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# Healthcare support workers' lived experiences and adaptation strategies within the care sector during the COVID-19 pandemic. A meta-ethnography review

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## Abstract

Support workers are an 'invisible' part of the health sector often working during pandemics to support clients. This meta-ethnography screened 167 articles out of 211 results identifying 4 qualitative studies that explored the support worker's experiences during the COVID-19 pandemic. 'Redundancy approach' was used to map non-essential criteria and the analysis was informed by the interpretative meta-ethnography method. Eight key themes identified from studies in UK and USA. The themes identified are: (1) job role; (2) marginalised profession; (3) impact of work; (4) concerns surrounding PPE; (5) transportation challenges; (6) level of support and guidance; (7) a higher calling and self sacrifice; (8) adaptation strategies. Adaptation strategies include purchasing their own masks, to policy and agency adaptation, cleaning, talk walks, meetings with colleagues or within the company. The adaptation strategies aim at tackling emotional distress and raise the level of appreciation that society or organisations show to the support workers.

**Key-words:** COVID-19, support workers, meta-ethnography, Personal Protective Equipment (PPE), job stress, adaptation.

**INTRODUCTION**

Pandemics are not an uncommon phenomenon in recent history: from the Spanish influenza (1918-1919), to the 'First Germ Panic' (1900-1940s), to Severe Acute Respiratory Syndrome [SARS] (2002-2003), Ebola (2014-2016), and more recently the coronavirus SARS- Cov-2 or COVID-19 (2019). Outbreaks of infectious diseases can have psychological effects; most commonly were reports of individual's experiencing emotional distress, discomfort and an inability to adapt to everyday life (Liu et al., 2020). Infectious diseases, of both epidemic and pandemic nature, require more psychological resources and mental adaptation than under normal circumstances. Previous research indicates that frontline health-care professionals are at an increased risk of developing work-related mental health problems during outbreaks of infectious diseases (Lee et al., 2018). There is also evidence of elevated anxiety and depression levels amongst frontline staff during different epidemic outbreaks (Maunder et al., 2003). Current adaptation strategies within the literature for healthcare staff have been identified as spirituality (e.g., praying), getting informed by trusted sources, professional commitments and seeking help (Sharov, 2020; Moghaddam-Tabrizi & Sodeify, 2021; Atashi et al., 2022) .

Public health recommendations from the World Health Organisation (WHO) and government bodies, during the COVID-19 pandemic, were numerous and imposed restrictions on daily living such as isolation and social distancing (Ammar *et al.,* 2020; Liu *et al.,* 2020). Within the health sector, providers have been faced with the challenge of implementing and managing restrictions and guidelines whilst also having to  look after vulnerable populations (Liu *et al.,* 2020). Blake and colleagues (2020)  suggest that the coronavirus pandemic (COVID-19) will have a significant psychological impact on healthcare workers, in particular frontline workers. Staff shortages within the sector has been a recognised issue prior to the pandemic and there is a need to recruit skilled professionals and to retain existing staff workers (Czuba, Kayes, & McPherson, 2019).

Typically, when organisations face an acute shortage of staff due to sick leave for example, there are measurable ripple effects on workload and stress levels leading staff feeling more likely exhausted and overwhelmed if experienced over a prolonged period of time (Czuba et al., 2019). Adding to the abovementioned challenges, a pandemic (e.g. public restrictions, understaffed organisations, high anxiety levels) creates unprecedented situations for healthcare providers that demand optimal response and management of staff support.

Meta-ethnography is a well-established method that generates novel, in-depth and more complete understanding of personal experiences and concepts (Fernández-Basanta, Lagoa-Millarengo & Movilla-Fernández, 2021). Since the topic explored is primarily influenced by personal beliefs,

experiences and cultural factors, this methodology allows for a unique understanding of these experiences. Support workers are an underrepresented profession within the healthcare sector (Chan et al., 2020). We identified systematic reviews and other meta synthesis exploring healthcare workers and front line staff in general (Amaratunga et al., 2007; Koh, Hegney and Drury, 2011; Billings et al., 2021; Busch et al., 2021; Li et al., 2021) however support workers were not in included in those reviews. More specifically, Amaratunga et al. (2007) conducted a critical gap analysis examining the support mechanisms of healthcare workers during the 2003 global SARS outbreak without identifying who the healthcare workers are even thought there was a distinct focus around nurses. Koh, Hegney and Drury (2011) systematic review explored the perceptions, risks and coping strategies of healthcare workers from 1997 to 2009. The review focused on nurses and other healthcare personnel such as doctors, pharmacists, management staff as well as hospital cleaners and clerks. Billings et al. (2021) systematic review focused on frontline healthcare workers and their views around support during COVID-19 and previous pandemics. The review examined general healthcare workers, management decision makers, community nurses, consultant, general medical staff, midwives, healthcare providers and volunteers. Busch et al. (2021) systematic review explored the psychological burden of frontline healthcare workers without identifying the role of the professionals. Li et al. (2021) conducted a systematic review on the prevalence of depression, anxiety and post traumatic stress disorder in health care workers. Participants were nurses, doctors, other medical workers (e.g., technicians, pharmacists) administration, support staff and healthcare worker with undefined occupation.

The results of the abovementioned reviews explored the experiences of healthcare staff in general. Therefore a need for further research in relation to support workers is necessary. A healthcare support worker is someone who looks after the well-being of service users. They support individuals with physical (e.g., wheelchair) and mental disabilities (e.g., paranoid schizophrenia) as well as enabling them to live more independently and be part of a community. Additionally, healthcare support workers try to empower individuals to manage their symptoms resulting in improving their overall quality of life.

The number of identified studies that include or are aimed at healthcare support workers is alarmingly low. As an example, in the UK the Adult Social Care sector employs 1.52 million people (Skills for care, 2020). In comparison, the National Health System employs 1.3 million people (NHS, 2021). In the USA according to the U.S Bureau of Labour Statistics (2020) home health and personal care aides (3.2 million) and nursing assistants (1.4 million) made up 71% of all healthcare support jobs.

To the best of our knowledge this is the first study examining the lived experiences for support workers internationally.

**Aim**

This review focuses on exploring the experiences of support workers within the social care sector.

**Research Question**

In order to formulate our questions we used and modified the PICO tool accordingly. PICO (Population, Interventions, Comparison, Outcomes) was developed for quantitative review questions (Butler, Hall and Copnell, 2016) however a modified version using PCO (Population, Context, Outcome) or PICo (Population, Interest, Context) is used for qualitative methodologies (Risenberg & Justice, 2014).

For this review we used the PICo tool (see Table 1) in order to generate the overall search terms and formulate the research questions that are suited to identify qualitative evidence synthesis (Butler, Hall and Copnell, 2016).

*PICo tool for questions Table 1\**

| Population or Problem | Interest | Context |
|---|---|---|
| Care worker | Lived experiences | Pandemics |
| Support worker | Adaptation | COVID-19 |
| | Coping | Care sector |
| | Interventions | |

1. What are the experiences of support workers as a result of the COVID-19 outbreak?
2. What enabled (e.g., interventions) support workers to cope and/or adapt during the COVID-19 pandemic within the care sector?

**Objectives**:

The objectives of this meta-ethnography is to:

1) Identify previous and current research around pandemics and the impact they had on support workers
2) Try to give an initial framework on support workers job role by combining all relevant roles
3) Understand the coping mechanisms used by support workers by analysing their lived experiences

**METHODS**

*Search strategy and selection criteria*

Five databases (see Table 2) were searched on the EBSCOHost platform on April 27, 2021.

*Databases Table 2\**

| Databases | |
|---|---|
| | AMED- The Allied and Complementary Medicine Databases |
| | APA PsyArticles |
| | APA PsyInfo |
| | Cumulative Index to Nursing and Allied Health Literature (CINAHL) |
| | MEDLINE with full text |

The search strategy was developed using the Sample, Phenomenon of interest, Study design, Evaluation, Research type (SPIDER) tool (Table 3).

*SPIDER Tool Table 3\**

| Sample | Phenomenon of Interest | Study Design | Evaluation | Research Type |
|---|---|---|---|---|
| Care worker | Pandemic | Descriptive | Care home | Qualitative |
| Support worker | Epidemic | Qualitative | Nursing home | |
| Senior support worker | Outbreak | | Assisted living | |
| Senior care worker | Covid-19 | | Residential home | |
| | Coronavirus | | | |

The final search terms used were: ***( care worker or support worker or senior support worker or senior care worker ) AND ( care home or nursing home or assisted-living or residential home ) AND ( pandemic or epidemic or outbreak or covid-19 or coronavirus )***

Apart from the articles identified through the search strategy, we hand searched the reference lists of all included papers to identify any potentially relevant articles that could be included in the study.

*Inclusion and Exclusion Table 4\**

| Concept | Inclusion | Exclusion |
|---|---|---|
| **Studies that examine support workers within the care sector** | The experiences of support workers explored through qualitative research from either a purely qualitative or a mixed methods design | Any study that fully incorporates quantitative, surveys, or statistical reporting |
| **Including qualitative data** | Studies that focus on the professionals lived experiences | Studies that focus on the professionals opinion in relation to the treatment or patient care |
| | Support workers within the care sector (e.g. supported living, nursing homes, home care support workers) | Studies that examine health care workers in general without a clear distinction between support workers/carers and other health care professionals (e.g. doctors, nurses). |
| | Studies that provide clear information on the 'how to' or the emotional journey of professionals regardless of design | Studies that are descriptive and do not provide clear emotional pathways |
| | Studies published in English | Studies published in other languages other than English will not be able to be translated therefore will not be included in the review |

**Reference management**

Abstracts from all papers identified by the database and hand searches were exported into Covidence (https://www.covidence.org/). Duplicates were removed automatically from the Covidence software. Screening was undertaken independently by two reviewers (PK and NC), firstly by screening by title and abstract and then through the full text of all potentially included papers in line with the criteria in Table 4. Disagreements were resolved through discussion.

The quality of the included articles was assessed using the 'Template for meta-synthesis of qualitative research studies' (Downe et al., 2009) (see Table 6) by two independent reviewers PK and NC. No quality bias was identified during the quality process. Discrepancies were resolved through discussion. This quality appraisal tool considers the aims, participants, design, methodology, analysis, results, reflexivity, context, rigour and ethics of the studies.

**Analysis**

Walsh and Downe (2006) 'redundancy approach' technique was used, eliminating non-essential criteria aiming at incorporating results from different qualitative studies that are inter-related. Additionally, analysis was informed by the interpretative meta-ethnography methods (see Table 5) (Noblit and Hare, 1988; Feeley, Thomson and Downe; 2019).

*Noblit and Hare's (1988) Seven Phases Table 5\**

1. *Getting Started (the search)*

2. *Deciding what is relevant to the initial interest*

3. *Reading studies and extracting data*

4. *Determining how studies are related (identifying common themes and concepts)*

5. *Translating studies (checking first and/ or second order concepts and themes against each other)*

6. *Synthesising translations (attempting to create new third order constructs)*

7. *Expressing the synthesis*

**PROSPERO**

A preliminary submission of the current study was published in PROSPERO with Ref.No.: CRD42021261018

**Reflexivity**

Reflexivity is important in qualitative research since it allows the reader to understand the background of the research team and offer an insight on the unique perspective of the researchers (Walsh and Downe, 2006). The research team is composed of a diverse group of individuals with unique educational and clinical backgrounds.

PK has a background in Psychology and Health Psychology and is currently undertaking his Professional Doctorate in Clinical Studies in the Department of Medicine at UCLan. He has more than 10 years of experience working within the mental health sector, particularly within operations (e.g. NHS mental health wards management).

NC has a background in Psychology and Public Health and is currently working as a Lecturer in Research Methods at UCLan. He has extensive experience in a wide range of research projects covering quantitative, qualitative and systematic review methodologies.

AM is a Health Psychologist and Senior Lecturer and lead for the social and behavioural sciences at UCLan School of Medicine. His research revolves around the study of motivation, personality and cognition as applied to health and well-being.

GD is a Professor of Cardiovascular Medicine and Consultant Cardiologist at North Cumbria Integrated Care NHS Trust. He is a frontline health care worker with experience in managing patients with COVID-19 and providing COVID 19 medical education to health care workers and the public.

**RESULTS**

The study selection process is outlined in the PRISMA chart (see Figure 1). A total of 211 records were identified through database searching and 0 records through other sources. 44 duplicates were removed leaving a total of 167 articles for screening. 135 articles were deemed irrelevant for this review based on the inclusion and exclusion criteria. 32 full text studies were assessed for eligibility 27 of which were excluded for: 23 wrong design, 3 insufficient data, 1 wrong intervention, 1 wrong population. This resulted in 4 studies (Figure 2).

*PRISMA (Page et al., 2020)* Figure 1
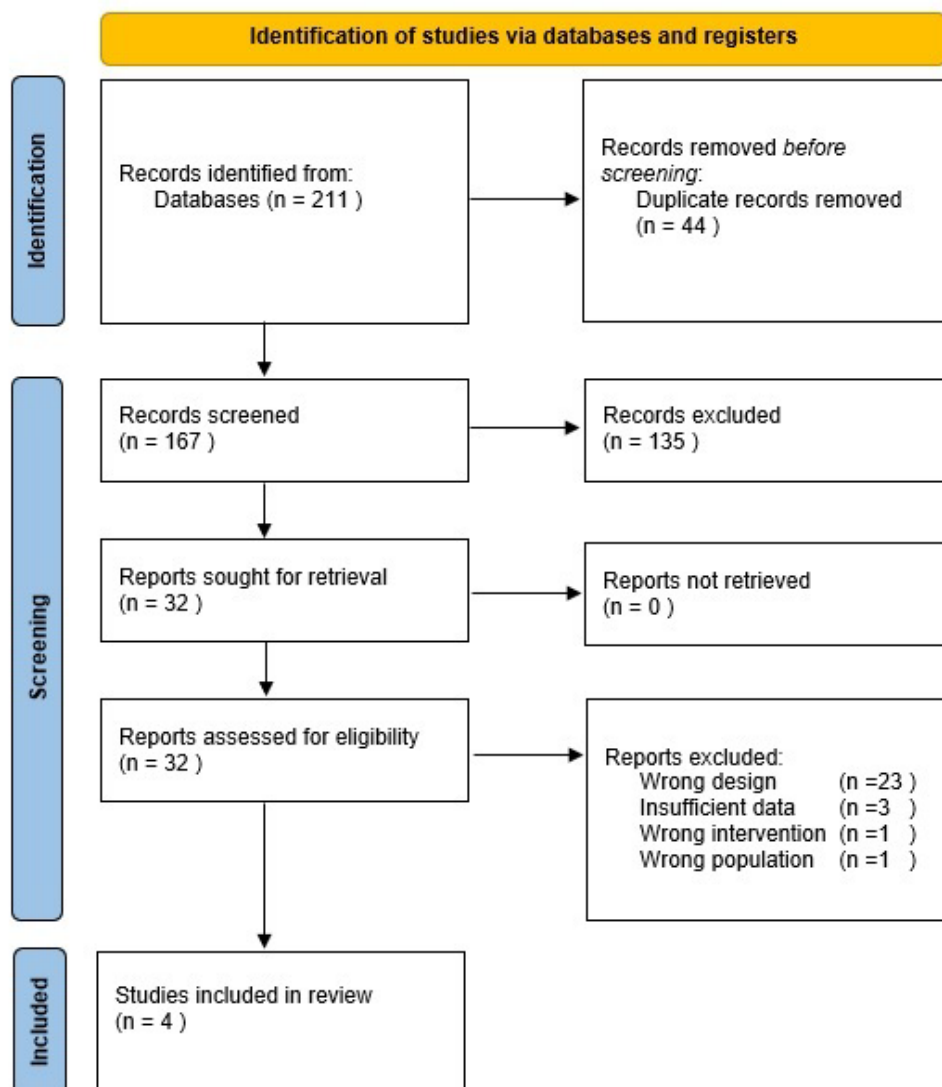
*Study characteristics* Figure 2

| Author | Country | Data collection | Analytical approach | Participants | Study focus |
|---|---|---|---|---|---|
| | | | | | |
| Bandini *et al.,* (2021) | USA | Snowball sampling | Thematic analysis | 16 home care aides | To (1) Examine experiences of agency employed home care aides during COVID-19 & to (2) identify ways to mitigate concerns |
| Nyashanu, Pfende and Ekpenyong, (2020a) | UK | Via email to private care organisations (e.g. care homes) | Thematic analysis | 40 (15 support workers, 15 nurses, 10 managers) | To explore the challenges faced by different frontline workers in health and social care during the COVID-19 pandemic |
| Nyashanu, Pfende and Ekpenyong, (2020b) | UK | Letters and information sheet to nursing homes and domiciliary care agencies | Thematic approach with Interpretative Phenomenological Analysis (IPA) | 40 (20 care homes, 20 domiciliary care) | To explore the triggers of mental health problems amongst frontline health care workers within private care homes and domiciliary care agencies |
| Sterling *et al.,* (2020) | USA | Purposive sampling technique | Grounded theory | 33 home health care workers | To understand the experiences of home health care workers during the COVID-19 pandemic in New York City |

*Dawne et al., (2009) quality appraisal* Table 6*

| | | Bandini et al., (2021) | Nyashanu et al., (2020a) | Nyashanu et al., (2020b) | Sterlin et al., (2020) |
|---|---|---|---|---|---|
| 1. | Author | | | | |
| 2. | **Aims Clear?** | Y | Y | Y | Y |
| 3. | **Participants appropriate for question?** | Y | Y | Y | Y |
| 4. | **Design appropriate for aims and theoretical perspective?** | UC | UC | UC | UC |
| 5. | **Methods appropriate for design** | Y | UC | UC | Y |
| 6. | **Sample size & sampling justified?** | UC | UC | UC | UC |
| 7. | **Does the analysis fit with the chosen methodology?** | Y | Y | Y | Y |
| 8. | **Reflexivity present?** | N | N | N | N |
| 9. | **Study ethical?** | Y | Y | Y | Y |
| 10. | **Do the data presented justify the findings?** | Y | Y | Y | Y |
| 11. | **Is the context described sufficiently?** | Y | N | N | Y |
| 12. | **Is there sufficient evidence of rigour?** | N | N | Y | Y |
| 13. | **Include?** | Y | Y | Y | Y |
| **Grade:** | | B | C | C | B |

**Y= Yes, N= No, UC= Unclear**

**Grade:**

**A: No, or few flaws. The study credibility, transferability, dependability and confirmability is high.**

**B: Some flaws, unlikely to affect the credibility, transferability, dependability and/or confirmability of the study.**

**C: Some flaws that may affect the credibility, transferability, dependability and/or confirmability of the study.**

**D: Significant flaws that are very likely to affect the credibility, transferability, dependability and/or confirmability of the study.**

**THEMES**

*Themes Table 7\**

1. *Job Role*

   1.1  *Duty of Care*

2. *Marginalised Profession*

3. *Impact of Work*

*3.1 Change of Caseload*

*3.2 Uncertainty*

*3.3. Fear of Infection*

4. *Concerns surrounding PPE*

5. *Transportation Challenges*

6. *Level of Support and Guidance*

*6.1 Additional Experience*

*7.2 Working Guidance*

7. *A Higher Calling and Self- Sacrifice*

8. *Adaptation Strategies*

## 1.  Job Role

A major challenge in the Health and Social Care sector is the definition and job description of support workers (see Table 8). All selected articles defined the role differently with common traits between them. This creates a confusion within the sector and between fields as to what these professionals do. It is important to put the role of support worker into a specific structure in order to provide them with the credibility they need and to create a distinct separation between healthcare professionals.  The job role is important in relation to the lived experiences since support workers feel underrepresented and unappreciated due to this confusion.

Bandini *et al.,* (2021) describes them as home care aides that provide vital support for the elderly and individuals with disabilities. Nyashanu et al., (2020a) describes them as health and social care frontline workers. Sterling *et al.,* (2020) describes them as:

*Home health care workers, who are composed of home health and personal care aides and home attendants, care*

*Job Role Description* Table 8*

| Bandini et al., (2021) | Nyashanu et al., (2020a) | Nyashanu et al., (2020a) | Sterling et al., (2020) |
|---|---|---|---|
| COVID-19- New York | COVID-19- UK | COVID-19 UK | COVID-19- UK |
| Support for elderly | Care | Care | Home health care workers |
| Home stay | | | Personal care |
| Personal care | | | Assisting with daily living |
| Assistance with daily living | | | Bathing |
| Housekeeping | | | Dressing |
| Meal prepping | | | Preparing meals |
| Toileting | | | Cleaning |
| Dressing | | | Medical tasks |
| Emotional support | | | Vital signs |
| Companionship | | | Wound care |

The role is diverse and it requires a vast knowledge and sacrifice from the employees.

Bandini et al. (2021) examined the safety concerns and job challenges of homecare aides during the COVID-19 pandemic, describing their roles as including:

> *...assistance with instrumental activities of daily living including housekeeping, meal prepping, personal care, upkeeping family demands, and providing companionship and support. Some home care aides provide assistance with activities of daily living including bathing, toileting, and dressing. Aides also provide support beyond practical and clinical tasks, including emotional support and companionship. This support helps keep their clients safe, decrease hospitalizations, and cut health care costs.*

Sterling et al., (2020) explored the experiences of home care workers in New York City during the COVID-19 pandemic. The duties of the role include:

*for community dwelling adults.*

> *Home health care workers spend hours to days with patients, assisting with activities of daily living (eg, bathing and dressing), instrumental activities of daily living (eg, preparing meals and cleaning), and medically oriented tasks (eg, vital signs and wound care).*

*1.1 Duty of Care*

Duty of care was described in three articles as a concept that allowed professionals to keep working under the circumstances.

> *Even in the face of personal risk, healthcare staff are often assumed to have a duty to work. This duty is enshrined in the codes of conduct that guide professional healthcare workers. Nevertheless, an effective health system does not only depend upon the services and skills of healthcare professionals such as doctors and nurses; but also depends on the services of other professionals, such as HSCFWs* (Nyashanu et al., 2020a).

High levels of stress and anxiety resulted from the dilemma of workers feeling the need to keep working under adverse conditions, consequently risking their own health but providing care for vulnerable individuals (Nyashanu et al., 2020b). Furthermore, as described by Sterling et al., (2021) many participants reported the need to balance the "duty" of care with their own health.

## 2. Marginalised Profession

Three articles raised concerns that the profession was not given enough attention from the government. The profession was marginalised with the focus primarily on other healthcare professionals such as doctors and nurses. For example, it was only after the Social Care Sector raised its voice that the UK Prime Minister included the sector within the government agenda. It is important to recognise the contribution of the healthcare workforce as a whole and not just a particular group (e.g. doctors).

> *Many aides also wrote about their concerns around safety in relation to feeling as though their voices as marginalized home care aides were often forgotten in the broader discourse around the risks taken by other frontline care providers during the COVID-19 pandemic, such as doctors and nurses* (Bandini et al., 2021).

> *Even in the face of personal risk, healthcare staff are often assumed to have a duty to work. This duty is enshrined in the codes of conduct that guide professional healthcare workers. Nevertheless, an effective health system does not only depend upon the services and skills of healthcare professionals such as doctors and nurses; but also depends on the services of other professionals, such as frontline health and social care workers (HSCFWs)* Nyashanu et al., (2020a).

*The research participants felt that HSCFWs were not being recognised as contributing to the healthcare system. This impacted on their morale. The participants also attributed lack of recognition to causing delays in receiving PPE and testing. This resulted in panic and anxiety* (Nyashanu et al., 2020b).

### 3. Impact of Work

Support workers face a lot of challenges when it comes to offering bespoke care during a pandemic. The current theme is subdivided into three smaller subthemes capturing these challenges; (1) change of caseload; (2) uncertainty; (3) fear of infection.

### *3.1 Change of Caseload*

Aides described that they experienced an increase in tasks such as sanitising and additional cleaning, which was a challenge since the clients occasionally did not have enough cleaning supplies. Furthermore, shopping for clients became challenging due to social distancing and increased tension within stores (e.g. longer queues, contactless payment, social distancing within the stores). Wearing masks was reported as a big challenge since clients often experienced breathing issues or difficulties understanding the support workers when they spoke with their masks on. A participant quoted:

> *"He [client] cannot lay on the bed on his own. He's in a wheelchair. It's a challenge for this coronavirus because you can't keep a distance from your clients, it's a direct contact."* (Bandini et al., 2021).

Since the profession was classified that of an -essential worker- individuals kept working despite the social distancing policies. In addition to continuing with their daily tasks, the support workers had to manage the COVID-19 situation for the clients as well. On occasion, this involved management of the emotional health of clients that was worsened when watching the news due to either misinformation or too much information resulting in stress and anxiety.

> *Participants reported that the majority of their patients had several chronic conditions, which rendered patients high risk for COVID-19* (Sterling et al., 2020).

*Beyond monitoring their patients' physical symptoms, participants also tried to assist with their patients' emotional health. Many reported that this endeavour was worsened by patients watching the news* (Sterling et al., 2020).

### 3.2 COVID -19 Diagnostic Uncertainty and Client Interaction

Shortage of staff was reported in three studies (Bandini et al., 2021; Nyashanu et al., 2020a; Nyashanu et al., 2020b). Three main reasons were given for shortage of staff. One was the uncertainty as to whether or not staff had COVID-19, secondly, individuals where not willing to risk their own health and be infected with COVID-19 and thirdly uncertainty if the support worker's family had COVID-19.

Nyashanu et al., (2020a) quotes :

*"The morale at work is sometimes low when you think of the situation. Moreso, many staff members are not taking up as many hours as they used to do due to self-isolation if any of their family members or themselves catch a cough."*

Uncertainty also comes from the reporting of false negative results. Nyashanu et al., (2020b) describes the pressure of having to accept hospital patients who were not tested but were found positive the day after discharge from the hospital resulting the support workers to take the responsibility.

*"We had one resident whom we sent to hospital with suspected COVID-19, they discharged him without testing on the same day."*

*"I had a resident on shift that I thought might have symptoms, I called the paramedics and when they checked him, they said there was nothing to worry about.....The next day we took the resident to hospital and it turned out he had COVID-19."*

Uncertainty on the job in terms of daily tasks and decision making was described amongst most of the articles. Nyashanu et al., (2020b) reported that care staff felt overwhelmed by the idea of dying or leaving dependents behind, resulting in feelings of anxiety. Additionally, the testing procedure, particularly during the beginning of COVID-19, was unreliable providing another stressor for the professionals.

The participants reported that staff shortages were a source of stress and anxiety. Sickness rates increased and some support workers used their leave entitlement causing staff shortages and leaving other staff physically and mentally drained (Nyashanu et al., 2020b).

Owing to these challenges, participants described constantly navigating hard choices. For example, when patients contracted COVID-19, workers had to decide whether to continue caring for them, which meant potentially exposing themselves. Sometimes, however, patients fearful of contracting COVID-19 declined homecare services, leaving workers to decide whether they should accept a new patient who they did not know. Workers also weighed up whether they should remove themselves from cases they perceived to be risky. Support workers had to balance the risks of work with their own health and financial well-being (Sterling et al., 2020).

### 3.3 Fear of infection

The majority of the articles identified that professionals were significantly concerned with the safety of clients and themselves. Additionally, one article pointed out that the risks outweigh the benefits of the jobs during the pandemic (Bandini et al., 2021). Furthermore, the idea that COVID-19 has killed many of their colleagues resulted in experiencing feelings of fear and anxiety.

The professionals were experiencing a dilemma between keeping safe the people they are caring for and safeguarding themselves and consequently their family.

> *Many aides described the frustration that they had to put themselves at risk while only receiving minimal compensation for their work during the pandemic. Several aides also expressed concerns around putting their own family members at risk because of the possibility of bringing home the virus from their job* (Bandini et al., 2021).

> *...their clients' family members who did not take proper precautions, putting aides at even greater risk* (Bandini et al., 2021).

> *Many aides worried about the negative consequences of possibly coming in contact with COVID-19 on the job and having to miss work, ultimately not being able to provide for themselves and their families* (Bandini et al., 2021).

Bandini et al., (2020) noted that the caseload changed due to COVID-19. Some staff had to work more hours due to staff shortages whilst others could not continue to work within the selected home because the family were afraid that they are going to increase the risk of infection to their loved ones. One participated quoted:

> *"We're sitting there on pins and needles and if we cough or sneeze, they can have a whole panic attack. It had an impact on the way we communicated and how I can do my job."*

Fear and anxiety of having to cope with an untreatable disease was noted in Nyashanu et al., (2020a):

*Feelings of anxiety and fear of the condition based on the notion that it is not treatable and that some HSCFWs had lost their lives were also reported.* As quoted by two (2) participants:

> *"I had this feeling of anxiety and fear every day when I wake up to go to work . . . it is mainly because the condition is untreatable and so many colleagues in the profession have lost their lives"*

> *"Everyone at work is fearful and anxious we really don't know what to do. No one has knowledge about this condition moreover, it is not treatable. With so many people losing their lives you really don't know your fate"*

The fear of infection of the disease was a major concern for individuals. Nyashanu et al., (2020b) reports:

> *Research participants reported fear of infection and infecting their residents and families. This was particularly severe for those who had vulnerable family members. Participants described the fear as being relentlessly at the back of their minds. High level of stress and anxiety was also described, stemming from the dilemma of performing their duty of care while in fear of cross infection.*

Furthermore, Sterling et al. (2020) reports that individuals lived in worry and they were constantly afraid of contracting the virus. Additionally, having to care for individuals who entered and left home each day added an additional stressor to the professionals:

> *Participants explained that providing care to patients placed them in a unique position with respect to COVID-19 transmission. They worried about their patients becoming ill in general and about transmitting the virus to them.*

*Participants also worried about their own risk of contracting COVID-19, and nearly all felt that their dependence on public transportation increased this risk. Many participants reported using public transportation to get to their patients' homes, to run errands for them, and to travel to their agency for supplies.*

*Finally, many participants cared for a patient alongside other workers who entered and left the home each day. This added to their fear of transmitting COVID-19 to their patients and to one another.*

### 4. Concerns surrounding PPE

One major theme identified in the articles is feelings of safety associated with the personal protective equipment (PPE) available at the time of the COVID-19 outbreak. Even though challenges regarding the supply of PPE was evident, it is clear that even the most prepared services (e.g. the ones who had adequate PPE prior to the pandemic) struggled to cope.

Bandini et al., (2021) reported that:

*Aides reported feeling overwhelmed because they did not have access to an adequate supply of PPE including face shields, disposable gowns, and N95 masks. Some aides reported that they resorted to purchasing their own PPE because their employer was unable to provide PPE*

with an individual quoting in the article:

*"It wasn't easy to get them [PPE], and they were limited. They made us reuse the mask which was not sanitary because the surgical masks that they give us clearly state one time use only. I personally went out and purchased my own reusable, cloth, washable mask"*

Sterling et al., (2020) reported that:

*Many home health care workers also reported that they lacked adequate PPE from their agencies, including masks and gloves, which they felt was essential for care.*

Additionally, Bandini et al., (2021) captured the need for PPE before and after two intervals (during national PPE shortages and after):

> ...in journal entries submitted at the beginning of the pandemic in April and May during the national shortage of PPE. While entries received later in the data collection period in June and July 2020 referenced PPE as necessities to providing care safely to clients, there was much less concern around the availability of PPE during this later time.

> As noted earlier, accessibility to PPE was a challenge for most aides, and many agency representatives themselves recognized these concerns and described limitations in their own ability to supply aides with proper protections to be able to safely do their jobs. Even agencies that already had a stock of PPE prior to the pandemic faced challenges obtaining PPE, and some reported paying price gouges to be able to supply aides with needed protection, suggesting that further emergency preparedness planning may be needed for agencies.

PPE shortages was not the only problem when it came to PPE challenges. Nyashanu et al., (2020a) describes:

> All the research participants expressed that there was severe shortage of PPE making it difficult for them to discharge their duties. They also felt that in some instance the PPE was not fit for purpose

With an individual quoting in the article:

> "Most of the PPE we had ran out within two days and we had to wait for days to get some only to last for two days. Honestly, this was the most difficult time to work in health and social care. The few PPE available was not fit for purpose as everyone had little knowledge about COVID-19"

Additionally, within the article it is reported that central governments reported consecutive updates for PPE and by the time the professionals were able to familiarise with the policies they government had already changed, thereby resulting in confusion and panic:

*The research participants reported ever evolving PPE guidelines from public health authorities and central government. They reported panic among HSCFWs every time the guidelines were changed as they feared contracting COVID-19 (*Nyashanu et al., 2020a*).*

### 5. Transportation Challenges

One article raised the issue of transportation during the pandemic.

*In terms of transportation, some agencies provided vouchers for ride-sharing services for aides during the pandemic, despite aides' reported challenges with delays or wait times. One representative explicitly recognized these issues around unreliable transportation, stating that their agency has been more lenient in disciplinary policies for aides.* (Bandini et al, 2021)

The issues raised suggest that additional funding is needed for the sector in order to aid the planning and support the workers during an infectious disease outbreak.

### 6. Level of Support and Guidance

The majority of articles described the levels of support given to support workers during the pandemic from either their agency, local government or place of work. The outcomes can be categorised into two subcategories: (1) the additional experience they received during the pandemic and (2) working guidance from the abovementioned bodies.

### *6.1 Additional Experience*

During the COVID-19 pandemic Sterling et al., (2020) explored the level of support care workers received from their agencies with participants describing that they received some COVID-19 related information whilst others reporting that they have not received any COVID-19 specific training but hoped that that would become available in the future. Agencies performed daily "self- assessments":

*"They text a 4-question screener every day. They want to know if something changes in our body. Do you have a fever? Do you have a cough?*

### 6.2 Working Guidance

Nyashanu et al. (2020b) reported that participants found it challenging to work without any clear form of guidance from the central government which caused distress amongst staff. Additionally, changing the guidance frequently lead to the operational concern and confusion which triggered "anxiety" quoting a participant:

> *"I am really worried with ever changing information from government on how to act during this pandemic…. Honestly it really makes me anxious."*

Sterling et al. (2020) describes participants being given different levels of support that was dependant on the organisation an individual was working with. The level of support focused around COVID-19 related information, availability of PPE and COVID-19 training:

> *Although some agencies adapted quickly to the pandemic by providing workers with COVID-19–related information on a weekly or daily basis, others reportedly barely communicated about the pandemic.*

> *Participants reported that they had not received COVID-19– specific training from their agencies but had hoped that it would be offered in the future. Some agencies asked participants to perform daily "self-assessments." Self-assessments, which were usually automated by phone, were intended to screen home health care workers for COVID-19symptoms*

> *Owing to varying levels of institutional support, participants often relied on others for information and help. For example, if their agency did not provide information on COVID-19, participants turned to the news media, social media, government briefings, and their worker union.*

Bandini et al. (2021) suggests that partnerships through the health sector may be able to reduce the understaffing issues and minimise some of the strain experienced during the outbreak of an infectious disease.

### 7. A Higher Calling and Self – Sacrifice

Two articles described the feelings of participants in relation to "fulfilment in helping those in need" and "the calling". The "calling" during a pandemic was something experienced by individuals via balancing the risk of caring for clients and the call of duty "the calling" (Nyashanu et al., 2020a; Sterling et al., 2020).

Quoting one of the participants:

> *"I see a fire. Am I going to walk right into that fire?[…]If I have the backup, the proper gear, yes, I'm going to be there on the front lines to help that person."*

Nyashanu et al., (2020a) explores the concept of self-sacrifice by describing the importance of acknowledging the social shielding by staying at work in order to protect the clients as well as the families

> *…traveling to and from work would increase their chance of acquiring the infection from COVID-19.*

### 8. Adaptation Strategies

Nearly all articles identified adaptation strategies used by professionals in order to cope. Examples include purchasing their own masks, to policy and agency adaptation, cleaning, talk walks, meetings with colleagues or within the company. The adaptation strategies aim at tackling emotional distress and raise the level of appreciation that society or organisations show to the support workers.

Bandini et al. (2021) describes the agency adaptation strategies in order to support aides during the pandemic and reduce stressors. Strategies included better communication channels between the agency and the workers, better monitoring of symptoms to help prevent COVID-19 from spreading and ensuring reliable transportation methods. Additionally, it quotes:

> *Lastly, agency leadership representatives also noted areas for improvement on a structural level in terms of policies to better support aides and strengthen the appreciation and recognition of aides as essential workers.*

Quoting an agency representative:

*"We're texting the aides every day and then calling them intermittently to see how things are going … And then keep calling and tell them not to go to work if they aren't feeling well and to call a doctor. They aren't in it alone"*

However, it is unclear if that actually helped the aides since no further information is given based on their experiences.

Organisations tried to adopt new ways of contacting the support workers in order to help them cope with the situation as well as provide them with assurance that they are present as described by Bandini et al. (2021):

*These communication strategies were designed to maintain regular contact with aides and provide support when needed. To minimize the spread of COVID-19 and help ensure safety of both aides and clients, some leadership representatives from agencies spoke of monitoring COVID-19 symptoms through the use of technology.*

Acquiring additional knowledge, having recourse to religion, and receiving support from colleagues were important factors in coping and adapting to the situation, particularly when it came to stress:

*Loss of colleagues and patients left HSCFWs fighting mental battles and turning to spiritual belief systems as coping mechanisms* (Nyashanu et al., 2020b).

*Owing to this concern, some participants tried to coordinate hygiene and handoff practices with the other aides caring for common patients* (Sterling et al., 2020).

*Some participants also relied on other home health care workers for advice and support or turned to religion* (Sterling et al., 2020).

**Line of argument synthesis**

An argument was drawn from the points presented above in order to bring together the similarities and differences of the data extracted. We understand that the number of articles exploring the experiences of support workers and consequently the data itself is limited; however, this meta-ethnography provides a valuable insight of the existing empirical data in relation to these experiences.

The findings suggest that the support worker's duties are diverse, and changes depending on the population the professionals are supporting. There are no consistent definitions around what the role entails. Regardless of setting, staff consistently report feeling marginalised as compared to other healthcare professions but retain a strong feeling that they have a duty of care towards clients. A pandemic creates additional anxieties and stressors in the form of changes to job role and fears for the health of themselves, their family and clients, which may be compounded by lack of resources in terms of staff capacity, travel options, PPE, reliable and consistent testing and guidelines available to support workers. While it was acknowledged that a pandemic may be the instigator of additional training and opportunities for self-development, this does not address the support needs of workers who have taken it upon themselves and those around them to tackle their own emotional distress and feelings of unappreciation which have been compounded by a pandemic.

**DISCUSSION**

In this review we explored the experiences of support workers during the COVID-19 pandemic. Only four studies were identified that met the inclusion criteria. The current meta-ethnography revealed eight key themes. A common problem amongst the role was the different views of the job title and job role of support workers resulting in confusion as to the expected requirements of the job. Support workers were also unclear as to what is expected from them during an infectious disease outbreak such as COVID-19 pandemic. Across the studies support workers expressed their feelings that they are underrepresented professionals as well as unappreciated, often invisible since the primary focus is given to other healthcare professionals (e.g. doctors, nurses) by the government or public in general. Physical safety was raised as an issue in the form of available PPE as well as the information sharing from the employing organisation in relation to handling the infection. All articles documented that the fear of infection was prevalent at all times. Support workers received different support levels from their job however their primary concern was their skills and knowledge on how to combat the virus. Additionally, support workers had to adapt to the new expectations of the role such as having to work even longer hours or self-isolate with clients which directly affected their mental and physical health.

The results of the current study are in line with findings from a review by Benfante et al., (2020) who examined traumatic stress in healthcare workers during the COVID-19 pandemic from China, Singapore and India. The authors found links between reported risk factors including psychological support, being a frontline member, having less work experience and a higher risk of exposure to infected people and negative outcomes such as traumatic stress. Additional sources of distress were found to revolve around concerns of the spread of the virus (e.g. spreading the virus to a family member), their health risks (e.g. contracting the virus via prolonged exposure with positive clients) and changes in the work environment (e.g. constant policy and protocols changing).

The adaptation strategies identified in the current study are partly line with adaptation strategies within other healthcare professions. Bender et al. (2021) analysed the responses of healthcare professionals in relation to their strategies for emotional connectedness during the COVID- 19 pandemic discussing that interactions chatacterised by various expressions of (e.g.) empathy or offering help was a significant factor for adapting similar to talk walks. Ridge et al. (2021) conducted a secondary analysis describing the strategies of adaptation of clinicians during a PPE shortage. The strategies included: (1) rationing PPE; (2) purchasing PPE themselves; (3) asking patients to purchase their own PPE; (4) working with substitute PPE; (5) working without PPE.

The results of this meta-ethnography answers in part the first question examining the experiences of care support workers during an infectious outbreak due to the fact that the studies identified did not cover the full scope of the role internationally. The title of support worker is neither protected nor clearly defined. Additionally, the needs of the role change based on the cultural and organisational expectations resulting in a borderline overlap with other professions and individuals (e.g. cleaning, nursing, family). However, there are common themes (e.g. living with anxiety and fear, role fulfilment, feeling undervalued) between our meta-ethnography and other studies (Bilal, Saeed, & Yousafzai, 2020; Plessas et al., 2021) outlining the experiences of healthcare staff in general. More specifically, our results identified adaptation factors that assist the support workers to cope with the job demands during a pandemic. These included adaptation to the situation by policy making, meeting with colleagues in order to discuss their experiences and offload the emotional burden, purchasing their own PPE, and cleaning in order to make sure they are in control of the environment.

**CONCLUSION**

This review is its first of its kind in the Western literature and highlights the need for further research into the role of support workers internationally and particularly in times of crisis. This is a large and underrepresented sector that is often left out when it comes to developing health services. Support workers face similar experiences, and challenges as other healthcare employees working in hospital settings. However, they do not work within a structural environment (e.g., hospital, local authority) that can provide them the necessary resources in order to do their job effectively in a time of crisis. Additionally, there is a need for identifying properly the job role so that clear guidelines can be drawn upon and followed.

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**REFERENCES**

Amaratunga, C. A. *et al.* (2007) 'Ready, aye ready? Support mechanisms for healthcare workers in emergency planning: a critical gap analysis of three hospital emergency plans', *American journal of disaster medicine*, 2(4), pp. 195–210. Available at: https://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=18488833&site=ehost-live (Accessed: 11 June 2022).

Ammar, A., Chtourou, H., Boukhris, O., Trabelsi, K., Masmoudi, L., Brach, M., . . . On Behalf Of The Eclb-Covid Consortium. (2020). COVID-19 home confinement negatively impacts social participation and life satisfaction: A worldwide multicenter study. International Journal of Environmental Research and Public Health, 17(17) doi:10.3390/ijerph17176237

Atashi, V., Abolhasani, S., & Afshari, A. (2022). Health-care workers' experience of stressors and adaptation strategies for COVID-19: A qualitative research. *Journal of education and health promotion*, *11*, 34. https://doi.org/10.4103/jehp.jehp_314_21

Bandini, J., Rollison, J., Feistel, K., Whitaker, L., Bialas, A., & Etchegaray, J. (2021). Home care aide safety concerns and job challenges during the COVID-19 pandemic. New Solutions: A Journal of Environmental & Occupational Health Policy, 30(5), 20-29. doi:10.1177/1048291120987845

Bender, A.E., Berg, K.A., Miller, E.K., Evans, K.E., Holmes, M.R. (2021). "Making Sure We Are All Okay": Healthcare Workers' Strategies for Emotional Connectedness During the COVID-19 Pandemic. Clinical Social Work Journal 49, 445–455.. doi:10.1007/s10615-020-00781-w

Benfante, A., Marialaura Di Tella, Annunziata Romeo, & Lorys Castelli. (2020). Traumatic stress in healthcare workers during COVID-19 pandemic: A review of the immediate impact. Frontiers in Psychology, 11, 569935. doi:10.3389/fpsyg.2020.569935

Bilal, A., Saeed, M. A., & Yousafzai, T. (2020). Elderly care in the time of coronavirus: Perceptions and experiences of care home staff in pakistan. International Journal of Geriatric Psychiatry, 35(12), 1442-1448. doi:10.1002/gps.5386

Billings, J. *et al.* (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), p. 923. doi: 10.1186/s12913-021-06917-z.

Blake, H., Bermingham, F., Johnson, G., & Tabner, A. (2020). Mitigating the psychological impact of COVID-19 on healthcare workers: A digital learning package MDPI AG. doi:10.3390/ijerph17092997

Busch, IM, Moretti, F, Mazzi, M, Wu, AW & Rimondini, M 2021, 'What We Have Learned from Two Decades of Epidemics and Pandemics: A Systematic Review and Meta-Analysis of the Psychological Burden of Frontline Healthcare Workers', *Psychotherapy and psychosomatics*, vol. 90, no. 3, pp. 178–190, viewed 11 June 2022, <https://search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=33524983&site=ehost-live>.

Butler, A., Hall, H. and Copnell, B. (2016). 'A guide to writing a qualitative systematic review protocol to enhance evidence-based practice in nursing and health care', Worldviews on Evidence-Based Nursing, 13(3), pp. 241–249. doi: 10.1111/wvn.12134.

Chan, E. Y. Y. et al. (2020). 'Informal home care providers: The forgotten health-care workers during the COVID-19 pandemic', The Lancet, 395(10242), pp. 1957–1959. doi: 10.1016/S0140-6736(20)31254-X.

Cooke, A., Smith, D., Booth, A. (2012). Beyond PICO. Qualitative Health Research 22, 1435–1443.. doi:10.1177/1049732312452938

Czuba, K. J., Kayes, N. M., & McPherson, K. M. (2019). Support workers' experiences of work stress in long-term care settings: A qualitative study Retrieved from https://search.ebscohost.com/login.aspx?direct=true&db=edb&AN=140354724&site=eds-live

Downe S., Walsh D., Simpson L., Steen M., (2009). Template for metasynthesis, Available from sdowne@uclan.ac.uk

Feeley, C., Thomson, G. and Downe, S. (2019) 'Caring for women making unconventional birth choices: A meta-ethnography exploring the views, attitudes, and experiences of midwives', Midwifery, 72, pp. 50–59. doi: 10.1016/j.midw.2019.02.009.

Fernández-Basanta, S., Lagoa-Millarengo, M., & Movilla-Fernández, M.-J. (2021). Encountering Parents Who Are Hesitant or Reluctant to Vaccinate Their Children: A Meta-Ethnography. International Journal of Environmental Research and Public Health, 18(14). https://doi.org/10.3390/ijerph18147584

Koh, Y., Hegney, D. G. and Drury, V. (2011) 'Comprehensive systematic review of healthcare workers' perceptions of risk and use of coping strategies towards emerging respiratory infectious diseases', International Journal of Evidence-Based Healthcare, 9(4), pp. 403–419. doi: 10.1111/j.1744-1609.2011.00242.x.

Lee, S. M., Kang, W. S., Cho, A., 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

Li, Y. et al. (2021) 'Prevalence of depression, anxiety and post-traumatic stress disorder in health care workers during the COVID-19 pandemic: A systematic review and meta-analysis', PLoS ONE, 16(3), pp. 1–19. doi: 10.1371/journal.pone.0246454./j.comppsych.2018.10.003

Liu, Q., Luo, D., Haase, J. E., Guo, Q., Wang, X. Q., Liu, S., . . . Yang, B. X. (2020). The experiences of health-care providers during the COVID-19 crisis in china: A qualitative study. The Lancet.Global Health, 8(6), e790-e798. doi:10.1016/S2214-109X(20)30204-7

Maunder, R., Hunter, J., Vincent, L., Bennett, J., Peladeau, N., Leszcz, M., . . . Mazzulli, T. (2003). The immediate psychological and occupational impact of the 2003 SARS outbreak in a teaching hospital. Canadian Medical Association Journal, 168(10), 1245-1251. Retrieved from http://www.cmaj.ca/cgi/content/abstract/168/10/1245

Moghaddam-Tabrizi, F., & Sodeify, R. (2021). Lived Experiences of Nurses in the Care of Patients with COVID-19: A Study of Hermeneutic Phenomenology. Iranian journal of nursing and midwifery research, 26(6), 537–543. https://doi.org/10.4103/ijnmr.IJNMR_319_20

NHS (2021). Working in the NHS. Retrieved from: https://www.jobs.nhs.uk/about_nhs.html Accessed 15 December 2021

Noblit, G. , Hare, R. (1988). Meta-Ethnography: Synthesising Qualitative Studies. Sage, London .

Nyashanu, M., Pfende, F., & Ekpenyong, M. (2020a). Exploring the challenges faced by frontline workers in health and social care amid the COVID-19 pandemic: Experiences of frontline workers in the english midlands region, UK. Journal of Interprofessional Care, 34(5), 655-661. doi:10.1080/13561820.2020.1792425

Nyashanu, M., Pfende, F., & Ekpenyong, M. S. (2020b). Triggers of mental health problems among frontline healthcare workers during the covid-19 pandemic in private care homes and domiciliary care agencies: Lived experiences of care workers in the midlands region, uk. Health & Social Care in the Community, doi:10.1111/hsc.13204

Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. (2020). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

Plessas, A., Paisi, M., Baines, R., Wheat, H., Delgado, M. B., Mills, I., & Witton, R. (2021). Frontline experiences and perceptions of urgent dental care centre staff in england during the COVID-19 pandemic: A qualitative study. British Dental Journal, doi:10.1038/s41415-021-3375-3

Ridge, L. J. *et al.* (2021) 'How clinicians manage routinely low supplies of personal protective equipment', *American journal of infection control*, 49(12), pp. 1488–1492. doi: 10.1016/j.ajic.2021.08.012.

Riesenberg, L. A., & Justice, E. M. (2014). Conducting a successful systematic review of the literature, part 1. Nursing, 44(4), 13–17. https://doi.org/10.1097/01.NURSE.0000444728.68018.ac

Sharov, K.S. (2020). Adaptation to SARS-CoV-2 under stress: Role of distorted information. European Journal of Clinical Investigation 50.. doi:10.1111/eci.13294

Skills For Care, (2020). The state of the adult social care sector and workforce in England. Retrieved from: https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/publications/national-information/The-state-of-the-adult-social-care-sector-and-workforce-in-England.aspx Accessed 05 October 2021

Sterling, M. R., Tseng, E., Poon, A., Cho, J., Avgar, A. C., Kern, L. M., . . . Dell, N. (2020). Experiences of home health care workers in new york city during the coronavirus disease 2019 pandemic: A qualitative analysis. JAMA Internal Medicine, 180(11), 1453-1459. doi:10.1001/jamainternmed.2020.3930

U.S Bureau of Labour Statistics (2020). The Economics Daily. Retrieved from: https://www.bls.gov/opub/ted/2021/healthcare-support-occupations-had-employment-of-6-4-million-in-may-2020.htm Accessed 06 December 2021

Walsh, D., & Downe, S. (2004). Midwives' contribution to normal childbirth care: Cross-sectional study in public hospitals in catalonia Springer Science and Business Media LLC. doi:10.1186/isrctn14062994

Walsh, D. , Downe, S. , (2006). Appraising the quality of qualitative research. Midwifery 22, 108–119 .