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Perceptions of healthcare professionals' psychological wellbeing at work and the link to patients' experiences of care: A scoping review

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Contribution of the paper

What is already known about the topic?

- The concept of psychological wellbeing is poorly understood.
- There is a link between healthcare professionals' experiences at work and patients' experiences of care.
- The COVID-19 pandemic has highlighted the need for more research on healthcare professionals' psychological wellbeing.

What this paper adds

- The review highlights the need for a consensus definition of psychological wellbeing at work.
- Healthcare professionals' psychological wellbeing is positively influenced by feeling safe, valued, and supported at work.
- The COVID-19 pandemic has emphasised the importance of prioritising healthcare professionals' psychological wellbeing needs.

1. Introduction

Healthcare professionals' psychological wellbeing has been a growing concern for the last 15 years. The more recent impact of both COVID-19 and global economic insecurity has propelled it into crisis. Prior to the onset of COVID-19, reports described a health system under mounting pressure to provide more immediate care for increasing numbers of people living with complexity, causing healthcare professionals to experience poor mental health, burnout, and stress due to their working environment (Health Education England, 2019; Point of Care Foundation, 2017; Royal College of Nursing, 2013; Wilkinson, 2015). With no respite from the extreme stress of working during the pandemic, healthcare professionals globally are now required to resume "business as usual" under the added strain of clinical backlogs and international workforce shortages (Reed *et al.*, 2022). In the United Kingdom (UK) National Health Services, these problems are intensified by increasing numbers of staff leaving the workplace and the growing gap between pay and the rising cost of living (British Medical Association, 2021; Royal College of Nursing,

2022). The psychological wellbeing of healthcare professionals is under unprecedented pressure.

Since the first review of the wellbeing of the National Health Service healthcare workforce in 2009 (Department of Health, 2009a), the wellbeing of healthcare professionals has become a growing priority in the UK. The influential "Boorman Report" (Department of Health, 2009b) was the first paper to emphasise the importance of the wellbeing of the National Health Service workforce on patient outcomes. It highlighted that National Health Service Trusts with low rates of sickness absence, turnover, and agency spending were associated with higher patient satisfaction, a better quality of care, and more efficient use of resources, as well as lower rates of infection (Department of Health, 2009b). Important emergent research indicates that the experience of healthcare professionals is an antecedent of patient experience (Dawson, 2018; Maben *et al.*, 2012a; Maben *et al.*, 2012b). However, despite policy commitments to improve the experience of healthcare professionals in the National Health Service, its staff survey has recorded rises in the number of staff feeling unwell due to stress caused at work over the last four years (NHS Survey Coordination Centre, 2022).

The effects of the COVID-19 global pandemic on the wellbeing of healthcare professionals, the rising workforce shortages, and international economic instability have now eclipsed any pre-existing concerns. Reports describe healthcare professionals experiencing emotional exhaustion and post-traumatic stress due to work (Gilleen *et al.*, 2021; Royal College of Nursing, 2022; Wanigasooriya *et al.*, 2021). The psychological wellbeing of healthcare professionals is deteriorating globally (Søvold *et al.*, 2021), suggesting an urgent need to address this issue.

Whilst some research has examined the links between healthcare professionals' psychological wellbeing and patient experience, much of it has focussed on quantitative methods and interventions. This paper seeks to provide a fresh appraisal of literature on healthcare professional wellbeing and its impacts on patient experience in the context of the COVID-19 pandemic and global economic instability.

2. Methods

This scoping review was conducted and is presented using the Arksey *et al.* (2005) framework, as updated by Levac *et al.* (2010). A protocol was developed *a prioiri* and registered with Open Science Framework in October 2021 (Bamforth *et al.*, 2021). We have followed the PRISMA-ScR Checklist for scoping reviews (Tricco *et al.*, 2018).

2.1 Identifying the research question

This scoping review aimed to answer two research questions:

1) What do we know about healthcare professionals' and patients' perceptions of healthcare professionals' psychological wellbeing at work?

2) How does the psychological wellbeing of healthcare professionals at work affect patients' experiences of care?

More specifically, the search sought to identify the research literature relating to healthcare professionals' psychological wellbeing at work. This included:

- Definitions or terms used to describe healthcare professionals' psychological wellbeing at work
- Healthcare professionals' and patients' perceptions of healthcare professionals' psychological wellbeing at work
- What healthcare professionals' psychological wellbeing at work means for patients' experiences of care

An advanced search in January 2023 of the JBI Database of Systematic Reviews and Implementation Reports, the Prospero register of systematic reviews, and the Cochrane library using the term "wellbeing" returned no current systematic or scoping reviews with these aims.

2.2 Search strategy

A comprehensive search was conducted of four databases: PubMed, CINAHL (via EBSCOhost, USA), Scopus, and PsychInfo. The date range for this review was

January 2011 – December 2021; this was to identify sources of evidence published since the scoping review by Maben *et al.* (2012b). The search strategy based on the original review was developed with the help of an information specialist. The search terms were kept deliberately broad to reflect the number of terms and concepts associated with wellbeing. The full search was: (nurse OR doctor OR "allied health professional" OR therapist OR "nursing staff" OR "medical staff" OR "healthcare professional" OR "health care professional" OR "health-care professional" OR "health personnel") AND (patient OR "patient care" OR "quality of care" OR "patient safety" OR "patient satisfaction") AND (wellbeing OR "well-being" OR "well being" OR "job satisfaction" OR "psychological aspect" OR "occupational health" OR "mental health" OR motivation OR "emotional exhaustion" OR burnout OR stress OR depression OR wellness OR "positive affect" OR "emotional intelligence" OR emotions OR "psychological factor" OR "psychosocial factor" OR "compassion fatigue" OR empathy OR "caring behaviour" OR "moral distress" OR "emotional labour") AND (experience OR attitude OR perception OR perspective OR impact OR view OR opinion OR relations*).

The reference lists of all included articles were hand-searched to identify any other articles that met the inclusion criteria. We searched for additional grey literature on the NIHR Journals, EThOS, Open Grey, Google Scholar, and the Department for Health and Social Care and Kings Fund websites or highlighted by the review team.

2.3 Study selection

At the outset, we agreed on predefined inclusion criteria. For this review, "psychological wellbeing" included psychological, mental, and emotional wellbeing (as opposed to physical or spiritual wellbeing). Based on the World Health Organisation's classification of healthcare workers (2010), we included studies that sampled health professionals (those with a high level qualification or first degree in healthcare; for example, doctors, nurses and allied health professional), healthcare associates (those with a formal qualification who support the implementation of healthcare plans established by healthcare professionals; for example, technicians and nursing associates) and personal care workers (those who provide direct personal care and other tasks of a routine nature; for example, healthcare assistants). This review excluded health management and support personnel (those

who support healthcare systems rather than provide direct patient care; for example, health service managers and secretaries). Empirical studies, theses, reviews, and reports based on empirical evidence and literature were included. Book chapters, editorials, discussions, and opinion pieces were excluded. The review included studies from international healthcare systems and, due to the resources available, only those published in English. We took an iterative approach to study selection (Levac *et al.*, 2010) and, given the large volume of articles initially returned, we refined the inclusion criteria to those publications with "wellbeing", "well being" or "well-being" in the title or abstract and excluded studies relating to students or volunteers to create a more manageable dataset and retain the focus on healthcare professionals.

Following de-duplication, all citations were uploaded onto Rayyan (https://www.rayyan.ai/). Two reviewers (KB and PR) independently screened titles and abstracts for eligibility. Any discrepancies were resolved by discussion with additional reviewers SP and HL. See Figure 1 for a PRISMA chart of the article inclusion process.
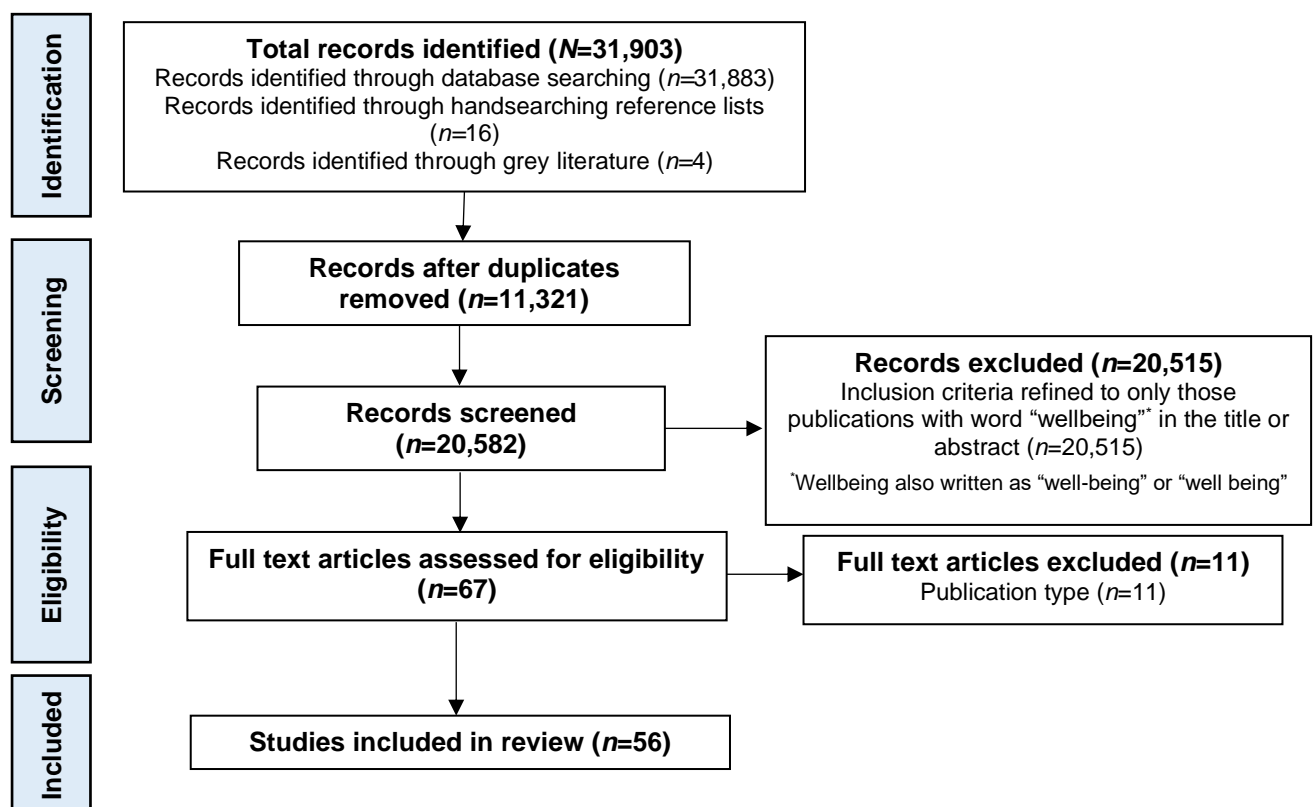

Fig. 1 PRISMA Chart

*2.4	Charting the data*

Data were extracted from included papers using a data extraction tool developed by KB guided by the research question (Arksey *et al.*, 2005). The tool was refined by KB and PR following a pilot using a small number of studies and a shared Google Excel sheet. The data extraction tool included (1) bibliographic data; (2) aim/purpose; (3) design adopted (4) core concept measured; (5) instruments used to measure core concept; (6) population group studied; (7) description/ definition of wellbeing (not defined/ directly defined/ indirectly referenced (via another concept, such as stress); (8) analysis conducted; (9) main results; (10) limitations identified, and (11) recommendations for further research. KB and PR independently reviewed five papers to test the data extraction tool and then compared their reviews for consistency (Levac *et al.*, 2010). KB then extracted data from all full-text articles. To reduce bias, PR independently extracted 10% of the data. An independent reviewer was available to discuss any disagreement, although this was not necessary. As this was a scoping review, the quality of the evidence was not rated. A summary of the full dataset is shown in Appendix 1. The extracted data were synthesized in a narrative summary of key themes relating to the review questions (Arksey *et al.*, 2005).

2.5 Collating, summarising and reporting the results

The extracted data were collated and summarised in the three steps recommended by Levac *et al.* (2010). Descriptive numerical summary analysis and qualitative thematic analysis were supported by the headings used in the data extraction tool (Table 1). The main findings were collated and coded by KB. These codes were then thematised and agreed through discussion with SP, HL and JM. The results and findings are discussed in relation to the research question, including implications for future research practice and policy.

Table 1
Data Extraction Tool
 A. Bibliographic data (authors, title, journal, year, publisher)

B. Publication data
Type of publication (ie. report of empirical research/ theoretical research, document of organisation or institution, editorial, policies etc.)
Country of origin (where the study was conducted)
C. Data on study
Aim/purpose
Design adopted (qualitative, report, opinion etc.)
Core concept measured
Does it include: Wellbeing?   Staff perception?   Patient perception?
Instruments used to measure core concept
Population group studied (Type of health care professionals/patients)
Description/definition of wellbeing
Analysis conducted
Main results
Limitations identified by authors
Recommendations for further research

3. Results

A total of 56 articles were included in the scoping review (included in the Appendix). Publications included empirical research (*n*=46), literature reviews (*n*=3), theses (*n*=3) and grey literature (*n*=4). No papers including the search terms were

published in 2011. Between 2012 and 2014, only the UK and Australia published research in this field, but by the end of the review period, the breadth of countries conducting research into the psychological wellbeing of healthcare professionals had increased to 16. The UK published the largest number of sources (n=23), followed by Australia (n=9) and the United States of America (n=6), with fewer publications from the other 13 countries. Between 2011 and 2019, the mean number of articles published each year was 2.2. The number of publications rose sharply in 2020 (n=12) and 2021 (n=23), possibly due to the focus on staff psychological wellbeing following the COVID-19 pandemic.

Nurses were the professional group most studied in papers sampling one professional group (n=19), followed by doctors (n=11), practice psychologists (n=1), and non-registered healthcare assistants (n=1). Studies investigating multiple professions included a non-specified range of healthcare professionals (n=8), a specified range of staff (variously doctors, nurses, anaesthesia technicians, cleaning staff, psychotherapists, allied health professionals and healthcare assistants) (n=5), nurses and doctors (n=4), staff and managers (n=2), nurses and midwives (n=3), mental health practitioners (n=1), and doctors and researchers (n=1).

Studies were set in a wide variety of clinical settings, including multiple specialties (n=20), mental health (n=5), palliative care (n=4), critical care (n=3), the operating room (n=2), primary care (n=2), and rural health (n=2). The following specialties had one publication each: cancer care; elderly care; ear, nose, and throat, and facial plastics; a COVID-19 quarantine centre; a forensic unit; a rehab unit; and a mixture of hospital and primary care. Details about the clinical settings were not given in 10 papers.

Empirical data collection was involved in 53 of the 56 papers found in this review, including three literature reviews and three doctoral theses. Most empirical studies used qualitative methods only (n=34). A survey method was used in 18 papers. We found that quantitative studies used a total of 39 scales or tools.

KB summarised the findings of each paper. Through an iterative process of discussion with PR, SP, HL, and JM (Levac *et al.*, 2010), five themes were developed: 1) The definition of healthcare professional psychological wellbeing; 2)

The relationship between healthcare professionals' psychological wellbeing and the nature of healthcare work; 3) The role of organizational culture in healthcare professionals' psychological wellbeing; 4) The impact of the COVID-19 pandemic on healthcare professionals' psychological wellbeing; and 5) The link between healthcare professionals' psychological wellbeing and patients' experiences of care.

3.1: Theme 1: The definition of healthcare professional psychological wellbeing

A definition of wellbeing was absent from 41 papers. Clear definitions were set out in only 15 papers: either citing or paraphrasing other authors or proposing their own definitions (Table 2). However, in all these papers, wellbeing was defined as a broad subject rather than qualified using a specific prefix, such as "psychological wellbeing".

Table 2
Variety of definitions of wellbeing

Type of Definition	Studies included in the review
Direct citation	**6**
"a combination of feeling good as well as actually having meaning, good relationships, and accomplishment" (Seligman, 2011)	Chaguaceda (2020) (p. 37) Galuska *et al.* (2020) (p. 350) Pérez-Belmonte *et al.* (2021) (p. 2)
"Individual and subjective functioning and experiences at work" (Warr, 1987)	Maben *et al.* (2012b) (p. 32) McLellan (2018) (p. 3)
"[the] balance point between an individuals' resource pool and the challenges they face" *Dodge et al.* (2012)	Chung *et al.* (2021) (p. 2)
Definition based on one previous author	**3**
"one's overall good mental health to include professional effectiveness, creativeness, and operational learning" (based on Niks *et al.* (2013))	Mascari (2020) (p.15)
"a combination of overall experiencing of positive and negative emotional states (the hedonic aspect), with overall estimation of life satisfaction (evaluative aspect) and sense of meaning and purpose (eudaimonic aspect)" (based on Waldron (2010))	Oates (2018) (p. 34)
"factors that contribute to positive wellbeing: joy, love, pride and pleasure" (based on Cameron et al. (2012))	West *et al.* (2020) (p. 31)
Definition based on 3 or more references	**2**

"Individual's life and work health and satisfaction and ability to meet challenges and stressors, with physical, emotional, mental and social aspects"	Creese et al. (2021) (p. 2)
"positive psychological functioning, a sense of personal fulfilment, and engagement with work that leads to joy in practice"	Munn *et al.* (2021) (p. 24)
Created definition	**4**
"'happiness', 'job satisfaction', and 'value and recognition' define wellbeing at work"	Ahmed (2019) (p. 8)
"the positive emotional and psychological functioning of individuals and is an important part of mental health"	Bogaerts *et al.* (2021) (p. 2)
"[wellbeing is] conceptualised as a spectrum, with flourishing, happiness and high wellbeing at one end, and elevated depression, anxiety and low wellbeing at the other"	Hall *et al. (2016)* (p. 2)
"wellbeing is a broader concept, best described as on a continua ranging from poor wellbeing (feelings of depression, anxiety and sadness) to good or high wellbeing (happiness, flourishing)	Hall *et al. (2020)* (p. e278)

There was a tendency for those authors who did not define wellbeing to frame it through negative constructs such as burnout, anxiety, and stress (*n*=14). Selamu et al. (2017) noted that the healthcare professionals in their study conceptualised wellbeing as the absence of stress rather than a positive state. Indeed, Chaguaceda (2020) agreed that most literature takes a negative view of wellbeing rather than a more positive perspective. This review highlights the difficulty in defining healthcare professional psychological wellbeing, which was acknowledged by six authors (Ahmed, 2019; Boateng et al., 2019; Chaguaceda, 2020; Creese et al., 2021; Oates, 2018; Selamu et al., 2017).

3.2: Theme 2: The relationship between healthcare professionals' psychological wellbeing and the nature of healthcare work

The included articles described how the psychological wellbeing of healthcare professionals is influenced by the nature of healthcare work itself. Healthcare professionals derived meaning and joy from providing care to patients and their families, having a human-to-human connection, and making a difference to people (Boateng et al., 2019; Chaguaceda, 2020; Chung et al., 2021; Galuska et al., 2018; Galuska et al., 2020; Latimer, 2013; Murray et al., 2020; Siffleet et al., 2015; Wei et al., 2020; West et al., 2020). Autonomy was another important factor that

contributed to wellbeing at work (Chaguaceda, 2020; Mascari, 2020; McGlinchey et al., 2021; McLellan, 2018; Oates, 2018; West et al., 2020). Being valued by people and colleagues and having work recognised and rewarded by line managers and the wider organisation made healthcare professionals feel good in their jobs (McLellan, 2018). Healthcare professionals found enjoyment and satisfaction when they supported colleagues' development and had opportunities for their own professional growth (Chaguaceda, 2020; Donoso *et al.*, 2015; Galuska *et al.*, 2018; McLellan, 2018; Wood *et al.*, 2021b). A degree of challenge and stretch at work was found to improve nurses' motivation and wellbeing (Donoso *et al.*, 2015; Jakimowicz *et al.*, 2018; Wood *et al.*, 2021b).

However, despite the personal and professional rewards of healthcare work, the job of caring for dependent and vulnerable people, regardless of the clinical setting, was also described as challenging and exhausting (Boateng *et al.*, 2019; Diehl *et al.*, 2021; Hayes *et al.*, 2019; Kinman *et al.*, 2020; Maben *et al.*, 2012b; Selamu *et al.*, 2017; Siffleet *et al.*, 2015; Wei *et al.*, 2020). Dealing with vulnerability, death, and anxiety evokes in healthcare professionals strong emotional reactions that they need to be able to manage (Hubik et al., 2021; Nwozichi et al., 2020). The expectation for healthcare professionals to remain calm and caring despite working in environments that can be chaotic and extremely emotional was described in two papers (Jakimowicz *et al.*, 2018; Matthews *et al.*, 2016).

The articles included this review highlighted a tension inherent in healthcare work: looking after others versus looking after self. Andrews et al. (2020) described how healthcare professionals tended to prioritise patient care over their own needs and felt an expectation to do so. The mental health nurses interviewed in a study by Oates (2018) claimed that they could separate their own mental health challenges from their professional persona by limiting the amount of personal information shared at work. However, when Latimer (2013) shared her vulnerability with a patient (something she knew could be viewed as 'unprofessional'), this transformed her understanding and caregiving. Andrews et al. (2020) highlighted how nurses needed permission to take time for self-care and felt that looking after themselves could be viewed as a weakness. Indeed, it was only after being given space and time to reflect that the nurses in the study by Terry et al. (2020) realised that they weren't

coping as well as they had thought. Hayes et al. (2017) and Selamu et al. (2017) both observed this suppression as avoidance, reporting that healthcare professionals felt a stigma attached to mental health problems that prevented them from discussing their individual needs.

3.3: Theme 3: The role of organizational culture in healthcare professionals' psychological wellbeing

Organisational culture was shown to have a considerable influence on the wellbeing of healthcare professionals, both positively and negatively. Healthcare organisations nurtured healthcare professionals' wellbeing through positive leadership and strong supervision, valuing and recognising their staff, supporting their development, and proactively promoting self-care (Ahmed, 2019; Andrews *et al.*, 2020; Chaguaceda, 2020; Galuska *et al.*, 2018; Maben *et al.*, 2012b; McLellan, 2018; Wei *et al.*, 2020; Zhao *et al.*, 2015).   The importance of local teamwork, co-worker support, manageable workload, and low emotional exhaustion were also identified as key factors in sustaining healthcare professionals' wellbeing (Chaguaceda, 2020; Galuska *et al.*, 2018; Maben *et al.*, 2012b; Murray *et al.*, 2020; Siffleet *et al.*, 2015). The working environment was emphasised in three papers. Sansó *et al.* (2020) found that the practice environment influenced how nurses' rate self-care and self-compassion and, as a result, their professional quality of life. Andrews et al. (2020) highlighted the importance of a stable working environment to foster the trust needed for healthcare professionals to share their vulnerability and thereby improve their wellbeing at work. Jakimowicz et al. (2018) agreed that healthcare professionals needed time to debrief and have counselling to maintain their wellbeing.

However, most authors described working environments that did not support the wellbeing of healthcare professionals. Shift work, a lack of schedule flexibility, long hours, and an inability to take sick leave made it difficult for healthcare professionals to maintain their health and achieve an acceptable work-life balance (Abhary *et al.*, 2021; Kinman *et al.*, 2020; McLellan, 2018). The intensity of the workload and physicality of healthcare work left little room for the debriefing and reflection required to support the emotional needs of staff (Boateng *et al.*, 2019; Jakimowicz *et al.*, 2018; Maben *et al.*, 2012b). Siffleet et al. (2015) reported that nurses working in an intensive care unit felt distressed when they were unable to provide the desired level

of care, reflect on incidents, or create distance between themselves and stressful situations. In a national cross-sectional survey, doctors working in Ireland reported insufficient ability to work, low levels of work-life balance, and high levels of work stress, and almost one third experienced burnout (Hayes et al., 2019). The demands of the job, a lack of role clarity, and a sense of isolation were detrimental to the wellbeing of healthcare professionals and left them feeling unsafe at work (Maben *et al.*, 2012b; Selamu *et al.*, 2017; Whiteing *et al.*, 2021).

Wellbeing was negatively impacted when individuals' values conflicted with those of the organisation. The nurses interviewed by Dunning et al. (2021) perceived that while their organisation purported to hold patient-centred values, their focus on targets and resources compromised the quality of care. A project to develop a reporting tool for patient and healthcare professionals' safety and wellbeing was thwarted in organisations where the managers and staff did not share a vision for wellbeing and feared it could be misused to apportion blame (Bruno *et al.*, 2016). Kinman *et al.* (2020) highlighted the workplace bullying, harassment, and power imbalances that adversely impacted the psychological wellbeing of nurses and midwives and called urgently for future research.

3.4: Theme 4: The impact of the COVID-19 pandemic on healthcare professionals' psychological wellbeing

The COVID-19 pandemic and its impact on the wellbeing of healthcare professionals was the focus of 16 papers included in this review. Enforced changes to workplace practices meant that some healthcare professionals experienced an improvement in their wellbeing during the initial wave of the COVID-19 pandemic. Byrne et al. (2021) highlighted the benefits of doctors being forced to take sick leave when unwell and having greater access to senior support as planned work was initially paused. Some teams developed a deep sense of camaraderie and pride in stepping up to the challenge of working in such unusual circumstances (Aughterson et al., 2021; Billings et al., 2021a; Khatatbeh et al., 2021). The COVID-19 pandemic was also seen by some as an opportunity for professional growth (Aughterson et al., 2021; Billings et al., 2021b; Creese et al., 2021). In the initial lockdown, some healthcare professionals finally slowed down and found the time and space needed to reflect on what mattered to them (Aughterson *et al.*, 2021; Creese *et al.*, 2021).

However, as the COVID-19 pandemic went on, the extreme pressure of working amid such high personal risks and uncertainty had a devastating impact on healthcare professionals' wellbeing (Billings *et al.*, 2021c; Creese *et al.*, 2021; Cubitt *et al.*, 2021; De Kock *et al.*, 2021; Khatatbeh *et al.*, 2021; Munn *et al.*, 2021; Yayla *et al.*, 2021). Military metaphors, such as "working in a war zone", "going into war without a weapon", and "self-sacrifice", reflected how some healthcare professionals viewed their work (Baldwin et al., 2021; Billings et al., 2021b). Prior to the COVID-19 pandemic, studies associated wellbeing with stress and burnout. However, in the studies post-2019, wellbeing was framed using more extreme constructs, such as moral distress and post-traumatic stress disorder (Billings et al., 2021a; Billings et al., 2021b; Billings et al., 2021c). Studies suggested the healthcare professionals felt lower levels of psychological safety and a decline in psychological wellbeing (Creese et al., 2021; Cubitt et al., 2021; De Kock et al., 2021; Munn et al., 2021). Stressors included an increased workload and redeployment to unfamiliar settings, the threat of contracting or transmitting COVID-19 due to insufficient personal protective equipment and inadequate facilities, a lack of guidance, and low staffing levels (Billings *et al.*, 2021b; Billings *et al.*, 2021c; Cubitt *et al.*, 2021; Khatatbeh *et al.*, 2021; McGlinchey *et al.*, 2021; Munn *et al.*, 2021). Healthcare professionals struggled with isolation from family and friends and caring for severely ill and dying patients without direct human contact (Khatatbeh et al., 2021; McGlinchey et al., 2021).

The focus on patient care meant that healthcare professionals often failed to recognise their own wellbeing needs (Baldwin *et al.*, 2021; Billings *et al.*, 2021a; Billings *et al.*, 2021b). Furthermore, Creese *et al.* (2021) highlighted the guilt experienced by healthcare professionals: having to cancel or postpone non-COVID care, being unable to touch patients to provide emotional care, taking time off work when sick, and infecting others. Interestingly, Billings *et al.* (2021a) and (2021c) described a reluctance among staff in seeking help for their mental health, ranging from a perception that such support was not intended for them, to an explicit stigma that prevented engagement with these services. Staff that did want support found it difficult to access formal interventions, such as psychological counselling or wellbeing apps, within their working days (Baldwin *et al.*, 2021; Billings *et al.*, 2021a; Creese *et al.*, 2021). Instead, healthcare professionals sought informal support from

their teams and line managers, using less traditional methods, such as Whats App (Aughterson et al., 2021; Billings et al., 2021a; Billings et al., 2021c; Byrne et al., 2021). However, staff redeployed to unfamiliar settings had less access to such casual support and found the loss of this interpersonal communication contributed to their stress and anxiety (Billings et al., 2021c; Cubitt et al., 2021; McGlinchey et al., 2021).

3.5 Theme 5: The link between healthcare professionals' psychological wellbeing and patients' experiences of care

A striking finding of this review is the underrepresentation of patient participants. Only one research team included patients as participants (Maben *et al.*, 2012b) and found a significant relationship between staff wellbeing as an antecedent to patients' experiences of care. Maben *et al.* (2012b) observed that all patients, but specifically older people, valued the relational aspects of care. However, patients felt this type of care was compromised by the continual challenges faced by healthcare professionals in their working environments. Patients described a hesitance to speak up where they saw poor care for fear of this impacting on their own experience.

Three studies included patients' perspectives through data collected from healthcare professionals. For example, Chung *et al.* (2021) recruited only nurses into their study looking at nurses' wellbeing and their "care nurse-patient interaction" competence. Andrews *et al.* (2020) and Hall *et al.* (2020) both explored the impact of healthcare professionals' wellbeing on patient care using only healthcare professional participants. The lack of patient participants prevents patients from directly reporting their experiences, introduces bias, and risks authors making assumptions.

A further finding relating to patient experience was the link between the psychological wellbeing of staff and patient safety. Hall *et al.* (2016) published a systematic review of 46 articles examining staff wellbeing, burnout, and patient safety and concluded that most articles found a significant positive correlation between staff wellbeing and patient safety. Patient safety and staff wellbeing were seen as intertwined by the staff participants interviewed by Bruno *et al.* (2016). Maben *et al.* (2012b) also found that patient safety was closely associated with staff

and patients' experiences. Hall *et al.* (2020) described a worrying link between general practitioners' reported levels of burnout and both their ability to show empathy or listen to their patients and their tendency to make inappropriate referrals and over-investigate.

4. Discussion

This scoping review aimed to answer two research questions: 1) What do we know about healthcare professionals' and patients' perceptions of healthcare professionals psychological wellbeing at work? 2) How does psychological wellbeing of healthcare professionals at work affect patients' experiences of care? The search strategy yielded 56 articles for inclusion. Compared to the Maben *et al.* (2012b) review examining the link between staff wellbeing and patients' experiences of care, which found mostly quantitative and survey methods, the papers included in this review, particularly those focussing on staff wellbeing, reflect a considerable shift towards qualitative methods, predominantly interviews. The choice of these methods indicates a perceived need for a deeper understanding of wellbeing, beyond measuring its prevalence and correlation. Despite the ubiquity of the term "wellbeing", we found that most of the included articles failed to provide a definition, and there was strikingly little consistency where one was given. Furthermore, the propensity of authors to focus on factors associated with poor wellbeing perpetuates a negative framing of wellbeing, where it is conceptualised through its absence rather than its presence.

The lack of a consensus in definition challenges an agreed "starting point" on which to build an evidence base, and it makes psychological wellbeing difficult to measure. This conceptual confusion may explain the use of 39 different outcome measures across 18 papers. Only four of the outcome measures used were explicitly designed to measure "wellbeing"; others focused on elements of work-life balance, job satisfaction, resilience, stress, and anxiety. This diversity in outcome measures makes comparison across studies difficult and risks diluting our understanding further. We have highlighted the need for an agreed definition of psychological wellbeing to refocus our developing understanding.

The findings of this review highlight a dynamic relationship between the psychological wellbeing of healthcare professionals, the nature of healthcare work, organisational culture, and patients' experiences of care. The studies reviewed showed that healthcare professionals gained a significant sense of wellbeing from the reward and recognition that comes with caring for others and working as a team, as well as developing themselves and colleagues. Where these factors were valued and supported by the organisational culture, this had a positive impact on healthcare professionals' psychological wellbeing and enabled staff to provide high-quality care. However, maintaining a positive wellbeing was challenged by emotional and physical demands intrinsic to healthcare work.

The cultural expectation of healthcare professionals to "absorb" the extreme emotions intrinsic to healthcare work is consistent with "emotional labour"; where staff suppress their emotional responses to stressful situations so that patients feel cared for and safe (Gray, 2009; Hochschild, 2003; Sawbridge *et al.*, 2013). Hochschild (2003) suggests that emotional labour needs adequate training and supervision, yet we suggest that the focus on patients means that staff needs are often not prioritised. Not only was emotional exhaustion seen as part of the job, but there is a deep-rooted stigma associated with healthcare professionals admitting to having psychological health problems, which has also been described elsewhere (Beresin *et al.*, 2016; Carrieri *et al.*, 2018; Riley *et al.*, 2021). This taboo was identified in a longitudinal study of nurses' psychological health needs during COVID-19 (Maben *et al.*, 2022). Those researchers found that nurses were hesitant to disclose "'real' problems to managers due to a stigma or worries about being judged by colleagues… due to a perceived impact on their career" (p.12) and highlighted that nurses continue to experience a lack of psychological safety about such issues at work.

In their scoping review, Maben *et al.* (2012b) described "wellbeing bundles" that are critical for organisations and individuals in supporting staff wellbeing: local/ work-group climate, co-worker support, job satisfaction, organisational climate, perceived organisational support, low emotional exhaustion, and supervisor support. In the papers included in this review (particularly those relating to the COVID-19 pandemic), we confirmed that healthcare professionals look to each other and their

immediate teams for wellbeing support rather than accessing more formal wellbeing interventions, which they perceived as less personalised or relevant. These findings were echoed again in the previously mentioned longitudinal impact of COVID-19 on nurses study by Maben *et al.* (2022) and highlight a now-chronic insufficiency in the organisational psychological wellbeing support offered to healthcare professionals.

The patients' perspective represents a significant gap in the literature on the psychological wellbeing of healthcare professionals. This is remarkable given that patients are explicitly placed at the centre of global healthcare (Stewart, 2001) and at the heart of the National Health Service (Department of Health and Social Care, 2013). Indeed, Brigham *et al.* (2018) suggests that without patients, there are no clinicians. As the "end-users" of healthcare, patients bear the brunt of the pressurised working environment with associated missed opportunities for care and poor outcomes (Ball *et al.*, 2014; Recio-Saucedo *et al.*, 2018) and, where staff wellbeing deteriorates, so too does the quality of care. Maben *et al.* (2012a) found that some nurses viewed patients as "poppets" (endearing patients), whereas other patients felt like "parcels" and were acutely aware of being perceived as "difficult". In our review, we found that patients tended to suppress their needs where they perceived that staff were too busy (Maben *et al.*, 2012b). Such concealment risks an increasingly dysfunctional relationship between patients and healthcare professionals, preventing truly person-centred treatment and recovery (Bell *et al.*, 2018; Delbanco *et al.*, 2007; Frosch *et al.*, 2012).

The relationship between the different levels of the wellbeing needs of healthcare professionals is shown diagrammatically in the National Health Service Staff Wellbeing poster (NHS Employers, 2022) based on Maslow's Hierarchy of Needs (1943). It shows how healthcare professionals must have their most basic needs met and feel protected by their organisations to progress up the hierarchy of need and focus on the self-fulfilment associated with positive wellbeing. We have added our findings to this diagram in Figure 2 to show the tensions both between the individual parts of the system and its whole. In this review, we have shown how the pressures of the COVID-19 pandemic have threatened the basic level of need shown in Figure 2. Without drastic prioritisation of the wellbeing of healthcare professionals, it is unrealistic to expect staff to excel in their ambition to provide high-quality care.

This finding supports a recent review (Maben *et al.*, 2023) that suggests "changing the work environment to promote positive staff well-being at work is likely to enable quality, safety and improvement work" (p.24), noting the benefits go beyond "an absence of negatives (sickness absence, low morale, high turnover)" (p.24). This echoes our findings that patient safety can also be affected by poor staff psychological wellbeing at work.

We have highlighted the need for a cultural shift in healthcare organisations, beyond an expectation for staff to be stoic and carry on despite poor psychological health. There is an urgent requirement for organisations to identify the level of staff psychological wellbeing need and ensure it is correctly aligned to appropriately-targeted wellbeing interventions. Organisations must prioritise time and training and actively promote safe, supportive environments where, perhaps for the first time, healthcare professionals can learn how exploring their vulnerabilities can improve their psychological wellbeing and care to patients.

4.1 Limitations

This review has provided a much-needed and timely appraisal of our current understanding of the psychological wellbeing of healthcare professionals and how it affects patients' experiences of care. We included broad search terms that were based on those used in a related previous scoping review to ensure consistency. As there was no geographical exclusion, the review may be limited by the differences in health care systems across the world, although the international impact of COVID-19 was captured. We have highlighted the complexity of term "wellbeing" and deliberately used a broad range of search terms. However, as this yielded an unmanageable dataset, we ultimately decided to limit inclusion to papers with "wellbeing", "well being", or "well-being" in the title or abstract. Whilst it is hoped that this has led to a more focussed and relevant dataset, future reviewers may consider explicitly including and excluding specific terminology from the outset. The diversity of measures of wellbeing used in the included papers made it impossible to compare any quantitative results, so this was not attempted. Furthermore, the absence of papers reporting patient data in relation to staff psychological wellbeing is notable, and it may be that with different search terms more relevant studies may have been identified.

The review included papers published up to December 2021. More recent publications in this field have been included in our discussion, however, given the wide range of definitions and concepts associated with psychological wellbeing and the continued interest in wellbeing and workforce issues post-COVID-19, it is possible that some pertinent literature was omitted.

There is an urgent need to establish a shared definition of psychological wellbeing that will help to unite research in this area and develop a robust evidence base. Future studies into the wellbeing of healthcare professionals should include patients' perspectives in their design, as well as methods that facilitate the development of meaningful ways to support, nurture, and retain staff. As this is a rapidly expanding field, it is likely that the review will need to be repeated to scope developments in this important area.

5. Conclusions

The aim of this scoping review was to address two research questions: 1) What do we know about healthcare professionals' and patients' perceptions of healthcare professionals psychological wellbeing at work? 2) How does psychological wellbeing of healthcare professionals at work affect patients' experiences of care? We included a total of 56 papers that met the search criteria. Given the dramatic changes in the healthcare landscape over the last decade, it is unsurprising that there has been a growing international interest in the psychological wellbeing of healthcare professionals, particularly since the 2020 COVID-19 pandemic. The findings highlight the difficulty in defining psychological wellbeing, the workplace challenges that detract healthcare professional from their own self-care, the importance of organisational culture in supporting the psychological wellbeing of staff, the impact of COVID-19, and the paucity of studies including patients to give direct accounts of their experiences.

The current international context of post-COVID-19 health systems, the chronic lack of pay increases, the burgeoning cost of living crisis, and an over-stretched workforce are ongoing threats to the psychological wellbeing of health professionals. Expectations of high-quality patient care in organisations where the psychological wellbeing of healthcare professionals is not explicitly prioritised may be unrealistic.

We have found that where organisations invest time, training, and support at the appropriate level of need, healthcare professionals, their teams, and the wider system can flourish, with commensurate benefits for patients' experiences of care and ultimately patient safety.
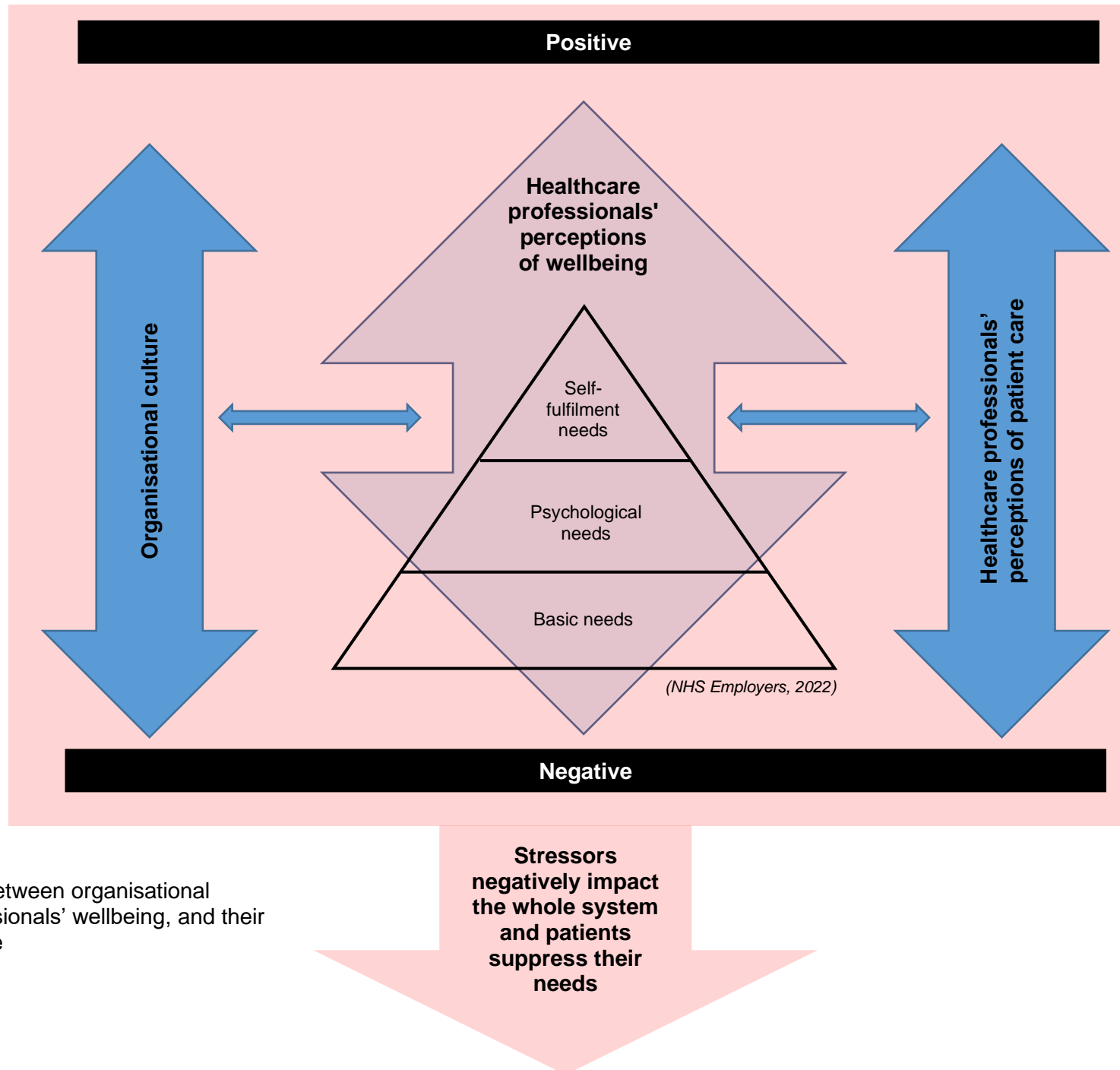
Declaration of Competing Interest

None

Fig. 2 The relationships between organisational culture, healthcare professionals' wellbeing, and their perceptions of patient care

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Appendix: Summary of the whole dataset
Table 1: Qualitative papers (*n*=31)

Author, Year & Country	Aim	Methods and analysis	Sample	Definition of wellbeing	Main Themes
Abhary *et al.* (2021) Australia	To explore factors impacting the health and wellbeing of doctors undertaking various specialty programs and the attitudes towards and utilisation of supports during their training	Semi-structured interviews. Thematic analysis	17 Doctors	Not defined. Intro focussed on burnout, psychological distress, anxiety, attempted suicide, and suicidal thoughts	1) poor supervision 2) shift work and on-call 3) inability to take sick leave 4) bullying and harassment 5) college-related factors 6) examination preparation 7) work-life balance
Ahmed (2019) United Kingdom	1) Frame a definition of wellbeing from the perspective of Operating Room (OR) nurses 2) Explore organisational factors that positively (facilitate) or negatively (stress) influence wellbeing of OR nurses 3) Examine the role of OR team leaders in promoting the wellbeing of nurses 4) Evaluate staff perceptions of positive wellbeing influence on effective team working	Semi-structured interviews. Some questions based on the staff survey. Thematic content analysis	Nurses, anaesthesia technicians, cleaning staff working in Operating Room (*n*=43)	Recognised not easy to define. Developed own definition	Wellbeing linked to: 1) happiness, job satisfaction, being valued and recognised 2) unscrupulous organisational culture rears negative wellbeing 3) Healthcare Assistant organisation must invest in staff wellbeing otherwise patient care will suffer 4) effective leadership is key to positive wellbeing 5) wellbeing drives effective team working, not the converse
Andrews *et al.* (2020) United Kingdom	To explore nurses' experience of self-care and self-compassion and how this may relate to compassionate care giving towards patients	Semi-structured interviews. Constructivist grounded theory	30 Mental health and learning disability nurses	Not defined. Wellbeing associated with self-compassion and life satisfaction	1) 'Hardwired to be caregivers' – vocation versus role 2) needing a stable base 3) Managing the emotions of caring which link to a core process: needing permission to self-care and be self-compassionate.
Aughterson *et al.* (2021) United Kingdom	To explore: 1) the impact of COVID-19 on the working lives and mental health of health and social care professionals 2) the factors that alleviate distress and contribute to the resilience of health and social care professionals during a pandemic	Semi-structured interviews. Thematic analysis	Drs, nurses, psychotherapist, physiotherapist (*n*=25)	Not defined. Mentioned in abstract only. Focussed on stress, anxiety, depression, poor sleep quality	1) communication challenges 2) work-related stressors 3) support structures 4) personal growth 5) Individual resilience
Baldwin *et al.* (2021) United Kingdom	1) To gain a broader understanding of: Frontline professionals' experiences of working during the pandemic 2) Reported impact of this work on Healthcare Assistant professionals' physical and mental health 3) How Drs, nurses and Allied Health Professionals could be better supported to promote/enhance their physical and mental wellbeing during COVID-19	Semi-structured interviews. Framework analysis	Drs, nurses, physiotherapists, and speech therapists (*n*=19)	Not defined. Focussed on mental health problems: anxiety, depression, insomnia, and stress	8 major categories identified: 1) Working in a war zone 2) Going into a war zone without a weapon 3) "Patients come first" 4) Impact of COVID-19 5) Leadership and management 6) Support systems 7) Health professionals' support needs 8) Camaraderie and pride. ↑stress & anxiety. ↓sleep. Prioritised patients' needs over their own & felt obliged to work
Billings *et al.* (2021a) United Kingdom	Explore UK frontline and social care workers' own experiences and views of psychosocial support during the pandemic	Telephone or video interviews. Reflexive thematic analysis	Doctors, nurses, Healthcare Assistant, Allied Health Professionals (*n*=25)	Not defined. Intro described elevated depression, anxiety, post-traumatic stress disorder and suicide	Sources of psychological support: 1) Self 2) Family and Friends 3) Colleagues, peers, and teams 4) Organisational support 5) Media and the wider public 6) Psychological support services
Billings *et al.* (2021b) United Kingdom	Explore: 1) mental health professionals' experiences of supporting frontline staff during the pandemic 2) how providing this support has impacted on them	Telephone or online video interviews. Reflexive thematic analysis	Mental health practitioners working in various roles (*n*=28)	Not defined.	1) Stepping up 2) Uncertainty, inconsistency, and lack of knowledge 3) Blurred boundaries 4) Isolation 5) Self-sacrifice 6) Vicarious traumatisation and vicarious moral injury
Boateng *et al.* (2019) Canada	What aspects of nurses' wellbeing are enhanced or exacerbated by the practice of direct care nursing? What differences exist between the situated health experiences of white nurses and ethnic minorities in direct care practice? What coping mechanisms do nurses use in managing the detrimental effects of direct care?	Semi-structured interviews.	70 registered and practical nurses	Not defined. Recognised need for positive framing. Used Hettler (1976) "6 dimensions of wellness" framework.	Direct care ↑ nurses' occupational, intellectual, and spiritual wellbeing but ↓their physical, social and emotional health. Ethnic minority nurses reported more detrimental effects of direct care nursing on their physical, emotional, occupational, and social wellbeing
Bruno *et al.* (2016) Italy	1) frame safety as an outcome of organisational wellbeing 2) develop practitioners' reflective practices and dissemination of good practices among colleagues 3) Sustain the participatory development of a tool for the detection of potential threats, their analysis and monitoring	Action research with a series of focus groups (*n*=60). Thematic analysis of project documents	Physicians and nurses working in Operating Room (*n*=60)	Not defined. Linked workers' wellbeing and patient safety to burnout, workload, miscommunication, and dysfunctional organisations	1) wellbeing and safety culture: safety and wellbeing are concepts that are intertwined 2) The participatory process 3) The use of the tool
Byrne *et al.* (2021) Ireland	How has the pandemic and health system response impacted junior doctors' working conditions during the first wave of COVID-19 in Ireland?	Semi-structured interviews. Inductive and deductive coding techniques	30 junior hospital doctors	Not defined. Intro described pressures on doctors: burnout, emigration, and workforce attrition	1) More doctors staffing the wards 2) Positive outcomes: being able to take sick leave, workplace relationships, collective workplace morale, access to senior clinical support and the scope of decision-making

Author, Year & Country	Aim	Methods and analysis	Sample	Definition of wellbeing	Main Themes
Creese *et al.* (2021) Ireland	Investigate doctors' conceptualisations of their own wellbeing at the time of the first wave of the pandemic	Semi-structured remote interviews. Thematic analysis	48 hospital doctors	Not easy to define. Definition summarised multiple authors. Uses Walton's Quality of work life (QWL) model.	Many doctors saw improvements to their physical wellbeing in the first wave of the pandemic. Most also experienced a decline in their mental wellbeing due to anxiety, emotional exhaustion, guilt, isolation, and poor support. Key finding: need for time to think, meet reflect and care for yourself and have a life outside of work.
Dunning *et al.* (2021) United Kingdom	Explore values, value congruence, and potential implications for individual nurses and organisations in terms of wellbeing and patient care and safety	Semi-structured telephone interviews. Analysed using thematic analysis	15 nurses	Indirect. Described "concepts of wellbeing": Linked personal and professional values to job satisfaction and performance	1) organisational values congruent with the work environment 2) personal and professional value alignment 3) nurse and supervisor values in conflict 4) nurses' values at odds with the work environment
Galuska *et al.* (2020) United States of America)	Not explicitly stated - one of the recommendations for a systems approach to professional wellbeing includes defining profession-specific fulfilment and wellbeing (National Academy of Medicine, 2019)	Secondary analysis of transcripts from previous study with an additional 2 interviews	Nurses (27 from original study plus 2 additional interviewees working in critical care)	Direct: Seligman (2013) PERMA model of wellbeing	Meaning and joy are major contributors to professional wellbeing and part of the solution for achieving the quadruple aim.
Galuska *et al.* (2018) USA	To describe nurses' experiences with meaning and joy in their practice	Qualitative. Narrative inquiry	27 registered nurses	Not defined. Helping nurses connect with meaning in their practice will foster engagement and nurse wellbeing	1) Fulfilling purpose: I am a nurse 2) Meaningful connection 3) Impact: The Wow factor 4) The practice environment: - teams work - leaders model the way - opportunities to grow and learn
Goodyear (2014) United Kingdom	To explore: 1) factors which affect newly qualified doctors' wellbeing 2) the implications for educational provision	Semi-structured interviews. Analysed using a grounded theory approach	9 Foundation doctors	Wellbeing described within the WHO definition of health: "a state of complete physical, mental and social wellbeing"	Newly qualified doctors' wellbeing is affected by: 1) personal experience: unprepared for FY1 role, FY1 role affects personal and social life, FY1 enjoyable and rewarding 2) Work-related factors: (un)supported at work, dealing with challenges of FY1, encountering difficult issues in FY1 training
Hall *et al.* (2020) United Kingdom	1) To explore whether GPs perceive burnout and wellbeing to impact on the quality and safety of patient care 2) To determine potential mechanisms behind these associations	5 focus groups. Thematic analysis	25 GPs	Own definition. "Wellbeing" and "burnout" used interchangeably	Poor wellbeing and burnout affected patient care by reducing doctors' ability to empathise and display positive attitudes and listening skills. This increased the number of inappropriate referrals made
Hubik *et al.* (2021) Australia	To understand what strong emotional reactions are experienced by doctors working in palliative care	Semi-structured interviews. Analysed thematic analysis	20 specialist palliative care doctors	Not defined. Described risks of compassion fatigue and burnout.	Palliative care work elicits a myriad of strong emotions: patient, family and staff distress and organisational issues. Reactions impact on clinical behaviours, patient care and doctor's personal lives.
Jakimowicz *et al.* (2018) Australia	To explore patient-centred nursing and compassion fatigue from ITU nurses' perspectives	In-depth interviews analysed using grounded theory processes.	21 critical care nurses	Not defined. Described compassion and compassion fatigue.	Core category: "Expectations" Subcategories: "Life in the balance", "Passion and pressure" "Understanding Advocacy". "Tenacity and Fragility"
Khatatbeh *et al.* (2021) Jordan	To explore the lived experience of physicians and nurses caring for patients with COVID-19 in Jordan	Semi-structured interviews analysed using IPA	26 nurses and physicians	Not defined. Described mental health problems: anxiety, depression, insomnia, stress.	1) emotional reactions 2) preparation 3) sources of support 4) extreme workload 5) occupational challenges 6) work-related concerns
Latimer (2013) Australia	Describes one nurse's experience of human connectedness with a patient and how, through use of reflection, this translated into better patient care and colleague interaction	Reflection	1 nurse	Not defined. Wellbeing described within definition of connectedness	Sharing a vulnerable space with a patient and revealing own vulnerability results in human connectedness that can transform how life is lived. Sharing vulnerability with a dying patient has transformed how she now cares for patients and interacts with her colleagues
Matthews *et al.* (2016) United Kingdom	To understand how Healthcare Assistant construct and manage demanding situations in a mental health setting and to explore the effects on their wellbeing to provide recommendations for support.	Multi-method qualitative: Diaries and FU semi-structured interviews. IPA.	10 Healthcare Assistant (diaries) 5 Healthcare Assistant (interviews)	Not defined. Focussed on mental Healthcare Assistant, stress, burnout, depression, and anxiety	1) normalising an abnormal environment 2) between compassion and control 3) imbalance of occupational demands and support

Author, Year & Country	Aim	Methods and analysis	Sample	Definition of wellbeing	Main Themes
McGlinchey *et al.* (2021) United Kingdom	To qualitatively examine the lived experience of Healthcare Assistant professionals in Northern Ireland working during the early stages of the pandemic	Interviews and analysed using IPA	10 Healthcare Assistant professionals	Not defined. Described PTSD, chronic stress, anxiety, and depression	1) Specific challenges of Healthcare Assistant professionals working during the pandemic 2) Insights into mental health and wellbeing 3) Feelings of being undervalued and misunderstood
Mills *et al.* (2018) Australia	Explore the meaning and practice of self-care as described by palliative care nurses and doctors. 1) What is the meaning of self-care as described by palliative care nurses and doctors? 2) How do palliative care nurses and doctors describe effective self-care practice?	Semi-structured interviews. Inductive content analysis	12 nurses 12 doctors	Not defined. Described in relation to self-care	1) proactive and holistic approach to promoting health and wellbeing to support professional care of others 2) personalised self-care strategies 3) Barriers and enablers to self-care practice
Murray *et al.* (2020) Australia	To capture and understand stories from nurses and midwives and develop a reflective resource that could be used to connect with caring and compassion.	Story-telling Thematic analysis	50 nurses and midwives	Not defined. A result of compassionate care.	4 key themes: 1) Connecting human to human 2) Engaging as a team 3) Self-care and wellbeing 4) Positive workplace cultures.
Nwozichi *et al.* (2020) Nigeria	To explore the psychological and emotional impact of caring among cancer nurses.	Semi-structured interviews.	7 nurses	Not defined. Discussed compassion fatigue, anxiety, emotional exhaustion, and burnout	1) Nurses' disinclination for cancer care practice 2) Death and health anxiety in cancer care
Selamu *et al.* (2017) Ethiopia	To explore the conceptualisations of wellbeing, stress, and burnout among Healthcare Assistant workers in primary Healthcare Assistant settings in rural Ethiopia in order to inform the future development of an intervention to promote their wellbeing	In-depth interviews and focus groups. Thematic analysis.	52 frontline primary care workers	Not defined. Discussed stress, emotional exhaustion, burnout, and implications eg. turnover and patient safety.	1) Wellbeing and threats to wellbeing 2) The "Chronics" 3) Strategies to handle stressors and their consequences
Siffleet *et al.* (2015) Australia	Explore the perspectives of experienced intensive care nurses regarding maintenance of their emotional wellbeing.	Semi-structured interviews. Descriptive data analysis	15 nurses	Not defined. Referred to prolonged stress, burnout, disengagement and emotional exhaustion, moral distress, and compassion fatigue.	Main psychosocial problem: inability to protect self from stress. 5 categories facilitate happiness and satisfaction: 1) Achieving best care 2) Caring for the patient's family 3) autonomy within the ICU environment 4) Teamwork 5) Previous nursing and life experience
Terry *et al.* (2020) Australia	To evaluate a workplace resilience intervention involving registered nurses working in rural and remote settings in Queensland, Australia	Semi-structured telephone interview.	21 nurses participated in interviews.	Not defined. Discussed impacts on psychological wellbeing: compassion fatigue, anxiety and depression which can lead to burnout.	1) Awareness of self, situation, and others 2) Utility of MSCR 3) Limitations 4) improvements of MSCR training
Wei *et al.* (2020) USA	To determine perceptions of self-care strategies to combat professional burnout among nurses and physicians in paediatric critical care settings	Semi-structured interviews. Qualitative descriptive analysis	13 nurses, 7 physicians	Not defined. Discussed professional burnout.	6 major self-care strategies: 1) finding meaning in work 2) connecting with an energy source 3) nurturing interpersonal connections 4) developing an attitude of positivity 5) performing emotional hygiene 6) recognising one's own uniqueness and contributions at work
Wood *et al.* (2021a) United Kingdom	To examine and explore organisational and role conditions that promote or inhibit job satisfaction and workplace wellbeing for advanced practice nurses.	Semi-structured telephone interviews. Thematic analysis	22 nurses.	Not defined. Refer to work-related satisfaction.	"The advanced nurse role and professional identity" "Feeling exposed" "Support for the advancement of the role" "Demonstrating impact"
Zhao *et al.* (2015) China	To determine the factors influencing the occupational wellbeing of experienced nurses	Semi-structured interviews.	8 nurses	Listed factors associated with wellbeing: job satisfaction, motivation, self-efficacy, achievement, deindividuation, physical and psychological fatigue, environment, and organisation identification.	Internal and external recognition and validation are important to nurses. Wellbeing viewed in terms of satisfaction and happiness.

Table 2: Quantitative papers (*n*=13)

Author, Year & Country	Aim	Methods	Sample	Definition of wellbeing	Main Themes
Bogaerts *et al.* (2021) Netherlands	To obtain insights into the item-level associations between work-related stress and COVID-19 psychosomatic and social fear items and the scale-level variables of psychological wellbeing and resilience	1) Questionnaire on the Experience and Evaluation of Work 2) Resilience Evaluation Scale 3) WHO Wellbeing Index 4) Covid-19 Fear Scale	318 Healthcare Assistant workers in 3 forensic units	Own definition.	Psychological wellbeing negatively associated with COVID-19 fear related psychosomatic and work-related stress symptoms. Those with higher resilience reported greater psychological wellbeing
Chung *et al.* (2021) Taiwan	To develop a conceptual model of nurses' wellbeing and their care nurse-patient interaction (CNPI) competence.	1) Nursing health and job satisfaction scale, 2) Chinese Comfort, Afford, Respect and Expect (CARE) Scale, 3) Care nurse-patient interaction (CNPI) competence Analysed with structured equation modelling analysis	250 registered nurses	Direct citation (Dodge *et al.*, 2012)	Positive correlation between 2 constructs of nurses' wellbeing (contentment and joyfulness) and CPNI competence. Positive correlation between the CNPI competence and nurses' wellbeing, health promoting lifestyles and work environment satisfaction forms a virtuous cycle.
Cubitt *et al.* (2021) United Kingdom	To understand the wider factors influencing and impacting upon hospital doctors' wellbeing during COVID-19 pandemic in England	Online survey with some free text questions: self-reported changes in physical and mental health, satisfaction with working hours and patterns, availability of Personal Protective Equipment, medication and facilities, and communication Simple quant data analysis using Excel. Free text analysed using thematic analysis	Doctors	Not defined. Discussed burnout.	96% of respondents were able to access Personal Protective Equipment. Around ½: deterioration in mental health. >1/3: physical health had also declined. Negative impact on wellbeing: 1) increased workload 2) redeployment 3) loss of autonomy 4) personal issues affecting family members 5) anxiety around recovery plans 6) inadequate access to changing and storage facilities and rest areas. Doctors appreciated: 1) access to "calm rooms" 2) access to clinical psychology 3) free drinks 4) free car parking
Diehl *et al.* (2021) Germany	To identify and compare the burdens, resources, health and wellbeing of nurses working in general (GPC) and specialised palliative care (SPC).	Cross sectional surveys: 1) Copenhagen Psychosocial Questionnaire 2) Patient Health Questionnaire 3) Resilience Scale Questionnaire 4) Single question about back pain 5) self- developed questions.	General palliative care (GPC) nurses (*n*=437) and specialised palliative care Nurses (SPC) (*n*=1316)	Not defined. Discussed burdens and personal resources. None of these are specifically linked to wellbeing	SPC nurses: higher emotional demands as well as higher burdens due to nursing care and the care of relatives. Reported organisational and social resources that were helpful in dealing with the demands of their job. GPC nurses: higher quantitative demands (ie. higher workload) and poorer health status and reported chronic low back pain and depressive disorder more than SPC nurses. GPC nurses had a higher intention to leave than SPC nurses.
Donoso *et al.* (2015) Spain	1) To examine whether daily emotional demands within a nursing work context have a positive effect on nurses' daily motivation at work and wellbeing at home. 2) To explore whether this positive effect could be enhanced by nurses' emotional regulation abilities.	General questionnaires and diary booklet completed twice over 5 consecutive days: 1) Emotional Labour Questionnaire, 2) Difficulty of Emotion Regulation Scale, 3) Utrecht Work Engagement Scale, 4) Ryan and Frederick Vitality Scale, 5) Positive and Negative Affect Schedule	53 Spanish nurses working in hospitals and primary health care centres.	Not defined. Discussed that personal resources and emotional regulation are needed for wellbeing	Day-level emotional demands at work had a positive effect on vigour at work and on vitality at home. Conversely, nurses with higher emotional regulation abilities have more motivation at work and wellbeing at home when they have to face high emotional demands at work - showing a *spill-over* effect after work.
Hayes *et al.* (2017) Ireland	To measure levels of psychological distress. Psychological wellbeing and self-stigma in hospital doctors in Ireland	National cross-sectional study. 1) Depression Anxiety Stress Scale, 2) WHO wellbeing Index, 3) General Health Questionnaire, 4) Single item scales on self-rated health and self-stigma	1749 doctors	Not defined. Suggested that it is possible to measure psychological distress and make inferences about psychological wellbeing (Winefield et al, 2012)	Over ½ reported their health as good/excellent (52%). 50.5% reported positive subjective wellbeing. Over a 1/3 reported psychological distress. Severe/extremely severe symptoms of depression, anxiety and stress were evident in 7.2, 6.2% and 9.5%. Distress, depression, anxiety and stress were significantly higher and wellbeing significantly lower in trainees compared with consultants. Self-stigma was present in 68.4%
Hayes *et al.* (2019) Ireland	To measure levels of occupational stress, burnout, work-life balance, presenteeism. work ability (balance between work and personal resources) and desire to practice in trainee and consultant hospital doctors in Ireland	Workplace wellbeing questionnaires: 1) Effort-Reward Imbalance Scale, 2) overcommitment, 3) Maslach Burnout Inventory 4) Single-item measures on work ability, presenteeism, work-life balance and desire to practice	1749 doctors	Not defined. Possible to measure psychological distress and make inferences about psychological wellbeing. Workplace wellbeing: occupational stress, overcommitment, burnout, work-life balance, presenteeism, work ability, desire to practice	29% respondents had insufficient work ability. 70.6% reported strong or very strong desire to practice. 22% reported a good work-life balance, 82% experienced workplace stress with effort greatly exceeding reward,exacerbated by over-commitment. Burnout was evident in 29.7% and significantly associated with male sex, younger age, lower years of practice, lower desire to practice, lower work ability, higher ERI ratio and greater overcommitment.

Author, Year & Country	Aim	Methods and analysis	Sample	Definition of wellbeing	Main Themes
Munn *et al.* (2021) USA	To identify modifiable environmental factors in the workplace that affect the wellbeing and resilience of Healthcare Assistant workers during the COVID-19 pandemic	Cross-sectional survey design. 1) Wellbeing Index, 2) Connor-Davidson Resilience Scale, 3) Psychological safety scale	2,459 Healthcare Assistant workers (nurses and Allied Health Professionals)	Composite of 3 other references	Factors ↑likelihood of at-risk wellbeing: 1) lower level of resilience 2) using support resources 3) feeling that the organisation lacked understanding of the emotional support needs of Healthcare Assistant workers during the pandemic 4) believing the workload had increased 5) believing there was insufficient Personal Protective Equipment 6) believing there was inadequate staffing to care safely for patients 7) having a lower degree of psychological safety
Pérez-Belmonte *et al.* (2021) Spain	To study the Personal Wellbeing Index (PWI) in a sample of Spanish palliative care professionals, as well as study their levels of wellbeing and the relationships of wellbeing with variables such as gender, age, marital status, profession and professional quality of life	Cross-sectional survey Personal wellbeing index (PWI)	296 palliative care professionals	Direct citation Seligman (2011)	The PWI is adequate to measure the wellbeing of Spanish Healthcare Assistant professionals. Professionals showed medium to high levels of wellbeing (counter-intuitive from the rest of the literature on Healthcare Assistant professionals' wellbeing)
Sansó *et al.* (2020) Spain	To study the effect of self-care and self-compassion on nurses' professional quality of life and wellbeing, specifically, life satisfaction.	Cross-sectional survey 1) Nursing Stress Scale, 2) Practice Environment Scale, 3) Nursing Work Index 4) Professional Self-care scale, 5) Self-compassion scale, 6) Professional Quality of Life Scale, 7) Satisfaction with Life scale	210 nurses from the Healthcare Assistant public system of the Balearic Islands	Not defined. Wellbeing associated with life satisfaction	Practice environment predicted both self-care and self-compassion, whereas nursing stress did not. Self-care and self-compassion predicted nurses' professional quality of life, whereas the practice environment and nursing stress were not predictors. Professional quality of life showed a positive relationship with life satisfaction.
Wadoo *et al.* (2020) Qatar	To evaluate and explore Healthcare Assistant workers' wellbeing working in quarantine centres in Qatar.	Cross-sectional web-based survey. 1) Warwick-Edinburgh Mental Wellbeing Scale	127 staff working in quarantine centres in Qatar	Not defined. Described the psychological impact of COVID-19: depression, anxiety, insomnia,	17% had wellbeing scores less than 45. 4.3% had wellbeing scores less than 40. Nurses as a professional group are most likely to be impacted with poor mental health
Walsh (2013) United Kingdom	Explores how factors relating to the work-life interface affect the wellbeing of a sample of hospital doctors. To assess whether gender differences are discernible in the pattern of factors associated with perceptions of job burnout and intentions to quit.	1) Quality of Working life Staff Attitude Survey	7,645 hospital doctors	Not defined. Discussed burnout and intention to quit.	Female doctors more likely to experience burnout than male doctors. Aspects of the work-life interface affected the wellbeing of all doctors, but women rely on different forms of social support than men to alleviate burnout.
Yayla *et al.* (2021) Turkey	To determine the relationship of nurses' psychological wellbeing with their coronaphobia and work-life balance.	1) Sociodemographic characteristics Form, 2) COVID-19 Phobia Scale, 3) Psychological Wellbeing Scale, 4) Work-Life balance scale	295 nurses	Not defined. Discussed anxiety, increased workload, fear, stress, depression, social isolation, role conflicts, impaired work-life balance	Positive statistically significant relationship between the scores on the PWB and the WLB scales. Negatively statistically significant relationship between the scores on the neglecting life and life consisting of work subscales and the COVID-19 phobia scale. Work-life balance and psychological wellbeing were negatively affected during the COVID-19 pandemic

Table 3: Mixed Methods papers (*n*=2)

Author, Year & Country	Aim	Methods and analysis	Sample	Definition of wellbeing	Main Themes
Oates (2018) United Kingdom	How UK mental health nurses with personal experience of mental health problems and high SWB negotiate, use and manage their own mental health and wellbeing	Surveys and semi-structured interviews. Analysis: Surveys: mean, standard deviation, t-tests and one-way analysis of variance. Thematic analysis.	237 mental health nurses (survey) 27 nurses interviewed.	Wellbeing tended to be associated with stress and burnout. Summarises subjective wellbeing (Waldron, 2010)	Descriptive sub-themes: 1) Activities to aid my SWB, 2) other people and my SWB, 3) attitudes for SWB, 4) SWB in relation to nursing work Interpretive themes: 1) choice and control, 2) distancing and connecting, 3) nurturing myself
Whiteing *et al.* (2021) Australia	To delineate contemporary practice of registered nurses working in rural and remote areas of Australia	Questionnaires and interviews	Nurses Questionnaire: *n*=70 Interviews: *n*=20	Not defined. Related to occupational stress.	1) A medley of preparation for rural and remote work 2) being held accountable 3) Alone, with or without someone 4) Spiralling wellbeing

Table 4: Literature Review papers (*n*=3)

Author, Year &Country	Aim	Methods	Sample	Definition of wellbeing	Main Themes
Billings *et al.* (2021c) United Kingdom	What is it like to work on the frontline and what support do frontline Healthcare Assistant workers want during a pandemic such as COVID-19?	Metasynthesis of 46 qualitative studies of experiences of working on the frontline and psychosocial support.	Healthcare Assistant workers	Not defined. Described issues with mental health and psychological wellbeing: stress, burnout, depression, drug and alcohol dependence and suicide.	1) Physical health, safety and security 2) Workload 3) Stigma 4) Ethical, moral and professional dilemmas 5) Personal and professional growth 6) Support to and from others 7) Knowledge and information 8) Formal support
De Kock *et al.* (2021) United Kingdom	To establish whether there are any identifiable risk factors for adverse mental health outcomes among HSCWs during the COVID-19 crisis	Rapid review of 24 published studies included.	Healthcare Assistant workers	Not defined. Described depression, anxiety, stress, burnout or other mental health conditions.	COVID-19 had a considerable impact on the psychological wellbeing of frontline staff. Nurses may be at higher risk of adverse mental health outcomes, but no studies compare this with a primary care workforce. No studies investigated the psychological impact of COVID-19 on social care staff. Whilst psychological interventions aimed at the individual may be of benefit, occupational and environmental factors must also be addressed.
Hall *et al.* (2016) United Kingdom	To explore the: 1) association between wellbeing in health care professionals and patient safety 2) association between burnout in health care professionals and patient safety 3) studies that measure both wellbeing and burnout in relation to patient safety	Systematic review of 46 studies	Healthcare Assistant professionals	Direct: Used own previous framework to describe wellbeing	Majority of wellbeing articles found a significant correlation with poor wellbeing and worse patient safety. One wellbeing study found a significant association in the opposite direction.

Table 5: Thesis papers (*n*=3)

Author, Year, Country and Type of Paper	Aim	Methods and Analysis	Sample	Definition of wellbeing	Main Themes
Chaguaceda (2020) USA	To understand the factors that promote or detract from resident wellbeing. To explore the lived experiences of resident physicians with a specific focus on factors that they perceive as positively or negatively influencing their wellbeing	Semi-structured interviews. IPA.	13 resident physicians (ENT and facial plastics)	Directly cited: Seligman (2011) PERMA model of wellbeing Most literature looks at adverse psychological states rather than as a positive construct.	4 themes: 1) evaluations of the journey through residency 2) work-related factors contributing to wellbeing 3) non-work-related factors contributing to wellbeing 4) personally controllable factors contributing to wellbeing
Mascari (2020) USA	To gain a first-hand understanding of reasons for job satisfaction and job dissatisfaction of doctors and researchers and explore and explain these reasons for any similarities or differences.	Qualitative comparative case study approach. Audio-recorded, telephone interviews	3 doctors and 3 researchers	Summarised work by Niks (2013) as:	**4 major themes of job satisfaction for doctors:** 1) Taking the initiative 2) Accommodation for autonomy 3) Keeping current 4) Clear communication of goals **7 Reasons for job dissatisfaction for doctors:** 1) Collaboration and teamwork 2) Administrative overload 3) Compensation 4) No voice concerning the computer system 5) Schedule flexibility 6) Keeping pace with perceptions from the community 7) Chaotic work environment
McLellan (2018) United Kingdom	To investigate wellbeing and burnout in mental health settings	1) Systematic review of literature on staff wellbeing and/or burnout in mental health services and the relationship this has with quality of care. 2) semi-structured interviews	Systematic Review: 8 papers Empirical study: with 15 practitioner psychologists. Thematic analysis	Directly cited Warr (2011) definition:	Systematic Review: Relationship between burnout and quality of care Relationship between wellbeing and quality of care: variable Relationship between burnout and wellbeing Empirical study: 5 themes: 1) Personal support 2) Traumatised systems 3) Positive and negative job aspects 4) Interprofessional job aspects 5) Drive to improve staff wellbeing

Table 6: Grey Literature papers (*n*=4)

Author, Year & Country	Aim	Methods and analysis	Sample	Definition of wellbeing	Main Themes
Kinman et al. (2020) United Kingdom	To summarise the research evidence on the mental health and wellbeing of nurses and midwives (N&M) in the UK. Conducted prior to the pandemic. 4 questions: 1) What is the current state and prevalence of mental ill health and wellbeing among N&M? 2) What are the factors that influence the mental health and wellbeing of N&M? 3) What impact does the mental health and wellbeing of N&M have on the workforce and patient care? What mental health and wellbeing interventions have been conducted with N&M and how effective are they?	3 stage process 1) Systematic review of evidence 2010-2020 2) Feedback from a steering group comprising people with expertise in Occupational health research and practice, the wellbeing of N&M and the lived experience of being a Healthcare Assistant professional. Review and prioritisation of draft recommendations by a panel of stakeholders using the Delphi technique.	Nurses and midwives	None given	Key findings around N&M are at considerable risk of work-related stress, burnout, and mental health problems due to systemic pressure. Little is known about how to ↑positive aspects of wellbeing. Poor mental health and wellbeing among staff impairs the quality of care to patients. 45 recommendations and 8 key priorities around: Organisational factors Optimum staffing levels Taking breaks Need for a mental health strategy Better understanding of impact of shift work Support for managers to support wellbeing of N&M Regular audits to assess mental health problems Urgent research needed into bullying, harassment and power imbalances on mental health and wellbeing of N&M.
Maben et al. (2012b) United Kingdom	1) Identify and analyse attitudes and behaviours of staff described by patients as shaping their experiences that may connect with and be influenced by staff wellbeing. 2) Determine which particular staff attitudes, affect and behaviours impact on patients' experiences of care. 3) Explore how staff experience work and how this influences their affect, motivation and capacity to deliver high quality care. 4) Identify how context, including different types of organisational arrangements, culture or climate contribute to staff wellbeing and patient care. 5) Explore with staff the issues of emotions at work, emotional labour and customer orientated care. 6) Identify ways to enhance the experience of patients and the wellbeing of the Healthcare Assistant workforce.	Phase 1: • Focus groups. • Interviews Phase 2: • Surveys and interviews • non-participant observation Patient survey: 1) Patient Evaluation of Emotional Care during Hospitalisation (PEECH), 2) Picker Short Form Adapted 17 different measures for staff survey Descriptive and correlational analysis of survey results and multiple regression analysis to test hypotheses "Funnel" structure qualitative data analysis (Rapley, 2011)	Nursing staff (including assistants and students) and medics. Healthcare Assistant professionals and managers. Elderly care	Directly cited Warr (1987) definition: "Individual's subjective experience and functioning at work".	1) Patient recollections of care focus on relational aspects. 2) Patients can distinguish between good and bad staff 3) Patients' and relatives have limited capacity to question staff about poor care. 4) Different organisational contexts mean a staff wellbeing and patient experience is understood in 2 different ways: corporate and vocational Staff wellbeing is an important antecedent of patient care performance. Wellbeing is affected by 7 staff variables: Local/work-group climate, co-worker support, job satisfaction, organisational climate, perceived organisational support, low emotional exhaustion, supervisor support
Stansfeld et al. (2015) United Kingdom	To test the acceptability of the trial and the intervention, the feasibility of recruitment and adherence to and likely effectiveness of the intervention within different clusters of the organisation.	Warwick-Edinburgh Mental Wellbeing Scale Sickness absence data	Hospital Staff and managers	Not defined.	WEMWBS scores fell slightly in all groups. The fall was significantly less among employees whose managers adhered to the intervention than among those whose managers did not
West et al. (2020) United Kingdom	To show how to transform nurses' and midwives' workplaces so that they can thrive and flourish and are better able to provide the compassionate care that they and those they serve wish them to deliver. To examine the workplace stressors, organisational cultures, working contexts and leadership styles that impact on nurse and midwife wellbeing and mental health, both before and during COVID-19.	Literature review. Secondary analysis of publicly available data from various regional and national surveys. Semi-structured interviews	47 nursing and midwifery staff	Described Cameron (2012) "factors that contribute to positive wellbeing: joy, love, pride and pleasure"	Nurses and midwives have 3 core needs: 1) autonomy 2) belonging 3) contribution When all 3 needs are met, people are more intrinsically motivated and engaged and have better health and wellbeing, leading to enhanced performance, persistence, and creativity