

Submitted in partial fulfilment of the Lancaster University Doctorate in Clinical Psychology

July 2022

Working on the Frontline of Public Service

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Word Counts

| | Main Text | Appendices (including tables, figures and references) | Total |
|--------------------|-----------|--|--------|
| Thesis abstract | 292 | - | 292 |
| Literature review | 7,937 | 5,555 | 13,492 |
| Empirical paper | 8,000 | 2,593 | 10,593 |
| Critical appraisal | 3,969 | 678 | 4,647 |
| Ethics section | 5,068 | 2,604 | 7,672 |
| Total | 25,266 | 11,430 | 36,696 |

Thesis Abstract

Police work can be stressful putting officers at risk of mental health difficulties. Despite this, literature suggests support seeking amongst officers is low. A meta-ethnography was conducted to synthesise qualitative research on police officers' views and experience of support, both formal and informal, for their psychological wellbeing. A systematic search identified 14 papers. Five main constructs were developed; *overarching influence of culture and stigma, the unknown professional consequences of accessing support, dual role of others: providing support and encouraging support utilisation, supervisors are the gatekeepers* and *addressing the unmet need of formal support*. Police officers in the reviewed studies recognised the need of support for their mental wellbeing, however, faced prominent barriers to accessing this, which need to be addressed systemically.

The Covid-19 pandemic created an unprecedented scenario for the UK healthcare workforce. The study aimed to explore the experiences of healthcare workers in intensive care units (ICU) responding to the pandemic, with consideration of the societal narrative surrounding the workforce. Semi-structured interviews were conducted with nine participants and analysed using Thematic Analysis. Four main themes were developed; *ICU environment, complexity of support, coping with the experience* and *individual psychological outcomes*, which were then used to develop a conceptual map. Overall, the pandemic was a psychologically demanding experience for participants with different influences supporting the navigation of the environment, as well as additional challenges.

The critical appraisal provides an overview of the findings from both papers, establishing the links. Although police officers and healthcare workers have distinctive roles, both the empirical study and systematic review highlighted the role of societal narratives surrounding workers and the influence this may have on mental wellbeing. Limitations and

future research recommendations are elaborated on. Author reflections on key considerations of the project are discussed.

Declaration

The work presented in this thesis is the author's own and has not been submitted to support an application for another degree or other academic reward.

Name: Emily Goodman

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Date: 1st July 2022

Acknowledgements

I would firstly like to thank the nine participants who took part in my study. Thank you for giving your time and sharing your experiences with me. Your dedication to helping others was so strongly evident throughout the accounts and it was a privilege to hear your stories.

To my supervisors, Dr Suzanne Hodge, Dr Anna Duxbury and Dr Anna Daiches, thank you for your continued support throughout the three years of training. Your words of encouragement, flexibility and guidance have been extremely appreciated.

To Aimee and Holly, I honestly do not think I would have made it through this process without both of your support as friends and fellow trainees. Thank you for being there for the tears and the laughter and for believing in me at times when I did not.

To all my family who have supported me throughout. To my mum, who has taught me the importance of finding a job you love and that you are never too old to take on a challenge, after returning to nursing at the age of 60. To my dad, who I will be forever grateful for introducing me to road cycling, a hobby which has helped me unwind on numerous occasions throughout training. To my grandparents, who let me live with them for the final few months of training and listened to my regular updates of how many words I had left to cut from my thesis.

Finally, to Layton, my partner. Over the last three years you have taken on the stress of two house moves, cooked 99% of my meals and tried very hard to understand what meta-ethnography is, all while going through your own training. I cannot thank you enough for your love, support and belief in me.

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Section One: Systematic Literature Review

**Police Officers' Views and Experiences of Support for their Mental Wellbeing:
A Meta-Ethnography**

Word count (excluding references, tables, and appendices): 7,937 words

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Prepared in accordance with guidelines for authors for *Journal of Traumatic Stress*[†]

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[†]See Appendix G for submission guidelines

Abstract

Police work can be a stressful job, due to responding to dangerous or potentially traumatic events and a high workload, putting officers at risk of a range of mental health difficulties. Although a wide range of support systems are often available, literature suggests support seeking for mental health difficulties is low amongst police officers. To understand police officers' relationship with support seeking, a meta-ethnography was conducted to synthesise existing qualitative research on police officers' views and experience of support, both formal and informal, for their psychological wellbeing. 14 papers were identified through a systematic search. Five main constructs were developed; *overarching influence of culture and stigma, the unknown professional consequences of accessing support, dual role of others: providing support and encouraging support utilisation, supervisors are the gatekeepers* and *addressing the unmet need of formal support*. Police officers in the reviewed studies recognised the need of support for their mental wellbeing due to the nature of their work, however, faced prominent barriers to accessing this, which need to be addressed systemically. Clinical and theoretical implications of these findings are discussed.

Keywords: Police, help-seeking, mental health, qualitative, meta-ethnography

Police are frequently required to respond to dangerous, stressful, and potentially traumatic events, such as emergency situations, violent assaults, and homicides, as well as facing more typical occupational stressors including demanding workloads. It is widely accepted that this puts police officers at risk of a range of mental health difficulties, which is demonstrated across the world. In a meta-analysis of global prevalence rates of mental health difficulties amongst police officers, Syed et al. (2020) found rates to be twice those of the general population. When compared to the United Kingdom (UK) Adult Psychiatric Morbidity Survey of the general population, Syed et al. found higher estimated prevalence of post-traumatic stress disorder (PTSD), anxiety disorders, depression, suicidal ideation, and hazardous drinking in police officers. Furthermore, in an Australian national survey, one in three emergency service personnel, including police officers, reported a high level of psychological distress compared to one in eight in the general population (Beyond Blue Ltd., 2018). Similarly in the UK, in a nationwide online survey to understand mental health needs of emergency service personnel, 91% of 1,194 responding police officers reported having poor mental wellbeing while working for the police (Mind, 2015). Although the survey data does not establish causation between police work and poor mental wellbeing, there is a plethora of research suggesting that police officers face a significant risk to their mental health.

While it may seem obvious that the exposure to potentially traumatic events impacts on officers' mental health, research seeking to understand the risk to officers highlights a complex interplay between several factors. Models of stress within the police force distinguish between two main sources of stress: operational stressors (i.e. job content, such as responding to traumatic events) and organisational stressors (i.e. job context, such as high workload) (Hart et al., 1993; Symonds, 1970). Sherwood et al.'s (2019) systematic review of risk factors for mental health difficulties amongst police officers highlighted the role of both

operational and organisational stressors, as well as individual factors such as limited social support, being female, personality types and avoidant coping strategies. The review demonstrated complex relationships between risk factors and mental health outcomes, for example PTSD was mainly associated with operational stressors, burnout with organisational stressors and social support associated with all mental health outcomes. However, Sherwood et al. also highlighted the paucity of research into the interaction of the three categories of risk factors, calling for more research into understanding police officers' mental health outcomes.

Supporting police officers' mental health

Considering the risk posed to police officers, employers often provide a range of systems to support officers additional to those provided through wider healthcare systems. In the UK this includes Trauma Risk Management (TRiM), Critical Incident Stress Debriefing (CISD), counselling services and peer-support networks (Mind, 2022). However, a Cochrane review of psychosocial interventions for police officers concluded a lack of quality research to demonstrate the effectiveness of interventions (Peñalba et al., 2008). A meta-analysis with a similar aim also concluded a lack of quality research regarding interventions and recommended future qualitative research of police officers' views of the provided support services (Patterson et al., 2012).

Despite the well-documented risk and possibility of multiple support routes, help-seeking behaviour amongst police officers is thought to be low. Carleton et al. (2020) conducted a study of 4,020 public safety personnel's (PSP), including police officers', perception of support, comparing individuals who had and had not received mental health training. For individuals who had not received any training in mental health, 43-60% reported they would never, or only as a last resort, access professional support. For those who had received training, approximately half said they would be extremely willing to access support.

Furthermore, Berg et al. (2006) found that less than 10% of the 3,272 police officers surveyed and experiencing mental health symptoms would seek professional help.

Several factors are thought to contribute to this low utilisation of formal support. Bell and Eski (2016) discuss the impact of culture within policing, often described as a ‘macho’ culture, that prevents disclosure of emotion and consequently accessing support. In a survey of 248 police officers, Karaffa and Koch (2016) found a negative correlation between stigma, both public and self-stigma, and attitudes towards support seeking for mental health. Concerns about confidentiality and impact on career progression are also cited as barriers to help-seeking behaviour (Haugen et al., 2017). Qualitative methodology has been utilised to explore police officer attitudes towards mental health support providing further understanding to the quantitative findings. Ricciardelli et al. (2020) qualitatively analysed PSP’s, including police officers’, responses to an open-ended comments box on an online survey regarding mental illness in participants. Results again highlighted the role of stigma, as well as systemic barriers in attitudes towards help-seeking. Ricciardelli et al. recognised the limitations of their data collection, recommending further qualitative study of this topic. Richards et al. (2021) aimed to review the qualitative literature on barriers to police officers accessing mental health services. The summary largely supported quantitative evidence, with barriers including negative views and limited knowledge of mental health, concerns around confidentiality and negative career impacts as well as the influence of support from significant others in accessing services. Though consistent in its findings, Richards et al.’s review is limited due to the inclusion of non-peer reviewed literature and its restriction to Canadian and American research, as well as focusing on barriers rather than general views of support. Further review of the qualitative literature base could provide clearer understanding of police officers’ relationship with formal support systems, offering guidance to those who implement such systems for the workforce.

As well as formal support systems, research literature highlights the role of social support outside of the work setting in influencing officer wellbeing. In Sherwood et al.'s (2019) systematic review of risk factors for mental health difficulties in police officers, low levels of social support were associated with lower officer wellbeing. Social support amongst officers has also been found to mitigate the relationship between work events and distress amongst police officers (Patterson, 2003). There are several theories of the role of social support following potentially traumatic events like those experienced by police officers. Hobfoll's (1989) conservation of resources model proposes social support can widen the availability of resources and protect existing resources following a traumatic event (Hobfoll et al., 1990). Further theories include a social-cognitive processing model by Lepore (2001) which posits that social support enables emotional adjustment and Joseph et al.'s (1995) integrative psychosocial model that suggests social support can promote coping strategies and reappraisal of the event. Furthermore, Carleton et al. (2020) found that 74% of PSPs would first seek support from spouse before professional help, suggesting that external social support is more acceptable to this workforce than formal systems.

With the high prevalence of mental health difficulties amongst police officers, it is logical that this population would benefit from formal mental health support systems. However, other literature suggests that more informal support may play a key role for this population, as well as being more acceptable. Barker and Pistrang (2002) argue that informal and formal 'psychological help' should be viewed on a spectrum of support which people often access multiple aspects of. For these reasons, when considering the role of support for police officers' psychological wellbeing it is important for the wide range of 'support' to be included.

The aim of this paper is to systematically review qualitative literature on police officers' views and experiences of support, both formal and informal, for their psychological

wellbeing. The aim is to add understanding to the role of support for police officers, which can help provide guidance to those who support the workforce, as well as police officers themselves.

Method

Noblit and Hare's (1988) method of meta-ethnography was adopted for this systematic review as the methodology translates qualitative studies into each other while allowing interpretation of the data. Meta-ethnography follows a seven-step process: *Getting started, deciding what is relevant to the initial interest, reading the studies, determining how the studies are related, translating studies into one another, synthesising translations, and expressing the synthesis*. To further guide the methodology, Atkins et al. (2008), Britten et al. (2002) and Sattar et al. (2021) were reviewed as they provide a detailed and critical view of the approach.

Systematic Search

The systematic search encompassed the first three stages of Noblit and Hare's (1988) method: *getting started, deciding what is relevant and reading the studies*. Initial scoping searches were conducted to find key qualitative research, identifying Richards et al.'s (2021) review. Due to limitations discussed previously, a systematic review of literature with a broader focus and considering international research was warranted. Through the initial scoping search, it was clear existing qualitative literature could be divided into two categories: papers which solely focus on police officers' views of support and papers which have a broader focus with an element of views on support. Restricting the review to papers solely focused on views of support would have potentially lost valuable data within broader research. It was decided that while the focus of the synthesis would be on data relating to views of support, the search would be kept broad.

The research question was initially broken down into two key concepts: police and the broader concept of mental health. Existing reviews within the police force research base were studied to establish free text search terms and database specific subject headings. A qualitative search string was also added to remove quantitative papers from the results. A specialist university librarian was consulted to review the search terms and to support in selection of databases. PsychInfo, CINAHL, MEDLINE complete, Academic Search Ultimate and Web of Science were used and the search was conducted in December 2021. Appendix A details the search strategy. References were imported into Rayyan, a freely available systematic review online tool. Duplicates were removed, leaving 4,192 papers. Inclusion and exclusion criteria were used to screen papers (Table 1). Papers were initially screened through title and abstract. 147 were then full text screened, of which 133 were excluded leaving 14 papers for inclusion within the review. The reference lists of included papers were searched for any further relevant papers, yielding no extra papers. Unfortunately, multiple reviewers were not available to check reliability of the screening system, however when it was unclear whether a paper met the criteria or not, the reviewer discussed this with the wider research team. Figure 1 shows a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram.

Insert Table 1

Insert Figure 1

Characteristics of Included Papers

Fourteen papers were included in the synthesis and were published between 2006 and 2022. Table 2 provides key details of the studies. All papers included active police officers and two included recently retired officers (Edwards & Kotera, 2021; Hofer & Savell, 2021). Two papers included stakeholders (Demou et al., 2020) or police communicators (Newell et al., 2022), however both fully delineated results for police officers. Gumani (2014) and Gumani et al. (2013) present data from the same sample of participants so the results were considered together to ensure duplication did not occur. The aims of five papers were focused on views and experiences of support, while the remaining papers had a broader focus with an element on support.

International literature was included within the review; six of the studies are from the UK or Europe, four from North America, three from South Africa and one from Australia. Syed et al.'s (2020) meta-analysis found increased global prevalence of mental health difficulties amongst officers, demonstrating a worldwide issue. However, it is recognised that geographical context may impact on officers' experiences, including culturally specific views of mental health and support, crime rates and policing systems. This context will be considered, where necessary, within the results.

The studies varied in their requirements of participants' access of support or experience with mental health difficulties. Ten papers did not include any participant criteria regarding mental health difficulties or support seeking. Burns and Buchanan (2020) required participants to have accessed or considered accessing support for their mental wellbeing. Edwards and Kotera (2021) required participants to have a diagnosed mental illness. Boshoff et al. (2015) required participants to have used trauma intervention services. Demou et al. (2020) required participants to have personal experience of mental health difficulties or worked with individuals with mental health difficulties.

Insert Table 2

Quality appraisal

The use of quality appraisal for qualitative literature has undergone debate amongst academics. Noblit and Hare's (1988) original meta-ethnographical approach did not use such appraisals. However, Atkins et al. (2008) and Sattar et al. (2021) suggest appraisal is an important part of the process to indicate quality, while recognising the need for caution. Using appraisal tools has significant limitations, for example reflecting publication requirements rather than quality of research and potential to be subjective (Walsh & Downe, 2006). For this reason, the Critical Appraisal Skills Programme (CASP, 2018) qualitative research checklist was used only to indicate quality rather than to exclude any papers. Duggleby et al.'s (2010) three-point rating system was applied to the CASP, in which total scores range from 8-24. This modified the original 'yes' and 'no' responses within the tool which has been critiqued for a simplification of complex information (Long et al., 2020). The application of the rating system provided further transparency and replicability of the review, creating clarity for comparison to any further research. A score of one represented little to no justification or evidence, two represented moderate but not fully elaborated justification or evidence, and a score of three representing detailed justification or evidence. 20% of papers were appraised by a second reviewer to check reliability of the process and no large discrepancies in ratings were found. CASP scores ranged from 13-21 (Appendix B). When reviewing the results, it was checked that first- and second-order constructs supporting the third-order constructs did not solely come from papers which scored lower on the CASP. This ensured the results were supported by studies considered to be of higher quality.

Analysis and Synthesis of Studies

The analysis and synthesis of studies involved a continuation of step three of Noblit and Hare's (1988) process, and the remaining steps: *determining how the studies are related, translating studies into one another, synthesising translations, and expressing the synthesis.* The studies were read and re-read to ensure familiarity with the papers. Concepts, encompassing author defined themes and concepts within the themes, relevant to the aim of the review, from each paper were listed and compared. Related concepts were collated to form a list of emerging key concepts. Schutz's (1962) concepts of first-order (participants' understandings of the phenomena e.g. quotes) and second-order (author's interpretations of participants' understandings) were used. First-order and second-order constructs were entered into a Microsoft Excel sheet with the emerging key concepts categorising the rows. A process of reciprocal translation was conducted through comparing similarities and differences in the constructs across the papers. From this reciprocal translation, emerging third-order constructs (synthesis of first- and second-order constructs to form new interpretations) were developed. Through constant comparison between the extracted constructs from each paper, five third-order constructs were finalised and written into a narrative translation. Finally, the relationships between the third-order constructs were considered to develop a line of argument that conceptualised participants' views and experiences of support for their mental wellbeing. Appendix C-F details the audit trail for the synthesis.

Results

Through the analysis process, five third-order constructs were developed; *overarching influence of culture and stigma, the unknown professional consequences of accessing support, dual role of others: providing support and encouraging support utilisation, supervisors are the gatekeepers and addressing the unmet need of formal support.*

Overarching Influence of Culture and Stigma

Culture and stigma were frequently discussed as influential factors in police officers' views and experience of seeking support for their mental wellbeing. Most prominently discussed was the culture within the police force. A 'macho' culture was described, where emotional expression was associated with weakness. "You're weak if you talk about [traumatic event]. You're weak if you let it get to you" (Hofer & Savell, 2021, p.550). Participants broadly accepted that the nature of incidents they respond to can be distressing, however there was an expectation to "remain stoic and manage the impacts of potentially psychologically traumatic event exposure" (Newell et al., 2022, p.116). Being able to cope was seen as a "hallmark of a reliable police officer" (Evans et al., 2013, p.3) and many participants expressed concerns they would be viewed as an untrustworthy colleague if they sought support. The culture did have an adaptive element in conducting the job but was widely recognised to be damaging. "While helpful in the moment as it allows officers to respond to the matter at hand, was identified by several participants as extremely hindering" (Burns & Buchanan, 2020, p.12).

Though the culture was discussed as predominantly from within the police force itself, it was recognised that societal expectations of police also perpetuated this. "Many described an expectation within the culture, and within society, for police officers to be strong yet kind, tough yet compassionate, able to respond appropriately to every emergency, withstanding any pressure or challenge they are faced with" (Burns & Buchanan, 2020, p.12). Additionally, the societal culture in which participants lived and grew up in was influential in creating barriers to mental wellbeing support. "Talking was described as a risky activity because it deviated from norms of British culture (keeping a 'stiff upper lip')" (Evans et al., 2013, p.3).

There was an acknowledgment within six of the most recent papers that the police culture and stigma about emotional expression and accessing support was shifting in a

positive direction (Burns & Buchanan, 2020, Demou et al., 2020, Edwards & Kotera, Hofer & Savell, 2021, Newell et al., 2022, Roach et al., 2018). This finding was also restricted to studies conducted in countries of the global north, i.e. UK, Europe and North America, suggesting the shift may not be universal. “It was felt that over the last 10-12 years, there had been a cultural shift in the police as there was more ‘acceptance that emotional problems are a natural reaction and not a sign of weakness’” (Roach et al., 2018, p.315). Despite this shift, there was an emphasis that more needed to be done to address the stigma preventing police officers from accessing the necessary support. “In spite of an acknowledgement of widespread mental health stigma, officers overwhelmingly felt that efforts must be taken to change ‘the perceptions and the culture within police departments’” (Hofer & Savell, 2021, p.551).

The existing culture and stigma affected different stages within the process of accessing support. Firstly, stigma acted as a barrier, preventing the use of support completely. “Among our participants, structural stigma was the most critical barrier to treatment seeking” (Hofer & Savell, 2021, p.548). Secondly, Gumani (2014) found that support available was considered within a hierarchical structure, “family traditions in the Vhembe District determine who the people are to who one may disclose your problems” (p.4). Though this was only demonstrated in studies based in South Africa, it demonstrates the potential influence of societal culture on support seeking.

The Unknown Professional Consequences of Accessing Support

Frequently cited as a barrier to accessing formal support was the unknown consequences of utilising such services, which was often closely linked to the stigma and culture of emotional expression. Fears of negative career repercussions recurred across the papers, due to concerns of appearing unreliable or unable to cope. “Officers generally felt that mental health service utilization could result in meaningful negative professional

repercussions, and many assumed that seeking mental health care would inevitably compromise their career opportunities and financial stability” (Hofer & Savell, 2021, p.549).

When considering the use of formal services provided by their employer, such as occupational health or in-house psychologists, participants reflected on a widespread distrust of such services. There was often a very close link between these services and the employer, and sometimes there was no separation.

One participant expressed concern about speaking with the designated mental health contact persons at the department, stating ‘At the end of the day I do not trust them, because for every single person that it is, they’re always supervisors.’ (Conn & Butterfield, 2013, p.281-282)

Participants did not have a clear understanding of the expectations and limitations of confidentiality in the services provided, and furthermore they did not trust services to be confidential. “Others prefer not to talk about it or seek assistance, as confidentiality is not always maintained” (Boshoff et al., 2015, p.276).

Fundamentally, there was a lack of clarity about the consequences of engaging in the services provided, which, along with previous experiences of confidentiality not being maintained, fuelled a lack of trust in the system.

I think always in the back of everyone’s mind and I dunno if it’s particular to policing or whatever, is you know, if I call EAP [Employee Assistance Program] for something um what’s really gonna happen? You know? Is it going to be flagged? Am I gonna somehow be tied in? Is there gonna be something in my file, is there something. (Newell et al., 2022, p.117)

Several studies concluded the need for clear and transparent policies detailing the provided services, steps taken to maintain confidentiality and its limitations and at what point adjustments to a police officer’s role would be needed. Once developed, such policies needed

to be followed consistently to build trust with employees. “Several interviewees explained that although the organisation had an ‘official line’ on mental illness, the reality was quite different and that once a diagnosis of mental illness ‘got out [your] card was marked’” (Turner & Jenkins, 2018, p.153).

Dual Role of Others: Providing Support and Encouraging Support Utilisation

Throughout the included studies reference was made to the vital role of key relationships in both providing support to participants and encouraging them to seek support. “Primary importance was placed on having a trusted and respected relationship, as often safe relationships were instrumental in assisting participants to access psychological services” (Burns & Buchanan, 2020, p.15). Social support was often “perceived as an effective method for dealing with stressors” (Duran et al., 2019, p.133) which navigates some of the barriers to support. Support from others was utilised from two main sources: external relationships and internal relationships with peers.

Support from people outside of the workplace was mainly from family and friends. Some participants showed a preference for seeking support externally, “many police officers reported that their spouse would be the first person they would go to if they wanted to seek support for their mental health” (Newell et al., 2022, p.119). Support gained from external others involved “‘talking things through’ but also included gestures (e.g., cooking a favourite meal)” (Evans et al., 2013, p.6), as well as recognising the impact of the work when the police officer was not aware themselves, “some were completely unaware of their emotional state until a concerned, valued and trusted individual brought this matter to their attention” (Burns & Buchanan, 2020, p.15). As previously discussed, Gumani (2014) highlighted the cultural influence in who officers seek support from, they also added that family support maybe sought when “there is a preoccupation with traumatic cases and a lack of debriefing

service at the workplace” (p.5), suggesting external support may be utilised when internal support is not sufficient or accessible.

Although external social support was widely discussed, it also presented significant challenges. Participants had great concern about sharing details of their job and the impacts with loved ones. “Some (n=5) felt that they could not talk about their job with their family, because this would result in their family being stressed or worried about them too. They did, however, have alternative social support” (Duran et al., 2019, p.193). To protect others, participants either avoided sharing or “selective sharing” (Gumani, 2014, p.5) occurred. This demonstrates that while external social support is important for police officers, it is not necessarily a simple source of support. Given the preference and key role for external social support and the risks to others’ wellbeing this may pose, Newell et al. (2022) found participants’ requests for mental health services provided by the employer to be extended to families, “it is unsurprising that many police officers and communicators in our sample suggested that improved mental health resources for their families would be beneficial” (p.119).

Alternatively, participants spoke of the peer support received on an informal basis at their workplace. Again, a preference was shown for such support compared to formal internal methods. Gumani et al. (2013) labelled peer support as a ‘substitute strategy’ that “whenever debriefing was offered, substitute strategies were introduced by the officers to avoid being de-briefed” (p.484). Peer support was viewed as important and effective as it provided a sense of understanding and normalisation for police officers. “I think just having another person who can say ‘Yeah, you know what, that bothered me too,’ so you just feel like you’re not the only one” (Conn & Butterfield, 2013, p.280). The shared experience “could lessen the shame or self-criticism that might otherwise arise” (Evans et al., 2013, p.4). Although participants described the benefits of peer support, caution was still warranted given the

influence of stigma attached to emotional expression in police. “As a result of concerns that showing emotion would risk reputation, officers described a complex, subtle system for picking up distress signals from colleagues” (Evans et al., 2013, p.5).

In addition to sharing experiences, humour amongst colleagues was supportive following challenging situations and was viewed as a “highly valued strategy in releasing work stress and in maintaining a working atmosphere that was light-hearted” (Wright et al., 2006, p.506). Humour may offer a peer support strategy which avoids the fears and stigma attached to emotional expression.

While the role of peer support was viewed as important, participants shared concerns that opportunities to utilise this avenue of support were being reduced. Financial cuts and attempts to remove the negative aspects of the ‘macho’ culture were cited as reasons for removal of social spaces where participants accessed peer support.

We don’t have canteens where you can go and sit and chat. You bring your own lunch. I eat at my desk. Everyone eats at their desk; we just get on with it. We’re together in work, but alone at heart. (Turner and Jenkins, 2018, p.154)

Finally, as well as support provided directly from peers, co-workers were also influential in participants accessing formal support services. An acceptability between peers to discuss emotional impacts of the job appeared to impact participants’ acceptance of using support services available. “Participants’ decisions to access psychological assistance were strongly influenced by co-worker attitudes and role modelling, effective peer support” (Burns & Buchanan, 2020, p.16).

Supervisors are the Gatekeepers

Supervisors were seen as key in influencing participants’ views and experiences of support. Experiences with supervisors impacted at an individual level as well as a team level. “Participants emphasised the importance of supervisors as a source of support and influence

on team attitudes towards talking” (Evans et al., 2013, p.6). According to Burns and Buchanan (2020), supervisors held significant power and when they were supportive, they “set an example, offering a template on how members should care for their mental wellbeing” (p.15).

In addition to being sources of support, participants also emphasised the need for effective supervisors to enable access to support services. Supervisors were often recognised as the gatekeepers of support, who participants had to first approach to then be assigned to support services. “Participants related that information was not readily available to them without going through a supervisor” (Conn & Butterfield, 2013, p.282). To be an effective supervisor, they needed to recognise when a supervisee may need additional support and be aware of what support was available and how it could be accessed. Often participants discussed not obtaining support due to ineffective supervisors.

Although there were no outward signs the female participant was suffering from mental ill health, she felt her senior managers could have done more for her. She was on the brink of a ‘meltdown’, but she had no support; either senior managers did not recognise the signs or were unsure of how to deal with the situation. (Edwards & Kotera, 2020, p.1124)

While there was criticism of ineffective supervisors creating barriers for police officers in need of support, there was also recognition that supervisors were affected by and operating within the same cultural and stigmatised environments as frontline officers.

Individual supervisors are charged with initiating a mental health response based on their subjective sense of whether such a response was warranted. Yet, in an environment where supervisors are operating under the same cultural mental health stigma as frontline officers (and may additionally be navigating fiscal pressures), they may not always be effective at making such decisions. (Hofer & Savell, 2021, p.549)

Addressing the Unmet Need of Formal Support

While significant barriers to accessing support, particularly formal services, were prominent, there was an unexpected acknowledgement amongst participants that support is vital to surviving the job.

Considering the documented cultural prohibition against mental health service utilization and general trends indicating that mental health services are typically underutilized among law enforcement, the trends in officers' care-seeking attitudes and behaviours may point to a surprising willingness to engage with mental health services. (Hofer & Savell, 2021, p.548)

While earlier studies suggested an ambivalence (Evans et al., 2013, p.3) and reluctance (Wright et al., 2006, p.505) towards support, more recent studies showed an increased awareness amongst participants of the need for support, though this was not universal. "We have the inside view of the seediness and grotesque parts of life. We have to maintain our mental health." (Burns & Buchanan, 2020, p.13). Duran et al. (2019) conceptualised support from the employer as an obligation expected from officers, however "their quotes implied that this obligation was not always being met" (p.189). Turner and Jenkins (2018) referred to 'unrequited support' describing participants' experience of needing support but not receiving it, "they can't do as much as we need them to. They used to be excellent, but then the funding was cut. We are all struggling" (p. 153). Generally, participants held the expectation that employers are responsible for providing support and addressing the barriers but recognised that this was often an unmet expectation.

So fundamentally if policing is a people business, each and every one of the people who are in it need to have good mental health to enable them to function and deliver that service. It is a fundamental core responsibility for the leadership to equip, support, encourage every single person to be the best person they can be, to navigate

their way through their daily life, and the ten, twelve, fourteen hours they do in the job. To do anything other than that is a failure of leadership. (Demou et al., 2020, p.705)

Throughout the reviewed studies there were recommendations of how participants' support needs could be addressed. One recommendation was the debate between mandated and voluntary support. Mandated support was endorsed by participants as a way of navigating the barrier of stigma and acknowledging the importance of maintaining wellbeing in a psychologically demanding job.

Some officers specified that they should have personally been forced to engage with services: 'I wish they'd made me go talk to somebody. I really do' (Ofc. 3), while others felt that mandated counselling should be used as a general strategy to ensure proactive care for officers who will inevitably experience high-stress, potentially traumatizing events: 'we should all be mandated to get help somehow'". (Hofer & Savell, 2021, p.550)

However, choice was also highlighted as important when accessing support. Evans et al. (2013) suggested the need for participants to "feel in control of the decision to talk" (p.5) given the perceived stigma associated with accessing support. Gumani et al. (2013) emphasised that those who choose to not access support at work may be relying on alternative strategies such as "inner resources of coping and the multifaceted support" (p.485) external to work.

An alternative to mandating support, could be mandating training about mental wellbeing. There was a recognition amongst participants that although they acknowledged the job could be distressing, there was limited knowledge about recognising 'symptoms' of distress, knowing when support was needed and what support they might benefit from.

Participants recognized the importance of help seeking and identified a need for education and awareness within their units. They spoke of the importance of promoting access to psychological assistance as needed and being informed about the detrimental effect of not reaching out. (Burns & Buchanan, 2020, p.14)

Increased awareness amongst police officers was highlighted as necessary to enable them to access the support. When training was provided on an optional basis, this portrayed the message that employers did not view mental wellbeing as important, possibly maintaining the culture and stigma around needing and accessing support. “Some of the training was optional, conveying the message to one participant that the information was not regarded as important.” (Conn & Butterfield, 2013, p.282).

In addition to training and leveraging mandatory services, participants’ support needs were not being met due to the lack of knowledge amongst formal support providers about the police officer role.

EHW [employee health and wellness] do not have a clue of what we are doing on ground level, they should attend operations and crime scenes, experience our frustrations. Only then they would be able to assess our unique needs and to come up with a relevant plan of action. (Boshoff et al., 2015, p.278)

Accessing support from providers who do not understand the police role and culture, created concerns of being misunderstood, acting as a barrier to accessing support. Ensuring that formal support was provided by individuals with an awareness of the police role and culture was vital for building trust and easing concerns.

One officer described the necessity of counsellors to have specialized knowledge because ‘we’re not very open to outsiders,’ and there would be a concern about ‘talking about certain things to people who maybe don’t understand what we do, and maybe, would take something the wrong way’. (Hofer & Savell, 2021, p. 553)

Frequently participants called for an expansion of the services provided in their workplace. Many existing support services were viewed as reactive to psychological distress and it was suggested that having preventative services could highlight the importance of mental wellbeing, reducing the impact of stigma. “Police leadership (and clinical practitioners) can challenge such beliefs by re-emphasizing the value of mental health counselling in terms of the prevention of negative mental health consequences” (Hofer & Savell, 2021, p.551). It was also viewed that providing services for difficulties beyond those associated with the operational stressors could be beneficial.

Most participants were, however, of the opinion that the content of the programmes only focused on the individual, and more specifically on trauma and stress, without looking at the person within the social environment. They felt it did not meet their expectations. (Boshoff et al., 2015, p. 279)

Finally, participants commented on the inaccessibility of formal support due to logistical barriers. This included timings of the provided support, duration, and workload.

Some of the participants mentioned that because of the nature of their work, and more specifically the heavy workload, they did not always have the time to attend trauma intervention programmes. The duration of programmes was sometimes too long, while the time of presentation (day of the week, month or year) was problematic in some cases. (Boshoff et al., 2015, p.280)

Discussion

The review synthesised qualitative data from 14 studies, with the aim of understanding police officers’ views and experiences with seeking support for their mental wellbeing. The studies varied in their aims, country of study and methodology. Despite this variation, the meta-ethnographical approach enabled synthesis of the data and a line of argument was developed. Police officers in the reviewed studies recognised the need of

support for their mental wellbeing due to the nature of their work, however, face prominent barriers to accessing this, which need to be addressed systemically.

The barriers highlighted in the synthesis included stigma and police culture, concerns of trust in services and perceived negative repercussions, which is largely reflective of the existing research in this topic area (Bell & Eski, 2016; Haugen et al., 2017; Karaffa & Koch, 2016; Ricciardelli et al., 2020). However, the review adds nuance to the understanding of police officer views of support and the barriers that the quantitative data does not capture. While Carleton et al. (2020) and Berg et al. (2006) found low proportions of police officers willing to engage in psychological support, the review suggests there is a willingness but that the support provided is not meeting their needs and expectations.

The stigma associated with emotional expression and help-seeking, and the police ‘macho’ culture had an overarching influence on police officers’ views and experiences of support. The stigma impacted all other themes in the synthesis, from the fears of career repercussions to how officers engaged in support from their peers. Corrigan (2004) proposed a social-cognitive model of stigma, where help may not be sought to avoid public-stigma (stereotypes, prejudice and discrimination held about those labelled with mental health difficulties) and self-stigma (an internalisation about the beliefs of people with mental health difficulties). Both types of stigma are evident among police officers’ accounts, though avoidance of public-stigma appears to be a significantly prominent barrier to help-seeking as it is perceived to risk damaging career opportunities and creating negative perceptions in others. However, concerns that emotional expression represents weakness are incongruent with the recognition of the impact of the job and desire for suitable support found in many of the studies. This incongruence may be due to the potential recent shift in the attitude towards acceptance of emotional expression portrayed in the latest studies within certain countries. Further, country specific research is required to explore this potential shift in stigma. The

endorsement by many of the use of mandated support highlights officers' desire to access support with the assistance from employers to help navigate the associated stigma. This emphasises that addressing the negative aspects of police culture and stigma is ultimately the responsibility of the employer, which Richards et al. (2021) also conclude in their review.

The current synthesis found multiple recommendations embedded within participants' responses, from increased training and education, expanding services available to family and preventative services, as well as clear policies detailing the implications of accessing support. These recommendations could help police officers to navigate the barriers they experience when considering accessing support. In their study of the impact of mental health training, Carleton et al. (2020) found that only approximately 10% more officers, who had received training, compared to those who had not, were likely to access professional support, reporting a significant impact of stigma in this willingness. What this demonstrates, along with the current synthesis, is the importance of addressing the stigma from multiple levels, not just at an individual officer level. Providing sufficient support will help produce an environment where mental wellbeing is considered highly important, which can then contribute to reducing the stigma attached to accessing help for mental health needs.

The concepts of *dual role of others* and *supervisors as gatekeepers* emphasise the influential role of those around police officers in their views and experiences of accessing support, providing insights into what officers may be seeking from support. Social support from others was viewed as an effective source of support, often preferred to formal methods as it navigates some of the stigma. Social support from peers provided space for shared understanding, normalisation, and validation of the emotional impacts through collective experience. Additionally, police officers discussed the lack of understanding of the police job and culture by mental health service providers as a barrier to accessing such support. Cohen and Wills' (1985) theory of social support suggests it is most effective when the source of

support matches the source of stress. It could be hypothesised that having shared understanding can contribute to a matching of support. Given the value placed on shared understanding, it is essential that opportunities for peer support are maintained and that officers are provided with training to help support each other, for example creation of peer-support networks. Regarding formal support, providers, such as clinical psychologists, need to understand the police role, including the operational and occupational stressors of the job and most importantly the police culture, considering both the perceived positive and negative aspects of this. This understanding may come from being embedded within police services, however, to ensure trust in confidentiality, there need to be explicit policies on how this is maintained.

Though there was a general preference for external support as it can help to avoid stigma, police officers showed concern about the impact utilising this support can have on their family and friends. This concern can prevent officers from sharing or officers may restrict what they share. Caution may be warranted given the literature around secondary traumatic stress (STS), which is the experience of PTSD symptomatology in individuals close to the person who experienced the trauma directly (Salston & Figley, 2003). Meffert et al., (2014) found STS symptoms in spouses of police officers. While this was a small-scale study, in a qualitative study, Landers et al. (2020) found a similar experience of spouses when their police officer partners experience traumatic events at work. Although the impact on police officer relatives and friends may require further substantiating through research, given the role of external others in providing and encouraging access to support, additional support for this external group may be warranted. Furthermore, if the role of external others and potential impact on them was recognised by providing or signposting to suitable support, it could further emphasise the importance of mental wellbeing by the workplace, helping to reduce the stigma officers experience.

Implications for Clinical Psychologists and Future Research

Multiple recommendations can be made based on the findings of this review regarding the support for police officer mental health, many of which were embedded within participants' responses and author interpretations. They include addressing the negative aspects of police culture and stigma, while recognising the positive parts, establishing peer-support systems, establishing transparent policies and guidance, providing training to increase awareness of mental health and of available services, expansion of services to non-work related difficulties and to family members and signposting to specialist psychological support. Although clinical psychologists have the knowledge and the skills to address these recommendations, they are not routinely placed within police organisations, and it may not be financially viable for this to happen. Clinical psychologists' role may be best placed in influencing practices within police workforces through production of research relevant to such issues. Further research around the role of stigma in the police force and the potential shift in the culture and stigma of help seeking is warranted, considering different countries. If the shift in stigma is replicated elsewhere, research into what has contributed to this would be vital in continuing to break the barrier not only within the police force but other occupations where mental health stigma is influential such as the military. Additional research is also required into effective psychological interventions. Patterson et al.'s (2014) review of stress management interventions for police officers found limited evidence for current approaches, calling for development of effective interventions. Further research into the use of mandatory services is also important. While the results suggest mandatory services are endorsed by many officers as a way of overcoming stigma, study authors also recommend caution given the importance of choice in talking (Evans et al., 2013). Research specifically into officers' views of mandated support and the variety of mandated support options, for example formal psychological support, annual mental health checks and training, is required. With clinical

psychologists' training in research and understanding of psychological distress, they are well placed to develop such research.

Given the preference for external support, clinical psychologists may encounter police officers accessing support in community based mental health services. The results from this review highlight the need for clinical psychologists providing support to officers to understand the police role, both organisational and occupational stressors, and the culture and stigma likely to impact officers' views and experiences of accessing support.

Strengths and limitations

The main strength of this review is the systematic methodology. While drawing on papers with relatively small numbers of participants, pooling together the data allowed for the synthesis of new insights. Studies from a range of countries were included, allowing comparisons and synthesis of data from different cultures. However, this was limited as only papers published in the English language were reviewed.

Although systematic in its approach, the review methodology was completed by a single researcher, except for the quality appraisal. This reduces the reliability of the process. However, steps were taken to try to mitigate this, for example discussion of inclusion and exclusion of ambiguous studies with the wider research team.

While a recognition of the need for mental health support was found this must be taken with caution due to the recruitment approaches of the studies. Most of the papers utilised a self-selective approach to recruitment, meaning participants may be those who are more willing to discuss their mental health. Additionally, four papers had a requirement for participants to have accessed/consider accessing support or have experienced mental health difficulties, again potentially biasing results. Future research from the perspective of police officers who identify as not willing to access services may be useful to further elaborate on the varied perspectives about support.

A final limitation is the methodological heterogeneity of the papers included within the review. Though all papers were qualitative, several different methods were used which may represent different epistemological viewpoints. While papers were included due to the interpretative nature of the research, the analysis processes may have affected this interpretation. Atkins et al. (2008), when reviewing meta-ethnography, identified the inclusion of papers from different theoretical viewpoints an area of contention due to limited guidance and clarity on the impact of synthesising such data. Further research regarding this is required and caution should be taken with results presented.

Conclusion

In conclusion, this synthesis found that police officers view support as necessary for managing the stressors of their role. Support is available from multiple sources; however, barriers often reduce the accessibility of the support. Officers show a preference for informal support from family or peers but have an expectation to receive accessible and effective formal support from their workplace, which is an expectation that is not being suitably met. Action needs to be taken by employers and providers of support services to meet police officers' needs.

References

- Atkins, S., Lewin, S., Smith, H., Engel, M., Fretheim, A., & Volmink, J. (2008). Conducting a meta-ethnography of qualitative literature: Lessons learnt. *BMC Medical Research Methodology*, 8(1), 21. <https://doi.org/10.1186/1471-2288-8-21>
- Barker, C., & Pistrang, N. (2002). Psychotherapy and social support: Integrating research on psychological helping. *Clinical Psychology Review*, 22(3), 361-379.
[https://doi.org/10.1016/S0272-7358\(01\)00101-5](https://doi.org/10.1016/S0272-7358(01)00101-5)
- Bell, S., & Eski, Y. (2016). 'Break a leg—it's all in the mind': police officers' attitudes towards colleagues with mental health issues. *Policing: A Journal of Policy and Practice*, 10(2), 95-101. <https://doi.org/10.1093/polic/pav041>
- Berg, A. M., Hem, E., Lau, B. R., & Ekeberg, Ø. (2006). Help-Seeking in the Norwegian Police Service. *Journal of occupational health*, 48(3), 145-153.
DOI: 10.1539/joh.48.145
- Beyond Blue Ltd. (2018). *Answering the call: national survey*. Beyond Blue.
https://www.beyondblue.org.au/docs/default-source/resources/bl1898-pes-full-report_final.pdf
- Boshoff, P., Strydom, H., & Botha, K. (2015). An assessment of the need of police officials for trauma intervention programmes-a qualitative approach. *Social Work*, 51(2), 244-261.
<http://dx.doi.org/51-1-447>
- Britten, N., Campbell, R., Pope, C., Donovan, J., Morgan, M., & Pill, R. (2002). Using meta ethnography to synthesise qualitative research: a worked example. *Journal of health services research & policy*, 7(4), 209-215. DOI: 10.1258/135581902320432732
- Burns, C., & Buchanan, M. (2020). Factors that influence the decision to seek help in a police population. *International journal of environmental research and public health*, 17(18), 6891. <https://doi.org/10.3390/ijerph17186891>

- Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Vaughan, A. D., Anderson, G. S., Anderson, G. S., Ricciardelli, R., MacPhee, R. S., Cramm, H. A., Czarnuch, S., Hozempa, K., & Camp, R. D. (2020). Mental health training, attitudes toward support, and screening positive for mental disorders. *Cognitive Behaviour Therapy*, 49(1), 55-73. DOI: 10.1080/16506073.2019.1575900
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological bulletin*, 98(2), 310. <https://doi.org/10.1037/0033-2909.98.2.310>
- Conn, S. M., & Butterfield, L. D. (2013). Coping with secondary traumatic stress by general duty police officers: Practical implications. *Canadian Journal of Counselling and Psychotherapy*, 47(2).
<https://journalhosting.ucalgary.ca/index.php/rcc/article/view/60048>
- Corrigan, P. (2004). How stigma interferes with mental health care. *American psychologist*, 59(7), 614. DOI: 10.1037/0003-066X.59.7.614
- Critical Appraisal Skills Programme. (2018). *CASP checklist: 10 questions to help you make sense of a qualitative research*. CASP UK. <https://casp-uk.net/wp-content/uploads/2018/03/CASP-Qualitative-Checklist-Download.pdf>
- Demou, E., Hale, H., & Hunt, K. (2020). Understanding the mental health and wellbeing needs of police officers and staff in Scotland. *Police Practice and research*, 21(6), 702-716. <https://doi.org/10.1080/15614263.2020.1772782>
- Duggleby, W., Holtslander, L., Kylma, J., Duncan, V., Hammond, C., & Williams, A. (2010). Metasynthesis of the hope experience of family caregivers of persons with chronic illness. *Qualitative Health Research*, 20(2), 148–158. doi:10.1177/1049732309358329

- Duran, F., Woodhams, J., & Bishopp, D. (2019). An interview study of the experiences of police officers in regard to psychological contract and wellbeing. *Journal of Police and Criminal Psychology*, 34(2), 184-198. <https://doi.org/10.1007/s11896-018-9275-z>
- Edwards, A. M., & Kotera, Y. (2021). Mental health in the UK police force: a qualitative investigation into the stigma with mental illness. *International Journal of Mental Health and Addiction*, 19(4), 1116-1134. <https://doi.org/10.1007/s11469-019-00214-x>
- Evans, R., Pistrang, N., & Billings, J. (2013). Police officers' experiences of supportive and unsupportive social interactions following traumatic incidents. *European Journal of psychotraumatology*, 4(1), 19696. DOI: 10.3402/ejpt.v4i0.19696
- Gumani, M. A. (2014). Concepts of multifaceted social support in operational work in the lives of South African Police Service members. *SA Journal of Industrial Psychology*, 40(2), 1-11. <https://doi.org/10.4102/sajip.v40i2.1209>
- Gumani, M. A., Fourie, E., & Blanche, M. T. (2013). Critical incidents impact management among South African police service officers. *Journal of Psychology in Africa*, 23(3), 481-487. <https://doi.org/10.1080/14330237.2013.10820655>
- Hart, P. M., Wearing, A. J., & Headey, B. (1993). Assessing police work experiences: Development of the Police Daily Hassles and Uplifts Scales. *Journal of Criminal Justice*, 21, 553-572. [https://psycnet.apa.org/doi/10.1016/0047-2352\(93\)90043-M](https://psycnet.apa.org/doi/10.1016/0047-2352(93)90043-M)
- Haugen, P., McCrillis, A., Smid, G., & Nijdam, M. (2017). Mental health stigma and barriers to mental health care for first responders: A systematic review and meta-analysis. *Journal of Psychiatric Research*, 94, 218-229. <https://doi.org/10.1016/j.jpsychires.2017.08.001>
- Hobfoll, S. E. (1989). Conservation of resources: a new attempt at conceptualizing stress. *American psychologist*, 44(3), 513. <https://psycnet.apa.org/doi/10.1037/0003-066X.44.3.513>

- Hobfoll, S. E., Freedy, J., Lane, C., & Geller, P. (1990). Conservation of social resources: Social support resource theory. *Journal of Social and Personal Relationships*, 7(4), 465-478. <https://psycnet.apa.org/doi/10.1177/0265407590074004>
- Hofer, M. S., & Savell, S. M. (2021). “There was no plan in place to get us help”: Strategies for improving mental health service utilization among law enforcement. *Journal of Police and Criminal Psychology*, 36(3), 543-557. <https://doi.org/10.1007/s11896-021-09451-0>
- Joseph, S., Williams, R., & Yule, W. (1995). Psychosocial perspectives on post-traumatic stress. *Clinical Psychology Review*, 15(6), 515-544. [https://psycnet.apa.org/doi/10.1016/0272-7358\(95\)00029-O](https://psycnet.apa.org/doi/10.1016/0272-7358(95)00029-O)
- Karaffa, K., & Koch, J. (2016). Stigma, Pluralistic Ignorance, and Attitudes Toward Seeking Mental Health Services Among Police Officers. *Criminal Justice and Behaviour*, 43(6), 759-777. <https://doi.org/10.1177/000145271663103>
- Landers, A. L., Dimitropoulos, G., Mendenhall, T. J., Kennedy, A., & Zemanek, L. (2020). Backing the blue: Trauma in law enforcement spouses and couples. *Family relations*, 69(2), 308-319. <https://psycnet.apa.org/doi/10.1111/fare.12393>
- Lepore, S. J. (2001). A social–cognitive processing model of emotional adjustment to cancer. In A. Baum & B. L. Andersen (Eds.), *Psychosocial interventions for cancer* (pp. 99–116). American Psychological Association. <https://psycnet.apa.org/doi/10.1037/10402-006>
- Long, H. A., French, D. P., & Brooks, J. M. (2020). Optimising the value of the critical appraisal skills programme (CASP) tool for quality appraisal in qualitative evidence synthesis. *Research Methods in Medicine & Health Sciences*, 1(1), 31-42. <https://doi.org/10.1177/2632084320947559>

- Meffert, S. M., Henn-Haase, C., Metzler, T. J., Qian, M., Best, S., Hirschfeld, A., McCaslin, S., Inslicht, S., Neylan, T. C., & Marmar, C. R. (2014). Prospective study of police officer spouse/partners: a new pathway to secondary trauma and relationship violence? *PLoS One*, 9(7), e100663. <https://psycnet.apa.org/doi/10.1371/journal.pone.0100663>
- Mind. (2015). *Blue light scoping survey: Police summary*. Mind.
<https://www.mind.org.uk/media-a/4583/blue-light-scoping-survey-police.pdf>
- Mind. (2022). *Coping with what you experience in the police*. Mind.
<https://www.mind.org.uk/news-campaigns/campaigns/blue-light-programme/blue-light-information/coping-with-what-you-experience-in-the-police/#where-to-get-support>
- Newell, C. J., Ricciardelli, R., Czarnuch, S. M., & Martin, K. (2022). Police staff and mental health: barriers and recommendations for improving help-seeking. *Police Practice and Research*, 23(1), 111-124. <https://doi.org/10.1080/15614263.2021.1979398>
- Noblit, G. W. & Hare, R. D. (1988). *Meta-ethnography: synthesizing qualitative studies*. SAGE publications, Inc. <https://dx.doi.org/10.4135/9781412985000>
- Patterson, G. T. (2003). Examining the effects of coping and social support on work and life stress among police officers. *Journal of Criminal justice*, 31(3), 215-226.
[https://psycnet.apa.org/doi/10.1016/S0047-2352\(03\)00003-5](https://psycnet.apa.org/doi/10.1016/S0047-2352(03)00003-5)
- Patterson, G. T., Chung, I. W., & Swan, P. G. (2012). The effects of stress management interventions among police officers and recruits. *Campbell Systematic Reviews*, 8(1), 1-54. <https://doi.org/10.4073/csr.2012.7>
- Patterson, G. T., Chung, I. W., & Swan, P. W. (2014). Stress management interventions for police officers and recruits: a meta-analysis. *Journal of Experimental Criminology*, 10(4), 487-513. <https://doi-org.ezproxy.lancs.ac.uk/10.1007/s11292-014-9214-7>

- Peñalba, V., McGuire, H., & Leite, J. R. (2008). Psychosocial interventions for prevention of psychological disorders in law enforcement officers. *Cochrane Database of Systematic Reviews*, (3). <https://doi.org/10.1002/14651858.cd005601.pub2>
- Ricciardelli, R., Carleton, R., Mooney, T., & Cramm, H. (2020). “Playing the system”: Structural factors potentiating mental health stigma, challenging awareness, and creating barriers to care for Canadian public safety personnel. *Health*, 24(3), 259-278. <https://doi.org/10.1177%2F1363459318800167>
- Richards, N. K., Suarez, E. B., & Arocha, J. F. (2021). Law enforcement officers’ barriers to seeking mental health services: a scoping review. *Journal of police and criminal psychology*, 36(3), 351-359. <http://dx.doi.org/10.1007/s11896-021-09454-x>
- Roach, J., Sharratt, K., Cartwright, A., & Skou Roer, T. (2018). Cognitive and emotional stressors of child homicide investigations on UK and Danish police investigators. *Homicide studies*, 22(3), 296-320. <https://doi.org/10.1177%2F1088767918759695>
- Sattar, R., Lawton, R., Panagioti, M., & Johnson, J. (2021). Meta-ethnography in healthcare research: a guide to using a meta-ethnographic approach for literature synthesis. *BMC Health Services Research*, 21(1), 1-13. <https://doi.org/10.1186/s12913-020-06049-w>
- Salston, M., & Figley, C. R. (2003). Secondary traumatic stress effects of working with survivors of criminal victimization. *Journal of traumatic stress*, 16(2), 167-174. <https://doi.org/10.1023/a:1022899207206>
- Schutz, A. (1962). Common-sense and scientific interpretation of human action. In *Collected papers I* (pp. 3-47). Springer, Dordrecht.
- Sherwood, L., Hegarty, S., Vallières, F., Hyland, P., Murphy, J., Fitzgerald, G., & Reid, T. (2019). Identifying the key risk factors for adverse psychological outcomes among

- police officers: a systematic literature review. *Journal of traumatic stress*, 32(5), 688-700. <https://doi.org/10.1002/jts.22431>
- Syed, S., Ashwick, R., Schlosser, M., Jones, R., Rowe, S., & Billings, J. (2020). Global prevalence and risk factors for mental health problems in police personnel: a systematic review and meta-analysis. *Occupational and environmental medicine*, 77(11), 737-747. <https://doi.org/10.1136/oemed-2020-106498>
- Symonds, M. (1970). Emotional hazards of police work. *American Journal of Psychoanalysis*, 30, 155–160. <https://psycnet.apa.org/doi/10.1007/BF01874038>
- Turner, T., & Jenkins, M. (2019). ‘Together in work, but alone at heart’: insider perspectives on the mental health of British police officers. *Policing: A Journal of Policy and practice*, 13(2), 147-156. <https://doi.org/10.1093/police/pay016>
- Walsh, D., & Downe, S. (2006). Appraising the quality of qualitative research. *Midwifery*, 22(2), 108-119. <https://doi.org/10.1016/j.midw.2005.05.004>
- Wright, R., Powell, M. B., & Ridge, D. (2006). Child abuse investigation: An in-depth analysis of how police officers perceive and cope with daily work challenges. *Policing: an international journal of police strategies & management*. 29(3), 498-512. <https://doi.org/10.1108/13639510610684728>

Figures and Tables

Table 1. Inclusion and Exclusion Criteria

| Inclusion criteria | Exclusion criteria |
|--|---|
| Police officers (active or retired) or a mixed population where police participants views are clearly separated from other participants. | Not frontline police officer participants (e.g., emergency dispatchers) or where police participants views are not clearly separated from mixed population. Participants with specific police roles which do not reflect general police role/outcomes are related to specific role rather than general policing (e.g., crime scene investigators). Student or candidate participants. |
| Qualitative methodology utilised, with data obtained through interview or focus groups. | Only quantitative methods used or inadequate detail about qualitative method used. |
| Empirical study reported. Peer-reviewed literature. | Reviews, editorials, books, opinion pieces. Non-peer reviewed literature (e.g. thesis/dissertations). |
| Available in English. | Not available in English. |
| At least one theme or sub-theme related to participants' views or experiences of emotional support. | No theme or sub-theme relating to emotional support. Specific events (e.g. specific terrorist attacks, disasters etc) Studies looking at specific interventions (e.g. CBT, CISD) |

Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)

flow diagram.

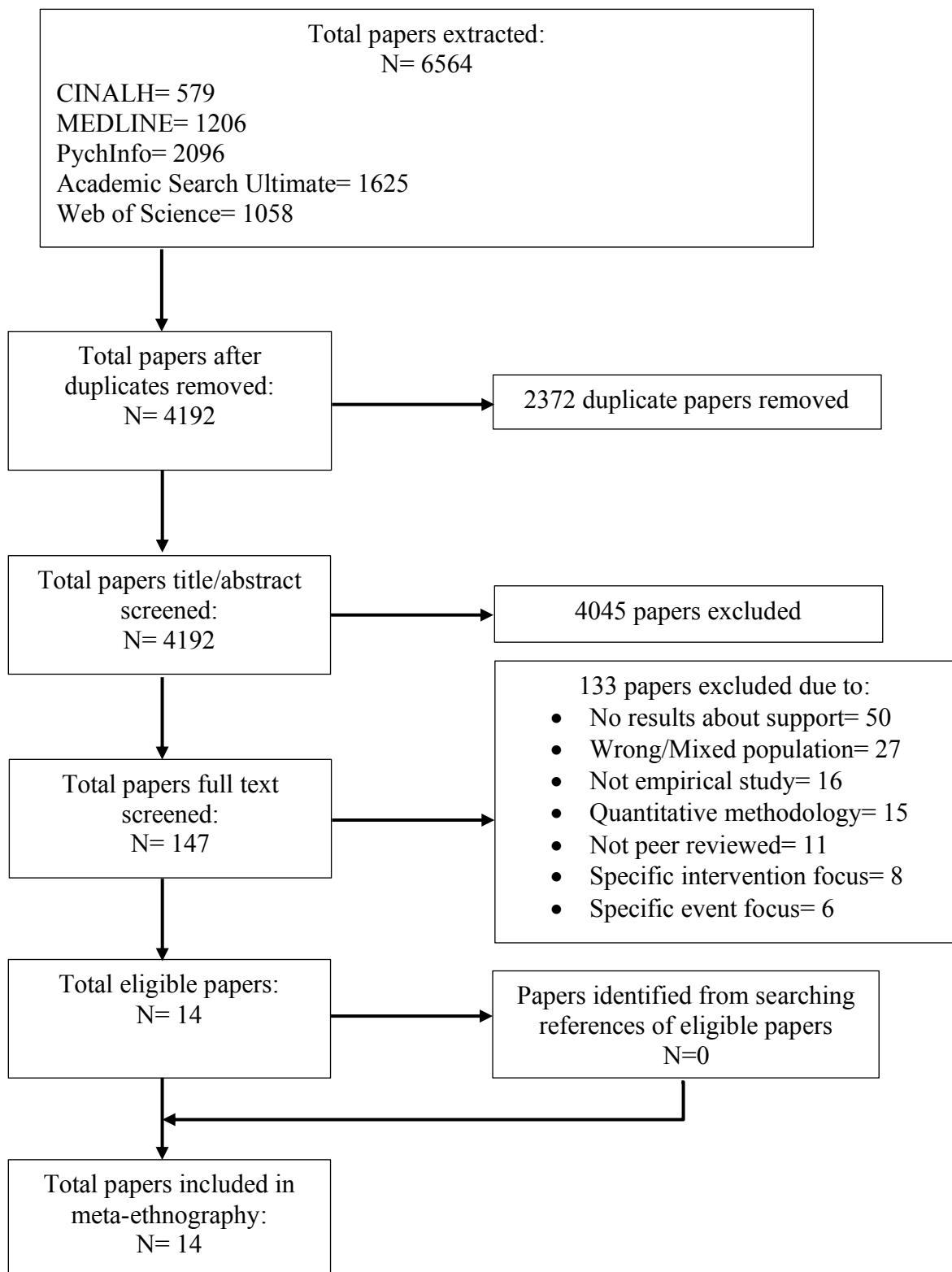


Table 2. Study Details

| Authors | Year | Country | Aims | Participants | Data Collection | Data Analysis |
|--------------------------|-------------|----------------|--|--|---|-----------------------------|
| Boshoff, Strydom & Botha | 2015 | South Africa | To conduct a qualitative situational analysis by exploring the experience and specific needs with regards to trauma and trauma intervention of police officials within the North-West Province's specialist units. | 40 active Police officials | Focus groups using semi-structured interviews | Thematic Analysis |
| Burns & Buchanan | 2020 | Canada | To investigate the following research question: What helps or hinders the decision to access psychological services in a police population? | 20 active Royal Canadian Mounted Police | Semi-structured interviews | Critical Incident Technique |
| Conn & Butterfield | 2013 | Canada | To examine the factors that helped, hindered, or might have helped 10 general duty police officers to cope with secondary traumatic stress. | 10 active Police Officers | Semi-structured Interviews | Critical Incident Technique |
| Demou, Hale & Hunt | 2020 | Scotland | To conduct an exploratory study within the Police Service of Scotland to understand the mental health issues officers and staff face and the perceived risk factors for poor mental health and assess what policies, practices and interventions police officers and staff think are appropriate and can be effective in their organisation. | 30 active Superintendents and 8 stakeholders (line managers, management/human resource personnel, trade union representatives, others involved in workforce wellbeing) | Semi-structured interviews | Thematic Analysis |
| Duran, Woodhams & Bishop | 2019 | England | To examine UK full-time police officers' perceptions of psychological contract and its impact on their stress and wellbeing. | 18 full time, active, frontline Police Officers | Semi-structured interviews | Framework Analysis |

| | | | | | | |
|----------------------------|------|--------------|---|---|----------------------------|------------------------------|
| Edwards & Kotera | 2021 | UK | To explore institutional negativity and stigma in the police force towards mental ill health. | 5 serving Police Officers with mental ill health or have left the force due to ill health | Semi-structured interviews | Thematic Analysis |
| Evans, Pistrang & Billings | 2013 | UK | To explore police officers' experiences of supportive and unsupportive interactions following distressing incidents. | 19 active Police Officers | Semi-structured interviews | Thematic Analysis |
| Gumani | 2014 | South Africa | To describe the concepts of multifaceted social support network systems as perceived by South African Police Service members in the context of the Vhembe District (South Africa) in assisting them to deal with the effects of their operational work. | 20 active Police Officers | Semi-structured interviews | Phenomenological Explication |
| Gumani, Fourie & Blanche | 2013 | South Africa | To show the critical incidents that were encountered in different police units and the strategies used to deal with the impact of those incidents. | 20 active Police Officers | Semi-structured interviews | Grounded Theory |
| Hofer & Savell | 2021 | US | To understand the idiosyncratic officer-perceived barriers and facilitators to MH service utilization to generate strategies for increasing the accessibility of MH resources. | 48 Police Officers (active or recently retired) | Semi-structured interviews | Thematic Analysis |

| | | | | | | |
|------------------|------|--------------|--|--|---|-------------------------|
| Newell et al. | 2022 | Canada | To understand the barriers that officers and communicators face when seeking mental health treatment or support, and what both groups prioritize or consider most important in overcoming barriers to accessing mental health resources. | 25 active Police Officers & 8 Police Communicators | Semi-structured interviews & focus groups | Thematic approach |
| Roach et al. | 2018 | UK & Denmark | A qualitative exploration of different cognitive and emotional stressors experienced by police homicide investigators, depending on whether the victim is an adult or a child. | 11 active Police Investigators | Semi-structured interviews | Qualitative Description |
| Turner & Jenkins | 2018 | UK | To explore the attitudes, opinions, and perceptions of current police officers in regard to mental disorder within the service. Opinions about the efficacy of current support mechanisms were also sought. | 6 serving Police Officers | Semi-structured interviews | IPA |
| Wright et al. | 2006 | Australia | To explore police officers' perceptions of the daily challenges involved in child abuse investigation and how those challenges affect their ability to undertake child abuse investigations, and to explore how these challenges are managed on a daily basis. | 25 active Police Officers working in child abuse units | Semi-structured interviews | Thematic Analysis |

Appendix 1-A

Table 3. Search Strategy

| | Police population | Mental health topic | Qualitative methodology |
|-----------------|---|--|---|
| Free text terms | (TI (police OR lawenforcement OR "law enforcement" OR law-enforcement OR (("public safety" OR "law enforcement" OR lawenforcement OR law-enforcement OR police) N3 (staff* OR officer* OR responder* OR person* OR force*))) OR (AB (police OR lawenforcement OR "law enforcement" OR law-enforcement OR (("public safety" OR "law enforcement" OR lawenforcement OR law-enforcement OR police) N3 (staff* OR officer* OR responder* OR person* OR force*))) | (TI ("mental health" OR mentalhealth OR mental-health) OR ("mental illness*" OR mentalillness* OR mental-illness*) OR ("mental disorder*" OR mentaldisorder* OR mental-disorder*) OR (trauma* OR "posttraumatic stress disorder*" OR "post-traumatic stress disorder*" OR PTSD) OR ("occupation* stress*" OR occupation*stress* OR occupation*-stress*) OR (resilience) OR ((emotion* OR psycholog* OR mental) N3 (wellbeing OR well-being OR "well being" OR health OR illness* OR disorder* OR disturbance* OR trauma*))) OR (AB ("mental health" OR mentalhealth OR mental-health) OR ("mental illness*" OR mentalillness* OR mental-illness*) OR ("mental disorder*" OR mentaldisorder* OR mental-disorder*) OR (trauma* OR | (TX (qualitative* OR "grounded theory" OR grounded-theory OR "interpretative phenomenological analys*" OR IPA OR "narrative analys*" OR "narrative-analys*" OR "thematic analys*" OR "thematic-analys*" OR interview* OR "semi-structured interview*" OR "semistructured interview*" OR "focus group*" OR focus-group*) OR ((qualitative OR phenomenolog*) N3 (research* OR stud* OR method* OR approach* OR finding* OR measure* OR technique*))) |

| | | | |
|-----------|-------------------------------|--|--------------------------------------|
| | | <p>“posttraumatic stress disorder*” OR “post-traumatic stress disorder*” OR “post traumatic stress disorder*” OR PTSD) OR (“occupation* stress*” OR occupation*stress* OR occupation*-stress*) OR (resilience) OR ((emotion* OR psycholog* OR mental) N3 (wellbeing OR well-being OR “well being” OR health OR illness* OR disorder* OR disturbance* OR trauma*)))</p> | |
| PsychInfo | (DE "Police Personnel" OR DE | (DE "Mental Health") OR (DE "Well | (DE "Qualitative Methods" OR DE |
| subject | "Law Enforcement Personnel") | Being") OR (DE "Psychopathology") OR | "Grounded Theory" OR DE |
| headings | | (DE "Mental Disorders") OR (DE "Stress | "Interpretative Phenomenological |
| | | and Trauma Related Disorders" OR DE | Analysis" OR DE "Narrative Analysis" |
| | | "Acute Stress Disorder" OR DE "Adjustment | OR DE "Semi-Structured Interview" OR |
| | | Disorders" OR DE "Posttraumatic Stress | DE "Thematic Analysis" OR DE "Focus |
| | | Disorder")) OR (DE "Occupational Stress") | Group" OR DE "Focus Group |
| | | OR (DE "Emotional Trauma")) OR (DE | Interview" OR DE "Qualitative |
| | | "Trauma Reactions")) OR (DE "Resilience | Measures") |
| | | (Psychological)" OR (DE "Psychological | |
| | | Endurance") | |

CINALH (MH "Police")

subject

headings

(MH "Mental Health") OR (MH
 "Psychological Well-Being") OR (MH
 "Psychopathology") OR (MH "Mental
 Disorders") OR (MH "Psychological
 Trauma") OR (MH "Stress Disorders, Post-
 Traumatic") OR (MH "Stress, Occupational")
 OR (MH "Stress, Psychological") OR (MH
 "Hardiness")

(MH "Qualitative Studies+") OR (MH
 "Focus Groups") OR (MH
 "Interviews+") OR (MH "Thematic
 Analysis")

MEDLINE (MH "Police") OR (MH "Law

subject

Enforcement")

headings

(MH "Mental Health") OR (MH
 "Psychopathology") OR (MH "Mental
 Disorders") OR (MH "Stress Disorders,
 Traumatic, Acute") OR (MH "Stress
 Disorders, Post-Traumatic") OR (MH
 "Psychological Trauma") OR (MH
 "Occupational Stress") OR (MH "Stress,
 Psychological") OR (MH "Resilience,
 Psychological")

(MH "Qualitative Research") OR (MH
 "Grounded Theory") OR (MH "Focus
 Groups") OR (MH "Interviews as
 Topic")

Academic (DE "POLICE")

Search

Ultimate

(DE "MENTAL health" OR DE
 "PSYCHOLOGICAL well-being" OR DE
 "MENTALLY ill" OR DE

(DE "QUALITATIVE research
 methodology" OR DE "QUALITATIVE
 research" OR DE "SEMI-structured

| | | | |
|-----------------------------|---|---|---|
| subject | | "PATHOLOGICAL psychology" OR DE | interviews" OR DE "FOCUS groups" |
| headings | | "ACUTE stress disorder" OR DE "POST-traumatic stress" OR DE "POST-traumatic stress disorder" OR DE "JOB stress" OR DE "PSYCHOLOGICAL stress" OR DE "EMOTIONAL trauma" OR DE "RESILIENCE (Personality trait)" | OR DE "GROUNDED theory" OR DE "NARRATIVE inquiry (Research method)" OR DE "THEMATIC analysis" OR DE "FOCUS groups" OR DE "PHENOMENOGRAPHY") |
| Web of Science search terms | (TS=(police OR lawenforcement OR "law enforcement" OR law-enforcement)) OR TS= (("public safety" OR "law enforcement" OR lawenforcement OR law-enforcement OR police) NEAR/3 (staff* OR officer* OR responder* OR person* OR force*)) | (TS= (("mental health" OR mentalhealth OR mental-health OR "mental illness*" OR mentalillness* OR mental-illness* OR "mental disorder*" OR mentaldisorder* OR mental-disorder* OR trauma* OR "posttraumatic stress disorder*" OR "post-traumatic stress disorder*" OR "post traumatic stress disorder*" OR PTSD OR "occupation* stress*" OR "occupation*stress*" OR "occupation*-stress*" OR resilience))) OR TS= ((emotion* OR psycholog* OR mental) NEAR/3 (wellbeing OR well-being OR "well being" | ((ALL=(qualitative* OR "grounded theory" OR grounded-theory OR "interpretative phenomenological analys*" OR IPA OR "narrative analys*" OR "narrative-analys*" OR "thematic analys*" OR "thematic-analys*" OR interview* OR "semi-structured interview*" OR "semistructured interview*" OR "focus group*" OR focus-group*))) OR TS= ((qualitative OR phenomenolog*) Near/3 (research* OR stud* OR |

OR health OR illness* OR disorder* OR
disturbance* OR trauma*))

method* OR approach* OR finding*
OR measure* OR technique*))

Appendix 1-B

Table 4. CASP Scores

| Study | Research design | Recruitment | Data collection | Reflexivity | Ethical consideration | Data analysis | Findings | Research value | Total |
|---------------------------|-----------------|-------------|-----------------|-------------|-----------------------|---------------|----------|----------------|-------|
| Boshoff et al. (2015) | 3 | 2 | 1 | 1 | 3 | 1 | 2 | 1 | 14 |
| Burns & Buchanan (2020) | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 3 | 21 |
| Conn & Butterfield (2013) | 3 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 18 |
| Demou et al. (2020) | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 13 |
| Duran et al. (2019) | 3 | 1 | 2 | 1 | 3 | 2 | 3 | 3 | 18 |
| Edwards & Kotera (2020) | 3 | 1 | 2 | 1 | 3 | 2 | 3 | 3 | 18 |
| Evans et al. (2013) | 3 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 18 |
| Gumani (2014) | 3 | 1 | 2 | 2 | 3 | 2 | 2 | 3 | 18 |
| Gumani et al. (2013) | 3 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 13 |
| Hofer & Savell (2021) | 2 | 2 | 3 | 1 | 2 | 3 | 3 | 3 | 19 |
| Newell et al. (2022) | 3 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 19 |
| Roach et al. (2018) | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 14 |
| Turner & Jenkins (2018) | 3 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 14 |
| Wright et al. (2006) | 3 | 3 | 3 | 1 | 1 | 2 | 3 | 3 | 19 |

1= little to no justification or evidence

2= moderate but not fully elaborated justification or evidence

3= detailed justification or evidence

Appendix 1-C
Extracted Themes/Concepts

Boshoff et al., (2015)

1. Coping
 - a. Avoidance coping
 - b. Action orientated coping
2. Trauma intervention programmes
 - a. Awareness and participation
 - b. Consumer orientation
 - c. Consumer satisfaction
 - d. Core marketing strategy

Burns and Buchanan (2020)

1. Systemic factors
2. Information and education
3. Quality and influence of relationships
4. Individual characteristics
5. Organisation processes

Conn and Butterfield (2013)

1. Family/significant other support
2. Talking with co-workers
3. Work environment
4. Mental health resources

Demou et al., (2020)

1. Police culture
2. Mental health policies/practices
3. Mental health interventions

Duran et al., (2019)

1. Employer obligations
 - a. Support
 - b. Breach of obligations
2. Mediators
 - a. Formal support/internal support
 - b. Informal support/external support

Edwards and Kotera (2020)

1. Police culture
 - a. Macho-culture
 - b. Emotional response sign of weakness
2. Stigma of mental health
 - a. Lack of support from line management
3. Disclosing Mental Illness
 - a. Effect of mental illness on career advancement
 - b. Relationship with fellow officers
4. Breaking down barriers
 - a. Support from within the force

- b. Increasing education and awareness
- c. Changing attitudes

Evans et al., (2013)

1. Dilemmas of talking
 - a. We don't need to talk
 - b. Talking is risky
 - c. Don't bottle up: 'talk, talk, talk'
2. The work context: informal interaction with colleagues and formal sources of support
 - a. Humour and banter
 - b. 'Dip in and out of chat'
 - c. Formal opportunities to talk
3. Support outside of work
 - a. A close relationship with someone who cares
 - b. Protecting others

Gumani (2014)

1. Support by family
2. Support by pastors
3. Support by friends
4. Support by community
5. Support by the next-of-kin of victims
6. Indiscriminate support

Gumani et al., (2013)

1. External resources of coping
 - a. Professional intervention
 - b. Multifaceted support

Hofer and Savell (2021)

1. Alleviate fear of negative professional consequences by addressing structural stigma
 - a. Clarify and make transparent mental health policies and processes
 - b. Systematize mental health responses
 - c. Leverage mandated counselling
2. Improve agency culture and social norms around mental health by focusing on prevention and resilience
 - a. Emphasise preventative mental health services
 - b. Expand mental health resources to address non-work-related stressors
 - c. Systematically address logistical barriers and incentivise service utilisation
3. Emphasise relevant and trustworthy mental health care
 - a. Maximise the perceived trustworthiness and confidentiality of mental health resources
 - b. Ensure service providers are knowledgeable of the realities of police work

Newell et al., (2022)

1. Barriers to care seeking
 - a. Stigma associated with care-seeking
 - b. Trust in confidentiality
 - c. Occupational experience in mental health

2. Overcoming barriers to accessing mental health care
 - a. Ensuring confidentiality
 - b. Providing an accessible, uncomplicated electronic resource
 - c. Customising resources specific to police

Roach et al. (2018)

1. Training and support

Turner and Jenkins (2018)

1. Minimising Trauma in a Culture of Invincibility
2. Mental health support for police officers

Wright, Powell and Ridge (2006)

1. Mechanisms for reducing work stress

Appendix 1-D
Emerging Key Concepts

1. Culture and stigma
2. Awareness and knowledge
3. Role of supervisors
4. Formal services
5. Confidentiality and trust
6. Role of co-workers
7. Work environment
8. Role of external others

Appendix 1-E

Table 5. Translation of Second-order Constructs

| Authors and date | Overarching Influence of Culture and Stigma | Unknown Professional Consequences of Accessing Support | Dual Role of Others: Providing Support and Encouraging Support Utilisation | Supervisors as Gatekeepers | Addressing the Unmet Need of Formal Support |
|---------------------------|---|---|---|---|--|
| Boshoff et al. (2015) | Avoidance Coping, unique police culture | Maintenance of confidentiality, trust of internal services | Reliance on family and peer support | - | Action-orientated coping, Awareness and Participation, Consumer Orientation, Core Marketing Strategy |
| Burns & Buchanan (2020) | Systemic factors, cultural expectations of being competent and capable, emotional control, change in attitude toward mental health and resilience, Individual characteristics | Systemic factors, tangible negative consequences, Organisational processes, policies and practices to promote psychosocial safety | Quality and influence of relationships, primary importance of trusted and respected relationships, instrumental to accessing services | Quality and influence of relationships, importance of supportive supervisors, power and influence | Information and education, knowledge of psychological impacts, Organisational processes |
| Conn & Butterfield (2013) | Work Environment, overall tone of the environment, stigma of help-seeking | Trust in internal services | Family/Significant Other Support, protecting others, Talking with Co-workers, being understand and normalisation | Accessing services through supervisors | Work Environment, Mental Health Resources |

| | | | | | |
|-------------------------|---|--|---|---|---|
| Demou et al. (2020) | Police culture, improvement in understanding of mental health, stigma | Impact on career | Family support | - | Time-consuming services, variation in support seeking, importance of leadership, need for increased messaging around mental health, mandatory health checks |
| Duran et al. (2019) | - | Reputation and job security, mistrust, and confidentiality | Informal support/External Support, effectiveness of social support, protecting others | - | Employer Obligations: Support, Breach of Obligations |
| Edwards & Kotera (2020) | Macho-culture, Emotional Response Sign of Weakness, Stigma of Mental Health, Changing Attitudes | Effect of Mental Illness on Career Advancement | Relationship with Fellow Officers, Support from within the Force | Lack of Support from Line Management, Support from within the Force | Support from within the Force, Increasing Education and Awareness |
| Evans et al. (2013) | Talking is Risky, fears of appearing weak, societal culture | Suspicion about rationale of formal services, concerns of damage to reputation | Support Outside of Work, A Close Relationship with Someone Who Cares, Protecting Others, Informal Interactions with Colleagues, | Supervisors as source of support and influence on attitudes | Dilemmas of Talking, Talking is Risky, Dip in and Out of Chat, Formal Opportunities to Talk, Don't Bottle It up: 'Talk, Talk, Talk' |

Humour and Banter, Dip in and Out of Chat

| | | | | | |
|--|---|--|---|---|--|
| Gumani (2014) and Gumani et al. (2013) | Cultural influence on sources of support | - | Multifaceted social support, selective sharing with others, peer support as substitute strategy | Supervisors' role in arranging formal support | Use of debriefing services |
| Hofer & Savell (2021) | Alleviate Fear of Negative Professional Consequences by Addressing Structural Stigma, Improve Agency Culture and Social Norms | Alleviate Fear of Negative Professional Consequences by Addressing Structural Stigma, Clarify and Make Transparent Mental Health Policies, Maximise the Perceived Trustworthiness and Confidentiality of Mental Health Resources | - | Systematise Mental Health Responses | Systematise Mental Health Responses, Leverage Mandated Counselling, Emphasise Preventative Mental Health Services, Expand Mental Health Resources to Address Non-Work-Related Stressors, Systematically Address Logistical Barriers, Ensure Service Providers are Knowledgeable About the Realities of Police Work |
| Newell et al. (2022) | Stigma Associated with Care-Seeking, Occupational Experience in Mental Health | Trust in Confidentiality, Ensuring Confidentiality, career repercussions | Spousal support | - | Providing an Accessible, Uncomplicated Electronic Resource, Customising Resources Specific to Police |
| Roach et al. (2018) | Cultural shift to acceptance of emotions | - | Teamwork, informal support system, shared experience, recognition | Line manager encouragement to access support | - |

| | | | | | |
|-------------------------|---|--|---|---|--|
| | | | of signs and encouragement to seek support | | |
| Turner & Jenkins (2018) | Minimising Trauma in a Culture of Invincibility, 'machismo' culture | Scepticism in maintenance of confidentiality, mistrust in formal services, professional consequences | Social spaces, disconnection from colleagues | - | Lack of organisational response, unrequired support, lack of awareness |
| Wright et al. (2006) | Stigma attached to mental health services | Potential negative repercussions, confidentiality | Preference for informal coping, collegial support, normalising emotional responses, office humour | - | Reluctance to seek formal support |

Appendix 1-F

Table 6. Development of Third-order Constructs**Overarching Influence of Culture and Stigma**

| Extracted Themes and Key Concepts | Emerging Third-Order concept | Final Third-Order concept |
|--|--|---|
| Avoidance coping, police culture, systemic factors, cultural expectations of being competent and capable, emotional control, work environment, overall tone of the environment, stigma of help-seeking, macho-culture, emotional response sign of weakness, stigma of mental health, talking is risky, fears of appearing weak, addressing structural stigma, improve agency culture and social norms, stigma associated with care-seeking, minimising trauma in a culture of invincibility, ‘machismo’ culture, stigma attached to mental health services | A strong, long-standing culture that police officers should be in control of their emotions, deviating from these risks the officer being viewed negatively. | The Overarching Influence of Culture and Stigma |
| Individual characteristics, societal culture, structural stigma, police culture, occupational experience in mental health | There are multiple levels of this experience of culture and stigma, both perceived and actual stigma. | |

Change in attitude toward mental health and resilience, improvement in understanding of mental health, Cultural shift to acceptance of emotions

Recognition of a shift in the culture and stigma, though still very present.

Avoidance coping, cultural influence on sources of support, stigma is barrier

Effect of stigma and culture penetrates the different process involved in seeking support, for example decision to seek support as well as the source of support to seek.

Unknown Professional Consequences of Accessing Support

| Extracted Themes and Key Concepts | Emerging Third-Order concept | Final Third-Order concept |
|--|--|--|
| Tangible negative consequences, impact on career, reputation and job security, effect of mental illness on career advancement, concerns of damage to reputation, alleviate fear of negative professional consequences by addressing structural stigma, career repercussions, professional consequences, potential negative repercussions | Concerns of the impact seeking support will have on careers is closely linked with stigma. | The Unknown Professional Consequences of Accessing Support |

Maintenance of confidentiality, trust of internal services, trust in internal services, mistrust, and confidentiality, suspicion about rationale of formal services, maximise the perceived trustworthiness and confidentiality of mental health resources, trust in confidentiality, ensuring confidentiality, scepticism in maintenance of confidentiality, mistrust in formal services

Distrust in internally provided services is a barrier to accessing internal support. Support is sought externally to overcome this.

Systemic factors, organisational processes, policies and practices to promote psychosocial safety, clarify and make transparent mental health policies

Lack of clear and transparent policies about internal formal support fuels police officers' concerns.

Dual Role of Others: Providing Support and Encouraging Support Utilisation

| Extracted Themes and Key Concepts | Emerging Third-Order concept | Final Third-Order concept |
|--|--|--|
| Reliance on family and peer support, quality and influence of relationships, primary importance of trusted and respected | Trusted relationships are key to helping police officers overcome barriers to support by | Dual Role of Others: Providing Support and Encouraging Support Utilisation |

| | |
|--|--|
| relationships, instrumental to accessing services, informal support/external support, effectiveness of social support, support outside of work, a close relationship with someone who cares, multifaceted social support, preference for informal coping | recognising signs and encouraging helping seeking. |
| Reliance on family and peer support, family/significant other support, protecting others, family support, selective sharing with others, spousal support | Using external support from family and friends helped to navigate some of the barriers to internal support. However, sharing was often filtered to protect others from distress and due to lack of shared understanding. |
| Reliance on family and peer support, talking with co-workers, being understood and normalisation, relationship with fellow officers, support from within the force, informal interactions with colleagues, humour and banter, dip in and out of chat, peer support as substitute strategy, teamwork, informal support system, shared experience, | Supportive peer interactions varied from talking about emotions to humour, creating an opportunity to be understood and experiences normalised. Stigma was still a barrier, as well as practical barriers. |

recognition of signs and encouragement to seek support, collegial support, normalising emotional responses, office humour

Supervisors are the Gatekeepers

| Extracted Themes and Key Concepts | Emerging Third-Order concept | Final Third-Order concept |
|---|--|----------------------------------|
| Quality and influence of relationships, importance of supportive supervisors, power and influence, lack of support from line management, support from within the force, supervisors as source of support and influence on attitudes, line manager encouragement to access support | Supervisors' attitudes towards mental health and support have significant influence on individuals and team. | Supervisors are the Gatekeepers |
| Quality and influence of relationships, accessing services through supervisors, supervisors' role in arranging formal support, systematise mental health responses, line manager encouragement to access support | Effective supervisors can recognise when support may be needed and direct to appropriate support. | |

Addressing the Unmet Need of Formal Support

| Extracted Themes and Key Concepts | Emerging Third-Order concept | Final Third-Order concept |
|---|---|---|
| Employer obligations: support, breach of obligations, support from within the force, dilemmas of talking, talking is risky, dip in and out of chat, formal opportunities to talk, don't bottle it up: 'talk, talk, talk', lack of organisational response, unrequired support, reluctance to seek formal support, action-orientated coping, variation in support seeking, importance of leadership, | Varied views on engaging with support, however there was recognition of the demands of the job and support is necessary. | Addressing the Unmet Need of Formal Support |
| Organisational processes, mandatory health checks, use of debriefing services, systematise mental health responses, leverage mandated counselling, | Mandatory support could navigate the stigma, but this would jeopardise the importance on control in choosing to access support. | |
| Ensure service providers are knowledgeable about the realities of police work, customising resources specific to police | Essential that formal support is offered with an awareness of police culture and experience. | |

Emphasise preventative mental health services, expand mental health resources to address non-work-related stressors
Systematically address logistical barriers, providing an accessible, uncomplicated electronic resource, time-consuming services

Expanding the support provided is necessary and would emphasise importance of wellbeing, reducing stigma.

In addition to stigma-based barriers, the accessibility of formal services often created more barriers.

Lack of awareness, awareness and participation, consumer orientation, core marketing strategy, information and education, knowledge of psychological impacts, organisational processes, need for increased messaging around mental health, increasing education and awareness

While demands of the job were acknowledged, there is a lack of awareness of how to recognise need for support and what support is available.

Appendix 1-G

Journal of Traumatic Stress Author Guidelines

Sections

1. Submission and Peer Review Process
2. Article Types
3. After Acceptance

1. Submission and Peer Review Process

Once the submission materials have been prepared in accordance with the Author Guidelines, manuscripts should be submitted online at <https://mc.manuscriptcentral.com/jots>.

For help with submissions, please contact JOTS@bu.edu.

This journal does not charge submission fees.

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Also, check out our resources for [Preparing Your Article](#) for general guidance about writing and preparing your manuscript.

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Journal of Traumatic Stress now offers [Free Format submission](#) for a simplified and streamlined submission process.

Before you submit, you will need:

- Your manuscript: this should be an editable file including text, figures, and tables, or separate files—whichever you prefer. All required sections should be contained in your manuscript, including abstract, introduction, methods, results, and conclusions. Figures and tables should have legends. Figures should be uploaded in the highest resolution possible. References may be submitted in any style or format, as long as it is consistent throughout the manuscript. Supporting information should be submitted in separate files. If the manuscript, figures or tables are difficult for you to read, they will also be difficult for the editors and reviewers, and the editorial office will send it back to you for revision.
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- The title page of the manuscript, including:
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Section Two: Research Paper

Frontline Healthcare Workers' Experience of the Covid-19 Pandemic and Societal Narrative: A Thematic Analysis.

Word count (excluding references, tables, and appendices): 7,995 words

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July 2022

Prepared in accordance with guidelines for authors for *Journal of Traumatic Stress*[†]

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Abstract

The Covid-19 pandemic was unprecedented for the UK healthcare workforce. The study aimed to explore the experiences of workers in intensive care units responding to the pandemic, within the context of the societal narrative. Semi-structured interviews were conducted with nine participants and analysed using Thematic Analysis. Four main themes were developed; *ICU environment, complexity of support, coping with the experience* and *individual psychological outcomes*, which developed a conceptual diagram. The results are discussed with regards to existing research, clinical implications and research recommendations. Overall, the pandemic was a psychologically demanding experience with different supporting and challenging influences.

Keywords: healthcare workers, Covid-19, pandemic, qualitative

Coronavirus disease (Covid-19), a novel virus first reported in December 2019, was declared a pandemic in March 2020 by the World Health Organisation (WHO). For many it is a mild to moderate respiratory illness, for others it is life-threatening (WHO, 2020a). As of April 2022, there have been approximately 500 million confirmed cases and six million deaths worldwide (WHO, 2022).

Healthcare workers (HCWs) have been on the frontline of responding to the pandemic. Hospital admissions peaked in the United Kingdom (UK) in January 2021 with almost 40,000 hospital patients having Covid-19, approximately 4,000 of whom required mechanical ventilation in intensive care units ([ICU], UK Health Security Agency, 2022). Existing pandemic research, including Middle Eastern Respiratory Syndrome (MERS), Severe Acute Respiratory Syndrome (SARS), and Covid-19, highlight the workforce impact. HCWs responding to pandemics show significantly higher symptoms of post-traumatic stress disorder (PTSD) compared to those not treating infected patients (Lee et al., 2018), furthermore 57% of HCWs experienced psychological distress (Tam et al., 2004). Factors contributing to these mental health outcomes include fear of infection, limited resources, and difficult decision making (Carmassi et al., 2020). Greenberg et al., (2020) highlighted the risk of moral injury amongst HCWs; psychological distress caused by action or inaction that goes against individual ethical principles, due to balancing duty to patients with personal safety and working with limited resources. Moral injury is associated with poorer mental health outcomes (Williamson, 2018). Consequently, the WHO (2020b) recognised the increased risk of psychological challenges for HCWs responding to Covid-19, particularly those in ICU, where there were high surges of patients and high exposure to the virus.

Existing research identifies HCWs, in particular ICU staff, responding to Covid-19 as 'at-risk' of psychological distress. A meta-analysis of HCWs' mental health following pandemics estimated prevalence of anxiety disorders at 16.1%, PTSD at 21.7%, depression at

13.4% and acute stress disorder at 7.4% (Hill et al., 2022). However, the literature is limited by focussing on quantitative methodology utilising symptom-based questionnaires, such as the Impact of Events Scale (Weiss, 2007). Although helpful in highlighting the mental health hazards, it risks pathologizing human responses to exceptional circumstances. Trauma research suggests individuals fall into three categories; the majority experience mild distress that recovers without formal intervention, a small group experience moderate distress benefiting from psychological support, a final, smaller group experience significant long-term distress requiring specialist intervention (Benedek et al., 2007). Further research proposes the potential for positive impact through post-traumatic growth, creating a greater appreciation for life, increased self-esteem and deeper understanding of work (Brooks et al., 2020). This suggests that research looking beyond symptoms is needed to understand HCWs' experience of pandemics.

A systematic review of qualitative research into HCWs' experience during pandemics synthesised 46 papers, spanning five continents and eight pandemics, five focused on Covid-19 (Billings et al., 2021). The authors determined eight themes: physical safety, workload, stigma, ethical dilemmas, personal and professional growth, support to and from others, knowledge and information and formal support. Of the five Covid-19 focused papers, four were from China, one from Lebanon, all were completed in the first half of 2020, capturing early stages. The studies found HCWs had different levels of needs, for example the need for safety and health, as well as differing levels of support, including from the wider community (Yin & Zeng, 2020). Co-occurring positive and negative emotions was also reported (Liu et al., 2020; Sun et al., 2020).

Only two studies included in Billings et al.'s (2021) review were conducted in the UK (Aghaizu et al., 2011; Ives et al., 2009), demonstrating the paucity of research exploring the UK workforce's experience. Since the review publication, several UK based studies have

been conducted. Montgomery et al. (2021) applied a sociological lens to the experiences of 40 HCWs from ICUs across the UK during the first wave, highlighting the role of teamwork when facing a collective crisis. Other research further demonstrates the role of teamwork and highlights the presence of both positive and difficult emotions (Baldwin & George, 2021; San Juan et al., 2021; Vindrola-Padros et al., 2020). The qualitative literature is supportive of the quantitative evidence base, indicating that HCWs face significant challenges, while adding complexity, stressing the need to expand beyond an individualistic view of the experience.

While responding to the Covid-19 pandemic, narratives regarding HCWs were prominent within the society in the UK, including ‘Clap for Carers’ (Manthorpe et al., 2021), narratives of HCWs being ‘heroes’ (Mohammed et al., 2021) and appreciation gestures (British Broadcasting Corporation, 2020). Narratives regarding individuals or groups of individuals can be defined as a depiction of connected events in any format, for example both verbal and non-verbal (Lee & Foo, 2007). Trauma research recognises the influential role of social context (Benedek et al., 2007). Both pre- and post-traumatic experiences of community support may shape individuals’ responses, including media representations (Carlson & Dalenberg, 2000). When exploring the experiences of HCWs from 2003 SARS outbreak in Toronto, Maunder (2004) concluded that media representation of workers impacted wellbeing through stigma and influencing morale. Furthermore, Belfroid et al. (2018) found ‘excessive attention’ a theme amongst HCWs responding to the 2014 Ebola outbreak, with participants describing being ‘watched’ but also support from others. Billings et al. (2021) found the media and public attention to have both positive and negative influences. Positive influences included support and advocacy for the workforce, while negative influences included increased stigma and families’ concerns about wellbeing. Existing research suggests that exploring HCWs’ perceptions of the societal narrative; the stories being told about HCWs and their work within the public domain, is important when understanding their

experience of the Covid-19 pandemic. It also provides an opportunity to further understand the social context surrounding such experiences.

Study Aims

The present study aimed to explore the experiences of ICU staff during the Covid-19 pandemic in the UK. In particular, the study aimed to understand how individuals navigated a potentially distressing environment and made sense of the experience within the context of societal narratives. Exploring frontline HCWs' experiences and how they navigated this is a first step in understanding how to support them.

Method

Design

A qualitative approach was employed using semi-structured interviews analysed by Reflexive Thematic Analysis (Braun & Clarke, 2019), allowing flexibility in the analysis approach (Braun & Clarke, 2006). A social constructionist stance was adopted as understanding experiences is considered part of a social process, acknowledging that finding a 'truth' was not the aim (Burr, 2003).

Participants

Participants were HCWs of any clinical profession working in the NHS on ICUs, who directly cared for patients with Covid-19. Recruitment of participants from a range of professional backgrounds was aimed for. Table 1 details the inclusion and exclusion criteria.

Insert Table 1

Nine participants took part; two doctors, one doctor redeployed as a nurse, one Advanced Critical Care Practitioner, two nurses, two physiotherapists and one occupational therapist. Seven participants identified as female and two as male. Participants' ages ranged from 25-55 years. Length of time since qualification ranged from 1-34 years (mean = 12.4

years), length of time in ICU role ranged from six weeks to 24 years. Table 2 details participant demographics.

Insert Table 2

Procedure

Ethical approval

Ethical approval was gained from the Lancaster University Faculty of Health and Medicine Research Ethics Committee (Appendix A).

Recruitment

A poster was advertised on the chief researcher's professional Twitter and shared by relevant accounts. Following this accounts specific to different professions were asked to share the advert, to recruit a range of HCW's. Interested individuals were invited to contact the chief researcher and provided with a research pack. See Ethics section for materials. An interview time, convenient to the participant, was arranged. All who contacted the researcher were interviewed.

The aim was to recruit 8-12 participants based on the breadth of aims, diversity of experience expected and pragmatic time limitations. As recommended by Braun and Clarke (2021) an 'in-situ' decision about sample size was made during early analysis by considering data 'quality'. 'Quality' was discussed in supervision and assessed through duration and depth of interview, whether aims were addressed and development of patterns.

Data collection

Data was collected between July and October 2021. At this time most lockdown restrictions had been removed (Institute for Government, 2022). From July until October, Covid-19 hospitalisations ranged from 5.40-7.79 per 100,000 people, compared to a peak in January 2021 of 36.68 per 100,000 people (Office for National Statistics, 2022).

Individual semi-structured interviews were completed with participants, eight via Microsoft Teams and one via telephone. A topic guide (Appendix B) informed the process. This was developed from existing qualitative research on HCWs' experiences of crisis events, with the aim of gaining insight into participants' experiences, perspectives, and sense-making (Kelly, 2010). Interviews ranged from 44-72 minutes in length, averaging 56 minutes.

Analysis

Reflexive Thematic Analysis was used enabling identification of patterns of meaning across data (Braun & Clarke, 2019). Braun and Clarke's (2006) six step process was used to guide the approach; *familiarisation with data, generating initial codes, search for themes, reviewing themes, defining and naming themes* and *producing the report*. Interviews were transcribed, read and re-read and short participant summaries written. After reviewing transcripts initial patterns were noted. Coding was conducted using NVivo 11. Codes were printed, cut out and arranged in provisional themes. Reviewing themes was an iterative process, moving between themes, codes and transcripts to ensure interpretation developed from the data. Supervision was used frequently across all stages of the process to support analysis, for example, provisional themes were sent to supervisors, who highlighted the descriptive nature of these initial themes. Through discussion and reviewing the data, a more interpretative analysis was developed. Following this a conceptual diagram was created to consider interactions. Themes were finalised by returning to codes and ensuring they produced a coherent narrative; key quotes were chosen. Appendix C provides an example of themes and codes.

An inductive approach was utilised, meaning no pre-existing theory was applied to analysis (Braun & Clarke, 2006). However, it is recognised that a purely inductive process is

not possible, and that the researcher's prior knowledge and assumptions need to be acknowledged (Braun & Clarke, 2019).

Reflexivity

A reflective journal was kept recognising the researcher's position. This included assumptions before beginning the study and reflections following each step (Appendix D). The researcher is a trainee clinical psychologist with no experience working in ICU. However, they have experience of living through the Covid-19 pandemic, including working within healthcare settings. Before beginning the study, the researcher thought working in ICU during the pandemic would have been stressful, causing fear. During analysis these assumptions were revisited in attempts to reduce bias. For example, feelings of surprise were noted following interviews about the infrequency of participants discussing fear. Considering the researcher's assumption that difficult emotions would be the overarching experience they reviewed the data and found that whilst difficult emotions were present, there was a mix of emotions for many participants.

Results

Four core themes were developed. The first, *ICU environment*, sets the context of participants' experiences, with two subsequent themes, *complexity of support* and *coping with the experience*, discussing elements which helped participants through the experience. Theme four, *individual psychological outcomes*, explores the overall impacts on the individuals. Finally, the results are presented in a conceptual diagram, drawing themes together, representing participants' journey.

Theme 1: ICU Environment

As with many aspects of participants' experiences, the ICU environment was discussed as two distinct phases: first wave and second/subsequent waves, which is key to understanding the psychological consequences for the workforce. Commonalities between

the waves were evident, including treating patients, unsuitable infrastructure and equipment, high workload, personal protective equipment (PPE), communication, and teamwork, however they were experienced differently at different points.

Subtheme 1.1: First wave: “We can do this”

The first wave was distinctive due to the unknown nature of treating Covid-19 and working in a pandemic. The ‘unknown’ of the situation created a mix of emotions. It was described as scary, anxiety provoking and frustrating. Participants experienced rapid changes, creating confusion and powerlessness with limited control. The wearing of PPE presented challenges, particularly with communicating, adding to an overwhelming environment.

I just remember sort of feeling a bit like, you know, you’ve been in the trenches, and someone was blowing the whistle and you were gonna have to go over the top and you weren’t prepared, and you weren’t trained, and you weren’t equipped, it was just really (...) But it was that realisation that nobody knew and that was quite scary.

(Participant 2)

Participants also described the work being adrenaline fuelled and, for some, exciting. This was often linked to high levels of camaraderie and teamwork, and being part of a global event.

The first wave felt very different, like, it felt almost like exciting, and I hate to say that but almost enjoyable because it was such a great sense of teamwork, and it was all just so new and kind of like you get a bit of excitement with that. (Participant 9)

Overall, the ICU environment in the first wave was psychologically and physically demanding, which participants navigated by a shared mindset of surviving together.

Everyone was fairly upbeat at that point, I dunno, we’d got the kind of blitz mentality, you know, we’ll dig in, we’ll get on with it, we can do this, we know it’s going to be hard (...) So we did very much dig in as a team. (Participant 8)

Subtheme 1.2: Second/subsequent waves: “We’re all on our knees”

Several of the first wave challenges had been resolved, to an extent, by the second wave. Protocols had been established and there was more information, creating more certainty. “The good thing was that we sort of knew what we were doing a bit more and like the PPE wasn’t so much of an issue” (Participant 9). However, concerns now focused on an uncertain future and exhaustion. “It’s this idea that here we go again, and we were so close, you know, we all worked so hard to kind of keep it low (...) we’re all on our knees” (Participant 2). Factors that were vital to surviving the first wave, such as adrenaline, camaraderie and support had reduced. “There wasn’t that same sort of camaraderie about it, and everyone was just more like exhausted” (Participant 9). Overall, participants described having a more challenging experience in subsequent waves. “The second wave was much more of a negative experience, although I didn’t have an experience where I couldn’t go to the toilet or take my mask off for seven hours, morale was, was much lower” (Participant 5).

Theme 2: Complexity of support

Support from others influenced participants’ experience. Social support was received from peers, family and friends. Formal psychological support was used in and outside of work. Additionally, participants reflected on the impacts of systemic support at their workplace and the societal response. Although all accessed support from others, engaging in interactions was often complex due to the uniqueness of participants’ experience, barriers to accessing support and the fine line between someone being supportive or additional stress.

Subtheme 2.1: Peer support: Importance of shared experience

Peer support encompasses speaking with colleagues informally. When reflecting on available formal support participants preferred peer support and consider this just as effective. “We had psychologists at our hospital (...) but actually, I think conversations when you were sat in the break room with the other nurses and the doctors were just as effective”

(Participant 1). Participants reflected on the uniqueness of their experience, emphasising that only those who lived through it were able to understand. This importance of shared experience may explain why peer support was considered more effective than formal support.

We were assigned to a clinical supervisor who was one of the intensive care consultants who would be available to speak to if needed, but I actually found I got that support better from the nursing staff and the nursing assistants as well because we were in it together. (Participant 3)

Talking to peers about emotionally difficult situations created feelings of not being alone and a process of ‘making sense’ of the situation.

I’ve got maybe two or three quite close colleagues and friends that I can talk to about stuff and try and make sense of it all and like I’ve said I think that just, it it definitely helps to share it. (Participant 2)

In contrast, one participant described a lack of peer support, creating isolation making coping difficult. “The fact that I’m not really connected to a lot of people in the hospital makes it particularly difficult for me I imagine because I can’t talk through it properly with any peers” (Participant 6). When the peer support was not available, it was sought elsewhere.

I did a lot of talking to people when I wasn’t in the hospital, so family or people who worked in other trusts but again OT and a psychologist, so kind of going through similar things and that was helpful. (Participant 6)

The process of seeking out others demonstrates how the importance of peer support. Accessing support from those with shared experience meant participants could be understood, enabling processing of challenges and emotions.

Subtheme 2.2: Blocks to support

Despite recognising the benefits of talking, blocks to seeking support were identified. Firstly, the ICU environment created logistical barriers and high workload limited the accessibility of support.

Especially after like a distressing experience it's important you have a culture of debriefing and talking to staff, making sure that they can process their emotions, unfortunately those sorts of things don't happen a lot, especially in covid times because unfortunately it becomes a regular occurrence people dying all the time and it gets harder to do a debrief every single time that happens. (Participant 4)

Participants found infection control measures, such as PPE, physically impeding communication. "It was very dehumanising because you didn't know who anyone was really, it was really difficult to differentiate between people, and from a communication perspective it's a lot harder to communicate between colleagues" (Participant 9).

Another block to accessing support was the disparity between participants' experience and that of friends and family who were not HCWs.

I was going to work and I was dealing with sick people and I was dealing with people who were really affected by covid and then I had friends who'd been furloughed who've been playing golf and doing things (...) they're stood complaining they've got nothing to do while I'm telling someone's family that their relative's going to die and it's very different. (Participant 1)

Speaking with those without shared experience could lead to frustration and anger, adding to emotional exhaustion. This increased over time as opinions divided over vaccines and lockdown restrictions. Even when others showed an interest, participants were reluctant to talk as there was no shared experience.

When people go 'ooo so is it really bad at the hospital?' and it's like I don't want to talk about it but I, because if I can tell you what I think but you don't really care what

I think and I don't really want to hear about your stuff because it will probably make me cross, so it's easiest, so I do feel kind of separate. (Participant 2)

The want to 'not talk' about the experience was compounded by participants' exhaustion and the 'all-consuming' experience. Participants often avoided or withdrew from others to manage.

Always facing the conversations of "oh how is it? How is it going?" and being like I just don't want to talk about it [laugh], like that is all, that is my life just covid, covid on the news, covid when I speak to people. So I did get to the point where I was quite withdrawn. (Participant 5)

Participants also highlighted talking with others could involve providing support to them which, during the pandemic, they did not have capacity for.

There was a stage where I had 10 or 11 voice notes in my WhatsApp inbox that I just didn't have energy to listen to and it's all friends and family checking in, seeing how things are but I just did not have the capacity to do another phone call and I felt very bad for doing that because I'm normally, number one I want to stay in contact with people and I want to be there for them and I want to support them but I just, I just couldn't. (Participant 7)

Engaging with others without shared experience could create difficult emotions due to a perceived lack of understanding, which participants did not have the capacity to manage. Participants avoided interactions, risking reducing support systems. Withdrawing from others could create difficult feelings due to not providing support to those they usually would.

Subtheme 2.3: Systemic support: From appreciation to being forgotten

Participants reflected on wider support received. Within the workplace practical support, such as cancellation of non-essential services, provided. However, support did not continue following the first wave, increasing the workload.

There was a lot of good will from other departments that were helping us and staff that were coming from elsewhere as well, so that was really, in that respect it was really positive. And suddenly we were being invested in financially so pieces of equipment that we had wanted for years and been told no, were just being given to us in abundance. It's gone back the other way now. (Participant 5)

Participants discussed the impact of public support received initially. Participants commented on how gestures, such as supplying food, boosted morale and helped with simple things that had become difficult. "Having little bits delivered from local businesses, some little treats and what not, really kept morale up and helped people" (Participant 3).

Participants reflected on symbolic displays of appreciation such as the weekly 'Clap for Carers'. Although there was variation in how comfortable participants felt this, all participants discussed how the support meant their 'sacrifice' was being recognised, often creating an emotional response. This boosted morale and participants felt the public understood, to an extent, what they were experiencing.

The first time they clapped I just stood on the doorstep and just cried, I think because it acknowledged that it was something so big and it felt like the people that didn't have to go out actually understood that other people were making a sacrifice. (Participant 6)

As the pandemic continued participants described a change in public response from appreciation to being forgotten. "In the second wave the attitude changed so completely that it was almost like we were forgotten about" (Participant 5). This was compounded by increased lockdown rule breaking, anti-vaccination narratives and public complaints. "It felt like no one cares because no one's paying attention to the rules anymore" (Participant 5). Receiving support to being forgotten created a sense of abandonment. "That did feel very very difficult, you did feel a little abandoned as a workforce" (Participant 8). The public

response became a stressor rather than supportive. Participants reflected on how HCWs deal with the consequences of public actions, often creating anxiety. “It’s a bit worrying particularly seeing what some of the towns look like” (Participant 3). Participants perceived the public to disregard the sacrifice they were making.

I find that a bit disrespectful because again there I am giving up all my holidays, extra time, fighting on the frontline, working in PPE in extortionate degrees of weathers, not being able to have a drink for 4 hours, not being able to go to the toilet for 4 hours because you have to stay in the unit with your PPE and there they are just roaming around not giving any worries about it, not really caring about it. (Participant 7)

Participants perceived the government as disregarding HCWs. “I feel quite frustrated about the politics in the country and their response to healthcare workers then and now and the sort of disregard for our experiences and the disregard for our wellbeing” (Participant 5). The shift from systemic and societal support to feeling abandoned added to the perceived disparity between participants and non-HCWs.

Theme 3: Coping with the experience

Coping refers to how participants navigated challenges, in addition to support. Participants recognised that coping required adjusting over time and an individualistic process. “It was just exhausting being in a mask all the time and it was really hot and uncomfortable having the PPE and then we kind of just got used to it” (Participant 2). Participants discussed several coping strategies, such as finding a routine, however one commonality amongst participants was ‘escapism’, engaging in non-covid related activities due to the all-consuming nature of the pandemic. “I painted a lot of walls I remember, suddenly the house needed painting and actually I found it quite therapeutic because it’s a mindless task” (Participant 8). Participants sought activities that required minimal cognitive demand, reflecting mental exhaustion. “I can’t watch anything too exciting on the telly, I just

watch fluff all the time (...) I don't have the mental capacity to kind of deal with anything too exciting or dramatic" (Participant 2).

Linked with 'escapism', participants coped with mental health impacts through taking breaks from the environment. This was discussed in terms of short breaks such as physically getting out of the ICU. While some participants described taking longer breaks as a direct consequence of the work. "I had a spell where I was off work for nine weeks due to anxiety, stress, depression, it all got a bit too much, so I took some time out" (Participant 8).

Coping through 'escapism' reflects the all-consuming nature of the work, emphasising the unsustainable environment.

Subtheme 3.1: Coping with opposing views

Participants navigated the frustration by again using avoidance to limit exposure to these messages. "I get very frustrated by anti-vax people and anti-mask people, which is why I don't interact on twitter because I think if I start something it'll just become too much" (Participant 1). Participants tried to rationalise people's actions, but with the perceived loss of societal support it became a difficult balance. "I appreciate that we probably do need to start living with covid, but I think people are forgetting that there are staff working in hospitals that are having to deal with the consequences of these actions" (Participant 3). Participants also reflected on the government role. "I'm not saying that the general public are necessarily doing anything wrong because the government are facilitating this now" (Participant 3). Trying to make sense of their emotional reactions was often difficult due to exhaustion. Rationally participants understood people's actions, but this did not mitigate the emotional impact.

Feeling so tired and so, so worn down by it all that my first feeling was of anger and of resentment because I was just like oh god that's just more stress, you are putting more on us and you're so selfish. So, I know that that sort of visceral reaction isn't

necessarily right, because everyone's got you know their own burdens and deal with it differently and some people need that social interaction for their own mental health and I completely understand that but that, it still had a very negative impact on me at the time. (Participant 5)

Participants described coping with these emotions towards the public while doing their job. When in the work environment participants suspended their emotional reactions and moral judgements.

I can get quite a lot of anger and frustration about it but I don't feel like it sort of necessarily impacted my sort of work environment, I don't, like treating an unvaccinated person, I don't resent them, because they are so sick and you don't, you just kind of just forget about that and you just park that and you look at the fact that you've got a person in front of you and you've got to just help that person and yeah like you, at that moment you don't really think about it. (Participant 9)

Participants demonstrated commitment to caring for others without judgement, enabling them to focus on treating the patient while coping with feelings of anger and frustration.

Theme 4: Individual psychological outcomes

Subtheme 4.1: Mental and physical impacts

Participants discussed several mental and physical health impacts. All participants commented on the physical exhaustion experienced, a barrier to engaging with activities. "I didn't have the energy when it was at its worst, so it was pretty much just trying to rest and then go back" (Participant 5). Disruption to sleep was mentioned by five participants. "Every single night I remember going home I couldn't sleep; I was thinking about the patients who passed away" (Participant 4). Participants linked sleep disruption either directly to work or generally to the level of busyness preventing the ability to 'switch off'.

All participants described mental health impacts. Some described feeling depressed. “I’m feeling a bit depressed about this and actually I’m feeling a bit negative, I feel nihilistic, the whole situation I felt oh nothing matters, nothing matters” (Participant 4). Others described trauma like response, “I went into a hospital just for some tests and I got like heart racing and like anxiety feelings and so I’ve obviously got a bit of a trauma reaction to what happened” (Participant 6). The most widely described impact was anxiety, expressed by all participants. In early stages, anxiety focused on fear of infection and transmission. At the time they were interviewed, anxiety was focused on the unknown future. “The thought of cases going back up is you know and just not knowing what will happen is the worst” (Participant 3). When the situation became more manageable on-going anxiety remained and participants struggled to trust the stability. “I think we’ve been having numbers of maybe five at once so that feels a lot more manageable. I think there is this on-going anxiety of the unknown, will it blow up again” (Participant 9).

Although long term impacts cannot be assessed due to the timing of the study, participants expected long term impacts would occur. “It’s had a negative effect on my mental health and my physical health and that is still with me and I think will be for quite a long time” (Participant 5).

Subtheme 4.2: Ethically compromised

Participants shared experiences where they were not able to complete the job in the way they wanted. Environmental factors, such as unit capacity, unsuitable infrastructure, staff shortages created barriers to practice. Participants felt ethically compromised as they could not give the care they were trained to, they experienced a loss of enjoyment and felt helpless at times.

As a therapist in terms of the environment it restricted my, my normal job and it’s very important that patients get out of bed so that they can improve and it, we

couldn't do it all the time because they had two beds in each cubicle so there was no space to be able to sit people out quite often and that was really hard. That was one big thing that was hard to not be able to provide the rehab that I knew people needed.

(Participant 6)

This experience was shared across disciplines, demonstrating the widespread barriers to providing ideal care.

I remember one poor nurse one day and I, we often laugh about this me and her, but she had, you know, she was one nurse and she had 4 patients to look after, all of whom were intubated on ventilators, I think one was on dialysis as well, she had a couple of helpers who were helping out but the stress in her face was something I could see and I made a point of saying to her that day how well she'd done. Just simply because as those ICU nurses they had to compromise the care they were able to deliver, as we all did and that just became another stress really. (Participant 8)

For participants with managerial responsibilities, feeling ethically compromised extended to the care provided to junior staff.

One thing I pride myself on and my education team on is the amount of support that we give to new members of staff to critical care and to the team as a whole and we weren't able to do that, and I found that really upsetting. (Participant 5)

Subtheme 4.3: Personal growth & Positive experiences

Despite challenges, participants described a wide range of positive impacts. This included professional development through skill development and new responsibilities, which for some shaped career decisions. Participants experienced pride in their job as it offered them a purpose. "I found it really rewarding, for not just being able to help out but for my career as well. It's really, well it's been a really positive experience for me" (Participant 3).

Participants learnt about their own mental wellbeing. Being pushed to the extreme by the environment, individuals became increasingly aware of their own mental strengths and boundaries, as well as learning how to maintain their wellbeing. These are skills which may benefit individuals as they continue to work in demanding environments.

On a personal level I think it's just kind of being way more aware of my emotional boundaries as well and also I think there was a point where I had a bit of a breakdown, just to the point where I just can't do this anymore, and I think just to kind of talk things early, kind of let things out earlier and be, although I want to be strong but sometimes you don't have to be strong and just let it go and sit with the feelings and I definitely think I've become more emotionally intelligent throughout the pandemic, 100%. To know to reach out when I need to. (Participant 7)

Subtheme 4.4: Re-evaluating priorities

Re-evaluating priorities refers to participants considering what is important and contemplating life changes. Many aspects of the experience link to the re-evaluation process. Increased risks associated with the role, both physical and psychological, made participants consider whether the job was worth it. An increased awareness of how their job affects their life led them to consider whether this is what they wanted.

It's almost like work was really really important and I've kind of been a bit let down by it so I'm kind of like yeah that isn't what I thought it was so I want to do something else that makes me happy and that can be something I do but it can't be my whole life. (Participant 6)

For some the increased risk and seeing so many people die led them to face their own mortality and consider what is important, prioritising life outside of work.

I used to think I'm young, I should be fine, I should be able to do what I want, even if I get covid what is the chance I would die, it was very slim, I'm fit and well, but

dealing with covid has just sort of changed my perspective completely (...) I kind of want a more balanced work life, having a good work life balance become more important to me. (Participant 4)

Participants also described personal life changes which they linked with working during the pandemic. “I recently separated with my partner, and I think part of that was probably covid related because you reflect on what’s really working and what’s important in your life and what’s not” (Participant 5).

Although re-evaluating frequently reflected difficult decisions for participants, it was often viewed as a positive process of focusing on what is important. Despite being positive on an individual basis it presents a potential challenge to the workforce as staff contemplate whether to continue in the job.

Conceptual diagram

Throughout participants’ accounts a narrative was evident of the journey that HCWs experienced during the pandemic, displayed through the diagram (Figure 1). Contributing factors are shown by circles, stressors are displayed in red and supportive influences in green. Some factors occur on both sides of the divide representing the complexity participants faced and the fine line between something being supportive or a stressor. Sizes of the circles indicate the salience of a particular factor during different stages of the pandemic, with the central phrases representing the overall mindset of the participants at these time points. In the first wave, although a psychologically demanding experience, the adrenaline, teamwork, and support created a survival mindset that was based on getting through the experience together. The shift of support during the second wave and the accumulative impact of previous waves, created exhaustion and an imbalance between stressors and supportive factors.

Insert Figure 1

Discussion

The study explored the experiences of ICU staff on the frontline of the Covid-19 pandemic in the UK, with the aim of understanding how individuals navigated a potentially psychologically distressing environment and made sense of the experience within the context of societal narratives. Nine participants shared their experiences, analysis of which produced four themes forming a conceptual diagram. The results will be discussed alongside existing research, clinical implications, and research recommendations.

The overall experience was understood as two phases with distinct mindsets; first wave experience of ‘we can do this together’ and second wave experience of exhaustion. Math et al (2015) also proposed a phased psychological response to disasters which followed four stages: heroic, honeymoon, disillusionment, and restoration. Elements of the heroic phase may be seen in the first wave mindset of teamwork, camaraderie, and societal support. Math et al. recommended a phased approach to mental health support. Support in early stages should be based on preventative methods, focusing on normalisation and stabilisation, whereas later support would require professionals to identify those at heightened risk of mental health difficulties. However, Math et al.’s model was based on experiences of tsunamis, a very distinctive disaster compared to the experience of a pandemic, which is prolonged in nature. The British Psychological Society ([BPS], 2020) also proposed a phased model in recommendations about psychological needs of HCWs during Covid-19, distinguishing two parts of an ‘active phase’, the first characterised by camaraderie and the second by heightened psychological risk, exhaustion, and cumulative stress. Though this closely maps on to the phases of the conceptual diagram in the present study, it is unclear what evidence base was used by the BPS to establish the model. A phased response to

disaster experiences would indicate a need for tailored mental health support for different stages, demonstrated in this study, however further research is required to replicate and explore this finding.

Participants described a wide range of psychological impacts, attributed to the direct experience of responding to the pandemic. As predicted by Greenberg et al. (2020), participants described being ethically compromised, possibly leading to moral injury. Although it is beyond the scope of this study to say participants did experience moral injury, it is clear they experienced an environment in which moral injury may occur. In a literature review of moral injury, Čartolovni et al. (2021) highlight a lack of research in HCWs. The Covid-19 pandemic created an opportunity to further research moral injury. Emerging studies demonstrated a link between moral injury and unsupportive work environments in HCWs (Hines et al., 2021) and an association between secondary traumatic stress and moral injury (Litam & Balkin, 2021). Further research will develop theoretical understandings of moral injury amongst HCWs and how best to support the workforce.

The current study found positive experiences, including participants' increased understanding of themselves and their mental wellbeing, as well as re-evaluating priorities, factors which may constitute post-traumatic growth (PTG) (Tedeschi & Calhoun, 2004). In a study of ICU nurses in China and Taiwan, Chen et al., (2021) found higher levels of PTG, measured by the Posttraumatic Growth Inventory-Short Form (Tedeschi & Calhoun, 1996), in those treating patients with Covid-19, while demonstrating co-occurring PTSD and PTG. In their qualitative study of nurses responding to Covid-19 in China, Sun et al. (2020) found a theme of 'growth under pressure'. Future research is warranted to explore the experience of PTG and pandemics, particularly within the UK workforce, to understand the contributing factors. Additionally, clinicians providing psychological support to the workforce need to have an awareness of the possibility of both negative and positive impacts.

Support appeared to be an important factor in how participants navigated and made sense of their experience, particularly peer support. A further qualitative study of UK HCWs also found that most participants reported benefiting from accessing peer support (Baldwin & George, 2021). Additionally, a qualitative study of health and social care workers in the UK by Billings et al. (2021) found peers to be an important source of support due to shared experience, however it also showed that accessing this support was not simple due to building tensions and a sense of burden. Multiple meta-analyses demonstrate the association between social support and mental health following a traumatic experience (Prati & Pietrantonio, 2010; Simon et al., 2019), with evidence of both a social causation model - social support mediating against PTSD, and a social selection model - experience of PTSD reduces social support (Wang et al., 2021). Multiple theories attempt to explain a social causation model, some of which are evident in the participants' responses. Horowitz' (1993) trauma response theory proposes a staged process of adjustment following a traumatic experience, involving 'working through' to assimilate the experience. Lepore's (2001) social-cognitive processing model suggests social support enables emotional adjustment. Participants showed a similar process of 'making sense' of their experience through talking with peers about difficult experiences.

Additionally, theories of social selection suggest that experiencing psychological distress may disrupt people's social systems, which King et al. (2006) found evidence of in a longitudinal study of veterans. Participants in the current study described withdrawing from social interactions due to exhaustion, as well as concerns of negative repercussions from sharing with people who did not understand the experience. Whilst it cannot be assumed participants in this study experienced PTSD, they described a range of mental health impacts and existing research highlights HCWs as at increased risk of psychological distress (Lee et al., 2018; Tam et al., 2004), and social support clearly has an important role in the

experience. Billings et al.'s (2021) meta-synthesis of qualitative research on HCWs' experience of pandemics concluded that the relationship with social support was complex, potentially being supportive and a stressor, which is replicated in the current study.

The study adds to the understanding of the role of societal narratives in shaping HCW's experience of work. A supportive societal narrative in the early stages boosted morale, which is replicated in research of previous pandemics (Belfroid et al., 2018; Billings et al., 2020; Maunder, 2004), as well as further studies of Covid-19. For example, participants in McGlinchey et al.'s (2021) study described how public perceptions of HCWs created community spirit and made them feel appreciated. As the societal narrative changed over time, participants perceived their role as no longer recognised and appreciated. This finding is replicated in a similar study of UK health and social care workers' experience of the Covid-19 pandemic. Billings et al. (2021) found workers initially appreciated the support from the public, which made them feel valued, however this was 'short-lived', leaving individuals feeling forgotten, de-valued and demoralised. Billings et al.'s study also adds views of the 'hero' narrative which were not evident within the current study, suggesting HCWs found it unhelpful and distracting from important conversations such as pay. When reviewing research of HCWs' psychological responses to disease outbreaks, Chew et al. (2020) recommended that continued recognition of HCWs' work could support psychological interventions. Recognition has also been shown to be important in HCWs' experience of work beyond pandemics. A small-scale study found nurses who experience higher levels of recognition of their work experienced lower levels of job stress (Abualrub & Al-Zaru, 2008). Another study found that following an intervention providing positive recognition, nurses reported higher feelings of being in control and pride (Angelopoulou & Panagopoulou, 2020). Within these studies, the source of recognition comes from within the workplace, whereas the current study and other pandemic-based research, suggests that recognition from

societal systems may also be important. Further research is needed to understand the impact of recognition on HCWs, particularly recognition from wider society.

Clinical implications

The study adds to our understanding of the impact of responding to a pandemic and how societal narratives influence the experience. The themes developed illuminate the importance of HCWs' wellbeing within the context of Covid-19. However, concerns for the wellbeing of healthcare staff pre-date the pandemic with the 'We are the NHS: People Plan 2020-21' (NHS England, 2020) emphasising psychological support for staff. From this study several recommendations can be taken with regards to supporting the psychological wellbeing of staff. Firstly, the phased response demonstrates the need for tailored support; early stages require clear information and normalisation of emotional experiences. In later stages, providing breaks from the most intensive work will be necessary and is also recommended by the Intensive Care Society's advice for maintaining wellbeing (Highfield, n.d.). Opportunities for peers to interact away from the stressful environment is also important given the role of shared understanding in support sought. However, this needs to occur alongside robust formal support systems to ensure impacts are acknowledged and addressed by the employer.

While these recommendations are valid it is recognised there are significant barriers to implementing them successfully. Firstly, stigma is often cited as a barrier for HCWs in accessing support available (Knaak et al., 2017). Secondly, there are logistical barriers to accessing support for example participants reported high workloads preventing them using resources. Thirdly, there is a need for flexible support which suits the needs of the individual or team. Clinical psychologists within healthcare teams are well placed to help address these challenges. While workplace culture and stigma are difficult to address, Knaak et al. (2017) recommends modelling from individuals in leadership and continued education and

awareness training to encourage HCWs to discuss mental health. Clinical psychologists often occupy leadership roles within teams and may use this to advocate for consistent and stable psychological support, given the negative impact of removal of support seen in this study, which is also highlighted in Billings et al.'s (2021) study of HCW's views of support. Finally, clinical psychologists should use their skills of research and evaluation to ensure the support provided is evidence-based and meeting the individual needs of the teams and individuals they support.

Limitations

The main limitation of the research is the sample demographics, which at times were highly varied, such as length of time since qualification and restricted in others, including over-representation of people of white ethnicity and who identify as female. These are factors which may have affected the study outcomes. While a strength was the inclusion of different professionals, due to the small sample size, this resulted in a very small sample from different professions. Differences in the experience that may be associated with different professions, for example allied health professions compared to nurses, may have not been apparent. A purposive approach to sampling could have been used to select participants according to specific demographics, allowing exploration of these more homogenous experiences, for example specific professions.

Conclusion

Participants' accounts demonstrate the importance of different stages of the pandemic in experiences and responses. Several factors involved in navigating the experience had the potential to be supportive and/or stressors. While participants separated the impact of societal narratives from conducting their jobs, when recognition was lost this created frustration in an already demanding time. Overall, participants described a range of psychological impacts both positive and difficulties.

References

- Abualrub, R. F., & Al-Zaru, I. M. (2008). Job stress, recognition, job performance and intention to stay at work among Jordanian hospital nurses. *Journal of nursing management*, 16(3), 227-236. doi: 10.1111/j.1365-2834.2007.00810.x
- Aghaizu, A., Elam, G., Ncube, F., Thomson, G., Szilágyi, E., Eckmanns, T., ... & Catchpole, M. (2011). Preventing the next 'SARS'-European healthcare workers' attitudes towards monitoring their health for the surveillance of newly emerging infections: qualitative study. *BMC Public Health*, 11(1), 1-11. doi: 10.1186/1471-2458-11-541
- Angelopoulou, & Panagopoulou, E. (2020). Is wellbeing at work related to professional recognition: a pilot intervention. *Psychology, Health & Medicine*, 25(8), 950–957. <https://doi.org/10.1080/13548506.2019.1707239>
- Baldwin, S., & George, J. (2021). Qualitative study of UK health professionals' experiences of working at the point of care during the COVID-19 pandemic. *BMJ open*, 11(9), doi: 10.1136/bmjopen-2021-054377.
- Belfroid, E., van Steenberg, J., Timen, A., Ellerbroek, P., Huis, A., & Hulscher, M. (2018). Preparedness and the importance of meeting the needs of healthcare workers: a qualitative study on Ebola. *Journal of Hospital Infection*, 98(2), 212-218. doi: 10.1016/j.jhin.2017.07.001
- Benedek, Fullerton & Ursano. (2007). First responders: mental health consequences of natural and human-made disasters for public health and public safety workers. *Annual Review of Public Health*, 28. <https://doi.org/10.1146/annurev.publhealth.28.021406.144037>
- Billings, J., Abou Seif, N., Hegarty, S., Ondruskova, T., Soulios, E., Bloomfield, M., & Greene, T. (2021). What support do frontline workers want? A qualitative study of health and social care workers' experiences and views of psychosocial support during

the COVID-19 pandemic. *PLoS One*, 16(9).

<https://doi.org/10.1371/journal.pone.0256454>

Billings, J., Ching B. C. F., Gkofa, V., Greene, T., & Bloomfield, M. (2021). Experiences of frontline healthcare workers and their views about support during COVID-19 and previous pandemics: A systematic review and qualitative meta-synthesis. *BMC health services research*, 21(1), 1-17. <https://doi.org/10.1186/s12913-021-06917-z>

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, 11(4), 589-597.

<https://doi.org/10.1080/2159676X.2019.1628806>

Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 13(2). <https://doi.org/10.1080/2159676X.2019.1704846>

British Broadcasting Corporation. (2020). *Coronavirus: Rainbow portraits thank the NHS*.

BBC. <https://www.bbc.co.uk/news/in-pictures-52542923>

British Psychological Society. (2020). *The psychological needs of healthcare staff as a result of the Coronavirus pandemic*. BPS.

<https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf>

Brooks, S., Amlot, R., Rubin, G. J., & Greenberg, N. (2020). Psychological resilience and post-traumatic growth in disaster-exposed organisations: overview of the literature. *BMJ Military Health*, 166(1), 52-56. <https://doi.org/10.1136/jramc-2017-000876>

Burr, V. (2003). *Social constructionism* (2nd ed.). Routledge.

- Carlson, E. B., & Dalenberg, C. J. (2000). A conceptual framework for the impact of traumatic experiences. *Trauma, violence, & abuse, 1*(1), 4-28.
<https://doi.org/10.1177/1524838000001001002>
- Carmassi, C., Foghi, C., Dell'Oste, V., Cordone, A., Bertelloni, C. A., Bui, E., & Dell'Osso, L. (2020). PTSD symptoms in healthcare workers facing the three coronavirus outbreaks: What can we expect after the COVID-19 pandemic. *Psychiatry research, 292*, 113312. <https://doi.org/10.1016/j.psychres.2020.113312>
- Čartolovni, A., Stolt, M., Scott, P. A., & Suhonen, R. (2021). Moral injury in healthcare professionals: a scoping review and discussion. *Nursing ethics, 28*(5), 590-602. doi: 10.1177/0969733020966776
- Chen, R., Sun, C., Chen, J. J., Jen, H. J., Kang, X. L., Kao, C. C., & Chou, K. R. (2021). A large-scale survey on trauma, burnout, and posttraumatic growth among nurses during the COVID-19 pandemic. *International journal of mental health nursing, 30*(1), 102-116. doi: 10.1111/inm.12796
- Chew, Q. H., Wei, K. C., Vasoo, S., & Sim, K. (2020). Psychological and coping responses of health care workers toward emerging infectious disease outbreaks: a rapid review and practical implications for the COVID-19 pandemic. *The Journal of clinical psychiatry, 81*(6), 16119. doi: 10.4088/JCP.20r13450
- Gershon, R., Dernehl, L. A., Nwankwo, E., Zhi, Q., & Qureshi, K. (2016). Experiences and psychosocial impact of West Africa Ebola deployment on US health care volunteers. *PLoS currents, 8*. doi: 10.1371/currents.outbreaks.c7afaae124e35d2da39ee7e07291b6b5
- Greenberg, N., Docherty, M., Gnanapragasam, S., & Wessely, S. (2020). Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *BMJ, 368*.
<https://doi.org/10.1136/bmj.m1211>

Highfield, J. (n.d.). *Advice for sustaining staff wellbeing in critical care during and beyond Covid-19*. NHS.

<https://www.practitionerhealth.nhs.uk/media/content/files/Sustaining%20wellbeing%20COVID19.pdf>

Hill, J. E., Harris, C., Danielle L, C., Boland, P., Doherty, A. J., Benedetto, V., Gita, B. E., & Clegg, A. J. (2022). The prevalence of mental health conditions in healthcare workers during and after a pandemic: Systematic review and meta-analysis. *Journal of Advanced Nursing*, 78(6), 1551-1573. doi: 10.1111/jan.15175

Hines, S. E., Chin, K. H., Glick, D. R., & Wickwire, E. M. (2021). Trends in moral injury, distress, and resilience factors among healthcare workers at the beginning of the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(2), 488. <https://doi.org/10.3390/ijerph18020488>

Horowitz, M.J. (1993). Stress-response syndromes. In J.P. Wilson & B. Raphael (Eds.), *International handbook of traumatic stress syndromes: The plenum series on stress and coping*. Springer, Boston, MA. https://doi.org/10.1007/978-1-4615-2820-3_4

Institute for Government. (2022). *Timeline of UK government coronavirus lockdowns and restrictions*. Institute for Government.

<https://www.instituteforgovernment.org.uk/charts/uk-government-coronavirus-lockdowns>

Ives, J., Greenfield, S., Parry, J. M., Draper, H., Gratus, C., Petts, J. I., Sorell, T., & Wilson, S. (2009). Healthcare workers' attitudes to working during pandemic influenza: a qualitative study. *BMC public health*, 9(1), 1-13. <https://doi.org/10.1186/1471-2458-9-56>

- Knaak, S., Mantler, E., & Szeto, A. (2017). Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions. *Healthcare management forum*, 30(2), 111-116. DOI: 10.1177/0840470416679413
- Kelly, S. (2010). Qualitative interviewing techniques and styles. In *The SAGE handbook of qualitative methods in health research* (pp. 307-326). SAGE Publications Ltd.
<https://dx.doi.org/10.4135/9781446268247>
- King, D. W., Taft, C., King, L. A., Hammond, C., & Stone, E. R. (2006). Directionality of the association between social support and Posttraumatic Stress Disorder: a longitudinal investigation. *Journal of Applied Social Psychology*, 36(12), 2980-2992.
<https://doi.org/10.1111/j.0021-9029.2006.00138.x>
- Lee, C. K., & Foo, S. (2007). Narratives in healthcare. In: R. K., Bali & A. N. Dwivedi (Eds.), *Healthcare knowledge management: Health informatics* (pp. 130-141). Springer, New York, NY. https://doi.org/10.1007/978-0-387-49009-0_10
- Lee, S. M., Kang, W. S., Cho, A. R., Kim, T., & Park, J. K. (2018). Psychological impact of the 2015 MERS outbreak on hospital workers and quarantined hemodialysis patients. *Comprehensive psychiatry*, 87, 123-127. doi: 10.1016/j.comppsy.2018.10.003
- Lepore, S. J. (2001). A social-cognitive processing model of emotional adjustment to cancer. In A. Baum & B. L. Andersen (Eds.), *Psychosocial interventions for cancer* (pp. 99-116). American Psychological Association.
<https://psycnet.apa.org/doi/10.1037/10402-006>
- Litam, S. D. A., & Balkin, R. S. (2021). Moral injury in health-care workers during COVID-19 pandemic. *Traumatology*, 27(1), 14. <https://doi.org/10.1037/trm0000290>

- Liu, Y. E., Zhai, Z. C., Han, Y. H., Liu, Y. L., Liu, F. P., & Hu, D. Y. (2020). Experiences of front-line nurses combating coronavirus disease-2019 in China: A qualitative analysis. *Public Health Nursing, 37*(5), 757-763. doi: 10.1111/phn.12768
- Manthorpe, J., Iliffe, S., Gillen, P., Moriarty, J., Mallett, J., Schroder, H., Currie, D., Ravalier, J., & McFadden, P. (2021). Clapping for carers in the Covid-19 crisis: Carers' reflections in a UK survey. *Health & Social Care in the Community, 30*(4), 1442-1449. <https://doi.org/10.1111/hsc.13474>
- Math, S. B., Nirmala, M. C., Moirangthem, S., & Kumar, N. C. (2015). Disaster management: mental health perspective. *Indian journal of psychological medicine, 37*(3), 261-271. doi: 10.4103/0253-7176.162915
- Maunder, R. (2004). The experience of the 2003 SARS outbreak as a traumatic stress among frontline healthcare workers in Toronto: lessons learned. *Philosophical Transactions of the Royal Society B: Biological Sciences, 359*(1447), 1117–1125. <https://doi.org/10.1098/rstb.2004.1483>
- McGlinchey, E., Hitch, C., Butter, S., McCaughey, L., Berry, E., & Armour, C. (2021). Understanding the lived experiences of healthcare professionals during the COVID-19 pandemic: an interpretative phenomenological analysis. *European Journal of Psychotraumatology, 12*(1). <https://doi.org/10.1080/20008198.2021.1904700>
- Mohammed, S., Peter, E., Killackey, T., & Maciver, J. (2021). The “nurse as hero” discourse in the COVID-19 pandemic: A poststructural discourse analysis. *International Journal of Nursing Studies, 117*, 103887. doi: 10.1016/j.ijnurstu.2021.103887
- Montgomery, C. M., Humphreys, S., McCulloch, C., Docherty, A. B., Sturdy, S., & Pattison, N. (2021). Critical care work during COVID-19: a qualitative study of staff experiences in the UK. *BMJ open, 11*(5), e048124. doi: 10.1136/bmjopen-2020-048124

NHS England. (2020). *We are the NHS People Plan 2020-21- action for us all*. England NHS

<https://www.england.nhs.uk/wp-content/uploads/2020/07/We-Are-The-NHS-Action-For-All-Of-Us-FINAL-March-21.pdf>

Office for National Statistics. (2022). *Coronavirus (Covid-19) latest insights: Hospitals*.

Office for National Statistics.

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19latestinsights/hospitals>

Prati, G., & Pietrantonio, L. (2010). The relation of perceived and received social support to mental health among first responders: a meta-analytic review. *Journal of Community Psychology*, 38(3), 403-417. <https://doi.org/10.1002/jcop.20371>

San Juan, N. V., Aceituno, D., Djellouli, N., Sumray, K., Regenold, N., Syversen, A., ... & Vindrola-Padros, C. (2021). Mental health and well-being of healthcare workers during the COVID-19 pandemic in the UK: contrasting guidelines with experiences in practice. *BJPsych Open*, 7(1). doi: 10.1192/bjo.2020.148

Simon, N., Roberts, N. P., Lewis, C. E., van Gelderen, M. J., & Bisson, J. I. (2019). Associations between perceived social support, posttraumatic stress disorder (PTSD) and complex PTSD (CPTSD): implications for treatment. *European journal of psychotraumatology*, 10(1), 1573129. doi: 10.1080/20008198.2019.1573129

Sun, N., Wei, L., Shi, S., Jiao, D., Song, R., Ma, L., ... & Wang, H. (2020). A qualitative study on the psychological experience of caregivers of COVID-19 patients. *American journal of infection control*, 48(6), 592-598. doi: 10.1016/j.ajic.2020.03.018

Tam, C. W., Pang, E. P., Lam, L. C., & Chiu, H. F. (2004). Severe acute respiratory syndrome (SARS) in Hong Kong in 2003: stress and psychological impact among frontline healthcare workers. *Psychological medicine*, 34(7), 1197-1204. doi: 10.1017/s0033291704002247

- Tedeschi, R. G. & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: measuring the positive legacy of trauma. *Journal of Traumatic Stress*, 9, 455–471. doi: 10.1007/BF02103658
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: conceptual foundations and empirical evidence. *Psychological inquiry*, 15(1), 1-18.
https://doi.org/10.1207/s15327965pli1501_01
- UK Health Security Agency (2022). *Coronavirus (Covid-19) in the UK*. GOV.UK.
<https://coronavirus.data.gov.uk/details/healthcare>
- Vindrola-Padros, C., Andrews, L., Dowrick, A., Djellouli, N., Fillmore, H., Gonzalez, E. B., Javadi, D., Lewis-Jackson, S., Manby, L., Mitchinson, L., Symmons, S. M., Martin, S., Regenold, N., Robinson, H., Sumray, K., Singleton, G., Syversen, A., Vanderslott, S., & Johnson, G. (2020). Perceptions and experiences of healthcare workers during the COVID-19 pandemic in the UK. *BMJ open*, 10(11), e040503. doi: 10.1136/bmjopen-2020-040503
- Wang, Y., Chung, M. C., Wang, N., Yu, X., & Kenardy, J. (2021). Social support and posttraumatic stress disorder: A meta-analysis of longitudinal studies. *Clinical psychology review*, 85, 101998. <https://doi.org/10.1016/j.cpr.2021.101998>
- Weiss, D. S. (2007). The impact of event scale-revised. In J. P. Wilson, & T. M. Keane (Eds.) *Assessing psychological trauma and PTSD: a practitioner's handbook* (2nd ed., pp. 168-189). New York: Guilford Press.
- Williamson. (2018). Occupational moral injury and mental health: systematic review and meta-analysis. *The British Journal of Psychiatry*, 212(6).
<https://doi.org/10.1192/bjp.2018.55>
- World Health Organisation (2020a). *Health Topics: Coronavirus*. WHO International.
https://www.who.int/health-topics/coronavirus#tab=tab_1

World Health Organisation (2020b). *Mental Health Considerations During COVID-19*

Outbreak. WHO International. <https://www.who.int/publications-detail/WHO-2019-nCoV-MentalHealth-2020.1>

World Health Organisation (2022). *WHO Coronavirus (Covid-19) dashboard*. WHO

International. <https://covid19.who.int>

Yin, X., & Zeng, L. (2020). A study on the psychological needs of nurses caring for patients with coronavirus disease 2019 from the perspective of the existence, relatedness, and growth theory. *International Journal of Nursing Sciences*, 7(2), 157-160. doi: 10.1016/j.ijnss.2020.04.002

Figures and Tables

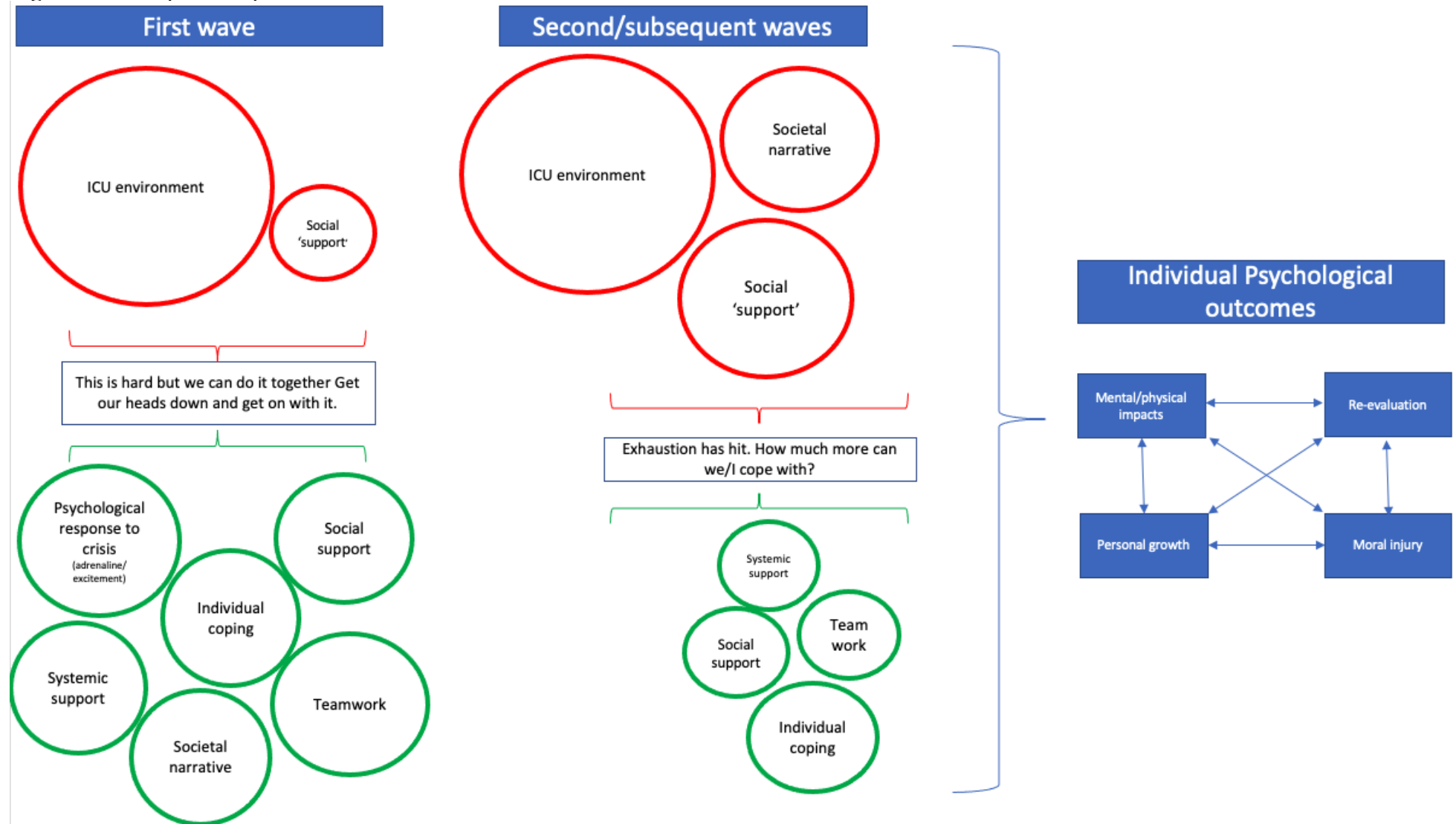
Table 1. Participant Inclusion and Exclusion Criteria

| Inclusion Criteria | Exclusion Criteria |
|---|--|
| Qualified members staff, working in the UK, who provided/provide direct care to patients diagnosed with Covid-19 for a minimum of 1 month | No involvement with direct care of patients diagnosed with Covid-19 |
| Staff from any clinical discipline on ICU (or equivalent ward e.g. intensive treatment unit or critical care unit) | Currently receiving psychological support from mental health services (see Ethics section) |
| English speaking (funding for interpreter was not available) | Students or non-qualified members of staff |

Table 2. Participant Demographics

| Participant | Job role | Age (Years) | Gender | Ethnicity | Years since qualification | Length of time in ICU role¹ |
|--------------------|------------------------------------|--------------------|---------------|------------------|----------------------------------|---|
| 1 | Doctor | 31 | Female | White British | 8 | 4 months |
| 2 | Nurse | 45 | Female | White British | 21 | 18 years |
| 3 | Doctor (redeployed as nurse) | 25 | Female | British | 1 | 6 weeks |
| 4 | Doctor | 28 | Male | Vietnamese | 4 | 6 months |
| 5 | Nurse | 38 | Female | White British | 14 | 10 years |
| 6 | Occupational therapist | 39 | Female | White British | 13 | 9 years |
| 7 | Physiotherapist | 30 | Female | White | 9 | 5 years |
| 8 | Advance Critical Care Practitioner | 55 | Male | White Caucasian | 34 | 24 years |
| 9 | Physiotherapist | 30 | Female | White British | 8 | 18 months |

¹Participants with shorter experiences in ICU reported working in other areas of the hospital throughout the pandemic

Figure 1. Conceptual Map

Appendix 2-A
Ethics Approval Letter



Applicant: Emily Goodman
Supervisor: Dr Suzanne Hodge
Department: Division of Health Research
FHMREC Reference: FHMREC20007

24 November 2020

Re: FHMREC20007
Frontline Healthcare Workers' Experience of the Covid-19 Pandemic and Public
Discourse: A Thematic Analysis

Dear Emily,

Thank you for submitting your research ethics application for the above project for review by the **Faculty of Health and Medicine Research Ethics Committee (FHMREC)**. The application was recommended for approval by FHMREC, and on behalf of the Chair of the Committee, I can confirm that approval has been granted for this research project.

As principal investigator your responsibilities include:

- ensuring that (where applicable) all the necessary legal and regulatory requirements in order to conduct the research are met, and the necessary licenses and approvals have been obtained;
- reporting any ethics-related issues that occur during the course of the research or arising from the research to the Research Ethics Officer at the email address below (e.g. unforeseen ethical issues, complaints about the conduct of the research, adverse reactions such as extreme distress);
- submitting details of proposed substantive amendments to the protocol to the Research Ethics Officer for approval.

Please contact me if you have any queries or require further information.

Email: fhmresearchsupport@lancaster.ac.uk

Yours sincerely,

A handwritten signature in black ink, appearing to read 'ABLP'.

Annie Beauchamp,
Research Ethics Officer, Secretary to FHMREC.

Appendix 2-B

Interview Topic Guide

Thank you for taking the time to participate in this study. As previously mentioned, this study is interested in exploring frontline healthcare workers experiences of the Covid-19 pandemic and how they navigated these experiences. We hope that this research will help to build an understanding of how workers, like yourself, managed the unprecedented situation and how workers going through similar situations may best be supported. We are also interested in what your perceptions of the public's view of you as a frontline healthcare work are and your experience of this.

Please provide as much information as you are comfortable with sharing and anything that you think is important and helpful for me to understand about you experience of the pandemic.

The interview is likely to last around one hour. You are welcome to ask for a break at any point and you may also ask to stop the interview at any time without having to give reason. Please try to avoid using identifiable information such as colleague or service names. However, if you do please be assured that this will be anonymised when transcribed. Before we start, do you have any questions?

1. Working during the pandemic

- Please could you tell me about your role and the team you work in?
- How long have you worked in that role/team?
- How did this role change in the past X months?
- Can you describe your first experience of Covid-19 on the ward?
- Can you describe your experiences as a frontline healthcare worker during the Covid-19 pandemic?
- What were the overall impacts of these experiences on you? Both positive and negative
- What were the impacts of these experience on...
 - i. Personal life
 - ii. Physical health
 - iii. Emotional wellbeing
- What were the impacts of the experiences on the team and work environment?
Both positive and negative
- Do you think you have been able to process these experiences?
- How do you feel now looking back at these experiences?
- Can you described the situation on the ward now?
 - i. Has your experience changed since the first experience of Covid-19 on the ward?

- What are your thoughts/hopes/fears for the future?
- What is important to understand from your experience of working in the pandemic?

2. Public discourses

- a. During this time, were you aware of the way healthcare workers were portrayed in public? E.g. newspapers, social media, TV
- b. Were public perceptions discussed among colleagues or in the workplace?
- c. What was the public view of healthcare workers from your perspective?
- d. What was your experience of the public views of healthcare workers?
- e. What, if any, was the influence of the public view on you?

Is there anything else you think it would be important for me to understand about your experience of the pandemic?

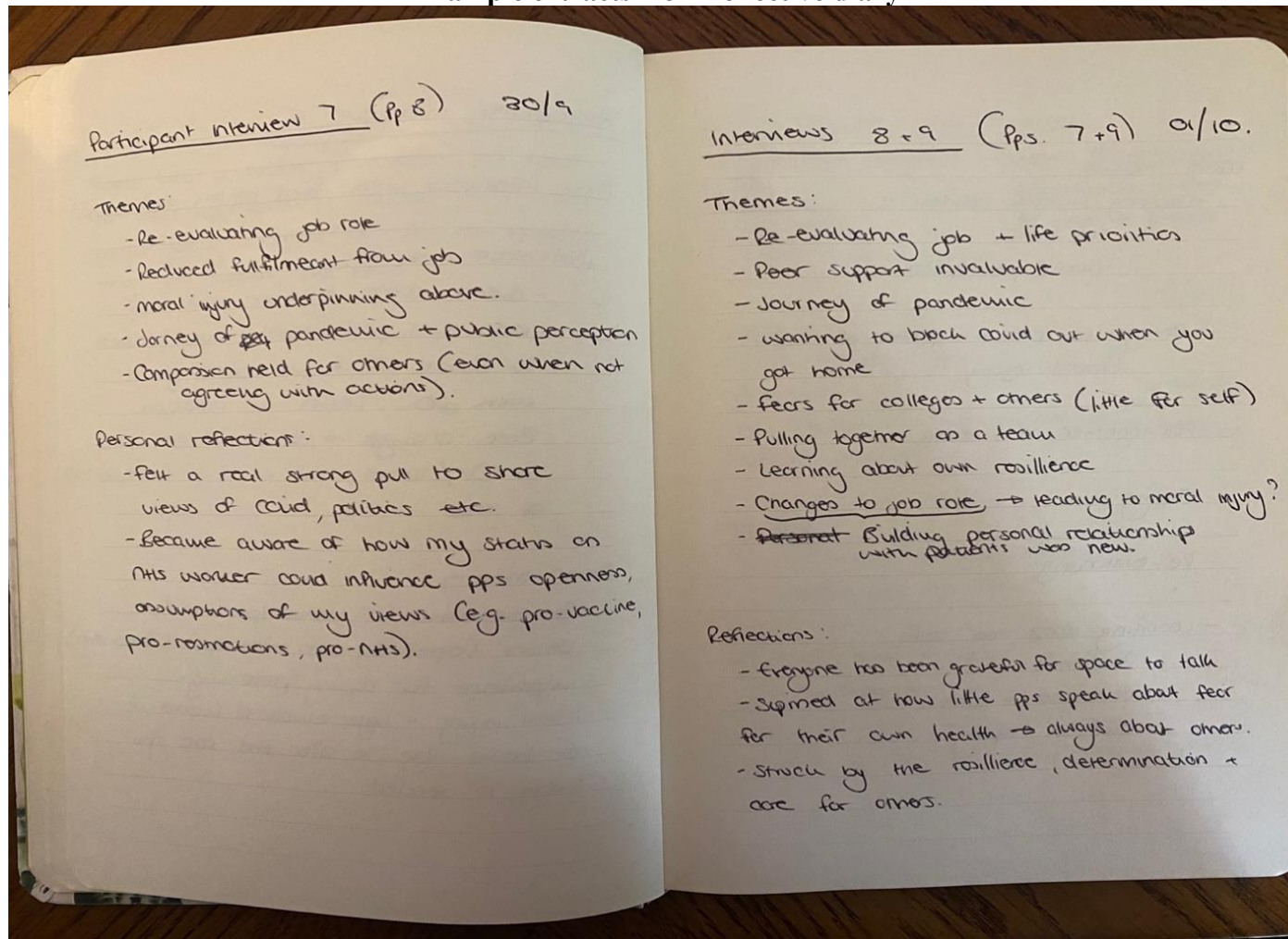
Appendix 2-C

Table 3. Example of Theme, Sub-themes, and Codes

| Theme | Sub-theme | Codes |
|-----------------------------------|--|--|
| Individual psychological outcomes | Mental and physical impacts | Appetite change |
| | | Impact on sleep |
| | | Putting on weight |
| | | Worsening diet |
| | | Anxiety of unknown future |
| | | Are we all going to have PTSD? |
| | | Awareness of risks to yourself |
| | | Emotional impact |
| | | Heightened anxiety |
| | | Long lasting impact |
| | | Emotions are still present |
| | | Mental baggage |
| | | Mental health impact |
| | | More stressed than expected |
| | | Fears of catching and transmitting |
| | | Too exhausted |
| | | Risk of burnout |
| | Ethically compromised | Barriers to practice |
| | | Compromising care |
| | | Dealing with not being able to give care |
| | | Facing dilemmas |
| | | Feeling ethically compromised |
| | | Feeling helpless |
| | | Guilt of not helping |
| | | Loss of enjoyment in the job |
| | | Unable to do your job |
| | | When things go wrong |
| | Personal growth and positive experiences | Becoming more emotional intelligent |
| | | Cherishing the good moments |
| | | Developing new skills |
| | | Feeling proud |
| | | Feeling useful |
| | | Fortunate to be able to help |
| | | Love for the job amongst the challenges |
| | | Making a difference |
| | | Mental health now daily discussion |
| | | Mental health stigma |
| | Re-evaluating priorities | New opportunities/responsibilities |
| | | Personal growth |
| | | Realising importance of my wellbeing |
| | | Understanding yourself more |
| | | Enjoying the little things now |
| | | Experience leading to lifestyle changes |
| | | Focusing on the present moment |

Looking for a way out now
It put things in perspective
Re-evaluating work and life
Thinking about quitting
Valuing family time more

Appendix 2-D
Example extracts from reflective diary



Appendix 2-E

Journal of Traumatic Stress guidelines

Sections

1. Submission and Peer Review Process
2. Article Types
3. After Acceptance

1. Submission and Peer Review Process

Once the submission materials have been prepared in accordance with the Author Guidelines, manuscripts should be submitted online at <https://mc.manuscriptcentral.com/jots>.

For help with submissions, please contact JOTS@bu.edu.

This journal does not charge submission fees.

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[Wiley Editing Services](#) offers expert help with English Language Editing, as well as translation, manuscript formatting, figure illustration, figure formatting, and graphical abstract design – so you can submit your manuscript with confidence.

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Free format submission

Journal of Traumatic Stress now offers [Free Format submission](#) for a simplified and streamlined submission process.

Before you submit, you will need:

- Your manuscript: this should be an editable file including text, figures, and tables, or separate files—whichever you prefer. All required sections should be contained in your manuscript, including abstract, introduction, methods, results, and conclusions. Figures and tables should have legends. Figures should be uploaded in the highest resolution possible. References may be submitted in any style or format, as long as it is consistent throughout the manuscript. Supporting information should be submitted in separate files. If the manuscript, figures or tables are difficult for you to read, they will also be difficult for the editors and reviewers, and the editorial office will send it back to you for revision.
- An ORCID ID, freely available at <https://orcid.org>. (*Why is this important? Your article, if accepted and published, will be attached to your ORCID profile. Institutions and funders are increasingly requiring authors to have ORCID IDs.*)
- The title page of the manuscript, including:
 - Your co-author details, including affiliation and email address. (*Why is this important? We need to keep all co-authors informed of the outcome of the peer review process.*)
 - Statements relating to our ethics and integrity policies, which may include any of the following (*Why are these important? We need to uphold rigorous ethical standards for the research we consider for publication*):
 - data availability statement
 - funding statement
 - conflict of interest disclosure
 - ethical standards statement
 - patient consent statement
 - permission to reproduce material from other sources
 - clinical trial registration

Important: the journal operates a double-blind peer review policy. Please anonymize your manuscript and supply a separate title page file.

To submit, login at <https://mc.manuscriptcentral.com/jots> and create a new submission. Follow the submission steps as required and submit the manuscript.

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JTS operates a double-blind peer review process. Authors are responsible for anonymizing their manuscript in order to remain anonymous to the reviewers throughout the peer review process (see "Main Text File" above for more details). Since the journal also encourages posting of preprints, however, please note that if authors share their manuscript in preprint form this may compromise their anonymity during peer review.

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4. The author's institutional affiliations where the work was conducted, with a footnote for the author's present address if different from where the work was conducted;
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Important: the journal operates a double-blind peer review policy. Please anonymize your manuscript and prepare a separate title page containing author details.

Main Text File

Please ensure that all identifying information such as author names and affiliations, acknowledgements or explicit mentions of author institution in the text are on a separate page.

The main text file should be in Word format and include:

- A short informative title containing the major key words (the title should not contain abbreviations).
- Abstract
- Up to seven keywords
- Main body, formatted as:
 - Method
 - Participants
 - Procedure
 - Measures
 - Data Analysis
 - Results
- References
- Tables (each table complete with title and footnotes)
- Figure legends: Legends should be supplied as a complete list in the text. Figures should be uploaded as separate files (see below).

Reference Style

Journal of Traumatic Stress uses APA reference style. However, because *JTS* offers Free Format submission, you do not need to format the references in your article until the revision stage when your article is more likely to be accepted.

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Figures, supporting information, and appendices should be supplied as separate files. You should review the [basic figure requirements](#) for manuscripts for peer review, as well as the more detailed post-acceptance figure requirements. View [Wiley's FAQs](#) on supporting information.

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This journal operates under a double-blind [peer review model](#). Papers will only be sent to review if the Editor-in-Chief determines that the paper meets the appropriate quality and relevance requirements.

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2. Article Types

| Article Type | Description | Word Limit | Abstract | Other Requirements |
|--------------------------|--|--|----------|---|
| Brief Report | Report of new research findings or | 7,500 words, | | Data |
| | Preliminary findings of research in progress or a case report of particular interest | 4,500 words, including abstract, references, tables, and figures | Yes | Data Availability Statement IRB Statement |
| State of the Art Article | Overview of developments in the field or current lines of thought; synthesizes multiple sources of information and has long list of references | 7,500 words, including abstract, references, tables, and figures | Yes | Data Availability Statement IRB Statement |
| Commentary | Evidence-based opinion piece on a recently published <i>JTS</i> article | 1,000 words, including references, tables, and figures | No | N/A |

Section Three: Critical Appraisal

Word count (excluding references, tables, and appendices): 3,975 words

Emily Goodman

Doctorate in Clinical Psychology

Division of Health Research, Lancaster University

July 2022

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In this critical review I will provide an overview of the findings from the systematic literature review and the empirical paper, establishing the links between them. I will elaborate on the limitations of the research and future research recommendations. I will also reflect on key considerations of the project, namely my role within the research and how the research has impacted me and my clinical practice.

Overview of Research

Empirical Paper

To understand healthcare workers' (HCWs) experiences of working on intensive care units (ICU) during the Covid-19 pandemic in the UK, within the context of societal narrative, semi-structured interviews were conducted with nine professionals from different disciplines. The data was analysed using Reflexive Thematic Analysis (Braun & Clarke, 2019), which produced four overarching themes: *ICU environment*, *complexity of support*, *coping with the experience* and *individual psychological outcomes*. Concepts within the themes were used to develop a diagrammatic map demonstrating links between themes and the shift from the first wave to subsequent waves. While the first wave was physically and psychologically demanding due to the ICU environment, it was characterised by a 'we can do this together' mindset, which was supported by teamwork, social support and a supportive societal narrative bolstering morale. The second and subsequent waves were characterised by exhaustion, with a continued demanding ICU environment, increasing challenges with social support due to disparity of experience and a loss of a supportive societal narrative. While participants discussed the negative emotional impacts of the societal narrative during the subsequent waves, they ensured that this did not affect their job. HCWs coped with the experience through seeking peer support, which was important due to the shared understanding, as well as escapism from the all-consuming nature of the Covid-19 pandemic. The psychological outcomes for individuals were varied, from physical exhaustion to anxiety

and feeling ethically compromised. In addition to the many challenges of the experience, HCWs described positive experiences and outcomes, including a re-evaluation of what was most important to them and personal growth in understanding themselves more, particularly regarding their mental wellbeing.

Systematic Literature Review

The systematic literature review sought to synthesise qualitative literature on police officers' views and experiences of support, both formal and informal, for their psychological wellbeing. Fourteen papers were identified and synthesised through meta-ethnography (Noblit & Hare, 1988). Through reciprocal translation of studies, five main constructs were developed. The first, *overarching influence of culture and stigma*, describes a dominant 'macho' culture which influenced all remaining constructs. The second construct, *unknown professional consequences of accessing support*, highlights the lack of clarity from organisations regarding outcomes for officers using support. The third construct, *dual role of others*, demonstrates the role of key relationships in providing support and encouraging support access. Construct four, highlights another key relationship, that of the supervisor who can act as a gatekeeper to accessing support due to their knowledge and awareness, as well as attitudes towards wellbeing. The fifth construct, *addressing the unmet needs of formal support*, discusses suggestions for organisations to improve support availability and reduce barriers. Finally, throughout the main constructs a line of argument was apparent. Despite stigma and cultural expectations, there was an unexpected acknowledgement amongst officers of the need of support for their mental wellbeing due to the nature of the work. However, officers faced prominent barriers in accessing this, which need to be addressed systemically.

Developing and Linking the Research Topics

From beginning my career in psychology as a support worker in inpatient mental health services, I experienced the emotional impact of working with people going through extremely challenging times in their lives, while trying to operate within a system that did not always fit with my value base. I witnessed and experienced the impact that staff support can have and, conversely, the detrimental effect when it is not available. Starting clinical psychology training, I felt passionate about becoming involved in staff support such as reflective practice, wellbeing sessions and training, and the research element of the doctorate training presented an opportunity to deepen my theoretical understanding of staff wellbeing.

The Covid-19 pandemic began as I was developing my research project and after reading articles and research from previous pandemics, it was clear that HCWs responding to the pandemic were going through an extreme challenge and psychological support, in its broadest sense, was essential. Discussions with colleagues at the time often involved considering the potential role of the societal narrative in HCWs' experience. Consulting literature showed that social context could be influential on traumatic experiences (Benedek et al., 2007; Carlson & Dalenberg, 2000), and research on previous disease outbreaks highlighted the social attention effect on HCWs' morale and experience of stigma (Belfroid et al., 2018; Maunder 2004).

As my empirical project developed, I had not anticipated the challenge this would present in developing an original systematic literature review topic. As the research community focused on understanding the impacts the Covid-19 pandemic would have on a variety of populations, reviews that would have been potential topics for my systematic literature review, were being registered and published rapidly. Following discussions with my research supervisors and given the importance of designing and conducting original research (British Psychological Society [BPS], 2019), a more tangential topic of police officer views and experiences of support was developed. While at first the two topics may not seem

directly related, it is important to consider the relationship between the findings and how the outcomes apply to frontline workers.

Although, police officers and HCWs have very distinctive roles, the value basis underpinning both workforces have many similarities around public service (College of Policing, 2016; Department of Health and Social Care, 2021). The empirical study highlighted the narrative surrounding HCWs in the pandemic and the impact of losing support and recognition during a time of extreme challenge. The systematic review highlighted the role of culture in police officers' views of engaging with support, recognising the barrier created by public expectations of police officers to be "strong yet kind, tough yet compassionate, able to respond appropriately to every emergency, withstanding any pressure or challenge they are faced with" (Burns & Buchanan, 2020, p.12). In Richards et al.'s (2021) review of North American research about barriers to police officers accessing support, it was highlighted that the studies occurred before the killing of George Floyd and international protests against racism and specifically police brutality. Richard et al. call for further research about the impact of negative public perceptions of police on their mental health and help-seeking behaviour. In the UK over the past few years the police force has come under increasing public scrutiny, particularly due to 'unjust racial disparities' in use of police powers (UK Parliament, 2021) and failures to tackle violence against women and girls (Casciani, 2021). While it is essential the police force is just, effective, and protective for all in society, it may be important for employers to consider the mental wellbeing impact the societal narrative can have on the workforce, given the influential role found in this research. Further research is needed to build on the understanding of the impact of societal narratives, particularly for public service related roles.

Strengths and Limitations

Empirical Paper

The timings of the interviews enabled an exploration of the shift from the first to second wave, at a time when the shift had recently occurred, and the second was still happening. I believe this is a strength of the study as participants were able to discuss immediate emotional experiences. Consequently, this also created a limitation as later phases were not explored. The benefit of conducting multiple interviews in longitudinal research will be discussed in the key considerations section.

The lack of ethnic diversity within the participant sample was a limitation of the empirical paper. While the sample may have been representative of the NHS workforce (NHS Digital 2021), the voices of people from Asian, Black, Chinese and mixed ethnicities are largely missing. Research shows that, in the UK, Black and Asian communities were disproportionately affected by Covid-19 and during the first wave had increased risk of hospitalisation, ICU admission and death compared to White populations (Morales & Ali, 2021). Research is required to understand the social and environmental contexts of the increased risk. Furthermore, Asian, Black, Chinese and mixed ethnic people may have experienced additional societal narratives prominent during Covid-19. An example of this is terms such as “Chinese virus” and “Asian virus” which were used widely by media outlets, politicians and the scientific community, perpetuating racism and discrimination (Su et al. 2020). Research is needed into the impact this increased risk and racist societal narratives may have had on the mental wellbeing of Asian, Black, Chinese and mixed ethnic background NHS staff.

Systematic Literature Review

The systematic literature review is the first, to the research team’s knowledge, to synthesise international qualitative research on police officers’ views and experiences of accessing support, both formal and informal, for their psychological wellbeing. The Critical Appraisal Skills Programme (CASP, 2018) was used to critically appraise included papers,

which may be considered a strength of the review. Noblit and Hare (1988) do not include critical appraisals within their original meta-ethnographical method, and quality appraisals can be limited in their reflection of publication biases, rather than quality research (Walsh & Downe, 2006). However, I considered it was necessary to critique the papers to reflect the general quality of the research base and ensure findings were not determined by lower quality research. I chose the CASP as it is considered a user-friendly tool, appropriate for novice qualitative researchers (Soilemezi & Linceviciute, 2018), which I am. I also considered the Evaluative Tool for Qualitative Research Studies (Long et al., 2002). The 39-item tool would have provided a more in-depth critique of the studies compared to the CASP. However, given the critiques within the literature about quality appraisal of qualitative research in general, the CASP was considered appropriate. The CASP is also susceptible to subjectivity, as are many quality appraisal tools. In an attempt to increase rigor, 20% of papers were critically appraised by a second reviewer.

Through using the CASP I found evidence of publication biases. All the included papers scored low on the criterion regarding researcher reflexivity, which Walsh and Downe (2006) highlight is often removed due to strict word counts. While this does not mean that authors did not consider their role within the research, it was not possible in the systematic review to consider the influence of this on the current evidence base. Although taking a social constructionist stance does not look for 'truth' within research and allows for the recognition of the researchers' role (Burr, 2003), this information is required to consider the trustworthiness and credibility of the research (Maeda et al., 2022). Within the empirical research, I documented key assumptions I had, how this may have affected the analysis and methods used in attempts to reduce bias. For example, this enabled me to consider how my perspective as a trainee clinical psychologist affected the analysis, such as being more focused on the psychological outcomes for participants. Including such reflections within

research highlights that outcomes are the researchers' interpretations of the participants experiences and having research from different perspectives could develop further insights.

Key Considerations

Using meta-ethnography

Noblit and Hare's (1988) method of meta-ethnography was used for the systematic literature review. Meta-ethnography is one of the most frequently used methods to synthesise qualitative data within healthcare research, offering an interpretative and inductive approach through the translation of key concepts within papers (Sattar et al., 2021). It is best suited to reviews of qualitative studies with relatively small samples sizes and with more interpretative methods (Soundy & Heneghan, 2022), meaning it was an appropriate method of synthesis for the review.

While meta-ethnography was a suitable choice of synthesis given the available papers, the approach does have limitations. Within Noblit and Hare's (1988) original method several of the stages, including the analysis, are not well defined, with France (2014) arguing this creates a barrier to assessing the approach's rigour and trustworthiness. More recent publications delineate in detail the method of meta-ethnography, which I drew upon to develop the methodology, including Atkins et al. (2008), Britten et al. (2002) and Sattar et al. (2021). However, each paper adapts the method differently. While adapting the method to fit the available data may be helpful and allow for creativity, it can reduce the credibility of the research, particularly if the method of if not clearly detailed.

An alternative method which could have been used for the review, was thematic synthesis detailed by Thomas and Harden (2008). This approach adopts methods from thematic analysis, using line by line coding of primary data which develops themes. As with meta-ethnography, thematic synthesis aims to add further interpretation to the original data. Starting with data-driven descriptive themes, these are then placed within a theoretical

framework to develop theory-driven analytical themes (Thomas & Harden, 2008). For this reason, Thomas and Harden suggest thematic synthesis may be most suited to reviews with specific research questions, whereas meta-ethnography suits reviews with broader aims, such as that of the review in question.

Conducting the Research Interview

The qualitative approach to the empirical paper allowed for in-depth understanding of the participants' experience of the Covid-19 pandemic which was achieved through single semi-structured interviews. Conducting single session interviews is a method adopted by many qualitative researchers and is based on the assumptions that information relevant to the topic exists and can be conceptualised, participants hold this information and are able to articulate this in a single interview (Read, 2018). While I believe these assumptions were borne out as a detailed understanding of participants' experience was developed, on reflection multiple interviews over different time points could have added further depth, interpretation and insights. Participants were interviewed during 2021 at a time when most lockdown restrictions were removed and hospitalisations due to Covid-19 were far below the rate during peak waves. However, the pandemic was still ongoing, which many participants acknowledged when reflecting on their current experience. The research provides a view of the participants' understanding of this experience at this moment in time. Though some participants predicted long term impacts from their experiences, the study was unable to explore this. Read (2018) suggests using serial interviews to capture longitudinal changes, which could have been beneficial for this research. Models suggest a phased response to the psychological impacts of traumatic events (Math et al., 2015) and having interviews at multiple time points could have added to the theoretical understanding of applying the phased responses to HCWs in pandemics. Having multiple interview points could have answered questions I had following analysis such as 'were participants plans to re-evaluate followed

through?', 'did they experience long term psychological impacts?' and "has their view of the societal narrative influenced them in the long term?". Exploring these questions through further research could have helped to investigate what psychological support needs participants had long term.

I have previously had limited experience in conducting research interviews, particularly in a semi-structured format. While completing the interviews I often relied on skills from my clinical practice such as active listening and communication skills. However, I also at times noticed a pull towards therapy during interviews, such as wanting to formulate with the participant, reframing their experience, particularly during emotive content. These reflections made me consider my role as a clinician and as a researcher. Clinical psychologists are well placed to conduct research interviews given the skills in managing emotive and sensitive information, however clarity between the intentions of research and therapeutic encounters need to be distinguished to avoid harm for participants (Thompson & Russo, 2012). Conducting research is a key role as a qualified clinical psychologist (BPS, 2011) and I hope to continue researching in my future clinical role. In the current study, my role as a researcher was communicated in the research pack and I did not feel participants were expecting therapy during the interview. When conducting research in a work environment where I am also a clinician, it is going to be even more imperative for me to hold the distinction between clinician and researcher in mind. In conducting research where I work clinically, it could be likely that participants have a heightened awareness of my clinical role and may have expectations of therapy. Using a reflective diary and supervision are tools I have found useful during this research and intend to use in future research to increase self-awareness, as well as clear communication of my role and the boundaries of the research interview.

Researching the Pandemic whilst Living Through It

One reason why I was drawn to use Reflexive Thematic Analysis for conducting this study is the requirement to actively recognise my role within the research (Braun & Clarke, 2019). I do not believe it is possible to completely eradicate the influence of the researcher within research. Using Reflexive Thematic Analysis with a social constructivist epistemology (Burr, 2003) enabled research where outcomes are considered a process of participants' understanding of their experience and my interpretations of their experiences. Working within these frameworks enabled me to consider my assumptions and bias, in an attempt to reduce them without expecting to eliminate them.

When developing the project, I was aware that although I was not working in ICU, I was living through the pandemic, a novel experience to me, and working as an NHS staff member. Along with considering the assumptions about participants' experiences when beginning the research, I also considered some of the impacts conducting the research may have on me. I had the assumption that working in ICU would be frightening, at least partly due to the high exposure level to a novel virus. This was based on my personal worries of Covid-19, not necessarily to myself, but to my vulnerable family members. Vincett (2018) emphasises the need to consider the emotional impact on the researcher for both the safety of the individual and their ability to effectively engage with the data. Vincett recommends a process of self-assessment, risk identification and development of a self-care plan. Before beginning the research, I identified that a potential emotional risk, that could create difficulty engaging with the data, was if someone in my close relationships became seriously unwell with Covid-19. If this did occur, I was confident in the support systems around me such as those with my research supervisors and provided from the training course. Fortunately, I have not had any loved ones seriously affected by Covid-19 but completing this project has taught me the importance of considering personal impacts of the work, as I would with clinical work.

Although, I did not have personal experience with Covid-19, I did resonate with participants' descriptions of the overwhelming and all-consuming nature of the pandemic. Researching Covid-19 added to this as I spent time listening to and reading about the pandemic. At times I noticed I was becoming fatigued and burnout and, like the participants, was avoidant of engaging with Covid-19 related activities including my research. This had the potential to impact on the quality of the research. In this example from my reflective diary, I identify experiences of burnout and consider the impact this could have on upcoming interviews, "feeling tired of covid and constantly reading about it. How might this affect the upcoming interviews? Might not be as present, engaged. How can I re-engage?". Through use of my reflective diary, I was able to identify when this happened and take actions to improve it, such as taking a break either completely from the research or by switching to working on the systematic literature review. Setting time aside before interviews to remind myself of my intentions of conducting the research in giving voice to NHS staff experience, helped foster my engagement during periods of fatigue. I also found that re-engaging with individual stories through reading participant summaries I had written helped to refocus on the importance and responsibility in representing participants' experiences to the best of my ability.

A further reflection which occurred frequently in my journal was regarding my relationship with participants, their perceptions of me and how this may have influenced the data retrieved from interviews. Increasing awareness of my status as a fellow NHS staff member and the influence this may have had can be seen in the following extract from my journal, "becoming more aware of how my status as an NHS worker could influence assumptions of my personal views (for example pro-vaccine, pro-restrictions) and participants openness". Karnieli-Miller et al. (2009) considers the power relations between participants and researchers within qualitative research. They argue that while it may seem

the participant holds the most power during data-collection as it is their story, views and opinions which are being sought, the researcher has significant influence in what participants choose to share. Rapport building is important to create a welcoming environment participants feel comfortable in, however I was mindful of how responses to participants which may allude to my personal views, could encourage individuals to share, into the public domain, more than they may have planned to. Utilising my reflective journal and supervision, enabled me to consider when this may happen, the ethics of interviewing and influence of my status on data collected.

Implications for My Clinical Practice

Finally, I will consider how the research, both the experience and the research findings, will influence my practice as I move into the next chapter of my career as a newly qualified clinical psychologist.

The reflective journal is something I found particularly useful in identifying my responses to interviews and the experiences shared by participants. Reflective practice is a key skill within clinical psychology. In a study of clinical psychologists' use of reflection within clinical work, participants reported reflection helped them to understand themselves better, as well as engaging and understanding clients (Fisher et al., 2015). I often use supervision as a place to reflect but as I transition to qualified life, I am aware that the amount of supervision will decrease. To ensure reflection is built into my work, I have begun incorporating a reflective journal into my clinical work on placement and found it useful in considering what to bring to supervision or noticing my own biases and lived experience and how they impact the perspectives from which I view my work. I aim to continue to embed the use of a reflective journal into my clinical practice as a qualified clinician.

I have secured my first qualified post in a physical health team, of which staff wellbeing will be part of the role. Whilst this is not with the ICU team, Covid-19 will have

undoubtedly impacted the team I will be working in. By conducting the research presented in this thesis I have a more in-depth understanding of what staff in physical health settings may have lived through and what factors may be impacting their ability to cope. I plan to implement findings from this research in my work by embedding myself within the physical health team in order to build trust and offer an effective system of support based on staff needs. My hope is to create space for staff to access support formally where needed and to recognise the importance and value of spaces for them to access peer support.

Conclusion

This thesis has explored an important area of research into the experiences of public facing professionals faced with psychologically challenging experiences due to their jobs and their relationship with support for their mental wellbeing. This chapter has considered key areas of reflection and learning, as well as summarising the results, strengths and limitations of both the empirical paper and systematic literature review. Whilst it is important to consider the limitations across each paper, they both make novel contributions to the literature and demonstrate the importance of providing timely support, recognising the role of others in the relationship with support and the impact of societal narratives.

References

- Belfroid, E., van Steenberg, J., Timen, A., Ellerbroek, P., Huis, A., & Hulscher, M. (2018). Preparedness and the importance of meeting the needs of healthcare workers: a qualitative study on Ebola. *Journal of Hospital Infection*, 98(2), 212-218. doi: 10.1016/j.jhin.2017.07.001
- Benedek, Fullerton & Ursano. (2007). First responders: mental health consequences of natural and human-made disasters for public health and public safety workers. *Annual Review of Public Health*, 28. <https://doi.org/10.1146/annurev.publhealth.28.021406.144037>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, 11(4), 589-597. <https://doi.org/10.1080/2159676X.2019.1628806>
- British Psychological Society. (2011). *Guidelines for clinical psychology services*. BPS. <https://www.bps.org.uk/sites/www.bps.org.uk/files/Member%20Networks/Divisions/DCP/Guidelines%20for%20Clinical%20Psychology%20Services.pdf>
- British Psychological Society. (2019). *Standards for the accreditation of Doctoral programmes in clinical psychology*. BPS. <https://www.bps.org.uk/sites/www.bps.org.uk/files/Accreditation/Clinical%20Accreditation%20Handbook%202019.pdf>
- Burns, C., & Buchanan, M. (2020). Factors that influence the decision to seek help in a police population. *International journal of environmental research and public health*, 17(18), 6891. <https://doi.org/10.3390/ijerph17186891>
- Burr, V. (2015). *Social constructionism* (2nd ed.). Routledge.

- Carlson, E. B., & Dalenberg, C. J. (2000). A conceptual framework for the impact of traumatic experiences. *Trauma, violence, & abuse*, 1(1), 4-28.
<https://doi.org/10.1177/1524838000001001002>
- Casciani, D. (2021). Police must priorities tackling violence on women. *BBC*.
<https://www.bbc.co.uk/news/uk-58591225>
- College of Policing. (2016). *Competency and values framework for policing: overview of framework*. College of Policing.
https://d17wy4t6ps30xx.cloudfront.net/production/uploads/2017/09/Competency-and-Values-Framework-for-Policing_4.11.16.pdf
- Critical Appraisal Skills Programme. (2018). *CASP checklist: 10 questions to help you make sense of a qualitative research*. CASP UK. <https://casp-uk.net/wp-content/uploads/2018/03/CASP-Qualitative-Checklist-Download.pdf>
- Department of Health and Social Care. (2021). *NHS constitution for England*. GOV.UK.
<https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-england>
- Fisher, P., Chew, K., & Leow, Y. J. (2015). Clinical psychologists' use of reflection and reflective practice within clinical work. *Reflective Practice*, 16(6), 731-743.
<https://doi.org/10.1080/14623943.2015.1095724>
- France, E. F., Ring, N., Thomas, R., Noyes, J., Maxwell, M., & Jepson, R. (2014). A methodological systematic review of what's wrong with meta-ethnography reporting. *BMC medical research methodology*, 14(1), 1-16.
<https://doi.org/10.1186/1471-2288-14-119>
- Karnieli-Miller, O., Strier, R., & Pessach, L. (2009). Power relations in qualitative research. *Qualitative health research*, 19(2), 279-289. DOI: 10.1177/1049732308329306

- Long A.F., Godfrey M., Randall T., Brett A.J. & Grant M.J. (2002). *Developing evidence based social care policy and practice. Part 3: Feasibility of undertaking systematic reviews in social care*. Nuffield Institute for Health, Leeds.
https://usir.salford.ac.uk/id/eprint/13071/1/Long_et_al_2002_Feasibility_Social_Care_Review_-_part_III.pdf
- Maeda, Y., Caskurlu, S., Kozan, K., & Kenney, R. H. (2022). Development of a critical appraisal tool for assessing the reporting quality of qualitative studies: a worked example. *Quality & Quantity*, 1-21. <https://doi.org/10.1007/s11135-022-01403-y>
- Math, S. B., Nirmala, M. C., Moirangthem, S., & Kumar, N. C. (2015). Disaster management: mental health perspective. *Indian journal of psychological medicine*, 37(3), 261-271. doi: 10.4103/0253-7176.162915
- Maunder, R. (2004). The experience of the 2003 SARS outbreak as a traumatic stress among frontline healthcare workers in Toronto: lessons learned. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 359(1447), 1117–1125.
<https://doi.org/10.1098/rstb.2004.1483>
- Morales, D. R., & Ali, S. N. (2021). COVID-19 and disparities affecting ethnic minorities. *The Lancet*, 397(10286), 1684-1685. [https://doi.org/10.1016/S0140-6736\(21\)00949-1](https://doi.org/10.1016/S0140-6736(21)00949-1)
- NHS Digital. (2021). *NHS workforce*. GOV.UK. <https://www.ethnicity-facts-figures.service.gov.uk/workforce-and-business/workforce-diversity/nhs-workforce/latest>
- Noblit, G. W. & Hare, R. D. (1988). *Meta-ethnography: synthesizing qualitative studies*. SAGE publications, Inc. <https://dx.doi.org/10.4135/9781412985000>

- Read, B. L. (2018). Serial interviews: When and why to talk to someone more than once. *International Journal of Qualitative Methods*, 17(1).
<https://doi.org/10.1177%2F1609406918783452>
- Richards, N. K., Suarez, E. B., & Arocha, J. F. (2021). Law enforcement officers' barriers to seeking mental health services: a scoping review. *Journal of police and criminal psychology*, 36(3), 351-359. <http://dx.doi.org/10.1007/s11896-021-09454-x>
- Sattar, R., Lawton, R., Panagioti, M., & Johnson, J. (2021). Meta-ethnography in healthcare research: a guide to using a meta-ethnographic approach for literature synthesis. *BMC Health Services Research*, 21(1), 1-13. <https://doi.org/10.1186/s12913-020-06049-w>
- Soilemezi, D., & Linceviciute, S. (2018). Synthesizing qualitative research: reflections and lessons learnt by two new reviewers. *International Journal of Qualitative Methods*, 17(1). <https://doi.org/10.1177%2F1609406918768014>
- Soundy, A., & Heneghan, N. (2022). Meta-ethnography. *International Review of Sport and Exercise Psychology*, 15(1), 266-286.
<https://doi.org/10.1080/1750984X.2021.1966822>
- Su, Z., McDonnell, D., Ahmad, J., Cheshmehzangi, A., Li, X., Meyer, K., ... & Xiang, Y. T. (2020). Time to stop the use of 'Wuhan virus', 'China virus' or 'Chinese virus' across the scientific community. *BMJ Global Health*, 5(9), e003746.
<http://dx.doi.org/10.1136/bmjgh-2020-003746>
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC medical research methodology*, 8(1), 1-10.
<https://doi.org/10.1186/1471-2288-8-45>
- Thompson, A. R., & Russo, K. (2012). Ethical dilemmas for clinical psychologists in conducting qualitative research. *Qualitative Research in Psychology*, 9(1), 32-46.
<https://doi.org/10.1080/14780887.2012.630636>

UK Parliament. (2021). *Urgent action needed to tackle deep rooted and persistent racial disparities in policing*. UK Parliament.

<https://committees.parliament.uk/work/347/the-macpherson-report-twentytwo-years-on/news/157006/urgent-action-needed-to-tackle-deep-rooted-and-persistent-racial-disparities-in-policing/>

Vincett, J. (2018). Researcher self-care in organizational ethnography: Lessons from overcoming compassion fatigue. *Journal of Organizational Ethnography*, 7(1), 44-58. <https://doi.org/10.1108/JOE-09-2017-0041>

Walsh, D., & Downe, S. (2006). Appraising the quality of qualitative research. *Midwifery*, 22(2), 108-119. <https://doi.org/10.1016/j.midw.2005.05.004>

Section Four: Ethics Documentation

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**Faculty of Health and Medicine Research Ethics Committee (FHMREC)
Lancaster University**

Application for Ethical Approval for Research

Title of Project: Frontline Healthcare Workers' Experience of the Covid-19 Pandemic and Public Discourse: A Thematic Analysis

Name of applicant/researcher: Emily Goodman

ACP ID number (if applicable)*: N/A

Funding source (if applicable): N/A

Grant code (if applicable): N/A

***If your project has *not* been costed on ACP, you will also need to complete the Governance Checklist [\[link\]](#).**

Type of study

☐ Involves existing documents/data only, or the evaluation of an existing project with no direct contact with human participants. **Complete sections one, *two* and four of this form**

☒ Includes *direct* involvement by human subjects. **Complete sections one, *three* and four of this form**

SECTION ONE

1. Appointment/position held by applicant and Division within FHM: Student

2. Contact information for applicant:

E-mail: e.goodman1@lancaster.ac.uk

Telephone: [REDACTED] (please give a number on which you can be contacted at short notice)

Address: Clinical Psychology, Division of Health Research, Faculty of Health and Medicine, Health Innovation One, Sir John Fisher Drive, Lancaster University, Lancaster, LA1 4AT

3. Names and appointments of all members of the research team (including degree where applicable)

Dr Suzanne Hodge- Lecturer in Health Research

Dr Anna Duxbury- Clinical Psychologist and Clinical Tutor

Dr Anna Daiches- Clinical Psychologist and Clinical Tutor

3. If this is a student project, please indicate what type of project by marking the relevant box/deleting as appropriate: (please note that UG and taught masters projects should complete **FHMREC form UG-tPG**, following the procedures set out on the [FHMREC website](#))

PG Diploma ☐ Masters by research ☐ PhD Thesis ☐ PhD Pall. Care ☐

PhD Pub. Health ☐ PhD Org. Health & Well Being ☐ PhD Mental Health ☐
MD ☐

DClinPsy SRP ☐ [if SRP Service Evaluation, please also indicate here: ☐
DClinPsy Thesis ☒

4. Project supervisor(s), if different from applicant:

Dr Suzanne Hodge- Lecturer in Health Research

Dr Anna Duxbury- Clinical Psychologist and Clinical Tutor

Dr Anna Daiches- Clinical Psychologist and Clinical Tutor

5. Appointment held by supervisor(s) and institution(s) where based (if applicable):

Suzanne- Lecturer in Health Research, Anna Duxbury and Anna Daiches both Clinical Psychologists and Clinical tutors. All based at Lancaster University

SECTION TWO

Complete this section if your project involves existing documents/data only, or the evaluation of an existing project with no direct contact with human participants

1. Anticipated project dates (month and year)

Start date: End date:

2. Please state the aims and objectives of the project (no more than 150 words, in lay-person's language):

Data Management

For additional guidance on data management, please go to [Research Data Management webpage](#), or email the RDM support email: rdm@lancaster.ac.uk

3. Please describe briefly the data or records to be studied, or the evaluation to be undertaken.

4a. How will any data or records be obtained?

4b. Will you be gathering data from websites, discussion forums and on-line 'chat-rooms'

4c. If yes, where relevant has permission / agreement been secured from the website moderator?

4d. If you are only using those sites that are open access and do not require registration, have you made your intentions clear to other site users?

4e. If no, please give your reasons

5. What plans are in place for the storage, back-up, security and documentation of data (electronic, digital, paper, etc)? Note who will be responsible for deleting the data at the end of the storage period. Please ensure that your plans comply with General Data Protection Regulation (GDPR) and the (UK) Data Protection Act 2018.

6a. Is the secondary data you will be using in the public domain?

6b. If NO, please indicate the original purpose for which the data was collected, and comment on whether consent was gathered for additional later use of the data.

Please answer the following question *only* if you have not completed a Data Management Plan for an external funder

7a. How will you share and preserve the data underpinning your publications for at least 10 years e.g. PURE?

7b. Are there any restrictions on sharing your data?

8. Confidentiality and Anonymity

a. Will you take the necessary steps to assure the anonymity of subjects, including in subsequent publications?

b. How will the confidentiality and anonymity of participants who provided the original data be maintained?

9. What are the plans for dissemination of findings from the research?

10. What other ethical considerations (if any), not previously noted on this application, do you think there are in the proposed study? How will these issues be addressed?

SECTION THREE

Complete this section if your project includes *direct* involvement by human subjects

1. Summary of research protocol in lay terms (indicative maximum length 150 words):

The Covid-19 pandemic has created an unprecedented scenario for healthcare workers within the UK, with many factors, such as rapidly increasing patient numbers, a novel virus and a risk to personal safety, leading to a highly stressful environment. Psychological distress may be a normal response to this environment, however there is also the opportunity for

psychological growth. This study will explore healthcare workers' experiences of the pandemic with the aim of understanding how they navigated the potentially distressing environment.

Throughout the pandemic the healthcare workforce has also received significant public attention, which literature suggests may influence their individual experiences. A further aim of the study is thus to understand whether and how public attitudes towards them have affected healthcare workers' experiences of navigating the pandemic.

Healthcare workers working on intensive care units caring for patients with Covid-19 will be recruited. Individual semi-structured interviews will be conducted and analysed using thematic analysis.

2. Anticipated project dates (month and year only)

Start date: April 2021

End date: March 2022

Data Collection and Management

For additional guidance on data management, please go to [Research Data Management webpage](#), or email the RDM support email: rdm@lancaster.ac.uk

3. Please describe the sample of participants to be studied (including maximum & minimum number, age, gender):

Participants will be healthcare staff working within the NHS on intensive care units, who provided direct medical care for patients for Covid-19, including, but not limited to, nurses, doctors, physiotherapists and dieticians. A balanced sample of professional roles will be aimed for. There will be no restriction on age, however as the roles included require a university education, participants will be over 21 years old. Participants of any gender will be welcome to take part.

The number of participants will depend on the depth of data gathered from each interview, for this reason between 8-12 participants will be recruited.

Individuals currently experiencing psychological distress requiring mental health services, will not be included in the study, to ensure participation does not add to the distress or interfere with ongoing support.

4. How will participants be recruited and from where? Be as specific as possible. Ensure that you provide the *full versions* of all recruitment materials you intend to use with this application (eg adverts, flyers, posters).

The study will be advertised through social media, such as Twitter. The advertising flyer (appendix A), which contains email contact of the researcher, will be posted by the chief researcher's professional Twitter account (handle @EmilyGo55444882). The post will be worded "Are you a healthcare worker on an intensive care unit treating individuals with Covid-19? Emily (Trainee Clinical Psychologist) is looking for English-speaking participants to talk via video or telephone call about their experiences of the pandemic. Please see advert for contact details." The researcher will ask other relevant Twitter pages to "retweet" the advert for example, the Lancaster Doctorate in Clinical Psychology Twitter account (handle @LancsDClinPsy) and the Intensive Care Society Twitter account (handle @ICS_updates). After initial recruitment, more targeted recruitment will be used to aim for a balanced sample of professionals if needed. This will be done by adding specific professional roles which have not yet been recruited into the post. When potential participants make contact, they will be

sent, via email, a copy of the expression of interest sheet (appendix B), participant information sheet (appendix C) and consent form (appendix D) and demographic data sheet (appendix E). Following this, potential participants will be contacted to answer any questions they have regarding participation and to see if they would like to take part. If participants wish to take part then a time, convenient for the participants, will be agreed to conduct the remote interview. All correspondence with participants, other than the interview, will be via email. Email addresses will be deleted following the interview or after summary of results is sent to participants if they request it.

Recruitment through individual NHS trusts was considered, however this may result in themes reflecting local conditions rather than the wider experience of being frontline healthcare workers during Covid-19 in the UK.

5. Briefly describe your data collection and analysis methods, and the rationale for their use.

The interviews will be conducted using Microsoft Teams or telephone if Microsoft Teams is not available. The interview topic guide (appendix F) will be used to inform the process, with prompts being used where necessary. Recording will be started and each point of the consent form (appendix D) will be read out loud by the researcher, asking the participant if they agree. Recording will then be stopped. The first paragraph of the interview topic guide will be read to introduce the study, make participants aware that the interview will last approximately 60 minutes and that they are welcome to ask for a break at any point and to stop the interview, for any reason. The interview recording will then be started. The interviews will take place from a private room in the chief researcher's home address. Once the interview is complete the research will enquire about the participants wellbeing and provide them with the debrief sheet (appendix G) via email. If the participants experience distress at any part of the process, they will be given the opportunity to stop, as well as being signposted to relevant support systems detailed on the debrief sheet.

For interviews conducted via Microsoft Teams, at the earliest opportunity, the interview recording will be downloaded and deleted from Microsoft Stream (where Microsoft Teams automatically stores recordings). The recording will be converted to an MP3 audio file (to remove identifiable data) using VLC media player and anonymously stored (e.g. file named "participant 1") on the chief researcher's secure university virtual private network (VPN) and stored separately to the consent recordings. For interviews conducted via telephone, the interview will be recording by Dictaphone. At the earliest opportunity the recording will be transferred to the chief researcher's secure university VPN and deleted from the dictaphone. Audio files will be deleted once the thesis has been examined.

Transcription will be conducted by the chief researcher in a password protected word document, which will be stored on the chief researcher's university OneDrive. Supervising researchers can securely be given access to transcripts if required. Information, including third party, will be anonymised at the point of transcription.

Paper transcripts will be stored at the chief researcher's home address in a locked cabinet and destroyed after analysis is complete. The transcripts will be analysed using thematic analysis as it allows the identification of patterns of meaning across individuals' experiences with a consideration of the impact of societal discourse on this meaning (Braun & Clarke, 2006). The analysis will aim for a rich description of the whole data set from an inductive approach as little is currently known about the common experiences of healthcare workers during Covid-19 (Braun & Clarke, 2006).

6. What plan is in place for the storage, back-up, security and documentation of data (electronic, digital, paper, etc.)? Note who will be responsible for deleting the data at the end

of the storage period. Please ensure that your plans comply with General Data Protection Regulation (GDPR) and the (UK) Data Protection Act 2018.

Microsoft Teams will be used to conduct and record consent and the interviews as it uses end-to-end encryption. For consent and interviews conducted over the phone, a dictaphone will be used to record. All recordings will be transferred to the chief researcher's university VPN or University OneDrive account at the earliest opportunity and deleted from all other store systems (i.e. Microsoft Stream and dictaphone). Data containing personal data (i.e. consent recordings and expression of interest form) will be stored separately to anonymised research data (i.e. interview audio files, transcripts and demographic data).

Transcripts will be fully anonymised and not contain any personal participant or third party information and will be stored on the chief researcher's university OneDrive account. Paper based transcripts will be stored in a locked cabinet in the chief researcher's home address and will be destroyed once analysis is complete.

After examination of the thesis, electronic research data (i.e. transcripts and consent recordings) will be securely transferred to the Research Co-ordinator in the Clinical Psychology programme, who is responsible for secure storage and deletion after 10 years. At this point, all remaining data will be deleted from the chief researcher's storage systems (i.e. OneDrive and VPN).

7. Will audio or video recording take place? ☐ no ☒ audio ☒ video

a. Please confirm that portable devices (laptop, USB drive etc) will be encrypted where they are used for identifiable data. If it is not possible to encrypt your portable devices, please comment on the steps you will take to protect the data.

All confidential data will be transferred to the chief researcher's university VPN at the earliest opportunity and deleted from all other storage systems (i.e. Microsoft Stream and dictaphone). Recordings will be downloaded onto the chief researcher's personal laptop, which is password protected, only for the purposes of transferring recordings to the VPN or university OneDrive account and will be immediately deleted. Electronic transcripts will be stored on the chief researcher's university OneDrive.

b What arrangements have been made for audio/video data storage? At what point in the research will tapes/digital recordings/files be destroyed?

Audio and video data will be stored on the chief researcher's university VPN or OneDrive account and will be deleted after the thesis has been examined.

Please answer the following questions *only* if you have not completed a Data Management Plan for an external funder

8a. How will you share and preserve the data underpinning your publications for at least 10 years e.g. PURE?

Research data will be securely transferred to the Research Co-ordinator in the Clinical Psychology programme and stored for 10 years, at which point it will be destroyed. Due to the small sample size and potentially sensitive nature of the underpinning data, transcripts will not be made available more widely for researchers. Tables documenting the analytic process will be incorporated into the thesis and stored in PURE, allowing for links to be incorporated in any publication of the study.

8b. Are there any restrictions on sharing your data?

Due to the small sample size, even after fully anonymisation there is a small risk that participants can be identified. Therefore, supporting data will only be shared on request. Access will be granted on a case by case basis by the Faculty of Health and Medicine.

9. Consent

a. Will you take all necessary steps to obtain the voluntary and informed consent of the prospective participant(s) or, in the case of individual(s) not capable of giving informed consent, the permission of a legally authorised representative in accordance with applicable law? ☒ yes

b. Detail the procedure you will use for obtaining consent?

Verbal consent to participate will be taken and recorded using Microsoft Teams or dictaphone, before starting the interview. Recording will be started and each point of the consent form (appendix D) will be read to the participant, asking if they agree. Recording will then be stopped and restarted for the interview itself, to ensure consent recording can be stored separately to the interview recording. At the earliest opportunity the consent recording will be downloaded and deleted from Microsoft Stream (where Microsoft Teams automatically stores recordings) or dictaphone. The consent recording will be transferred to the chief researcher's secure university virtual private network (VPN) and stored separately to the interview recordings and transcription.

10. What discomfort (including psychological eg distressing or sensitive topics), inconvenience or danger could be caused by participation in the project? Please indicate plans to address these potential risks. State the timescales within which participants may withdraw from the study, noting your reasons.

There is minimal risk anticipated for participants taking part in the study. However, participants may find discussing their personal experiences of working during the pandemic distressing. If participants become distressed during the interview, the researcher will offer to pause or stop the interview. All participants will be offered suitable support including a debrief following the interview and a debrief sheet (appendix G) detailing sources of further support. Individuals currently experiencing psychological distress requiring mental health services, will not be included in the study, to ensure participation does not add to the distress or interfere with ongoing support.

Although the focus of the interview is on the participant's individual experience of navigating the pandemic, this is within the context of their work as a healthcare worker, meaning incidences of poor practice may arise. If this happens, the researcher will discuss with supervising researchers and appropriate action will be taken, in line with the Health and Care Professionals Council.

Participants are advised that they can withdraw from the study at any time up until two weeks after completing the interview. Requests to remove their data will be limited to two weeks, as this may not be possible once data has been analysed and pooled.

11. What potential risks may exist for the researcher(s)? Please indicate plans to address such risks (for example, noting the support available to you; counselling considerations arising from the sensitive or distressing nature of the research/topic; details of the lone worker plan you will follow, and the steps you will take).

No risk to the researchers is expected above or beyond that experienced in their usual work. If support is required, this will be sought through existing supervisory pathways.

All contact with participants will be via email and Microsoft Teams or telephone, for which the researcher will use their university email address/account or withheld number.

12. Whilst we do not generally expect direct benefits to participants as a result of this research, please state here any that result from completion of the study.

There may not be any direct benefit for individuals taking part in the study, however participants may find it interesting to talk about their experiences and will be helping to develop an understanding of frontline healthcare workers' experiences of the pandemic.

13. Details of any incentives/payments (including out-of-pocket expenses) made to participants:

It is not expected that any participant will acquire expenses from participating.

14. Confidentiality and Anonymity

a. Will you take the necessary steps to assure the anonymity of subjects, including in subsequent publications? ☒ yes

b. Please include details of how the confidentiality and anonymity of participants will be ensured, and the limits to confidentiality.

At point of transcription data will be anonymised to ensure participants are not identifiable by assigning them a participant number and pseudonym. Every effort will be made to ensure verbatim quotations included in published data will be anonymous, so the participant is not identifiable. Any data containing identifiable information (i.e. consent recordings and expression of interest form) will be stored separately to anonymised research data.

It will be made clear to the participants in the participant information sheet (appendix C) that there are limits to confidentiality, for example if the researcher has concerns about risk to the individual, risk to others or unsafe practice.

15. If relevant, describe the involvement of your target participant group in the *design and conduct* of your research.

Healthcare workers have informally been asked about the impact of the public discourse on navigating the current pandemic, to determine the relevance of the issue. Respondents talked about positive impacts of boosting moral and feeling supported. Others included feeling conflicted by the glorification of their role when faced with realities of the work and imposter syndrome.

16. What are the plans for dissemination of findings from the research? If you are a student, include here your thesis.

Collected data will be seen by researchers mentioned within this application.

A written report of the study and findings will be produced and submitted as part of a thesis as partial fulfilment of a Doctorate in Clinical Psychology at Lancaster University. Direct feedback will be given to participants, if they wish, in the form of a written summary. The study and results may also be published in academic journals and open access sources

such as ResearchGate and PURE, as well as social media outlets and academic blogs, such as Psychology Today.

17. What particular ethical considerations, not previously noted on this application, do you think there are in the proposed study? Are there any matters about which you wish to seek guidance from the FHMREC?

None.

SECTION FOUR: signature**Applicant electronic signature:**Date 07/09/2020

Student applicants: please tick to confirm that your supervisor has reviewed your application, and that they are happy for the application to proceed to ethical review ☒

Project Supervisor name (if applicable): Dr Suzanne Hodge
discussed 07/09/2020

Date application

Submission Guidance

1. Submit your FHMREC application by email to Becky Case
(fhmresearchsupport@lancaster.ac.uk) as two separate documents:

- i. **FHMREC application form.**
Before submitting, ensure all guidance comments are hidden by going into 'Review' in the menu above then choosing *show markup>balloons>show all revisions in line*.
- ii. **Supporting materials.**
Collate the **following materials for your study, if relevant, into a single word document:**
 - a. **Your full research proposal (background, literature review, methodology/methods, ethical considerations).**
 - b. Advertising materials (posters, e-mails)
 - c. Letters/emails of invitation to participate
 - d. Participant information sheets
 - e. Consent forms
 - f. Questionnaires, surveys, demographic sheets
 - g. Interview schedules, interview question guides, focus group scripts
 - h. Debriefing sheets, resource lists

Please note that you DO NOT need to submit pre-existing measures or handbooks which support your work, but which cannot be amended following ethical review. These should simply be referred to in your application form.

2. Submission deadlines:

- i. Projects including direct involvement of human subjects [**section 3 of the form was completed**]. The *electronic* version of your application should be submitted to [Becky Case](#) **by the committee deadline date**. Committee meeting dates and application submission dates are listed on the [FHMREC website](#). Prior to the FHMREC meeting you may be contacted by the lead reviewer for further clarification of your application. Please ensure you are available to attend the committee meeting (either in person or via telephone) on the day that your application is considered, if required to do so.
- ii. The following projects will normally be dealt with via chair's action, and may be submitted at any time. [**Section 3 of the form has *not* been completed, and is not required**]. Those involving:
 - a. existing documents/data only;

- b. the evaluation of an existing project with no direct contact with human participants;
 - c. service evaluations.
- 3. **You must submit this application from your Lancaster University email address, and copy your supervisor in to the email in which you submit this application**

Frontline Healthcare Workers' Experience of the Covid-19 Pandemic and Public**Discourse: A Thematic Analysis****Research Protocol****Applicants****Chief Researcher**

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Introduction/Rationale

Coronavirus disease (Covid-19) is a novel virus first reported in December 2019 and was declared a pandemic in March 2020 by the World Health Organisation (WHO), with daily reported cases exceeding 200,000 worldwide in July 2020. For many who contract Covid-19, it is a mild to moderate respiratory illness, however for others it can cause a serious and life threatening illness (WHO, 2020a). In the United Kingdom (UK) some healthcare workers are on the frontline in the response to the Covid-19 pandemic, caring for individuals who experience critical illness due to Covid-19. For these healthcare workers, the experience will potentially have a significant impact on individuals and the workforce as a whole. The World Health Organisation (WHO, 2020b) has formally recognised that the healthcare workforce is at an increased risk of psychological challenges, due to prolonged high stress situations, threats to individual safety and many other factors. Research emerging from China suggests significant psychological burden on workers in the immediate response to the crisis (Lai, 2020). Research has also shown long term impacts for healthcare workers responding to disaster events, including post-traumatic stress disorder (PTSD; Garbern, Ebbeling, & Bartels, 2016) and depression (Liu et al., 2012). Further to this, healthcare workers may experience moral injury; psychological distress caused by action or inaction that goes against individual moral ethics (Greenberg, Docherty, Gnanapragasam, & Wessely, 2020). During the pandemic healthcare workers may face a number of challenging dilemmas such as managing duty to patients with personal safety as well as safety of family and friends and carrying out care with limited resources (Greenberg et al., 2020). Though moral injury is not a mental health difficulty, it has been associated with poorer mental health outcomes (Williamson, Stevelink, & Greenberg, 2018).

When assessing mental health outcomes for frontline responders to crisis situations, such as pandemics, Benedex, Fullerton and Ursano (2007) concluded that individuals will fall

into three categories; the majority will experience mild distress that will recover without formal intervention, a small group may experience moderate distress benefiting from psychological support and a final, smaller group will experience significant long-term distress requiring specialist intervention. Recent research, however, also suggests the potential for positive impact on crisis workers through post-traumatic growth, creating a greater appreciation for life and relationships, increased self-esteem and a deeper understanding of their work (Brooks, Amlôt, Rubin, & Greenberg, 2020).

While responding to the Covid-19 pandemic, healthcare workers are also receiving a significant amount of media and public attention. The discourse surrounding healthcare workers is predominantly of gratitude, including terms such as ‘heroes’. Literature concerning the experience of crisis has found that the public narrative surrounding the crisis can impact on the individual’s experience and how they make sense of that experience. One study of a community affected by conflict found that social framing of the situation by the wider community was associated with emotional distress symptoms (Abramowitz, 2005). When looking at community responses to disasters, Chamlee-Wright and Storr (2011) found that public narratives of resilience and hope impacted on behaviour, for example whether to rebuild or not. Further to this, Murphy (2010) found that if a public narrative resonates with the individual’s experience of the event this can be validating and affirming. However, when public narrative contradicts personal memory, it can create challenges in trying to integrate the narrative into personal identity. Additionally, when exploring the experiences of frontline healthcare workers of the 2003 severe acute respiratory (SARS) outbreak in Toronto, Maunder (2004) concluded that media representation of workers impacted well-being, for example through stigma or influencing morale. Therefore, healthcare workers’ perceptions of the surrounding public narratives need to be considered when exploring their experience of working on the frontline of the covid-19 pandemic.

Study Aims

The present study aims to explore the subjective experiences of healthcare workers on the frontline of the Covid-19 pandemic in the UK. In particular, the study aims to build an understanding of how individuals navigated a potentially psychologically distressing environment and how they made sense of the experience within the context of the public narratives. Exploring frontline healthcare workers' experiences and how they navigate this likely distressing environment is a first step in understanding how to best support this workforce. The study will add to the literature in understanding the impact of prolonged crises and traumatic experiences, as well as how public discourse influences the individual's experience. Within the We are the National Health Service (NHS) People Plan 2020-21 (NHS England, 2020) there is a significant emphasis on psychological support for staff, for which clinical psychologists will play a key role. Themes developed from the study may be used to help provide guidance to staff facing similar situations in the future to help navigate psychologically distressing crises, as well as providing guidance on how healthcare workers make sense of the experience, for clinical psychologists supporting them.

Method**Design**

A qualitative approach will be used as the research aims to explore individuals' subjective experiences, while considering how their perceptions of surrounding societal discourse may influence the meaning of this experience. A semi-structured interview approach will be used with an open-ended starting question and guiding prompts to encourage further exploration of the individual's experience, as well as follow up questions about their perceptions of how they are viewed by the public, if not organically discussed. This approach aims to elicit a detailed and rich account of the individual's experience, which addresses the

main aim of the study (Riessman, 2008). The collected data will then be analysis using a thematic analysis approach (Braun & Clarke, 2006).

Participants

Participants will be healthcare staff working within the NHS on intensive care units (ICU), who provided direct care to patients with Covid-19, including nurses, doctors, physiotherapists and dieticians. A balanced sample of professional roles will be aimed for. The number of participants will depend on the depth of data gathered from each interview, for this reason between 8-12 participants will be recruited.

Inclusion Criteria

- Qualified members staff, working in the UK, who provided/provide direct care to patients diagnosed with Covid-19 for a minimum of 1 month
- Staff from any clinical discipline on ICU (or equivalent ward e.g. intensive treatment unit or critical care unit)
- English speaking (funding for interpreter is not available)

Exclusion Criteria

- No involvement with direct care of patients diagnosed with Covid-19
- Currently receiving psychological support from mental health services (see ethical considerations section)
- Students or none qualified members of staff

Materials

Semi-structured interview schedule/topic guide, laptop and transcription equipment (e.g. foot pedal- provided from the Doctorate of Clinical Psychology programme).

Procedure

Recruitment

The study will be advertised through social media outlets, such as Twitter. The advertising flyer (appendix A) will be posted by the chief researcher's professional Twitter account (handle @EmilyGo55444882). The post will be worded "Are you a healthcare worker on an intensive care unit treating individuals with Covid-19? Emily (Trainee Clinical Psychologist) is looking for English-speaking participants to talk via video call or telephone about their experiences of the pandemic. Please see advert for contact details." The researcher will ask other relevant Twitter pages to "retweet" the advert, for example, the Lancaster Doctorate in Clinical Psychology Twitter account (handle @LancsDClinPsy) and the Intensive Care Society Twitter account (handle @ICS_updates). After initial recruitment, more targeted recruitment will be used to aim for a balanced sample of professionals if needed. This will be done by adding specific professional roles which have not yet been recruited into the post. Potential participants will be invited to respond directly to the chief researcher via email. When potential participants make contact, they will be sent, via email, a copy of the expression of interest sheet (appendix B), participant information sheet (appendix C) and consent form (appendix D) and demographic data sheet (appendix E). Following this, potential participants will be contacted, after they have had at least 24 hours to read through the research documents, to answer any questions they may have regarding participation and to see if they would like to take part. If participants wish to take part then a time, convenient for the participant, will be agreed to conduct the remote interview. All correspondence with participants, other than the interview, will be via email. Email addresses will be deleted following the interview or after summary of results is sent to participants if they request it.

Recruitment through individual NHS trusts was considered, however this may result in themes reflecting local conditions rather than the wider experience of being a frontline healthcare worker during Covid-19.

Conducting Interviews and Transcription

Microsoft Teams will be used to conduct and record the interviews as it uses end-to-end encryption. The chief researcher will provide guidance to participants in using Microsoft Teams if required. If Microsoft Teams is not available interviews will be conducted by phone and recorded via dictaphone. The interview topic guide (appendix F) will be used to inform the interview process, with prompts being used where necessary. Recording will be started and each point of the consent form (appendix D) will be read out loud by the researcher, asking the participant if they agree. Recording will then be stopped. The first paragraph of the interview topic guide (appendix F) will be read to introduce the study, make participants aware that the interview will last approximately 60 minutes and that they are welcome to ask for a break at any point and to stop the interview, for any reason. The interview recording will then be started. The interviews will take place from a private room in the chief researcher's home address. Once the interview is complete the researcher will enquire about the participant's wellbeing and provide them with the debrief sheet (appendix G) via email. If the participants experience distress at any part of the process, they will be given the opportunity to stop, as well as being signposted to relevant support systems detailed on the debrief sheet.

For interview conducted via Microsoft Teams, both consent and interview will be recorded using Microsoft Teams which automatically stores recordings on Microsoft Stream. At the earliest opportunity, both recordings will be downloaded and deleted from Microsoft Stream (and therefore Microsoft Teams). For interviews conducted over the phone, both consent and interview will be recorded using a dictaphone. The recordings will be transferred at the earliest opportunity and deleted from the dictaphone. In both cases, the consent recording will be stored on the chief researcher's secure university virtual private network (VPN). At the earliest opportunity the interview recording will be converted to an MP3 audio file (to remove identifiable data) using VLC media player and anonymously stored (e.g. file

named “participant 1”) on the chief researcher’s secure university virtual private network (VPN) or university OneDrive, separate to the consent recording. Video and audio recordings will be deleted once the thesis has been examined.

Transcriptions will be conducted by the chief researcher in a password protected word document, which will be stored on the chief researcher’s university OneDrive. The chief researcher’s research supervisors can securely be given access to transcripts if required. Information, including third party, will be anonymised at the point of transcription.

Analysis

Thematic analysis will be used as it allows the identification of patterns of meaning across individuals’ experiences with a consideration of the impact of societal discourse on this meaning (Braun & Clarke, 2006). The approach will explore how healthcare workers make meaning out of their experience and the public views and expectations of them. To ensure analysis is rigorous, Braun and Clarke’s (2006) six step process, detailed below, will be followed.

1. Familiarising yourself with the data
2. Generating initial codes
3. Searching for themes
4. Reviewing themes
5. Defining and naming themes
6. Producing the report

The Covid-19 pandemic is an unprecedented event across the UK and worldwide, though previous pandemics have occurred. As the experiences of healthcare workers during the Covid-19 pandemic are likely to be new and little is known about possible themes an inductive approach will be utilised, meaning no pre-existing theoretical framework will be applied when coding the data (Braun & Clarke, 2006). Following this, the analysis will aim

for a rich description of the whole data set to determine common themes building an understanding of how healthcare workers navigated the potentially distressing experience of the pandemic and the influence of the public discourses.

Dissemination

A written report of the study and findings will be produced and submitted as part of a thesis as partial fulfilment of a Doctorate in Clinical Psychology at Lancaster University. Direct feedback will be given to the participants, if they wish, in the form of a written summary. The study and results may also be published in academic journals and open access sources such as ResearchGate and PURE, as well as social media outlets and academic blogs, such as Psychology Today. Due to the small sample size and potentially sensitive nature of the underpinning data, transcripts will not be made available more widely for researchers. Tables documenting the analytic process will be incorporated into the thesis and stored in PURE, allowing for links to be incorporated in any publication of the study.

Practical Issues

As described above, healthcare workers are under heightened demand at the moment, which is likely to be the case at time of recruitment and interview as the pandemic continues. It has been considered that this may present a challenge in recruitment of such participants. To minimise this the interviews will take place outside of participants' work hours and at a time that best suits them. Conducting the interviews remotely means that social distancing and other restrictions will not impact on the data collection stage, as well as reducing demand on participants' time as they are not having to travel to take part in the study.

Ethical Considerations

Risk to participants

There is minimal risk anticipated for participants taking part in the study. However, participants may find discussing their personal experiences of working during the pandemic

distressing. If participants become distressed during the interview, the researcher will offer to pause or stop the interview. The chief researcher is a trainee clinical psychologist with clinical experience in managing distress and signposting. All participants will be offered an appropriate level of support including a debrief following the interview and a debrief sheet (appendix G) detailing sources of further support. Individuals currently experiencing psychological distress requiring mental health services will not be included in the study, to ensure participation does not add to the distress or interfere with ongoing support.

Although the focus of the interview is on the participant's individual experience of navigating the pandemic, this is within the context of their work as a healthcare worker, meaning incidences of poor practice may be reported. If this happens, the researcher will discuss with the supervising researchers and appropriate action will be taken, in line with the relevant professional regulators.

Participants are advised that they can withdraw their data from the study at any time up until two weeks after completing the interview. Requests to remove their data will be limited to two weeks, as this may not be possible once data has been analysed and pooled.

Risk to researcher

No risk to researchers is expected above or beyond that experienced in their usual work.

Data protection

All recordings will be transferred to the chief researcher's university VPN or OneDrive at the earliest opportunity and deleted from all other store systems (i.e. Microsoft Stream and dictaphone). Data containing personal data (i.e. consent recordings and expression of interest form) will be stored separately to anonymised research data (i.e. interview audio files and transcripts). Video and audio recordings will be destroyed after examination of thesis.

Transcripts will be fully anonymised and not contain any personal participant or third party information and will be stored on the chief researcher's university OneDrive. Paper transcripts will be stored in a locked cabinet in the chief researcher's home address and will be destroyed once analysis is complete.

After examination of the thesis, electronic research data (i.e. consent recordings and transcripts) will be securely transferred to the Research Co-ordinator in the Clinical Psychology programme, who is responsible for secure storage and deletion after 10 years. At this point all remaining data will be deleted from the chief researcher's storage systems (i.e. OneDrive and VPN).

References

- Abramowitz, S. A. (2005). The poor have become rich, and the rich have become poor: Collective trauma in the Guinean Languette. *Social Science & Medicine*, 61(10), 2106-2118. doi:10.1016/j.socscimed.2005.03.023
- Benedek, D. M., Fullerton, C., & Ursano, R. J. (2007). First responders: mental health consequences of natural and human-made disasters for public health and public safety workers. *Annu. Rev. Public Health*, 28, 55-68. doi:10.1146/annurev.publhealth.28.021406.144037
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
- Brooks, S., Amlôt, R., Rubin, G. J., & Greenberg, N. (2020). Psychological resilience and post-traumatic growth in disaster-exposed organisations: overview of the literature. *BMJ Military Health*, 166(1), 52-56. doi:10.1136/jramc-2017-000876
- Chamlee-Wright, E., & Storr, V. H. (2011). Social Capital as Collective Narratives and Post-Disaster Community Recovery. *The Sociological Review*, 59(2), 266-282. doi:10.1111/j.1467-954X.2011.02008.x
- Garbern, S. C., Ebbeling, L., & Bartels, S. A. (2016). A Systematic Review of Health Outcomes Among Disaster and Humanitarian Responders. *Prehospital Disaster Medicine*, 31(6), 635-642. doi:10.1017/S1049023X16000832
- Greenberg, N., Docherty, M., Gnanapragasam, S., & Wessely, S. (2020). Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *bmj*, 368. doi: 10.1136/bmj.m1211.
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., . . . Hu, S. (2020). Factors Associated with Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. *JAMA Network Open*, 3(3).

- Liu, X., Kakade, M., Fuller, C. J., Fan, B., Fang, Y., Kong, J., . . . Wu, P. (2012). Depression after exposure to stressful events: lessons learned from the severe acute respiratory syndrome epidemic. *Comprehensive Psychiatry*, 53(1), 15-23.
doi:10.1016/j.comppsy.2011.02.003
- Maunder, R. (2004). The experience of the 2003 SARS outbreak as a traumatic stress among frontline healthcare workers in Toronto: lessons learned. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 359(1447), 1117-1125.
doi: 10.1098/rstb.2004.1483
- Murphy, J. (2010). Memory, Identity and Public Narrative: Composing a Life-Story after Leaving Institutional Care, Victoria, 1945-83. *Cultural and Social History*, 7(3), 297-314. doi:10.2752/147800410X12714191853229
- NHS England (2020). We are the NHS: People Plan for All 2020/21- Action for all of us. Retrieved from the NHS England website: https://www.england.nhs.uk/wp-content/uploads/2020/07/We_Are_The_NHS_Action_For_All_Of_Us_FINAL_24_08_20.pdf
- Riessman, C. K. (2008). Narrative Methods for the Human Sciences. California, USA: Sage
- Williamson, V., Stevelink, S. A., & Greenberg, N. (2018). Occupational moral injury and mental health: systematic review and meta-analysis. *The British Journal of Psychiatry*, 212(6), 339-346. doi: 10.1192/bjp.2018.55
- World Health Organisation (2020a). *Health Topics: Coronavirus*. Retrieved from the World Health Organisation website: https://www.who.int/health-topics/coronavirus#tab=tab_1
- World Health Organisation (2020b). *Mental Health Considerations During COVID-19 Outbreak*. Retrieved from the World Health Organisation website: <https://www.who.int/publications-detail/WHO-2019-nCoV-MentalHealth-2020.1>

Appendix 4-A
Research Advert



Research Study

Do you work on an intensive care unit in the UK?

We are interested in hearing about your experiences of the Covid-19 pandemic.

What is the research about?

The Covid-19 pandemic has created an unprecedented environment for those working on the frontline of healthcare, adding to an already demanding job. Their work has also taken on a high profile, with healthcare workers being praised for their dedication.

We want to hear how frontline healthcare workers have experienced the pandemic and whether their experiences have been affected by public attitudes.

What will it involve?

Participants will take part in an interview about their experiences for around an hour. The interview will take place via video conference.



Who is eligible to take part?

- Clinical, qualified staff working on ICU (or equivalent) who are providing/provided direct care to patients with Covid-19, for at least 1 month
- Individuals not currently receiving support from mental health services



If you are interested in hearing more about the project, please contact Emily Goodman (Trainee Clinical Psychologist) at e.goodman1@Lancaster.ac.uk or on Twitter @EmilyGo55444882

Appendix 4-B
Expression of Interest Form

Name:

.....
.....

Role on Intensive Care Unit:

.....
.....

Have you provided direct care for patients diagnoses with Covid-19 for more than 1 month?

.....
.....

How would you like to be contacted?

.....
.....

Appendix 4-C

Participant Information Sheet***Frontline Healthcare Workers' Experience of the Covid-19 Pandemic and Public Discourse: A thematic Analysis***

For further information about how Lancaster University processes personal data for research purposes and your data rights please visit our webpage: www.lancaster.ac.uk/research/data-protection

My name is Emily Goodman and I am conducting this research as a Trainee Clinical Psychologist in the Doctorate in Clinical Psychology programme at Lancaster University, Lancaster, United Kingdom.

What is the study about?

The purpose of this study is to explore frontline healthcare workers' experiences of the Covid-19 pandemic. I am particularly interested in how you adjusted to the environment of intensive care units during the pandemic and what you think helped or did not help with this. I am also interested in how you think healthcare workers have been perceived by the public and whether this influenced your experience of working during the pandemic.

Why have I been approached?

You have been approached because the study requires information from people who work on intensive care units and provided direct care to patients diagnosed with Covid-19.

Do I have to take part?

No. It's completely up to you to decide whether or not you take part.

What will I be asked to do if I take part?

If you decide you would like to take part, you will be asked to take part in an interview with me via video call using Microsoft Teams or via telephone. As I can only interview a maximum of 12 people, I may not be able to interview everyone who is interested in taking part, but I will let you know by XXXX if you are not needed to be in the study.

The interview will focus on your experiences of the Covid-19 pandemic and adjusting to it, as well as your perception and experience of the public discourse around healthcare workers. It is expected that the interview will take approximately one hour, however it can be stopped at any point should you wish to. We can also take breaks during the interview.

Will my data be Identifiable?

The data collected for this study will be stored securely in university approved secure cloud storage and only myself and my supervisors will have access to this data:

- Interview recordings will be deleted once the project has been examined.
- Hard copies of documents will be kept in a locked cabinet and destroyed after analysis is complete.
- Electronic data (i.e. consent recordings, interview recordings & transcripts) will be stored on university approved secure cloud storage. All files will be deleted from the chief researcher's stores once the thesis has been examined.

- The electronic transcript of your interview will be made anonymous by removing any identifying information including your name and any third party information. Anonymised direct quotations from your interview may be used in the reports or publications from the study, so your name will not be attached to them. All reasonable steps will be taken to protect the anonymity of the participants involved in this project.
- All your personal data will be confidential and will be kept separately from your interview responses.
- Consent recordings and transcripts will be kept in a password protected Lancaster University data storage for 10 years in line with the university's data policy.

There are some limits to confidentiality: if what is said in the interview makes me think that you, or someone else, is at significant risk of harm or if there is any other breach of ethical professional guidelines discussed, I will have to break confidentiality and speak to my supervisors about this. If possible, I will tell you if I have to do this.

What will happen to the results?

The results will be summarised and reported in a thesis and may be submitted for publication in an academic or professional journal. You will be asked if you would like to receive a summary of the results.

Are there any risks?

There are no risks anticipated with participating in this study. However, if you experience any distress following participation you are encouraged to let me know. I will also provide you with a debrief sheet after completing the interview, which will contain contact details for organisations that can provide support.

Are there any benefits to taking part?

Although you may find participating interesting, there are no direct benefits in taking part. However, you will be helping to develop our understanding of frontline healthcare workers experiences of the pandemic.

Who has reviewed the project?

This study has been reviewed and approved by the Faculty of Health and Medicine Research Ethics Committee at Lancaster University.

Where can I obtain further information about the study if I need it?

If you have any questions about the study, please contact the main researcher:

Chief Researcher:

Emily Goodman

Email: e.goodman1@lancaster.ac.uk

Supervising Researchers:

Dr Suzanne Hodge

Lecturer in Health Research, Division of Health Research, Faculty of Health and Medicine, Health Innovation One, Sir John Fisher Drive, Lancaster University, Lancaster, LA1 4AT

Tel: [REDACTED] Email: s.hodge@lancaster.ac.uk

Dr Anna Duxbury

Clinical Psychologist & Clinical Tutor, Division of Health Research, Faculty of Health and Medicine, Health Innovation One, Sir John Fisher Drive, Lancaster University, Lancaster, LA1 4AT

Tel: [REDACTED] Email: a.duxbury@lancaster.ac.uk

Dr Anna Daiches

Clinical Psychologist & Clinical Director, Division of Health Research, Faculty of Health and Medicine, Health Innovation One, Sir John Fisher Drive, Lancaster University, Lancaster, LA1 4AT

Tel: [REDACTED] Email: a.daiches@lancaster.ac.uk

Complaints

If you wish to make a complaint or raise concerns about any aspect of this study and do not want to speak to the researcher, you can contact:

Dr Ian Smith

Research Director

Division of Health Research

Faculty of Health and Medicine

Health Innovation One

Sir John Fisher Drive, Lancaster University

Lancaster, LA1 4AT

Tel: [REDACTED]

Email: i.smith@lancaster.ac.uk

If you wish to speak to someone outside of the Clinical Psychology Doctorate Programme, you may also contact:

Dr Laura Machin Tel: +44 (0)1524 594973

Chair of FHM REC Email: l.machin@lancaster.ac.uk

Faculty of Health and Medicine

(Lancaster Medical School)

Lancaster University

Lancaster

LA1 4YG

Thank you for taking the time to read this information sheet.

Appendix 4-D



Consent Form

Study Title: Frontline Healthcare Workers' Experience of the Covid-19 Pandemic and Public Discourse: A thematic Analysis

We are asking if you would like to take part in a research project which aims to explore frontline healthcare workers' experiences of the Covid-19 pandemic and the public discourse. Before you consent to participating in the study, we ask that you read the participant information sheet. Verbal consent will be recorded during the video call before commencing with the interview itself. If you have any questions or queries before regarding the consent form, please speak to the principal investigator, Emily Goodman.

- | | Please initial
each statement |
|--|----------------------------------|
| 1. I confirm that I have read the information sheet and fully understand what is expected of me within this study | <input type="checkbox"/> |
| 2. I confirm that I have had the opportunity to ask any questions and to have them answered. | <input type="checkbox"/> |
| 3. I understand that my interview will be video and audio recorded and then made into an anonymised written transcript. | <input type="checkbox"/> |
| 4. I understand that video and audio recordings will be kept until the research project has been examined. | <input type="checkbox"/> |
| 5. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. | <input type="checkbox"/> |
| 6. I understand that my data may not be removed from the study if I withdraw later than two weeks after my interview. After that date, the researcher will make their best efforts to remove the data, but this cannot be guaranteed. | <input type="checkbox"/> |
| 7. I understand that the information from my interview will be pooled with other participants' responses, anonymised and may be published; all reasonable steps will be taken to protect the anonymity of the participants involved in this project. | <input type="checkbox"/> |
| 8. I consent to information and quotations from my interview being used in reports, conferences and training events. | <input type="checkbox"/> |
| 9. I understand that the researcher will discuss data with their supervisors as needed. | <input type="checkbox"/> |
| 10. I understand that any information I give will remain confidential and anonymous unless it is thought that there is a risk of harm to myself or others, or evidence of poor workplace practice, in which case the principal investigator | <input type="checkbox"/> |

will need to share this information with their research supervisor and action taken in line with the Health and Care Professional Council.

11. I consent to Lancaster University keeping written transcriptions of the interview and consent recording for 10 years after the study has finished.

☐

12. I consent to take part in the above study.

☐

Name of Participant _____

Date _____

Name of Researcher _____

Date _____

Appendix 4-EDoctorate in
Clinical Psychology**Demographic Data Form**

Please complete this form and return to the research team.

Age (years) (optional):

.....

Gender (optional):

.....

Ethnicity (optional):

.....

Length of time since qualification:

.....

Length of time in current role:

.....

Appendix 4-F

Interview Guide

Introduction

Thank you for taking the time to participate in this study. As previously mentioned, this study is interested in exploring frontline healthcare workers experiences of the Covid-19 pandemic and how they navigated these experiences. We hope that this research will help to build an understanding of how workers, like yourself, managed the unprecedented situation and how workers going through similar situations may best be supported. We are also interested in what your perceptions of the public's view of you as a frontline healthcare work are and your experience of this.

Please provide as much information as you are comfortable with sharing and anything that you think is important and helpful for me to understand about you experience of the pandemic.

The interview is likely to last around one hour. You are welcome to ask for a break at any point and you may also ask to stop the interview at any time without having to give reason. Please try to avoid using identifiable information such as colleague or service names. However, if you do please be assured that this will be anonymised when transcribed. Before we start, do you have any questions?

3. Working during the pandemic

- Please could you tell me about your role and the team you work in?
- How long have you worked in that role/team?
- How did this role change in the past X months?
- Can you describe your first experience of Covid-19 on the ward?
- Can you describe your experiences as a frontline healthcare worker during the Covid-19 pandemic?
- What were the overall impacts of these experiences on you? Both positive and negative
- What were the impacts of these experience on...?
 - i. Personal life
 - ii. Physical health
 - iii. Emotional wellbeing
- What were the impacts of the experiences on the team and work environment?
Both positive and negative
- Do you think you have been able to process these experiences?
- How do you feel now looking back at these experiences?
- Can you describe the situation on the ward now?

- i. Has your experience changed since the first experience of Covid-19 on the ward?
 - What are your thoughts/hopes/fears for the future?
 - What is important to understand from your experience of working in the pandemic?
4. Public discourses
 - a. During this time, were you aware of the way healthcare workers were portrayed in public? E.g. newspapers, social media, TV
 - b. Were public perceptions discussed among colleagues or in the workplace?
 - c. What was the public view of healthcare workers from your perspective?
 - d. What was your experience of the public views of healthcare workers?
 - e. What, if any, was the influence of the public view on you?

Is there anything else you think it would be important for me to understand about your experience of the pandemic?

Appendix 4-G**Debrief Sheet****Study Title: Frontline Healthcare Workers' Experience of the Covid-19 Pandemic and Public Discourse: A thematic Analysis**

Thank you for taking part in this study which is exploring frontline healthcare workers experience of the Covid-19 pandemic and the public discourse. Once all of the interviews have been conducted the data will be analysed and submitted as part of a doctoral thesis, in partial fulfilment for a Doctorate in Clinical Psychology. If you would like to receive a summary of the main findings, please inform the chief researcher. If you have any questions regarding the study, please contact Emily Goodman (e.goodman1@lancaster.ac.uk).

If you found the interview in anyway distressing or it raised difficult feelings, you may wish to seek support from one of the below organisations that will be able to provide that support. You may wish to also speak with your GP.

NHS Practitioner Health

www.practitionerhealth.nhs.uk

Tel: 0300 131 17000

Text: "frontline" to 85258

Infoline: 0300 123 3393

www.mind.org.uk

Email: info@mind.org.uk

Text: 86463

Post: Mind Infoline, PO Box 75225, London, E15 9FS

NHS Services

www.nhs.uk

Tel: 111

Samaritans

www.Samaritans.org

Email: jo@Samaritans.org

116 123