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How to cite:

Jones, Kerry; Schnitzler, Katy and Borgstrom, Erica (2022). The implications of COVID 19 on health and social care personnel in longterm care facilities for older people: An international scoping review. Health & Social Care in the Community (Early access).

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Version: Version of Record

Link(s) to article on publisher's website:
<http://dx.doi.org/doi:10.1111/hsc.13969>

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REVIEW ARTICLE

The implications of COVID-19 on health and social care personnel in long-term care facilities for older people: An international scoping review

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Open University

Abstract

This scoping review mapped out the existing literature pertaining to health and social care personnel experiences during the coronavirus disease-2019 (COVID-19) pandemic and their work in a long-term care setting for older people. This review identified the gaps in the implications of health and social care personnel's own health and well-being during the pandemic as well as the ethical dilemmas inherent in providing care during the COVID-19 pandemic. The authors utilised the PRISMA checklist for undertaking scoping reviews. The Databases Medline, PsychINFO, CINAHL, SCOPUS, Web of Science and Google Scholar were searched for relevant articles in English that were published between March 28, 2020 and June 1, 2022. This time period was selected to focus specifically on the COVID-19 pandemic. In the context of this review, long-term care facilities were defined to include institutions such as nursing homes, skilled nursing facilities, retirement homes and residential care homes. The gaps identified were a paucity of research on the experiences of health and social care personnel in long-term care facilities, the impact on their mental health, and the wider challenges experienced during the COVID-19 pandemic is discussed. The findings of this scoping review indicate a need for adequate preparedness during a pandemic within the health and social care sector to protect health and social care personnel and the individuals they care for.

KEYWORDS

COVID-19, ethical challenges, health and social care personnel, mental health, psychological impact

1 | INTRODUCTION

Coronavirus disease (also known as COVID-19, caused by the severe acute respiratory syndrome coronavirus 2 [SARS-CoV-2]) has emerged as a significant contemporary, global health crisis. The outbreak was declared as a Public Health Emergency of International Concern in January 2020 and subsequently designated

as a pandemic in March 2020 (World Health Organization, 2020a). Within just 144 days of the first reported case in Wuhan, China, COVID-19 infected nearly 5,000,000 people globally and claimed more than 328,000 lives (World Health Organization, 2020b). A nationwide lockdown was initiated in many countries, including the UK, Australia, United States, Canada, France, Italy and New Zealand, in March 2020. With a surge in cases, especially amongst older

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people residing in long-term care facilities, Health and Social Care Personnel (HSCP) across the world have been thrust into the role of frontline workers in the fight to stem the spread of COVID-19 and minimise the impact on those infected (Rajhans et al., 2020).

During the COVID-19 pandemic, community care facilities including nursing and residential homes have been termed 'hubs' and 'besieged castles' in North America and Europe, having experienced large outbreaks due to the rapid transmission of COVID-19 (Barnett & Grabowski, 2020; Logar, 2020; Onder et al., 2020). COVID-19 disproportionately affects nursing and care home residents due to their increased age, frailty, disability and multimorbidity—making them particularly vulnerable to contracting COVID-19 (Arons et al., 2020; Gilissen et al., 2020; Lauretani et al., 2020; McMichael et al., 2020; Wang et al., 2020; Zhou et al., 2020).

Many nursing and care homes reported large and sustained outbreaks with high fatality rates (Jordan et al., 2020). In England and Wales, there were 45,899 deaths amongst care home residents between March 02, 2020 and May 02, 2020; 12,526 (27.3%) were attributable to COVID-19 (Office for National Statistics, 2020). By early 2021, data available for the 22 countries covered in this report amounts to just over 325,000 deaths of care home residents attributed to COVID-19 since the beginning of the pandemic had been recorded in 22 countries (Comas-Herrera et al., 2021). Many resident deaths caused by COVID-19 have occurred within hospital settings and are not necessarily included in care home statistics which suggests the resident death rate as a result of COVID-19 is even higher (Comas-Herrera et al., 2020). Whilst death is something to be expected within many long-term care homes due to the older age and frailty of residents (Dempster, 2012; Greenberg, 2020), the regular experience of death does not make it easier to cope with (Knowles, 2020; Marcella & Kelley, 2015), especially given the relationships HSCPs build with residents (Arons et al., 2020; Boerner et al., 2015; Boerner et al., 2016; Boerner et al., 2017; Bohlken et al., 2020; Rajkumar, 2020).

HSCPs caring for older adults within long-term care establishments during the COVID-19 pandemic have been presented with a unique set of circumstances (Knowles, 2020). This included but has not been limited to the closure of institutions to visitors, including reduced or restricted visits from other health care professionals such as doctors, therapists and entertainment providers, and residents' relatives; insufficient access to personal protective equipment (PPE) for staff and residents; increased hygiene protocols, and initially in Spring 2020 in the UK, increased admissions of new and existing residents being discharged from hospital. It is anticipated that working in such circumstances can have an impact on HSCP's mental health including anxiety and depression, causing burnout, compromised quality of life, and resigning from their jobs (Blake et al., 2020; Brady et al., 2021; Greenberg, 2020; Husky et al., 2022; Martin et al., 2021; Rajhans et al., 2020), and for others, it may increase their resilience (Almendrala, 2020).

What further exacerbates the situation in older age long-term care settings has been the lack of supplies of PPE to this workforce, particularly in the early stages of the pandemic with many across the globe working without sufficient PPE 2 months into the pandemic (Bottery, 2020; Oliver, 2020; Vogel, 2020), leading to an increased

What is known about this topic

- The provision of high-quality care for older adults in long-term care facilities by care workers is even more pertinent during viral outbreaks such as the COVID-19 pandemic.
- A scoping review of the academic literature specific to health and social care personnel experiences who provide care in long-term care facilities for older adults would assist in gap identification.

What this paper adds

- This scoping review maps the literature on the experiences of health and social care personnel and the impact on their mental health and the additional challenges they faced during the COVID-19 pandemic
- The review also identified the ethical dilemmas health and social care personnel are challenged by and negotiate to overcome which did not always concur with Personal Protective Equipment guidelines issued by governments.
- The gaps identified in the included sources of evidence regarding the needs of employees of nursing and care home staff including nurses, healthcare and social care assistants and in some instances physicians and non-clinical staff referred to here as Health and Social Care Personnel (HSCP).

infection and death rates in care homes (Ayalon et al., 2020; Blake et al., 2020; Brainard, 2020).

In several countries, governments have recommended incentives to ease the burden on care homes impacted by COVID-19 (Comas-Herrera et al., 2020; Duan & Zhu, 2020; Towers et al., 2020). For example, in Spain incentives include raising HSCP's minimum wage, encouraging former HSCPs to return to the workforce and providing an allowance for those training to become HSCPs. However, as yet, it is not known the extent to which such incentives have been implemented and their ability to ease the burden on care homes and HSCPs.

Research undertaken during the COVID-19 outbreak has the potential to demonstrate ways to support staff both in the short and longer term. To inform ongoing discussions on how to best support nursing in these settings, we conducted a scoping review on the impact of the pandemic on HSCPs including physicians and non-clinical staff such as managers, and administrators as well as the mental health consequences and wider challenges and experiences of working during the COVID-19 pandemic. Topics included changes to work practices, impact on mental health and stressors, as well as staff emotional responses and ethical dilemmas. The results from this review can inform ways in which to better support HSCPs during the current COVID-19 situation and in the future. This scoping review was utilised to address the objectives of this paper and is appropriate to scope a body of literature on which relatively little is known of the experiences of HSCP during the COVID-19 pandemic as such studies are still emerging (Pham et al., 2014).

2 | OBJECTIVES

The review is guided by the following research questions:

- What are the mental health consequences faced by HSCP working in nursing and care homes for older adults during the COVID-19 pandemic.
- What are the additional challenges experienced by HSCP working in nursing and care homes for older adults during the COVID-19 pandemic.

3 | RESEARCH DESIGN AND METHODS

A Scoping review is an increasingly popular literature review method, especially in health and social care research. This type of review enables researchers to map a specific research field for relevant research literature with broad research questions to summarise research findings and find gaps in the research field in question (Arksey & O'Malley, 2005). The review process followed the methodological framework proposed by Arksey and O'Malley (2005). This framework has five stages: identifying the research question; identifying relevant studies; selecting studies; charting the data; collating, summarising, and reporting the results.

The Preferred Reporting Items for Scoping reviews and Meta-Analysis extension for Scoping Reviews (PRISMA-ScR) checklist guidelines are used to report our findings (Appendix S1). This review follows the Joanna Briggs Institute (JBI) process and guidelines for conducting scoping reviews (Peters et al., 2020). JBI updated guidelines identify scoping reviews as the most suitable reviews to explore the breadth of literature on a topic by mapping and summarising evidence that is available. Scoping reviews are also best suited to address gaps in knowledge (Peters et al., 2020). Adopting a scoping review enabled us to map the existing literature in a field and topic that has not yet been extensively reviewed and is of a complex or heterogeneous nature (Pham et al., 2014).

3.1 | Protocol and registration

No review protocol for this topic on care workers' experiences during the COVID-19 pandemic was registered by the authors.

3.2 | Search strategy

Within this review, we searched multiple databases to obtain the search for relevant references. Our access to these databases was determined by institutional subscription and access to obtaining access to relevant articles.

Databases Medline, PsychINFO, CINAHL, SCOPUS, Web of Science and Google Scholar were selected since Medline, Web of Science, and Google are the recommended minimum required to guarantee adequate coverage. Given that studies emerging during

the time of the search, CINAHL and SCOPUS were also searched with the aim to capture any additional studies that were reported (Bramer et al., 2017). We searched for relevant articles in English that were published between March 28, 2020 and June 1, 2022 by two of the authors (KJ, KS). This time period was selected to capture COVID-19 pandemic-specific literature pertaining to HSCP.

In the context of this review, long-term care facilities were defined to include institutions such as nursing homes, skilled nursing facilities, retirement homes and residential care homes (ECDC Public Health Emergency Team et al., 2020). In this review, residents of older adults' long-term care establishments experience difficulties living independently in the community due to physical, mental or sensory impairments related to older adults (i.e. frailty, dementia) (Bell et al., 2020; ECDC Public Health Emergency Team et al., 2020).

Drawing on the WHO, the search strategy combined terms including Medical Subject Headings (Mesh) of the keywords and synonyms 'COVID-19', 'HCW's', 'HSCP' (World Health Organization, 2016). Keywords were combined using the Boolean operator 'AND' and 'OR'. These were combined with older adult long-term care to include, care homes, nursing homes, residential and retirement homes with terms such as pandemic, Coronavirus, COVID-19 and search terms referring to the psychological impact of working during the pandemic (e.g., mental health, emotion, anxiety, depression, stress, guilt, fear, coping, resilience and trauma).

Table 1 provides an example of our search strategy for the Google Scholar and Medline databases.

3.3 | Study selection

The selection process as outlined in Figure 1, was conducted in four phases through identification, screening, eligibility and inclusion. First, all potential studies were identified in six different databases by using the search strategy outlined previously. After removing duplicates, titles and abstracts were selected for screening. Based on the inclusion and exclusion criteria as outlined in Table 2, two authors (KJ, KS) independently assessed the records. Any disagreements were discussed with the other author (EB). Two authors (KJ, KS) assessed the remaining records and retained titles and abstracts that fit with the inclusion criteria. Full remaining articles were selected in the eligibility phase and the two authors (KJ, KS) again assessed the full papers for inclusion in this review, and the reference lists of these papers were screened for any additional relevant studies. Screening of the reference lists did not result in identifying or selecting any new records.

3.4 | Data extraction and analysis

Table 3 provides an outline of included studies presenting study type and main results. Information about the impact on mental health as well as other challenges experienced was extracted using thematic synthesis (Thomas & Harden, 2008). One of the authors (KJ) inductively coded the results section of included studies and grouped the

TABLE 1 Example search (Medline and Google) string search example

Nursing homes and impact of covid-19.
 Retirement homes and impact of covid-19.
 Care homes and impact of covid-19.
 Nursing home staff and covid-19 and emotional stressors.
 Care home staff and covid-19 and psychological impact.
 Retirement home staff and covid-19 and impact.
 Coronavirus and care and nursing home staff and impact.
 Long-term care facilities and older adults aged over 65 and covid-19 and impact.
 Nursing home staff and older adults aged over 65 and covid-19 and impact.
 Retirement home staff and older adults aged over 65 and covid-19 and impact.
 Care home staff and older adults aged over 65 and covid and impact.
 ("Severe Acute Respiratory Syndrome Coronavirus 2" [Supplementary Concept] OR "COVID-19" [Supplementary Concept] OR "covid 19 diagnostic testing" [Supplementary Concept] OR "covid 19 drug treatment" [Supplementary Concept] OR "covid 19 serotherapy"[Supplementary Concept] OR "covid 19 vaccine" [Supplementary Concept] OR "Severe Acute Respiratory Syndrome Coronavirus 2"[tiab] OR ncov*[tiab] OR covid*[tiab] OR sars-cov-2[tiab] OR "sars cov 2"[tiab] OR "SARS Coronavirus 2"[tiab] OR "Severe Acute Respiratory Syndrome CoV 2"[tiab] OR "Wuhan coronavirus"[tiab] OR "Wuhan seafood market pneumonia virus"[tiab] OR "SARS2"[tiab] OR "2019-nCoV"[tiab] OR "hcov-19"[tiab] OR „novel 2019 coronavirus"[tiab] OR "2019 novel coronavirus*"[tiab] OR „novel coronavirus 2019*"[tiab] OR "2019 novel human coronavirus*"[tiab] OR „human coronavirus 2019"[tiab] OR "coronavirus disease-19"[tiab] OR "corona virus disease-19"[tiab] OR "coronavirus disease 2019"[tiab] OR "corona virus disease 2019"[tiab] OR "2019 coronavirus disease"[tiab] OR "2019 corona virus disease"[tiab] OR „novel coronavirus disease 2019"[tiab] OR „novel coronavirus infection 2019"[tiab] OR "new coronavirus*"[tiab] OR "coronavirus outbreak"[tiab] OR "coronavirus epidemic"[tiab] OR "coronavirus pandemic"[tiab] OR "pandemic of coronavirus"[tiab]).

AND

("Health Personnel" [MeSH] OR "health personnel" [all fields] OR "healthcare personnel"[all fields] OR "health care personnel"[all fields] OR "health worker"[all fields] OR "health workers"[all fields] OR "healthcare worker"[all fields] OR "healthcare workers"[all fields] OR "health care worker"[all fields] OR "healthcare provider"[all fields] OR "healthcare providers"[all fields] OR "health care provider"[all fields] OR "health practitioners"[all fields] OR "healthcare practitioner"[all fields] OR "health care practitioner"[all fields] OR "health care practitioners"[all fields] OR "health employee"[all fields] OR "health employees"[all fields] OR "medical staff"[all fields] OR doctor[all fields] OR doctors[all fields] OR physician* [all fields] OR ("allied health"[all fields] AND ("staff"[all fields] OR personnel[all fields]) OR "nursing staff"[all fields] OR nurse[all fields] OR nurses[all fields] OR "nursing auxiliary"[all fields] OR "care worker."[all fields])

AND

("mental health"[MeSH Terms] OR "psychological impact" [MeSH Terms] OR "challenges" [All Fields] OR "ethical dilemmas"[MeSH Terms] OR "qualitative studies" [All Fields]. OR "thematic analysis" [All fields])

"older adult long-term care" [MeSH Terms] OR "care homes" [MeSH Terms] OR "nursing homes"[MeSH Terms], OR "residential homes" [MeSH Terms] OR "retirement homes" [MeSH Terms].

codes into themes. A second author (KS) checked for consistency in categorisation. In cases of uncertainty, the other author (EB) was consulted. The final list of codes and themes were agreed upon by the authors. The results section below is structured according to the final themes identified.

4 | RESULTS

The objective of the scoping review was to identify any of the mental health consequences faced by HSCP during the COVID-19 pandemic and additional challenges.

Fifteen studies met the inclusion criteria and were analysed. These studies were conducted in ten different countries: the UK, the USA, Australia, Canada, China, Spain, France, the Netherlands, Austria and Ireland (Brady et al., 2021; Duan et al., 2020; Gómez-Salgado et al., 2020; Husky et al., 2022; Hoedl et al., 2021; Jones

et al., 2021; Martin et al., 2021; McGarry et al., 2020; McGilton et al., 2021; Nyashanu et al., 2020; van Dijk et al., 2022; White et al., 2021; Xu et al., 2020; Zalakain et al., 2020; Zhao et al., 2021). The studies were conducted in long-term care settings or gathered data from such establishments; one study did not specify the number of nursing homes involved (Gómez-Salgado et al., 2020). A variety of study designs were employed including: 10 quantitative studies (Brady et al., 2021; Duan et al., 2020; Gómez-Salgado et al., 2020; Husky et al., 2022; Jones et al., 2021; Martin et al., 2021; McGarry et al., 2020; van Dijk et al., 2022; White et al., 2021; Xu et al., 2020), and four qualitative studies (Hoedl et al., 2021; McGilton et al., 2021; Nyashanu et al., 2020; Zhao et al., 2021). One study (McGarry et al., 2020) evaluated nursing home data from a national database containing data from 98% of the US nursing homes. A further study (Zalakain et al., 2020) undertook the documentary analysis of the impact of COVID-19 on HSCP.

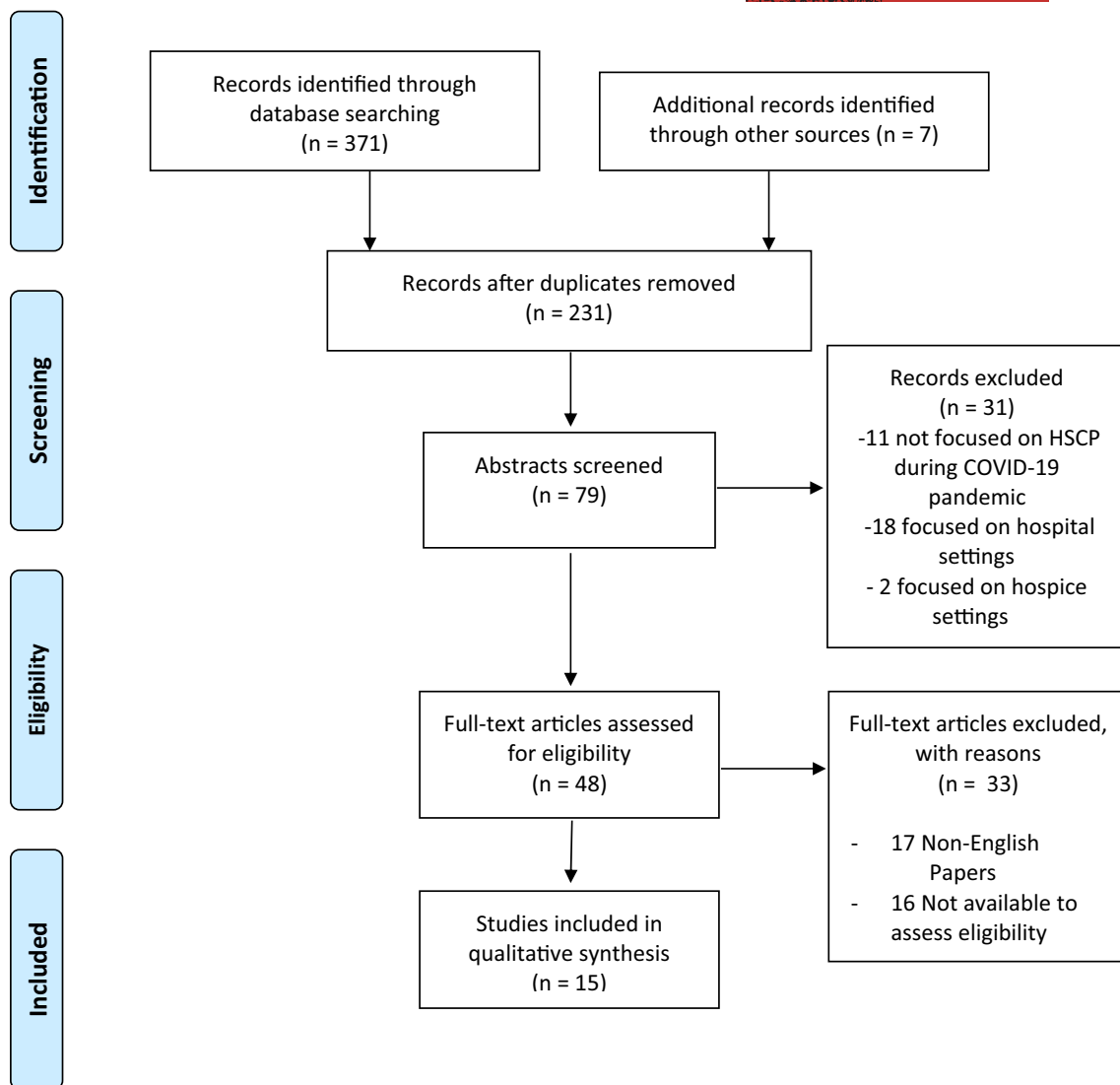


FIGURE 1 Literature selection process (flow diagram) here.

The themes identified include a lack of preparedness; increased workload to manage infection control; implementing of social distancing measures; dealing with distressed residents and families; ethical dilemmas, and fears around becoming infected.

4.1 | Mental health

Three studies focused specifically on the mental health consequences for HSCPs during the COVID-10 pandemic (Brady et al., 2021; Husky et al., 2022; Martin et al., 2021). In Husky et al.'s (2022) study of six nursing homes in France, 127 HSCPs responded to an online survey. One-third of HSCP's reported mental distress which met at least one criterion for mental disorder. For example, panic attacks (22.05%) were the most frequently reported mental health problem, followed by depression (16.54%) and which were associated with pre-pandemic mental health status.

Reports of mental distress experienced by some HSCPs were in keeping with Brady et al.'s (2021) cross-sectional anonymous study in the Republic of Ireland. Between November 2020 and January 4, 2021, 390 HSCPs (120 nurses, 172 Health Care Assistants and 98 non-clinical staff) were surveyed. It was not defined specifically who the non-clinical staff were. Utilising the World Health Organisation's Well-Being Index (WHO-5), of all HSCPs, moderate-severe post traumatic stress disorder (PTSD) symptoms were found in 45.1%, whilst the low mood was reported by 38.7% of all HSCPs. There were reported differences in well-being and coping styles between staff groups with more nurses reporting poor well-being compared with HCA's reporting normal well-being. Scores which were associated with depression were reported by 20% of HSCPs with no differences found between the groups of HSCPs (Brady et al., 2021: 4). Yet, nurses reported higher levels of utilising adaptive coping styles compared with the non-clinical staff when responding to the Brief Coping Orientation Experienced (Brief-COPE) (Brady et al., 2021: 8).

TABLE 2 Inclusion and exclusion criteria

Inclusion criteria
Participants
<ul style="list-style-type: none"> Health and social care personnel which include physicians and health and social care assistants, managers working in long-term care for older adults and or 24-hour care with older adults.
Exposure
<ul style="list-style-type: none"> COVID-19
Outcome
<ul style="list-style-type: none"> Results pertaining to impact on mental health, experience of wider challenges such as ethical dilemmas.
General
<ul style="list-style-type: none"> English language Peer-reviewed journals Grey literature
Exclusion criteria
Participants
<ul style="list-style-type: none"> Mainstream hospital staff Patients Paediatric populations and younger adults (below 60 years) Family members Community members Hospice staff
Exposure
<ul style="list-style-type: none"> Other types of pandemics
Outcome
<ul style="list-style-type: none"> Epidemiology studies
General
<ul style="list-style-type: none"> Articles published prior to March 2020 and which relate to other infections or pandemics Unpublished articles

Brady et al., 2021, acknowledge that it is difficult to state with absolute certainty that the mental health consequences identified are a result of the COVID-19 pandemic or due to pre-existing issues such as organisational problems, and levels of staffing. Nonetheless, despite nurses adopting greater use of coping styles, it does not appear to have protected them from high levels of PTSD or depression.

Similarly, high levels of mental health distress were found in Martin et al., 2021 study of 120 care home workers in Spain. Utilising the Generalised Anxiety Disorder 7-item scale, Impact Event Scale-Revised, Insomnia Severity Index and Health-Related Quality of Life Questionnaire. Of the 210 care home workers, 49.28% had clinical depression; 58.7% had clinical anxiety; 70.95% had clinical stress and 28.57% had clinical insomnia. Increased use of sedatives and tranquilisers appears to be an explanatory variable of suffering greater anxiety, depression, stress and insomnia amongst care home workers. However, as with Husky et al., 2022 and Martin et al.'s, 2021 studies, a limitation of Brady et al.'s, 2021, the study is that it is difficult to state if identified distress was due to the pandemic or as a

result of pre-existing issues, for example, organisational problems such as staff shortage or support deficits.

Whilst these studies indicate that there is no absolute certainty that mental distress amongst HSCPs are a direct consequence of the COVID-19 pandemic, other studies (Duan et al., 2020; Gómez-Salgado et al., 2020; Jones et al., 2021; Hoedl et al., 2021; McGarry et al., 2020; McGilton et al., 2021; White et al., 2021) indicate that the additional challenges brought about by the COVID-19 pandemic placed additional stressors on HSCPs.

4.2 | Additional challenges

The COVID-19 pandemic presented HSCPs with a number of additional challenges that have been identified by this scoping review. Such challenges comprised increased workloads to manage infection control and social distancing, staff shortages, reading government guidelines, managing and reassuring care and nursing home residents and families, and a lack of PPE and preparedness. Moreover, ethical dilemmas and fears around becoming infected with COVID-19 represented additional challenges. As a consequence, this led to some HSCPs suffering burnout, anxiety, depression and insomnia (van Dijk et al., 2022). In van Dijk et al. (2022), a study in the Netherlands, of the 1699 HSCPs surveyed amongst 10 nursing homes, 19.2% had high levels of depression and 22% burnout associated with increased job demands.

Several studies reported HSCPs experiencing additional due to heightened workload, staff shortages, new work regulations, and lack of preparedness (Jones et al., 2021; Nyashanu et al., 2020; White et al., 2021; Zalakain et al., 2020).

4.2.1 | Preparedness and guidance

A lack of preparedness was experienced by HSCPs during the COVID-19 pandemic (Jones et al., 2021; Nyashanu et al., 2020; White et al., 2021; Zalakain et al., 2020). Information and training about how to stem the virus were perceived as lacking by HSCPs leaving ongoing ambiguity about how to care adequately for infected residents in long-term care (Nyashanu et al., 2020). Yet, when HCSP's were guided by infection control nurses about how best to control a virus, HSCPs felt more positive about their role in long-term care establishments (McGilton et al., 2021). In a US-based survey, Jones et al. (2021) found that by mid-March 2020 most (140 out of 143) nursing homes had a pandemic response plan for COVID-19 (i.e. social distancing measures). Nevertheless, many facilities continued to report a shortage of personal and protective equipment (Jones et al., 2021) suggesting that improved information and communication did not immediately translate to resource preparedness.

Even where guidance was available, some studies found that some HSCPs were challenged by conflicting and rapidly overwhelming information and guidance (Jones et al., 2021; White et al., 2021)

TABLE 3 Characteristics of studies

Author	Year	Country of study	Study design	Participants	Care group	Long-term care setting	Main findings
Brady, Fenton, Loughran, Hayes, Hennessey, Higgins, Leroi, Shanager and McCloughlin	2021	Ireland	Cross-sectional utilising an online survey	Nursing home staff including nurses (n = 120) and health care assistants (n = 172) and non-clinical (n = 98) staff Total (n = 390)	Older people	Nursing homes for older adults	Moderate-severe PTSD symptoms found in 45.1% of all staff. A WHO wellbeing index score of low mood was reported by 38.7% of all staff. Nursing home staff report high levels of PTSD, mood disturbance or moral injury during the COVID-19 pandemic. Differences in the degree of moral injury, well-being and coping styles were found between staff groups. The cohort of non-clinical staff in terms of rank or profession was not defined.
Duan, Iaconi, Song, Norton, Squires, Keefe and Cummings	2020	Canada	Descriptive quantitative analysis of data on Care Aides working in multiple care homes and additional jobs	Care Aides (n = 3765)	Older people	Care homes for older adults	Approximately 15% of care aides are working in locations other than main long-term care home (i.e. home care services, acute care, assisted living and group homes) for more than 18 hours a week. Working in multiple sites is necessitated for financial reasons. During the current pandemic care aides are subject to the risk of transmission of COVID-19 and transmitting to others. Of those working in a single site as a result of restrictions, financial burden is pressing.
Gomez-Salgado, Dominguez-Salas, Romero-Martin, Ortega-Moreno, Garcia-Iglesias and Ruiz-Frutos.	2020	Spain	Descriptive analysis of questionnaire delivered to HCW's	1459 care workers	Older people	Nursing homes, clinics, care centres	Nursing home-specific data—increased prevalence of psychological distress reported including anxiety and depression. Fears by the staff of passing on covid-19 to family members especially if relatives are at risk.
Jones, Mantey, Washer, Meddings, Patel, Montoya, Gibson and Mody	2021	USA	Quantitative analysis of survey results of 143 nursing homes	Nursing home workers	Older people	Nursing homes for older adults	Survey participants reported rapidly received of changing guidelines. Two-thirds surveyed reported a lack of personal, protective equipment, whilst half lacked the testing resources to test for COVID-19 amongst staff and residents. The majority (55%), experienced staff shortages. Sixty-three per cent of nursing homes experienced increases in resignations, with staff caring for residents affected by Covid more likely to resign.
Martin, Padierna, Villanueva Quintana	2021	Spain	Quantitative analysis utilising descriptive statistics, univariable analysis and multivariable regression models.	Care home workers (n = 210)	Older people	Care homes for older adults	Utilising the Generalised Anxiety Disorder 7-item scale, Impact Event Scale-Revised, Insomnia Severity Index and Health-Related Quality of Life Questionnaire. Of the 210 care home workers, 49.28% had clinical depression; 58.7% had clinical anxiety; 70.95% had clinical stress and 28.57% had clinical insomnia. Increased use of sedatives and tranquilisers appears to be an explanatory variable of suffering greater anxiety, depression, stress and insomnia amongst care home workers.

(Continues)

TABLE 3 (Continued)

Author	Year	Country of study	Study design	Participants	Care group	Long-term care setting	Main findings
Hoedi, Thonhofer % Schoberer Husky, Villeneuve, Teguio, Alonso, Bruffaerts, Swendsen and Amieva	2021 2022	Austria France	Qualitative descriptive study utilising interviews. Quantitative study with a cross-sectional online survey utilising the World Mental Health Consortium survey to screen for COVID-related fears, anxiety, depression, PTSD and substance use.	Nurses, nursing aides and care aides (n = 18) Nursing home workers (n = 127)	Older people Older people	Nursing homes for older people Nursing homes for older people	Qualitative workload and work organisation were major concerns with staff required to undertake additional tasks to care for residents since the pandemic interventions placed residents under stress and dealing with relatives presented with challenges. Staff reported psychological consequences such as uncertainty, fear and stress as a result of the pandemic. Overall, 48.03% reported experiencing fear of infecting others, 14.96% that close others feared being infected by them. One-third of the sample (34.65%) of the sample met the criteria for at least 1 probable current mental disorder. Panic attacks (22.05%) were the most frequently reported mental health problem followed by depression (16.54%). In multivariate analysis, the only factor associated with a current probable mental disorder was the presence of pre-pandemic mental health problem (adjusted od ratio 4.76, 95% CI 2.08–10.89). Type of employment contract, full-time status and medical vs non-medical staff were not significantly associated with mental health status.
McGarry, Grabowski and Barnett	2020	USA	Quantitative analysis of 15,035 nursing home data from the CMS Covid-19 nursing home database	Medicaid-certified and Medi-care nursing homes	Older people	Nursing homes for older adults	Of the 15,388 nursing homes registered on the CMS nursing home database, 15,035 (98%) nursing homes submitted data on staff and PPE shortages during the pandemic (June 24–July 19, 2020). At the end of the study period, 20.7% of nursing homes reported a severe shortage of PPE and staff. A total of 20.8% of nursing homes reported staff shortages. Facilities which were government-owned, had higher Medicaid revenue shares, and had staff and resident COVID-19 cases were more likely to report shortages of staff in at least 1 in 5 nursing homes. Whilst shortages for health care workers in the sector were common pre-pandemic, the pandemic has created strain on an overstretched workforce that has contended with low pay and demanding work environments. This has a major ability to impact the quality of care provided.

TABLE 3 (Continued)

Author	Year	Country of study	Study design	Participants	Care group	Long-term care setting	Main findings
McGilton, Krassikova, Boscart, Sidani, Laboni, Vellani and Escrig-Pinol	2021	Canada	Explorative qualitative study employing a phenomenological approach	Fourteen nursing practitioners	Older people	Long-term care facilities for older adults	Thematic analysis generated four themes relating to NP practices and experiences during the pandemic: containing the spread of Covid-19, stepping in where needed, supporting staff and families and establishing links between fragmented systems of care. Findings indicate that NPs occupied multiple roles in long-term care facilities. An innovative model is required for NPs to act as leaders and to build capacity in LTC homes.
Nyashnu, Pfende and Ekpenyong	2020	UK	Explorative qualitative design with 41 in-depth interviews.	Health and social care workers	Older people	Nursing homes, residential homes and domiciliary care for older adults	Main themes from interviews were HSCW reporting a lack of preparedness, lack of PPE, Anxiety and fears amongst professionals and residents. Other themes identified the challenges of fulfilling guidance on social shielding, shortage of staff and evolving PPE guidance.
White, Wetle, Reddy and Baier Van Dijk, Janus, de Boer, Achterberg, Roelen and Zuidema.	2021 2022	USA Netherlands	Explorative mixed methods using an electronic survey of open and closed questions Quantitative study utilising an online survey.	Long-term care staff (n = 132) Employees of 10 nursing home organisations (n = 1699)	Older people Older people	Nursing homes for older adults Nursing home organisations	Direct care staff expressed fear of infecting themselves and their families. They described experiencing burnout due to increased workloads, staffing shortages and the emotional burden for residents facing isolation, illness and death. The lack of communication and teamwork contributed to being able to work in challenging circumstances. Staff also described the demoralising impact of negative media coverage of nursing homes, contrasting with the heroic public recognition given to hospital staff. The survey measured participant characteristics, job demands, work functioning, depressive symptoms and burnout. Of the participants, 19.1% had high levels of depressive symptoms and 22% burnout. Job demands, work functioning, depressive symptoms and burnout differed between participants who never worried and participants who often worried about the COVID-19 crisis.
Xu, Intrator and Bowblis	2020	USA	Quantitative analysis from a survey on staff shortages and exposure to Covid-19, and PPE availability.	Nursing homes (n = 11,920)	Older people	Nursing homes for older adults	Of the nursing homes that self-reported, 46.6% reported shortages of staff who provide direct care to residents. Multivariate regression suggests that shortages in staff were more likely in nursing homes which reported residents and staff with Covid-19.

(Continues)

TABLE 3 (Continued)

Author	Year	Country of study	Study design	Participants	Care group	Long-term care setting	Main findings
Zalakain, Davey and Suarez-Gonzales	2020	Spain	Documentary evidence of the impact of COVID-19 users and staff of long-term facilities	Health care workers and users of long-term care facilities	Older people	Long-term care facilities including residential and nursing homes for older adults.	In care homes, staff are reporting distress and exhaustion and frustration with the lack of PPE. To address the impact on staff well-being, former health professionals and care workers including those without a training certificate are legally entitled to work in the long-term care sector. There are indications that psychological and well-being support is provided in some nursing and care homes although this is not widespread.
Zhao, Yin, Xiao, Shuang, Wu, Li, Yang, Zhang, Liao and Feng	2021	China	A qualitative study using in-depth semi-structured interviews with the nursing staff	Nursing staff (n = 21) comprising seven nursing managers, seven registered nurses and seven nursing assistants	Older people	Nursing homes in seven provinces	Three main themes were identified and included challenges experienced by nursing managers; challenges experienced by registered nurses and coping strategies; challenges experienced by nursing assistants and coping strategies. Different groups encountered different sources of stress and adopted various coping strategies to fulfil their responsibilities. Overall, staff were unprepared for dealing with COVID-19-related challenges.

and was exacerbated by a shortage of staff and having to undertake additional duties despite a lack of PPE (Brainard et al., 2020; Duan et al., 2020; Vogel, 2020; Zalakain et al., 2020). For example, of the 15,035 nursing homes identified in McGarry et al. (2020) US study, one in five facilities faced a staff shortage of PPE during the height of the pandemic in July 2020. This same study identified that staff stepped in where needed and performed multiple roles such as educating colleagues about the appropriate use of PPE. Overall, some literature indicates that exhaustion caused by stressors led to low adherence to infection prevention practices (McGarry et al., 2020; Hoedl et al., 2021; Zalakain et al., 2020).

4.2.2 | Increased workload

The heightened workload was reported when additional duties involved taking time out to read and digest COVID-19-related guidelines (Nyashanu et al., 2020; White et al., 2021; Xu et al., 2020) or due to the performance of extra cleaning duties, and personal care of service users in line with regulations which brings about additional stressors (McGarry et al., 2020; McGilton et al., 2021; van Dijk et al., 2022).

Indeed, in Zhao et al., 2021's qualitative interviews with 21 HSCPs (7 nursing managers, 7 nurses and 7 nursing assistants), nursing assistants were responsible for assisting residents with daily living such as washing and dressing. During the pandemic, nursing assistants expressed great fear due to inadequate prevention and control measures that exposed themselves and residents to potential infection (Zhao et al., 2021: 891).

Workload and workload organisation was also an additional challenge and contributing factor to HSCP stress in a qualitative study conducted by Hoedl et al. (2021) amongst 18 HSCPs (nurses, nursing aides and care aides) in Austria. As many of the interventions (i.e. social distancing; mask wearing non-contact visits) caused distress (i.e. confusion, boredom, restlessness) for nursing and care home residents HSCPs spent considerable time reassuring residents and also their families which led to a number of adverse outcomes such as feeling threatened by family members (Hoedl et al., 2021:5). Indeed, this is in keeping with other studies (Husky et al., 2022; Martin et al., 2021; Zhao et al., 2021) which found that HSCPs were challenged when trying to resolve disputes with relatives who demanded to see residents face-to-face.

4.2.3 | Ethical dilemmas

Several studies (Jones et al., 2021; McGarry et al., 2020; Nyashanu et al., 2020) reported on HSCPs confrontation with ethical dilemmas during the COVID-19 pandemic. Dilemmas included refusing to work with infected residents and dilemmas posed by other staff members who do not conform PPE guidelines (McGarry et al., 2020; Jones et al., 2021; Xu et al., 2020). As a consequence, some HSCPs, refused to come to work placing pressure on other

staff who had to undertake additional tasks (Jones et al., 2021). Studies found that HSCPs were faced with the dilemma of having to isolate residents by locking doors to stem an outbreak and engaging in wearing PPE (i.e., masks and gowns) which increased a sense of loneliness amongst residents (Jones et al., 2021; McGarry et al., 2020; Nyashanu et al., 2020).

To mitigate the dilemma of infecting other family members, HSCPs, lived in the workplace for days and weeks to avoid going out and potentially bringing in COVID-19 to individuals they were looking after (Nyashanu et al., 2020). However, for some HSCPs the fear of becoming infected and infecting others prevailed. In a survey conducted by Gómez-Salgado et al., 2020 in Spain amongst 1459 HSCPs, the findings suggest that HSCPs experienced a higher level of psychological distress due to work-related COVID-19 infection risk when compared with the general population.

5 | DISCUSSION

The findings of this scoping review overall concur with the view that the COVID-19 pandemic posed challenges for HSCPs within nursing and care homes including the mental health challenges experienced by HSCPs. Issues pre-existed the COVID-19 pandemic (Brady et al., 2021; Martin; Husky et al., 2022). Whilst it is uncertain if mental health challenges pre-existed the COVID-19 pandemic, nevertheless such experiences were exacerbated by the presence of additional challenges such as a lack of preparedness, ethical dilemmas infection control to reduce the impact of the outbreak. Already difficult working situations can be heightened as HSCPs feel responsible for managing the safety, care and communication with residents and their families (White et al., 2021). Prolonged work hours due to staff shortages are consequential for stress (McGilton et al., 2020). The combination of issues raised in this review can impact the moral cohesiveness of staff in long-term care establishments (Martin et al., 2021). Furthermore, they can be subject to challenging experiences when faced with ethical dilemmas and are often having to choose between competing priorities (Brady et al., 2021; Gómez-Salgado et al., 2020).

In the context of COVID-19, the findings of this review point to reports of increased anxiety, depression, substance use, post-traumatic stress disorder (PTSD) and other psychiatric symptoms such as insomnia and obsessive-compulsive symptoms which last longer than a few days (Brady et al., 2021). Fear of contracting the COVID-19 or exposing others resulted in increased absenteeism or abandonment of their work (van Dijk et al., 2022; Zalakain et al., 2020; Zhao et al., 2021).

Indeed, the role of infection control was a particular challenge identified in several studies where nursing and care homes were considered 'high-risk' areas for both morbidity and mortality related to COVID-19 (Gómez-Salgado et al., 2020; Jones et al., 2021; Zalakain et al., 2020). HSCPs are positioned both as protectors of residents and themselves needing to adhere to enhanced hygiene protocols despite increased workloads—as well as potential vectors

for infection (Gómez-Salgado et al., 2020; van Dijk et al., 2022). As demonstrated in the findings, managing these expectations and risks can be emotionally and ethically difficult for staff and can have an impact on their sense of professionalism. For example, not informing colleagues who do not adhere to infection control protocol or not providing care to residents infected with COVID-19 leading to an increased workload for other staff (Hoedl et al., 2021; Nyashanu et al., 2020; Xu et al., 2020). The findings in this review also indicate that HSCPs do not necessarily feel well-prepared, educated or supported for managing these challenges (Jones et al., 2021; Zhao et al., 2021). As a consequence, this can lead to compromises in infection control procedures, staff absenteeism and/or mental health and psychological impacts on staff (Duan et al., 2020; Hoedl et al., 2021; Husky et al., 2022; McGarry et al., 2020; Xu et al., 2020).

Based on the findings of included studies it is clear that clear direction and guidance by long-term care leaders and regulators; keeping staff healthy; human resource policies (such as sick pay and increased workforce); and implementing clinical changes, including education about end-of-life care (McGilton et al., 2020). Preparedness and clear communication are crucial to reduce confusion and anxiety amongst HSCPs. Clear policies which provide direction to HSCPs when they are confronted with a pandemic like COVID-19 can mitigate the sense of fear and panic felt (Nyashanu et al., 2020). Within institutions, managers should facilitate a supportive working environment for care workers during viral outbreaks and pandemics. This should include adequate services for mental health promotion and prevention since mental health issues are expected to arise as well as identification and management of mental health issues. For example, employers should be encouraged to ensure staff have the opportunities for self-care, including breaks and rest periods, fostering casual interactions between colleagues, and provide counselling (to HSCPs).

6 | IMPLICATIONS FOR POLICY AND PRACTICE

This review identified that staff experience mental health challenges and workload pressures which were exacerbated by the COVID-19 pandemic. This can cause staff sickness, absenteeism, and impact infection control. At a structural level, long-term care facilities and social care more generally need more funding to ensure there is an adequate workforce, both with the required skills and equipment (Ayalon et al., 2020).

When considering this in light of future disaster preparedness, the findings of this review can help inform policies by illuminating how HSCPs have responded to the nature of the threat and how their experiences were influenced by the functioning of systems and behaviours of those around them (McGilton et al., 2021; Xu et al., 2020). Moreover, additional analysis is needed to understand the unintended consequences of policies, such as social distancing as well as the longer-term impact on staff. There is potential to grow a collective knowledge base in this area.

7 | STRENGTHS AND LIMITATIONS

This scoping review analysed studies that used a variety of research methods. The review focused only on English language studies, peer-review literature, and adult care homes; expanding these criteria may provide a wider source of literature for future analysis. Moreover, it is likely that as COVID-19 continues there will be more published in this field over the coming years. A further limitation is that it is uncertain whether the mental health challenges experienced by HSCPs were a direct result of the COVID-19 pandemic or due to pre-existing conditions.

Notwithstanding the limitations the present review contributes to increasing attention to HSCP who are likely to be at risk of pandemic-related stressors facilitating access to appropriate mental health services is particularly challenging. These settings may benefit from implementing mental health literacy campaigns, screening and facilitated access to care not just for clinical staff but the whole team. The review has shed light on the lack of proper resources and a lack of preparedness.

8 | CONCLUSION

The COVID-19 pandemic has highlighted how long-term care institutions can be at the forefront of viral outbreaks. This scoping review sought to investigate how HSCP in these facilities experienced the COVID-19 pandemic in order to inform discussions about how to support them. Fifteen studies were analysed and highlighted how staff experience mental health challenges in addition to other difficulties such as workload issues, ethical dilemmas and reassuring distressed residents of care and nursing homes. Whilst it has been difficult to ascertain with any certainty if the mental health challenges experienced by HSCPs pre-existed the pandemic, the additional challenges faced and the burden of further emotional stressors can further impact their mental health, and reduce their ability to work or to comply with infection control measures. There is a lack of evidence-based interventions to address these areas as well as a lack of literature discussing ways in which to adequately support HSCPs.

Not only is there scope to improve the preparedness for such pandemics in the future, including the working conditions of HSCP through better staff resourcing and mental health support, but there is also scope to further research the experiences and needs of this marginalised group of workers.

AUTHORS CONTRIBUTION

KJ and EB conceived the article, KJ designed and developed the protocol for the review. KJ, KS undertook the searches, screening and selection of analysis with EB referred in the event of clarification. KJ thematically analysed selected papers. All authors contributed to the writing of the paper.

ACKNOWLEDGEMENTS

The authors would like to acknowledge the care workers who have had to experience working under conditions of viral outbreaks and acknowledge the impact that this can have on them as individuals.

This review was supported by internal research funds from the Open University. The authors would like to thank the peer-reviewers.

FUNDING INFORMATION

This scoping review was funded by internal research development funds by The Open University.

CONFLICT OF INTEREST

The authors have no competing interests.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analysed in this study.

REFERENCES

- Almendrala, A. (2020) 'It Hurts Our Soul': Nursing Home Workers Struggle With Thankless Position, *Medscape*. <https://www.medscape.com/viewarticle/929414> (Accessed: 6 January 2021).
- Arksey, H. and O'Malley, L. (2005) 'Scoping studies: Towards a methodological framework', *International Journal of Social Research Methodology*. Taylor and Francis Group Ltd, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- Arons, M. M., Hatfield K.M., Reddy S.C., Kimball A., James A., Jacobs J.R., Taylor J., Spicer K., Bardossy A.C., Oakley L.P., Tanwar S., Dyal J.W., Harney J., Chisty Z., Bell J.M., Methner M., Paul P., Carlson C.M., McLaughlin H., Thornburg N., Tong S., Tamin A., Tao Y., Uehara A., Harcourt J., Clark S., Brostrom-Smith C., Page L.C., Kay M., Lewis J., Montgomery P., Stone N.D., Clark T.A., Honein M.A., Duchin J.S., Jernigan J.A., Public Health–Seattle and King County and CDC COVID-19 Investigation Team. (2020) Presymptomatic SARS-CoV-2 infections and transmission in a skilled nursing facility, *New England Journal of Medicine*. Massachusetts Medical Society, 382(22), 2081–2090. <https://doi.org/10.1056/nejmoa2008457>
- Ayalon, L., Zisberg A., Cohn-Schwartz E., Cohen-Mansfield J., Perel-Levin S., Bar-Asher Siegal E. (2020) Long-term care settings in the times of COVID-19: Challenges and future directions, *International Psychogeriatrics*. Cambridge University Press, 32 1239–1243. <https://doi.org/10.1017/S1041610220001416>
- Barnett, M. L. & Grabowski, D. C. (2020) Nursing homes are ground zero for COVID-19 pandemic, *JAMA Health Forum*. American Medical Association (AMA), 1(3), e200369. <https://doi.org/10.1001/jamahhealthforum.2020.0369>
- Bell, D., Comas-Herrera, A., Henderson, D., Jones, S., Lemmon, E., Moro, M., Murphy, S., O'Reilly, D., & Patrignani, P. (2020). COVID-19 mortality and long-term care: A UKcomparison. *International Long Term Care Policy Network* <https://ltccovid.org/2020/08/28/covid-19-mortality-and-long-term-care-a-uk-comparison/>
- Blake, H., Bermingham F., Johnson G., Tabner A. (2020) Mitigating the psychological impact of covid-19 on healthcare workers: A digital learning package, *International Journal of Environmental Research and Public Health*. MDPI AG, 17(9), 1–15. <https://doi.org/10.3390/ijerph17092997>
- Boerner, K., Burack O.R., Jopp D.S., Mock S.E. (2015) Grief after patient death: Direct care staff in nursing homes and homecare, *Journal of Pain and Symptom Management*. Elsevier Inc., 49(2), 214–222. <https://doi.org/10.1016/j.jpainsymman.2014.05.023>

- Boerner, K., Gleason, H. and Baroah, A. (2016) Home Health aides' experience with client death: The role of employer policy, *Home Healthcare Now*. NIH Public Access, 34(4), 189–195. <https://doi.org/10.1097/NHH.0000000000000360>
- Boerner, K., Gleason, H. and Jopp, D. S. (2017) Burnout after patient death: Challenges for direct care workers, *Journal of Pain and Symptom Management*. Elsevier Inc., 54(3), 317–325. <https://doi.org/10.1016/j.jpainsymman.2017.06.006>
- Bohken, J., Schömig F., Lemke M. R., Pumberger M., Riedel-Heller S. G. (2020) COVID-19 pandemic: Stress experience of healthcare workers: A short current review, *Psychiatrische Praxis*. Georg Thieme Verlag, 47, 190–197. <https://doi.org/10.1055/a-1159-5551>
- Bottery, S. (2020) How Covid-19 has magnified some of social care's key problems, *The King's Fund*. <https://www.kingsfund.org.uk/publications/covid-19-magnified-social-care-problems> (Accessed: 14 January 2021).
- Brady, C., Fenton, C., Loughran, O., Hayes, B., Hennessey, M., Higgins, A., Leroi, I., Shanager, D., & McCloughlin, D. M. (2021). Nursing home staff mental health during the Covid-19 pandemic in the Republic of Ireland. *International Journal of Geriatric Psychiatry*, 37(1), 1–10. <https://doi.org/10.1002/gps.5648>
- Brainard, J. et al. (2020) Introduction to and spread of COVID-19 in care homes in Norfolk, UK, *medRxiv*. <https://www.medrxiv.org/content/10.1101/2020.06.17.20133629v1.full.pdf> (Accessed: 14 January 2021).
- Bramer, W. M., Rethlesen, M. L., Kleijnen, J., & Franco, O. H. (2017). Optimal database combinations for literature searches in systematic reviews: A prospective exploratory study. *Systematic Reviews*, 6, 245. <https://doi.org/10.1186/s13643-017-0644-y>
- Comas-Herrera, A., Zalakaín, J., Lemmon, E., Henderson, D., Litwin, C., Hsu, A. T., Fernández, J.-L. (2021). Updated international report: Mortality associated with COVID-19 in care homes, data up to 26th January 2021 – Resources to support community and institutional long-term care responses to COVID-19. <https://tccovid.org/2021/02/02/updated-international-report-mortality-associated-with-covid-19-in-care-homes-data-up-to-26th-january-2021/>
- Comas-Herrera, A., Zalakaín, J., Lemmon, E., et al. (2020) Mortality associated with COVID-19 outbreaks in care homes: early international evidence – Resources to support community and institutional Long-Term Care responses to COVID-19, *LTC Responses to COVID-19: International Long-Term Care Policy Network*. <https://tccovid.org/2020/04/12/mortality-associated-with-covid-19-outbreaks-in-care-homes-early-international-evidence/> (Accessed: 6 January 2021).
- Dempster, P. G. (2012) Memorialisation and the metaphor of final journeys: Workers' experiences of dealing with death within care homes for the elderly, *Mortality*. Routledge, 17(3), 221–239. <https://doi.org/10.1080/13576275.2012.696808>
- Duan, L. and Zhu, G. (2020) Psychological interventions for people affected by the COVID-19 epidemic, *The Lancet Psychiatry*. Elsevier Ltd, 7 300–302. [https://doi.org/10.1016/S2215-0366\(20\)30073-0](https://doi.org/10.1016/S2215-0366(20)30073-0)
- Duan, Y., Iaconi A., Song Y., Norton P.G., Squires J.E., Keefe J., Cummings G.G., Estabrooks C.A. (2020) Care aides working multiple jobs: Considerations for staffing policies in long-term care homes during and after the COVID-19 pandemic *Journal of the American Medical Directors Association*. Elsevier Inc., 21, 1390–1391. <https://doi.org/10.1016/j.jamda.2020.07.036>
- ECDC Public Health Emergency Team, Kostas, D., Laure, F., Scarlett, G., Côme, D., Sibylle, B.-S., Lisa, D., Joan, O'. D., Helene, H. S., Sara, D., Eline, V., der Heyden Johan, V., Françoise, R., Natalia, B. S., Enrico, R., Birgitta, S., Nicole, S., Muna, A. S., Tim, E., ... Elke, S. (2020). High impact of COVID-19 in long-term care facilities, suggestion for monitoring in the EU/EEA. *Euro Surveill*, 25(22), pii=2000956. <https://doi.org/10.2807/1560-7917.ES.2020.25.22.2000956>
- Gilissen, J., Pivodic, L., Unroe, K. T., & Van den Block, L. (2020). International COVID-19 palliative care guidance for nursing homes leaves key themes unaddressed. *Journal of Pain and Symptom Management*, 60(2), e56–e69. <https://doi.org/10.1016/J.JPAINSYMMAN.2020.04.151>
- Gómez-Salgado, J., Domínguez-Salas S., Romero-Martín M., Ortega-Moreno M., García-Iglesias J. J., Ruiz-Frutos C. (2020) Sense of coherence and psychological distress among healthcare workers during the COVID-19 pandemic in Spain. *Sustainability (Switzerland)*. MDPI AG, 12(17), 6855. <https://doi.org/10.3390/SU12176855>
- Greenberg, N. (2020). Mental health of health-care workers in the COVID-19 era. *Nature Reviews. Nephrology*, 16, 425–426. <https://doi.org/10.1038/s41581-020-0314-5>
- Hoedl, M., Thonofner, N., & Scoberer, D. (2021). COVID-19 pandemic: Burdens on and consequences for nursing home staff. *Journal of Advanced Nursing*, 78, 2495–2506. <https://doi.org/10.1111/jan.15193>
- Husky, M. M., Villeneuve, R., Teguo, M. T., Alonso, J., Bruffaerts, R., & Swendsen, J. (2022). Nursing home Workers' mental Health during the COVID-19 pandemic in France. *JAMDA*, 23, 1095–1100. <https://doi.org/10.1016/j.jamda.2022.04.001>
- Jones, K., Mantey, J., Washer, L., Meddings, J., Patel, P. K., Montoya, A., Mills, J. P., Gibson, K., & Mody, L. (2021). When planning meets reality: COVID-19 interpanidemic survey of Michigan nursing homes. *American Journal of Infection Control*, 49, 1343–1349. <https://doi.org/10.1016/j.ajic.2021.03.016>
- Jordan, R. E., Adab, P. and Cheng, K. K. (2020) Covid-19: Risk factors for severe disease and death, *The BMJ*. BMJ Publishing Group, 368, 1–2. <https://doi.org/10.1136/bmj.m1198>
- Knowles, K. (2020) Mental health policy response during COVID-19: Support for care workers, *LTC Responses to COVID-19: International Long-Term Care Policy Network*. <https://tccovid.org/2020/06/08/mental-health-policy-response-during-covid-19-support-for-care-workers/> (Accessed: 6 January 2021).
- Lauretani, F., Ravazzoni G., Roberti M.F., Longobucco Y., Adorni E., Grossi M., de Iorio A., la Porta U., Fazio C., Gallini E., Federici R., Salvi M., Ciarrocchi E., Rossi F., Bergamin M., Bussolati G., Grieco I., Broccoli F., Zucchini I., Ielo G., Morganti S., Artoni A., Arisi A., Tagliaferri S., Maggio M. (2020) Assessment and treatment of older individuals with covid-19 multi-system disease: Clinical and ethical implications, *Acta Biomedica*. Mattioli 1885, 91(2), 150–168. <https://doi.org/10.23750/abm.v91i2.9629>
- Logar, S. (2020) Care home facilities as new COVID-19 hotspots: Lombardy region (Italy) case study, *Archives of gerontology and geriatrics*. NLM (Medline), 89, 104087. <https://doi.org/10.1016/j.archger.2020.104087>
- Marcella, J. and Kelley, M. Lou (2015) "Death is part of the job" in long-term care homes, *SAGE Open*. SAGE Publications Inc., 5(1), 215824401557391. <https://doi.org/10.1177/2158244015573912>
- Martin, J., Padierna, A., Villanueva, A., & Quintana, J. M. (2021). Evaluation of the mental health of care home staff in the Covid-19 era. What price did care home workers pay for standing by their patients? *International Journal of Geriatric Psychiatry*, 36, 1810–1819. <https://doi.org/10.1002/gps.5602>
- McGarry, B. E., Grabowski, D. C., & Barnett, M. L. (2020). Severe staffing and personal protective equipment shortages faced by nursing homes during the COVID-19 pandemic. *Health Affairs*, 39(10), 1812–1821.
- McGilton, K. S., Krassikova, A., Boscart, V., Sidani, S., Iaboni, A., Vellani, S., & Escrig-Pinol, A. (2021). Nurse practitioners rising to the challenge during the coronavirus disease 2019 pandemic in long-term care homes. *The Gerontologist*, 61(4), 615–623. <https://doi.org/10.1093/geront/gnab030>
- McGilton, K. S., et al. (2020). Uncovering the devaluation of nursing home staff during COVID-19: Are we fuelling the next Health care crisis? *Journal of the American Medical Directors Association*, 21, 962–965. <https://doi.org/10.1016/j.jamda.2020.06.010>

- McMichael, T. M. et al. (2020) COVID-19 in a Long-Term Care Facility – King County, Washington, February 27–March 9, 2020, *MMWR. Morbidity and Mortality Weekly Report*. Centers for Disease Control MMWR Office, 69(12), 339–342. <https://doi.org/10.15585/mmwr.mm6912e1>
- Nyashanu, M., Pfende, F. and Ekpenyong, M. (2020) 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*. Taylor and Francis Ltd, 34(5), 655–661. <https://doi.org/10.1080/13561820.2020.1792425>
- Office for National Statistics (2020) *Deaths within the care sector involving COVID-19, England and Wales*. <https://www.ons.gov.uk/releases/deathswithinthecaresectorinvolvingcovid19englandandwales> (Accessed: 6 January 2021).
- Oliver, D. (2020) Let's be open and honest about covid-19 deaths in care homes, *BMJ*. BMJ Publishing Group, 369, m2334. <https://doi.org/10.1136/bmj.m2334>
- Onder, G., Rezza, G. and Brusaferro, S. (2020) Case-fatality rate and characteristics of patients dying in relation to COVID-19 in Italy, *JAMA - Journal of the American Medical Association*. American Medical Association, 323, 1775–1776. <https://doi.org/10.1001/jama.2020.4683>
- Peters, M. D. J., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., et al. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBI Evid Synth*, 18(10), 2119–2126.
- Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & McEwen, S. A. (2014). A scoping review of scoping reviews: Advancing the approach and enhancing the consistency. *Research Synthesis Methods*, 5(4), 371–385. <https://doi.org/10.1002/jrsm.1123>
- Rajhans, P., Deb, K. S. and Chadda, R. K. (2020) COVID-19 pandemic and the mental Health of Health care workers: Awareness to action. *Annals of the National Academy of Medical Sciences (India)*. Georg Thieme Verlag KG, 56(3), 171–176. <https://doi.org/10.1055/s-0040-1715285>
- Rajkumar, R. P. (2020) COVID-19 and mental health: A review of the existing literature, *Asian Journal of Psychiatry*. Elsevier B.V., 52, 102066. <https://doi.org/10.1016/j.ajp.2020.102066>
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8, 45. <https://doi.org/10.1186/1471-2288-8-45>
- Towers, A.M., Killelt A., Handley M., Almack K., Backhouse T., Bunn D., Bunn F., Dickinson A., Mathie E., Mayrhofer A., Mikelyte R., Goodman C. (2020) Producing “top tips” for care home staff during the COVID-19 pandemic in England: Rapid reviews inform evidence-based practice but reveal major gaps, *Journal of Long-Term Care*. LSE Press, 0(2020), 151. <https://doi.org/10.31389/jltc.43>
- van Dijk, Y., Janus, S. L. M., de Boer, M. R., Achterberg, W. P., Roelen, C. A. M., & Zuidema, S. U. (2022). Job demands, work functioning and mental Health in Dutch nursing home staff during the COVID-19 outbreak: A cross-sectional multilevel study. *International Journal of Environmental Research and Public Health*, 19(7), 4379.
- Vogel, S. (2020) *Nursing Home Workers Demand PPE on National Day of Action*, SEIU HCII. <https://seiuhciiin.org/2020/04/nursing-home-workers-demand-ppe-on-national-day-of-action-2/> (Accessed: 6 January 2021).
- Wang, H., Li T., Barbarino P., Gauthier S., Brodaty H., Molinuevo J.L., Xie H., Sun Y., Yu E., Tang Y., Weidner W., Yu X. (2020) Dementia care during COVID-19, *The Lancet*. Lancet Publishing Group, 395 1190–1191. [https://doi.org/10.1016/S0140-6736\(20\)30755-8](https://doi.org/10.1016/S0140-6736(20)30755-8)
- White, E. M., Wetle, T. F., Reddy, A., & Baier, A. R. R. (2021). Front-line nursing home staff experiences during the COVID-19 pandemic. *Journal of the American Medical Directors Association*, 22(1), 199–203. <https://doi.org/10.1016/j.jamda.2020.11.022>
- World Health Organization. Finding public health information: WHO library PubMed cochrane library 2016. <https://www.gfmer.ch/SRH-Course-2019/research-methodology/pdf/WHOLibPubMedCochrane-Allen-2019.pdf>. Accessed 30 March 2020.
- World Health Organization (2020a) *Coronavirus (COVID-19) events as they happen*, *Rulling Updates on coronavirus disease (COVID-19)*. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen> (Accessed: 6 January 2021).
- World Health Organization (2020b) *WHO Coronavirus Disease (COVID-19) Dashboard*. <https://covid19.who.int/> (Accessed: 6 January 2021).
- Xu, H., Intrator, O., & Bowblis, J. R. (2020). Shortages of staff in nursing homes during the COVID-19 pandemic: What are the driving factors? *Journal of the American Medical Directors Association*, 21(10), 1371–1377.
- Zalakain, J. Davey, V. & Suárez-González, A. The COVID-19 on users of long-term care services in Spain. LTCcovid, International Long-Term Care Policy Network, CPEC-LSE, 28 May 2020.
- Zhao, S., Yin, P., Xiao, L. D., Wu, S., Li, M., Yang, X., Zhang, D., Liao, L., & Feng, H. (2021). Nursing home staff perceptions of challenges and coping strategies during COVID-19 pandemic in China. *Journal of Geriatric Nursing*, 42(4), 887–893. <https://doi.org/10.1016/j.gerinurse.2021.04.024>
- Zhou, F., Yu T., du R., Fan G., Liu Y., Liu Z., Xiang J., Wang Y., Song B., Gu X., Guan L., Wei Y., Li H., Wu X., Xu J., Tu S., Zhang Y., Chen H., Cao B. (2020) Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: A retrospective cohort study, *The Lancet*. Lancet Publishing Group, 395(10229), 1054–1062. [https://doi.org/10.1016/S0140-6736\(20\)30566-3](https://doi.org/10.1016/S0140-6736(20)30566-3)

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Jones, K., Schnitzler, K., & Borgstrom, E. (2022). The implications of COVID-19 on health and social care personnel in long-term care facilities for older people: An international scoping review. *Health & Social Care in the Community*, 00, 1–14. <https://doi.org/10.1111/hsc.13969>