of support, for example, midwives describing how showing support for a bullied peer risked prompting reprisals.<sup>66</sup>

#### *Hours and employment autonomy*

In general, the studies in this review found that working longer weekly<sup>38, 46, 62</sup> or daily<sup>56</sup> hours correlated with poorer emotional wellbeing, while lacking control over working patterns is also influential.<sup>39, 62, 71</sup> How midwives experience long hours may vary depending on their setting and model of care: those providing continuity of carer may experience such stressors less negatively than other midwives, especially if they have control over their working patterns. There is insufficient evidence here to claim that night working correlates with poorer wellbeing.

Several studies found a significant correlation between higher working hours and burnout.<sup>38, 46, 56, 62</sup> In contrast to this, only one study found no correlation between burnout and either number of hours worked or ratio of day and night shifts.<sup>59</sup> These findings are supported by qualitative data, for example, from midwives who described how long hours, including on-call, disrupt family life and can cause stress, anxiety and somatic symptoms.<sup>28</sup> Similarly, although it does not directly implicate long hours, the impact of work patterns on work-life balance was identified as a factor in midwives' emotional distress by the WHO global survey.<sup>33</sup>

Other studies found that the effect of hours worked was overridden by more influential variables: while employed midwives (as opposed to self-employed or mixed employment) worked fewer hours, they experienced higher burnout, potentially due to a number of other unfavourable work factors.<sup>58</sup> This suggests that the negative effects of longer hours are mitigated by supportive factors, or a lack of damaging factors, at work, connected to self-employment versus employment. Staffing may be such a factor; for example, the impact of not being able to take any breaks is more harmful when the shifts are 12.5 rather than 8 hours.<sup>10</sup> Satisfaction from work may also be important: some caseloading midwives (i.e. providing continuity of carer) chose to continue with relatively long periods of on-call, for example, because they valued the satisfaction of continuity that higher availability brought.<sup>69</sup> Another factor may be autonomy over working patterns: data from caseloading team midwives in a UK study demonstrated no connection between burnout or distress and rates of on-call, but there was an association with lack of control over workload.<sup>62</sup> Another study found that conflict between home and work commitments was a major stressor, and 26% of participants suggested that greater employer flexibility over working times (implicitly giving midwives more control) would reduce stress.<sup>39</sup> Qualitative data echoed this finding, in a study where control over working patterns was a major theme identified as reducing burnout.<sup>71</sup> Similarly, midwives who had left, or were considering leaving the profession, highlighted lack of control over shift patterns, and having short notice of shifts (e.g. two weeks' notice of the Christmas rota) as crucial stressors.<sup>10</sup>

Exceptions to this pattern of results are two studies which found a significant association between experiencing high personal accomplishment and high weekly hours<sup>57</sup> and more night shifts.<sup>45</sup> Neither study could demonstrate that the emotional effect temporally followed the working pattern. The authors of the first study suggested that higher hours may lead to greater confidence; an alternative explanation is that midwives already suffering burnout reduced their hours as a coping mechanism.

### *Caseloading and continuity*

Four quantitative studies demonstrate that continuity of carer is protective for midwives' emotional wellbeing,<sup>36, 38, 41, 58</sup> and the qualitative evidence suggest some mechanisms for this.

One of the few prospective longitudinal studies compared burnout in two groups of midwives who had initially similar baseline scores, re-testing them after two years of practice in caseloading vs standard care.<sup>36</sup> The caseloading midwives had lower mean scores in all three types of burnout. On the two subscales where most burnout was seen, many fewer of them scored as clinically 'burnt out' compared with the standard care midwives: fewer developed personal burnout (14% vs 49% of midwives) and fewer developed work-related burnout (5% vs 40%). All these results were highly significant ( $p < 0.01$ ). Two other studies also found that increased continuity of carer correlated with lower mean burnout scores,<sup>38, 41</sup> and in one, significantly fewer caseloading midwives scored highly, again suggesting a clinical difference.<sup>41</sup> As mentioned above, one study found that self-employed caseloading midwives had significantly lower burnout despite working longer hours than employed non-caseloading midwives.<sup>58</sup>

Other studies illustrate links between continuity and other work factors which may amplify its positive effects on emotional health. For example, in the study just cited (Dixon et al., 2017<sup>58</sup>), the caseloading and non-caseloading groups also showed significant differences in autonomy, empowerment and professional recognition.<sup>58</sup> Similarly, in the longitudinal study comparing caseloading and hospital midwives after two years' work, there were significant differences in three of four scales measuring working conditions: caseloading midwives reported higher professional satisfaction, professional support and client interaction.<sup>36</sup> The qualitative literature suggests further explanations for the association between continuity and emotional health. Midwives cite building meaningful relationships with women as crucial in reducing burnout,<sup>71</sup> and describe the emotional satisfaction of continuity,<sup>49</sup> empowering and reciprocal relationships with women,<sup>49, 72</sup> flexible control over one's hours,<sup>47</sup> and improved colleague continuity and support<sup>67, 69</sup> as mediating the effects of caseloading on their emotional health. Midwives who had witnessed traumatic births described how lack of continuity kept them ignorant of postnatal outcomes for the women, causing on-going anxious speculation about the potential physical and mental impact of the event.<sup>68</sup> Other midwives raised the issue of safety: since continuity reduces the number of handovers and new or unexpected situations, the midwife can be more confident that she hasn't 'missed something'.<sup>67</sup> Other practical connections were also drawn,

with amount of work and control over workload cited as an emotionally beneficial aspect of continuity of carer models.<sup>49, 72</sup>

In contrast, in a sample of midwifery leavers, those who worked in integrated posts (hospital and community), or team midwifery, were significantly more likely to have been stressed by the demands of their jobs, suggesting these work models were more stressful due to a higher imbalance of demands and staffing; however, it was unclear to what extent these were caseloading roles.<sup>66</sup> Midwives in one qualitative study described on-call as a part of their work that was detrimental to their emotional health, causing anxiety, anhedonia and disturbing sleep and appetite.<sup>28</sup> This suggests that the emotional benefits of continuity of carer are accompanied by the negative impact of time spent on-call, which may negate those benefits if short-staffing necessitates an unreasonable workload. One of the participant statements supports this idea: her on-call model is just one negative part of a job that she otherwise 'loves'. This suggests that there are more benefits than problems caused by her model of working, but that this may be reversed in other circumstances, e.g. poorer staffing.<sup>28</sup> However, there may be emotional risks associated with caseloading which may override the effect of hours. More sustainable hours and healthier levels of time off did not necessarily improve all aspects of wellbeing, if midwives continued with dependent, rather than empowering, relationships with women; in such cases, reducing hours may lead to feeling guilty for not being available at all times.<sup>69</sup>

### *Challenging clinical situations*

Midwifery involves various situations that might be expected to take a heavy emotional toll. Several studies linked emotional distress to traumatic births,<sup>55, 63, 65</sup> stillbirth and other forms of bereavement,<sup>27, 34, 35, 40, 43,</sup> and working with women with complex social and psychiatric problems.<sup>38, 45, 53</sup> Important mitigating or aggravating factors were also identified, such as adequate training<sup>40</sup> and colleague support<sup>55, 68</sup> or understaffing<sup>68</sup> and lack of continuity of care.<sup>68</sup>

Three papers investigated the impact of traumatic events,<sup>55, 63, 65</sup> finding that both the events themselves and what follows can have profoundly negative effects on midwives' emotional health. Of



midwives who had witnessed at least one traumatic workplace event, a third reported symptoms equivalent to PTSD (33%<sup>63</sup> and 36%<sup>55</sup> in two studies), and there seems to be an exposure-response link: symptoms correlated with both the number of traumatic experiences and the extent of the exposure (i.e. witnessing events *vs* listening to women's accounts).<sup>63</sup> Involvement with traumatic births also seems to worsen sleep and increase depressive symptoms in the immediate aftermath.<sup>65</sup>

Participants in qualitative studies study confirmed and enriched these findings by describing how events that follow traumatic births can further affect emotional wellbeing. Some described being re-traumatised by investigations,<sup>55</sup> the importance of colleague support (and its absence),<sup>68, 55</sup> the negative impact of high workload<sup>68</sup> and lack of continuity in care.<sup>68</sup> Some described feeling 'stuck' and powerless between opposing models of care,<sup>68</sup> especially when faced with over-interventionist practices or outright malpractice,<sup>44</sup> and were, for example, disciplined for advocating for a woman's wishes.<sup>68</sup>

Perhaps the worst event midwives witness is maternal death, a topic covered by two papers reporting different aspects of one study. Midwives who had witnessed a maternal death nearly all (93%) had moderate or high death anxiety, with 59% suffering moderate to high death obsession and 40% suffering moderate to high death depression.<sup>34</sup> An exposure-response effect was also found between death anxiety and measures of extent of exposure to maternal death, namely, having witnessed two or more maternal deaths in the last 2 years (OR = 3.175), and being the midwife in control when the woman had died, four or more times, (OR = 5.13).<sup>35</sup> Caring for 'incurable patients' was described as stressful or highly stressful by 52% of the midwives in another sample;<sup>43</sup> this likely to be more often foetal or neonatal than maternal in this context (Croatia).

The emotional impact of providing termination care seems to be complicated. Qualitative responses suggested that midwives found it stressful and distressing, especially in morally complex cases, and they found women asking them for advice especially difficult.<sup>27</sup> Some of this was echoed in quantitative findings in another sample, where, despite only a minority of midwives having ethical

concerns over certain terminations, 65% of midwives found their role in terminations emotionally difficult and 70% found the need to provide emotional support to distressed women especially difficult.<sup>40</sup> However, midwives with more experience, more training, and interestingly, those who performed more terminations, found this kind of care less difficult.<sup>40</sup> This inverted exposure-response relationship suggests that termination care itself may not be intrinsically emotionally damaging; instead, the study also reports positive experiences, including satisfaction at supporting the couple, their colleagues, or preventing the suffering of a child.<sup>40</sup>

Supporting women with complex social or psychological problems was a stressor in three studies. One study found a correlation with burnout,<sup>38</sup> another found a correlation with frustration but not with burnout,<sup>45</sup> and a major theme emerging from the participants in one qualitative study was the cumulative negative emotional impact of frequent disclosures of complex traumatic histories.<sup>53</sup>

#### *Clinical autonomy and models of midwifery*

A strong message from the qualitative literature is that individual clinical autonomy and models of midwifery that prioritise women's needs and choices are related to midwives' wellbeing.<sup>51, 68</sup> This is supported by two quantitative papers:<sup>58, 62</sup> burnout was strongly associated with a lack of clinical autonomy in different settings and models of work.

In a hierarchical workplace, autonomy for senior clinicians can reduce autonomy, and bring further stressors, for juniors. Participants in one study<sup>51</sup> described how students and novice midwives were held to unwritten rules of practice that varied materially between mentors; this caused additional stress, always having to be alert to the clinical preferences of the midwife they were working with that day. They were also held to other unwritten rules of clinical practice that were felt to be out-dated, not based on best evidence, and over-interventionist. They were unable to challenge these demands due to an environment of authoritarian, punitive behaviours from seniors. These conditions led to a sense of powerlessness, low morale and despondency. A study of midwives who had witnessed traumatic births echoed these findings, that feeling 'stuck' between medical and midwifery models of care, unable to

practice autonomously, led to feelings of powerlessness.<sup>68</sup> Similarly, compromised professional autonomy, and events where a woman's needs conflicted with institutional demands, were described as extremely stressful,<sup>44</sup> and as major challenges to resilience,<sup>52</sup> whereas having control over one's clinical practice was crucial to resilience.<sup>52</sup>

The qualitative literature again revealed how midwives were not passive recipients of an institution-centred culture of care, or controlling behaviours which undermined their professional autonomy. The participants in two studies described using covert strategies to avoid clinical practices which they knew were against best evidence or the woman's wishes.<sup>47, 51</sup> While this may benefit women, it did not improve midwives' emotional wellbeing, but led to continued frustration and internalisation of blame.<sup>51</sup> This was mitigated by peer support, bonding and sharing resistance strategies with peers.<sup>51</sup>

#### *Litigation and investigation*

Simply the possibility of litigation may have negative effects on midwives, with 55% of leavers reporting that they were worried by it;<sup>66</sup> actually being under investigation seems to cause dire emotional consequences according to several papers.<sup>52, 55, 70, 73</sup>

Having one's practice investigated by employers or regulators was described as a critical challenge to personal resilience in a study of experienced midwives, one of whom described it as "every midwife's nightmare".<sup>52</sup> Two papers provide in-depth explorations of such experiences, eliciting descriptions of severe emotional damage from being under such scrutiny. Midwives described experiencing stress, anxiety, loss of confidence, depression, sleeplessness; feelings of guilt, panic, anger, self-doubt and feeling traumatised.<sup>70, 73</sup> Several midwives recognised clinically significant symptoms or disorders in themselves, and attributed them to the investigation, including depression, panic attacks, PTSD and suicidal ideation. They also described the impact on their personal lives, causing strain or breakdown in couple relationships. When such investigations followed already traumatising experiences, the emotional effects were even more extreme: one midwife stated that "to this day I am weakened" by the process; another described that her "soul had died."<sup>55</sup>

### *Area of work*

The literature suggests that working in hospital wards may be correlated with lower emotional wellbeing.<sup>61, 62</sup> However, this may vary between contexts and may simply reflect the effects of other workplace factors, such as staffing<sup>60</sup> or ethos of midwifery.<sup>50</sup>

One study found that midwives' burnout varied according area of work, being ranked as follows, highest burnout to lowest: hospital work, models combining hospital and community work, community team midwives, midwives attached to primary care practices.<sup>62</sup> Similarly, one study found that working in hospital wards, as opposed to outpatient units or mixed work, was correlated with work-related burnout.<sup>61</sup> In contrast to this, a study elsewhere found that working in outpatient care was associated with higher personal-related burnout.<sup>59</sup> However, 'outpatient' characterised only the 4% of this sample working in outpatient clinics, whereas 22% worked in antenatal care, ultrasound and homebirth, and these areas were not associated with higher burnout.

A possible explanation for the connection between area of work and burnout was provided in a study in which hospital-based midwives were more likely to rate their working environment unfavourably, especially as having inadequate staffing and resources.<sup>60</sup> Similarly, hospital and community midwifery may involve very different philosophies of care, with the medicalised, institution-focused ethos of hospital care challenging midwives' professional ideals and causing additional stress.<sup>50</sup> Qualitative participants gave another perspective: midwives found compulsory rotation between different areas stressful or otherwise damaging to emotional health.<sup>10, 66</sup> The papers above reporting on area of work do not explain whether midwives freely chose their area, which may complicate these data.

### *Salary*

There is some evidence to suggest that low salaries are correlated with emotional distress.<sup>33, 43, 62</sup> 55% of one sample described 'inadequate income' as stressful or highly stressful;<sup>43</sup> low and irregular pay, and a lack of pensions and health insurance where these are not provided by the state, were both factors in midwives' emotional distress in the WHO survey.<sup>33</sup> Burnout was associated with lower

salaries<sup>38</sup> and being on a lower grade in the UK National Health Service,<sup>62</sup> although this may be complicated by other emotional harms of workplace hierarchies. In qualitative data about salaries, low pay was not blamed for emotional distress, but was described as an example of the undervaluing and derogatory treatment of midwives, and as inadequate for the emotional impact of the job.<sup>10</sup>

### *Organisational change*

Organisational change seems to be a stressor for midwives, due both to specific side-effects of particular changes, and to the disruptive effects of change itself.<sup>48, 59, 66</sup> In one study, midwives who had experienced recent organisational change experienced higher personal and work-related burnout.<sup>59</sup> Qualitative data highlighted changes to structures and ways of working as a crucial factor in midwives' stress, especially via mechanisms of creating additional demands on their time and exposing dysfunctional colleague dynamics.<sup>48</sup> Although the most recent change for this sample involved team midwifery, they described repeated organisational change as a constant ongoing challenge, with the move to team midwifery simply the latest disruption. Other midwives revealed how certain well-intentioned changes to work practices may have negative emotional effects: for example, added tasks exacerbated pressures caused by understaffing.<sup>66</sup>

### *Training*

There is some indication that inadequacies in training may be correlated with poorer emotional wellbeing.<sup>33, 35, 39, 40, 43</sup> 'Insufficient knowledge to cope with changes [to work practices]' was cited as stressful by 12% of midwives in one sample;<sup>39</sup> similarly, 'lack of education' was described as stressful or highly stressful by 15% of midwives in another study<sup>43</sup> and 'limited or poor-quality training' was identified as a cause of distress in the WHO's international survey.<sup>33</sup> Training for specific difficult circumstances is associated with resilience in those situations, namely maternal death<sup>35</sup> and termination care.<sup>40</sup> Low staffing may not allow time for adequate ongoing training.<sup>74</sup>

### *Organisational commitment to employee wellbeing*

Several studies revealed a relationship between organisational commitment to employees' health and

wellbeing and midwives' distress.<sup>39, 46, 54</sup> Reduced emotional exhaustion was independently associated with midwives' perception of their organisation's commitment to employees' work-life balance,<sup>46</sup> and in another study, 100% of the midwives who described themselves as stressed also felt unsupported by their organisation.<sup>39</sup> In one questionnaire-based study, there were many differences between the emotional wellbeing of midwives who felt their organisation took positive action on health, safety and wellbeing, and those who did not. For example, those in organisations seen as not taking positive action were more likely to feel stressed every day or most days (64% vs 30%).<sup>54</sup> Although the survey was large, no information was given on statistical significance.

## **Minor themes**

### *Discrimination*

As discussed previously, discrimination against employees belonging to marginalised groups is a known stressor based on research outside midwifery,<sup>17, 18</sup> but this theme does not feature strongly in the included papers. The WHO international survey of midwives identified gender inequality in the workplace, including bullying and harassment, as a cause of midwives' distress and burnout.<sup>33</sup> Several quoted respondents to two surveys gave examples of direct discrimination or a discriminatory workplace culture, based on ethnicity, disability, sexuality, pregnancy/caring responsibilities, age, and religion.<sup>10, 54</sup> Unfortunately, in general, studies in this review did not investigate this topic. For example, one study found significant ethnic differences while comparing the wellbeing of self-employed, employed and mixed-employment midwives but did not perform any sub-group analyses.<sup>58</sup>

One exception is a study which found a correlation between one type of burnout (depersonalisation) and experience of workplace discrimination,<sup>37</sup> but the data are unclear: they use a scale which asks about sex discrimination and race discrimination,<sup>75</sup> but the authors summarise the results as involving sex only, while giving no data on participant ethnicity.<sup>37</sup> The other major exception is a study of recent midwifery leavers, which found no significant differences in ethnicity regarding extent of experiences of bullying, but did not investigate whether there were racist or other discriminatory aspects to bullying or other negative workplace experiences.<sup>66</sup> However, the qualitative data in this study

suggested that some midwives were discriminated against on the grounds of being part-time workers,<sup>66</sup> which may correlate with disability, age or caring responsibilities.

#### *Conflict with women/families*

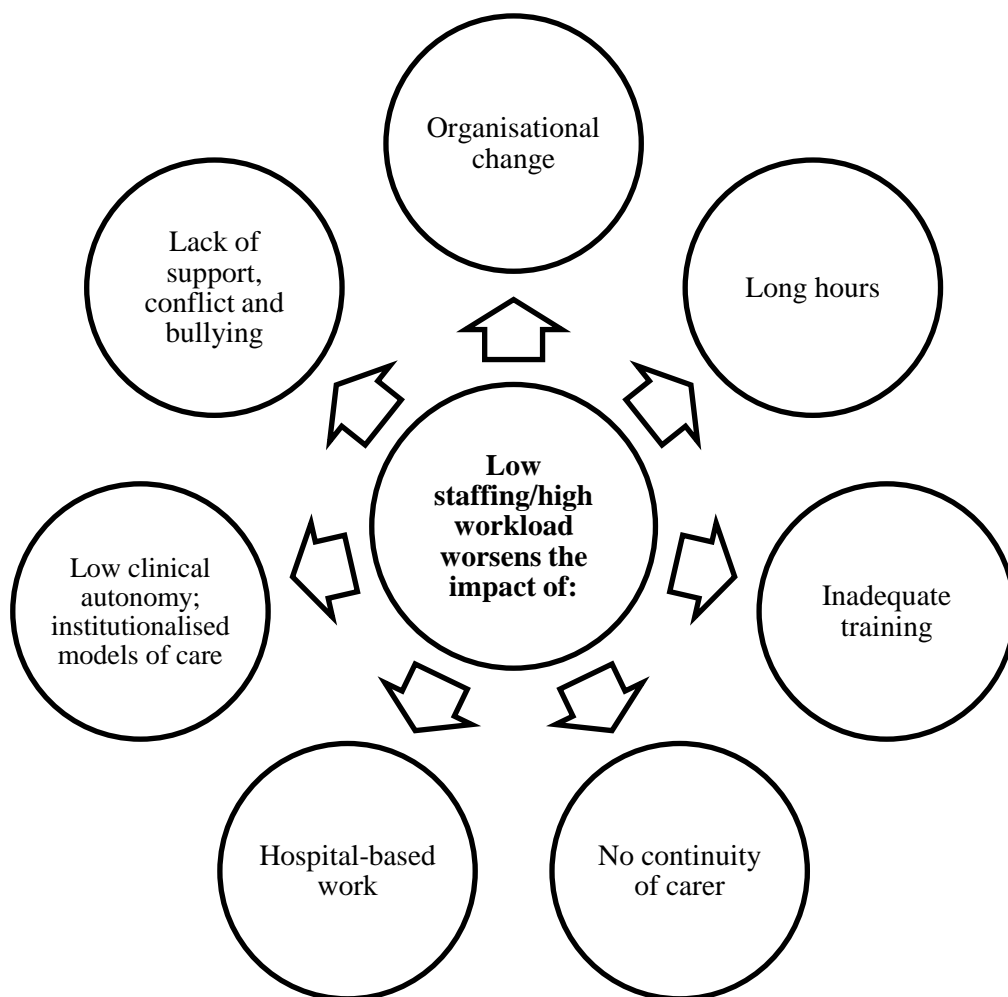
Conflicts with patients and families, and verbal or physical violence, are significant factors in nurses' emotional distress<sup>20, 21</sup> as described above. It is therefore interesting to note that this issue is largely absent in the included papers. It was identified as a minor theme in two papers<sup>33, 44</sup> including the WHO survey; while a number of midwives faced violence and harassment from work colleagues, or faced dangerous environments when attending births at night, only a small number in certain areas described a threat posed by service users.<sup>33</sup> As discussed previously, one paper identified 'interpersonal conflict' as playing a major role in various aspects of distress, but it is unclear whether this was conflict with colleagues, women, families, or a combination.<sup>64</sup> The only paper that explicitly identified this theme found that conflict with women and families had a moderate correlation with emotional exhaustion and a weak correlation with the personal accomplishment aspect of burnout.<sup>37</sup>

#### *Organisational Justice and Critical Social Empowerment*

The effects of medical hierarchies and organisational injustice on nurses' emotional health is already known,<sup>22, 23</sup> as mentioned in the introduction; however, this theme is barely touched on in the included papers. Limited leadership or decision-making positions for midwives was identified in the WHO survey as a cause of midwives' distress, describing how this disempowered midwives within healthcare power structures.<sup>33</sup> The organisational undervaluing of midwives and midwifery was also identified as a theme, and this was echoed in a survey of midwifery leavers where respondents described how this was linked to depression.<sup>10</sup> The perception that midwives were not listened to by their employers and were structurally excluded from decision-making processes was a theme in one study.<sup>47</sup> No other included paper aimed to study these aspects of working conditions or identified them as major themes, but similar ideas were mentioned by a few participants in some of the qualitative data.<sup>54, 66</sup>

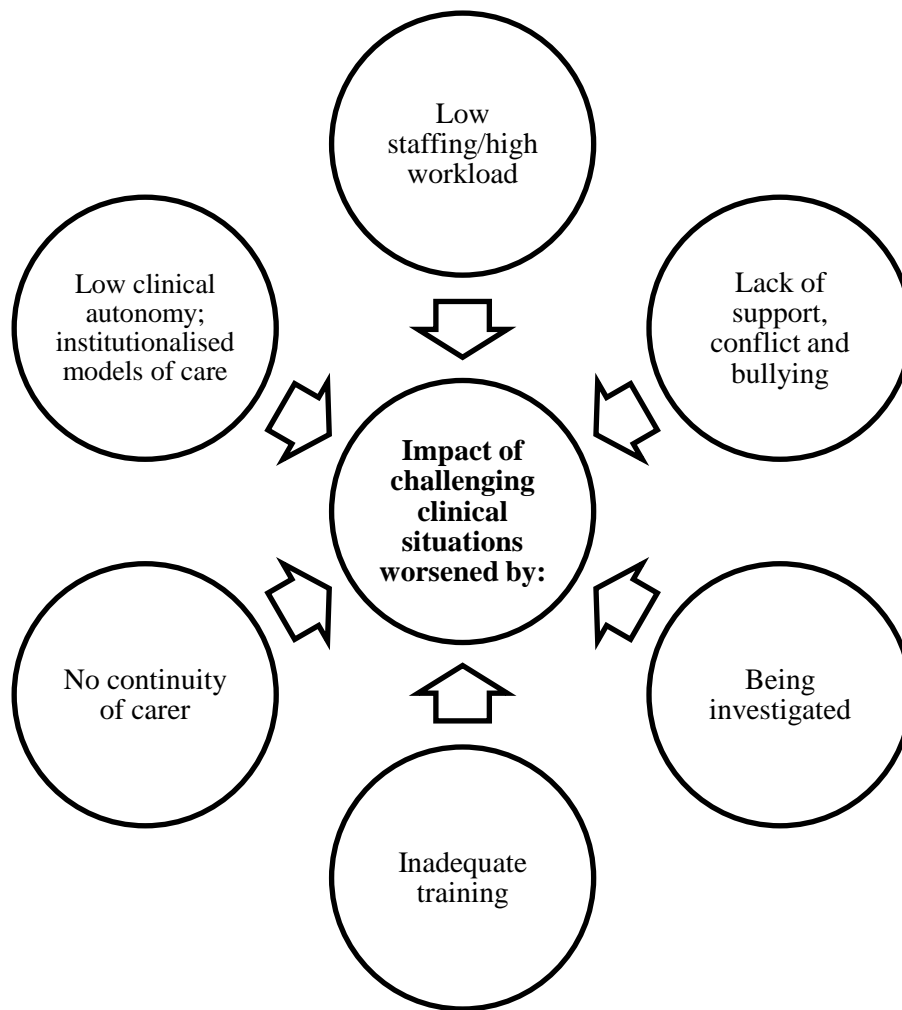
### Interactions between risk indicators

Both qualitative and quantitative research suggested various relationships between variables; there are too many to show clearly in one diagram. The two factors with the most links to other variables were low staffing/high workload and challenging clinical situations. Their links with other variables are shown in figures 2 and 3. Organisational commitment to employee wellbeing clearly has the potential to interact with all modifiable variables.



**Figure 2: Interrelationships with low staffing/high workload**





**Figure 3: Interrelationships with challenging clinical situations**

## Discussion

This review has identified several closely interrelated aspects of working conditions which are linked to midwives' emotional wellbeing; most notably, staffing, degree of continuity, support from colleagues, exposure to traumatic events, level of clinical autonomy and control over work patterns. Many mirror the findings of research in other occupational groups and general employed populations. The major exceptions to this are factors unusual in other healthcare professions, or specific to midwives in certain geographical and political contexts: continuity vs fragmented care models, the different roles within midwifery, and compulsory rotation between those roles. This section will discuss: a proposed framing of these variables as risk indicators; why a non-individualistic approach should be taken to this issue; and the limitations of this review.

## **Risk indicators**

Within each of the general themes identified in the literature, one or more specific variables have been identified which correlate with decreased wellbeing for midwives. These are summarised in Figure 4. A useful way to understand these variables is as risk indicators. Although terminology varies, the concept of ‘risk indicator’ is commonly seen as covering both risk factors (where the relationships between factor and outcome is causal) and risk markers (where the association is non-causal). ‘Risk indicator’ is therefore fitting for an area where the research is observational and therefore knowledge about causation cannot yet be claimed. The corresponding opposite of each variable (e.g. ‘adequate training’ or ‘high levels of clinical autonomy’ could also be described as protective indicators.

Figure 4 also shows how the identified themes can be described as modifiable and non-modifiable risk indicators. For ease of application to the workplace, the standard of modifiable and non-modifiable for these conditions has been set here according to what may be achieved by leaders of healthcare organisations (not by the individual midwife or team, or by the legislator or regulator, for example). This may vary between contexts. For example, where salary is determined by each organisation rather than national bodies, this becomes modifiable. Initiatives to reduce certain distressing outcomes, such as maternal or foetal/neonatal mortality, may modify the number of these tragedies to a certain degree, but in many contexts this may not be a large enough change to make a difference to the exposure of midwives to such incidents. Certain organisational changes may be mandated on a national level.

## **A non-individualist approach**

The rich qualitative stream to the literature gives a rounded picture of midwives interacting with their environments. Many of the papers here considered the impact of individual characteristics (e.g. personality or demographics), but this review has not. To focus on workplace variables rather than individual characteristics is not to portray midwives as helpless recipients of their work stressors; rather, this literature reveals midwives as developing skilful behaviours to mitigate the effects of risky working conditions, benefiting themselves, each other, birthing women and their families.

<b>Theme</b>	<b>Non-modifiable risk indicators</b>	<b>Modifiable risk indicators</b>
<b>Staffing and workload</b>		Low staffing/high workload
<b>Relationships with colleagues</b>		Lack of support from colleagues; conflict with colleagues; experiencing bullying
<b>Hours and employment autonomy</b>		Long hours; low autonomy over working patterns
<b>Caseloading and continuity</b>		Models of practice that do not enable continuity of carer
<b>Challenging clinical situations</b>	Traumatic births; bereavement; high levels of working with psychosocial complexities	
<b>Clinical autonomy and models of midwifery</b>		Low clinical autonomy; midwifery cultures that prioritise institutional needs and rules over women's wishes
<b>Investigation and litigation</b>	Being, or fearing being, under investigation	
<b>Area of work</b>	Hospital-based work	Compulsory rotation between areas
<b>Salary</b>		Low salaries
<b>Organisational change</b>		Experiencing organisational change
<b>Training</b>		Inadequate training
<b>Organisational commitment to employee wellbeing</b>		Low organisational commitment to employee wellbeing

**Figure 4: Summary of risk indicators identified in the review**

## **Limitations of the findings**

The study designs in this body of literature were all observational, and so this review cannot definitively determine a causal relationship between any of the working conditions identified and the emotional states to which they seem to be related, or between any of the seemingly linked working conditions. Two studies included a longitudinal element, and so the evidence is slightly stronger here (that continuity of carer is a protective factor against burnout<sup>36</sup> and that high workload and lack of support are crucial factors in burnout<sup>27</sup>), at least demonstrating that these working conditions preceded the emotional outcome. Several studies identified an exposure-response link with certain correlations, namely exposure to traumatic births<sup>63</sup> and maternal death.<sup>35</sup> The richness of the explanatory causal mechanisms provided by midwives' qualitative data strengthens the idea of causation for several connections, especially how distress may be caused by the deleterious effects of understaffing on care quality<sup>47, 52, 66</sup> and the negative effects of having to work in a midwifery culture which goes against one's own ethos, or undertake institution-centred rather than woman-centred care.<sup>51, 68</sup> In some areas, existing knowledge supports a claim to causation: it is reasonable to assume that witnessing traumatic events causes PTSD symptoms, given the abundant literature on this phenomenon.<sup>76</sup>

The preponderance of high-income countries in this review means that some or all of these findings may not be applicable to other settings. Even within otherwise similar high-income countries, a variety of midwifery cultures and models exist, and this variance may also affect applicability. Several studies exclusively studied midwives with a particular characteristic or experience (e.g. leaving the profession, or having witnessed traumatic births), without comparison with others. While these findings cannot necessarily be applied to all midwives, these studies provide useful insight into the experiences of these groups.

Many of these studies' methods rely on midwives knowing and accurately reporting what causes them most stress or other emotional problems, or how much distress is caused by different aspects of work. This review has taken the epistemological position that midwives are the experts in their own experiences of employment. In addition, in their social location as an oppressed group (as employees,

and also, almost exclusively as women), subject to social institutions created by dominant groups, they have an epistemic privilege which gives them greater and more useful knowledge about those institutions, and how to improve their conditions.<sup>77</sup> Other approaches are possible, and notably taken by one paper included here: the participating midwives suggested that the most helpful changes to reduce stress would be support from their organisation and colleagues, and increased flexibility of working times, while the author recommends that teaching personality awareness and individual coping mechanisms should be prioritised, despite not measuring these factors.<sup>39</sup> Moreover, research in other professions which uses more objective measures, such as external measures of nurse staffing ratios and burnout, confirm that understaffing correlates with burnout.<sup>78</sup> Thus researching the employee perspective is appropriate here.

## **Conclusion**

### **Summary of main findings**

This review has identified a significant body of observational data which shows that several aspects of working conditions are strongly related to midwives' emotional wellbeing. These include staffing, degree of continuity, support from colleagues and level of autonomy over both clinical matters and patterns of work. The literature also reveals some of the ways in which these aspects may correlate with each other or modify each other's effects. In particular, short-staffing seems to be implicated in many other working conditions that correlate with poor wellbeing, and the emotional impact of being involved in challenging or traumatic clinical situations seems to be affected by many other work variables. Aspects of work can be understood as modifiable or non-modifiable conditions, guiding practical and/or academic work in this area.

### **Recommendations for research**

Further research could take several forms. It may be necessary to confirm these observational data, for example, in contexts not included here, or after political changes in well-studied contexts. Aspects of work which here are explored largely qualitatively, such as organisational change or commitment to

employee wellbeing, may benefit from investigation in robust quantitative studies. Even factors well-studied here with quantitative research may benefit from further research using more objective measures that could be easily applicable to other workplaces. For example, rather than measuring perception of work overload, studies could measure staffing either with basic ratios of midwives-to-women/babies for ward settings, or with measures that take acuity into account, perhaps based on evidence-based guidance.<sup>74</sup> Observational research could otherwise focus on potential factors only briefly touched on in this review, for example, discrimination or organisational justice.

Potentially more useful would be research designed to establish causation, or the efficacy of interventions aimed at altering modifiable factors, such as randomised controlled trials. Such experimental research on fundamental elements of the workplace may be difficult to organise, but far from impossible.<sup>12</sup> Such studies should also investigate associated costs and cost savings. Research on specifically midwifery interventions has thus far addressed the problem of work-related emotional wellbeing solely using an individualist, psychological model, testing interventions which aim to improve the individual's ability to cope with existing stressors.<sup>31</sup> There is therefore a need for research which tests the feasibility and effectiveness of modifying these stressors, for example, by improving staffing or re-introducing models of midwifery which involve greater continuity of carer.

### **Recommendations for policy**

Healthcare leaders could approach any of these modifiable variables with improvement initiatives; staffing/workload should be a particular priority given the evidence of its importance and how it seems to influence many other factors. Given the observational nature of this literature, any such initiative should be carefully designed to maximise the potential for measuring effectiveness. Such interventions may be costly, but investment in improving staff wellbeing is likely to be cost effective in terms of staff costs, patient care costs and improved safety;<sup>79</sup> the extent of this too should be studied. Given how interrelated many of these variables are, any intervention should avoid unintended consequences in related areas. For example, interventions must avoid taking time away from midwifery hours, or exacerbating any workload issues, since staffing seems to be such a crucial factor in midwives'

emotional wellbeing.

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