Causes and solutions to workplace psychological ill-health for nurses, midwives and paramedics: the Care Under Pressure 2 realist review

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Scientific summary

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Background

The National Health Service (NHS) is the biggest employer in Europe and the world's largest employer of highly skilled professionals with 1.6 million people. The NHS needs healthy, motivated staff to provide high-quality patient care; however, in recent years increasing workload, due to societal demand for healthcare services, combined with increasing external scrutiny of their work, has been associated with a high prevalence of psychological ill-health amongst staff. Due to budget constraints and staff shortages, pressure is building in the health and care system and this is taking its toll on staff and patients. In 2018, commentators described staff as 'running on empty' and the COVID-19 pandemic has only added to these pressures. The 2021 NHS staff survey reports that 47% of staff felt unwell because of work-related stress in the last 12 months, 55% went into work despite not feeling well enough to perform their duties in the last 3 months, 77% often felt they had unrealistic time pressures, 73% felt there were not enough staff to enable them to do their job properly and only 68% were happy with the standard of care provided by their organisation.

Nurses, midwives and paramedics are the largest collective group of clinical staff in the NHS, comprising 29.3% of the NHS workforce and over 56% of the clinical workforce. Although there is a large body of literature on interventions that offer prevention, support or treatment to nurses, midwives and paramedics experiencing poor psychological health, this literature tends to be profession-specific and focused on individual interventions that place responsibility for good psychological health with nurses, midwives and paramedics themselves. There is a need for research that is sensitive to the complexities of psychological ill-health in nurses, midwives and paramedics and provides an understanding of the causes of poor psychological health in these three groups, thus identifying what is unique to each group or setting. Through this understanding, we will be able to design context-sensitive interventions that are more likely to address the pressing workforce problems faced by the NHS.

Aims

The overall aim of this research was to improve understanding of how, why and in what contexts nurses, midwives and paramedics experience work-related psychological ill-health; and determine which high-quality interventions can be implemented to minimise psychological ill-health in nurses, midwives and paramedics. Our specific aims were to (A1) understand when and why nurses, midwives, and paramedics develop psychological ill-health at work and provide examples of where and how it is most experienced; (A2) identify which strategies/interventions to reduce psychological ill-health work best for these staff groups, find out how they work and in what circumstances these are most helpful; (A3) design and develop resources for NHS managers/leaders so that they can understand how work affects the psychological health of nurses, midwives and paramedics; and what they can do to improve their psychological health in the workplace.

Methods

A realist synthesis methodology based on the realist and meta-narrative evidence syntheses: evolving standards' reporting guidelines was adopted to search, identify, appraise and synthesise the literature (including primary and secondary empirical research, as well as editorials, theoretical and discussion papers, and key reports) to reach an ontologically deep understanding of causes and interventions to mitigate psychological ill-health in nurses, midwives and paramedics. A stakeholder group supported the project, meeting four times over the course of the project to confirm that our developing analysis was

resonating with stakeholders and to make suggestions regarding important areas for improving understanding. The realist approach allowed us to synthesise evidence on organisational and structural contexts (e.g. community or hospital work) and profession-specific working practices (e.g. types of shift work, team or lone-working) within each of these three professional groups, but also differences and similarities between the groups (e.g. by specialty, setting). By illuminating differences in organisational factors, context and working practices (service architecture), we anticipated how these might influence the development of psychological ill-health and the uptake and success or otherwise of interventions aimed at supporting psychological wellness within and between these staff groups. This feature of the approach is particularly appealing because the causes and solutions to workplace psychological ill-health are complex and multifactorial.

Due to the broad mandate, and the potential for locating insights across a diversity of literature in nursing, midwifery and paramedic professions, in February–March 2021, we undertook a broad first round of database searching using Medical Literature Analysis and Retrieval System Online Database ALL (via Ovid), cumulative index to nursing and allied health literature database (via EBSCO) and health management information consortium database (via Ovid), followed by more specific supplementary searching strategies (e.g. hand searching journals, expert solicitation of key papers). Subsequent database searches in December 2021 targeted COVID-19-specific literature, as well as literature reviews, to supplement that found in the first database search. We used reverse chronology quota screening to include a manageable, recent set of papers relating to each profession, and excluded literature focussing on physical health, students and patient well-being. All included papers were read multiple times and we extracted key information, including causes and interventions. We used an appraisal journaling technique to enable the multidisciplinary team to extract key insights, built on existing knowledge of the research literature and the NHS, and use these insights to formulate context-mechanism-outcome configurations (CMOcs). Multiple rounds of analysis in consultation with stakeholders allowed us to crystallise the key findings, and generate insights into the tensions facing nurses, midwives and paramedics, as well as a range of interventions that might support their workplace psychological ill-health and wellness.

Results

We built on seven key reports and included 75 papers in the first round (26 nursing, 26 midwifery, 23 paramedic) plus 44 expert solicitation papers, 29 literature reviews and 49 COVID-19 focused articles in the second round.

We found that overall there are more similarities than differences in causes of psychological ill-health among nurses, midwives and paramedics; and very few interventions were profession-specific. Some causes may be more prevalent or exacerbated in certain professions, or roles within professions (rather than being profession-specific). In most cases it is the service architecture (organisational factors, context and working practices), that can increase risk rather than the profession itself. Our findings suggest that staff come into health care with high ideals, strong values and the desire to do a good job every day, yet many develop psychological ill-health as a result of their work.

Through the realist synthesis and by surfacing 14 key tensions in the literature, we identified five key findings, supported by 26 CMOcs. The key findings (and 14 key tensions) were as follows:

1. Interventions are fragmented, individual-focused and insufficiently recognise cumulative chronic stressors, with tensions between the below:

   T1: a focus on individuals versus a focus on systemic issues
   T2: a focus on acute episodes of trauma versus recognising and supporting chronic cumulative stressors.

2. It is difficult to promote staff psychological wellness where there is a blame culture, with tensions between the below:

   T3: a lack of collective accountability, which blames individual staff for errors, versus a team/system-based approach
   T4: needing to raise concerns to improve conditions and patient safety versus fitness-to-practice processes becoming an oppressive force
   T5: encouraging staff to speak up versus the 'deaf effect' response from managers and hearers.

3. The needs of the system often override staff well-being at work ('serve and sacrifice'), with tensions between the below:

   T6: a professional culture that promotes a 'serve and sacrifice' ethos, which persuades staff to prioritise institutional needs, versus a culture that promotes self-care
   T7: supporting existing staff in the context of staff shortages versus perceived coercion to fill vacant shifts beyond contracted hours
   T8: the lived reality of staff shortages versus the wish to deliver high-quality patient care, which can result in moral distress (MD).

4. There are unintended personal costs of upholding and implementing values at work and tensions between the below:

   T9: the reality of healthcare delivery versus the taught theory and values, which can lead to guilt and moral and emotional distress
   T10: the benefits of staff empathy to patients (ensuring quality care) versus the harms of staff empathy to staff (increasing risk of vicarious trauma or unhealthy/negative coping strategies).
   T11: the excessive requirements for emotional labour inherent in healthcare practice versus the need to improve workplace psychological ill-health.

5. It is challenging to design, identify and implement interventions to work optimally for diverse staff groups with diverse and interacting stressors, with tensions between the below:

   T12: making staff wellness interventions mandatory versus voluntary
   T13: the need for spaces to debrief with managers/leaders so they hear and can thereby offer support versus the need for peer-led spaces for debriefing
   T14: the need to act and offer support versus providing interventions that are ineffective because they are too soon, reactive and/or single time point.

Importantly, we identified that a multi-layered systems approach to psychological well-being is required; not a one-size-fits-all approach, but individualised, where everyday events as well as acute events, are acknowledged as impacting on staff psychological wellness. A psychologically safe culture, where good visible leaders enable and support staff to speak up and take accountability is needed to change the status quo. Initiatives such as the 'Freedom to Speak up Guardians' are promising but need adequate resources to learn from data, change culture and respond to concerns raised. Through the analysis, we learned that healthcare delivery and staff psychological health is a balancing act, with different considerations needing to be held in productive tension, such as needs of staff and the needs of patients. Our findings showed that nurses, midwives and paramedics tend to put patients first, often putting their own needs second, which can erode well-being in the face of intense and potentially traumatic work, and (counterintuitively) actually serve to compromise high-quality patient care. We identified that healthcare staff are selected and trained to hold strong professional values and codes of conduct. Yet, compassion and empathy can come at a high price for staff in terms of their own psychological health and not being able to deliver care in line with their values can cause guilt and MD or moral injury. We also identified the significant challenges of designing and embedding complex

interventions within large organisations that meet the dynamic needs of diverse groups of healthcare staff, for example, considering who, when and how interventions are delivered, not just what they are. This implementation gap needs significant future attention in practice and research. Finally, the analysis of COVID-19 literature revealed that the pandemic had significantly impacted the psychological health of staff, in an almost entirely negative way, exacerbating and accelerating staff mental distress from already difficult pre-pandemic conditions. One of the few benefits that the pandemic offered was the focus on staff health and psychological well-being and adaptation and innovation of interventions to support staff, but many interventions had unintended negative consequences.

Unfortunately, while most editorials and commentaries tended to call for multi-level, systems approaches, most empirical papers focused on single interventions, perhaps because these interventions are easier to design or evaluate. In other words, the practice and research effort seem to be focusing on what is easiest currently, rather than what is likely to be most effective. Therefore, in the future, more attention needs to be paid to how the primary, secondary and tertiary levels can work together to provide a systems approach to preventing, mitigating and treating psychological ill-health in staff. There is a focus on the traumatised (tip of the iceberg), rather than the essential needs of the majority and organisational prevention is under-represented. Some individual characteristics (e.g. ethnicity, sexual orientation and/or gender identity, and disability) deserve greater focus to improve understanding of causes and interventions. Our profession-specific analysis revealed a need for targeted interventions to support particular staff groups, especially minority groups and newly qualified staff, and at specific times when they may be at greater risk of psychological ill-health. Encouragingly, we also identified many 'informal' interventions, perhaps developed by front-line staff to plug gaps in current provision, some of which could be formalised.

The strengths of our study were the use of realist methodology that uncovered rich insights, the cross-professional analysis, which provided unique perspectives, and the expertise offered by the multidisciplinary research team, advisory group and stakeholder group. In terms of limitations, the literature was not equivalent in size and quality across the three professions, the literature synthesised was not comprehensive, although it was appropriate to the methodology, and we did not carry out citation searches since hand searching and stakeholder/expert suggestions had proved an efficient way to identify papers.

Conclusions

Unequivocally our realist synthesis suggests the need to improve the systemic working conditions and the working lives of nurses, midwives and paramedics to improve their psychological well-being. Individual, one-off psychological interventions are unlikely to succeed alone. Psychological ill-health is highly prevalent in these staff groups (and can be chronic and cumulative as well as acute) and should be anticipated and prepared for, indeed normalised and expected. Our research has resulted in eight implications for healthcare practice suggesting a need for healthcare organisations to the following:

1. rebalance the working environment to enable healthcare professionals to recover and thrive;
2. invest in multi-level systems approaches to promote staff psychological well-being;
3. continue to reduce stigma by implementing long-term plans and investment;
4. focus on staff essential needs in order of priority;
5. assume that staff are doing the best job they can in difficult circumstances, to counteract a blame culture;
6. enable the needs of staff to be prioritised, to challenge a 'serve and sacrifice' ethos;
7. identify and nurture future compassionate leaders; and
8. use an evidence-based framework to self-assess and implement a systems approach to staff well-being, for example, the NHSE/I Health and Wellbeing Framework.

Future research examining psychological ill-health in nurses, midwives and paramedics should build on our synthesis and seek to implement, refine and evaluate systemic interventional strategies. We recommend that interventions and evaluations are co-designed with front-line staff and staff experts by experience and tailored where possible to local organisational and workforce needs. Future interventions and research should focus on what is most needed, rather than what is easy to implement or evaluate, and significant attention should be paid to the implementation design and process.

Study registration

This study is registered as PROSPERO CRD42020172420. Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42020172420.

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