




# Care home workers experiences of stress and coping during COVID-19 pandemic: A mixed methods study

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## Abstract

**Aim:** The aim of the study was to explore the stress and coping experiences of healthcare workers (HCWs) in care home settings in Scotland during the COVID-19 pandemic.

**Design:** A cross-sectional mixed methods study was conducted using an online survey and interviews.

**Methods:** Mean scores were calculated for both stress and coping and t-tests used to explore possible links to demographics. Qualitative data were analysed thematically using Braun and Clarke's method.

**Results:** For 52 survey participants, the mean score for the PSS was  $M = 39.75$  and  $CSE-M = 150.6$  indicating high stress and medium coping skills. From the t-test, only absence of health issues was associated with higher levels of coping. Thirteen HCWs participated in one-to-one interviews. Qualitative data analysis generated four themes contributing to stress: 1. personal factors, 2. changed care environment, 3. amplified scrutiny and 4. psychological responses. Coping was represented as three main themes: 1. personal factors, 2. organizational culture and 3. safety and security. There is a critical need for a strategic approach to provide psychological support to care home staff both during and beyond the context of the pandemic.

## KEYWORDS

coping, nursing homes, stress, workforce issues

## 1 | INTRODUCTION

The COVID-19 pandemic created unprecedented challenges for healthcare workforces globally (World Health Organization [WHO], 2020). The emergence of COVID-19 in January 2020 caused a worldwide emergency which impacted on healthcare systems and healthcare workers (HCWs). These include an increased number of those requiring care, changes in how care is delivered, and a

reduction in the healthcare workforce due to staff illness or shielding, with increasing staff stress and anxiety (Jackson et al., 2020). Whilst HCWs were and are central to the COVID-19 response, they are also amongst the most vulnerable to infection and psychological impact due to their frontline exposure.

Many care homes experienced multiple outbreaks with devastating impacts. This impact was evidenced in the high mortality rates of COVID-19 amongst residents (Comas-Herrera et al., 2021;

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McMichael et al., 2020) ranging from 0.02% in Singapore and 0.04% in New Zealand, to over 5% (one in 20) in Belgium, France, the Netherlands, Slovenia, Spain, Sweden, the UK and the USA (Comas-Herrera et al., 2021). Those working in care home settings were especially impacted due to caring for ageing residents with associated multimorbidity, cognitive impairments, high resident to staff ratios and shared resident facilities (Davidson & Szanton, 2020; Xu et al., 2020).

Whilst the individual impact of this unparalleled uncertainty has varied, it is apparent that COVID-19 has led to widespread stress and other mental health impacts on HCWs in care home settings (Cabarkapa et al., 2020). Nurses and care workers are known for their ability to adapt and overcome adversity, but resilience amongst HCWs has been challenged by the current pandemic (Akkuş et al., 2021; Chigwedere et al., 2021). Given the ongoing impacts of COVID-19, there is an urgent need to develop interventions to support the health and well-being of HCWs in the care home sector. However, it is essential to first explore and understand context-specific experiences of HCWs prior to designing interventions. Listening and acting on their unique experience will enable tailoring of interventions to support current and future coping, as well as giving care home staff a voice.

## 1.1 | Background

Healthcare workers in care homes are often undervalued due to a lack of social, professional and public recognition in comparison with others employed in the healthcare system (Blanco-Donoso et al., 2021). This was further exemplified in the UK at the start of the pandemic with the delayed response of governmental agencies to implement protective measures for this group and the initial decision to move patients from acute hospitals into care home environments without COVID-19 testing. For the purposes of this paper, HCWs include both care workers (carers and senior carers) and registered nurses. The term care homes includes both long-term residential care and nursing homes. Historically, research into the experience of HCWs in care home settings has been neglected (Fallon et al., 2020). However, currently an evidence base exploring the impact of the COVID-19 pandemic on HCWs is emerging. The psychological impact of working in care homes during the COVID-19 pandemic is significant (McMichael et al., 2020). A recent systematic review of psychological symptoms amongst HCWs during the COVID-19 pandemic reported a high prevalence of anxiety (23.2%), depression (22.8%) and insomnia (38.8%) (Pappa et al., 2020). Female HCWs, including nurses, presented with higher rates of symptoms than their male, medical colleagues. Notably, of the 13 studies included in the review, 12 were undertaken in China and one in Singapore, which highlights the dearth of the UK evidence. Additionally, it is unclear whether any of the participants included in the review worked in a care home setting. A phenomenological study exploring the psychological experiences of HCWs caring for patients with COVID-19 in hospitals found that staff responses changed and fluctuated during

different stages of the pandemic (Sun et al., 2020). Initially, negative emotions such as fatigue, helplessness, fear and anxiety predominated. However, positive emotions emerged alongside negative emotions over time. Despite the significant impact of COVID-19 on HCWs in care home settings, there is a lack of evidence exploring the experiences of stress and coping within these contexts during the COVID-19 pandemic.

Lazarus & Folkman (1984) provide a useful theoretical framework to understand stress and coping. They describe coping as a transactional dynamic process which requires individuals to utilize cognitive and behavioural strategies to manage both external and internal demands presented by specific stressors. Psychological stress is a relationship between the individual and their environment, and stress occurs when the individual determines that the perceived threat exceeds their resources to cope (Lazarus & Folkman, 1986, p63). This highlights two important mediators of stress; firstly, the cognitive appraisal of their situation and, secondly, their coping strategies. The COVID-19 pandemic presented, and continues to present, both a physical and psychological threat to HCWs health and well-being, and, at a time, they have been required to work with insufficient resources to meet the demands of care (Akkuş et al., 2021). Lazarus and Folkman suggest that in response to these stressful situations, individuals will engage in positive coping approaches, such as emotion-focused or problem-based coping or may initiate maladaptive coping. Emotion-focused coping involves altering the emotional response (feelings, triggered by thoughts) to the stressful situation, whereas problem-based coping requires acting in response to stressful situations to resolve the problem. Maladaptive coping can provide a temporary reprieve from the stress but often results in longer term harm, for example when avoidance strategies are used, such as alcohol and/or drug misuse (Zeidner & Saklofske, 1996). COVID-19 will have lasting psychological impacts on HCWs in care homes, and it is important that insight is gained into how they have experienced stress and coping to inform the design of tailored solutions for support (Nie et al., 2020).

## 2 | METHODS

### 2.1 | Aim and study design

The aim of this study was to explore the stress and coping experiences of healthcare workers (HCWs) in care home settings in Scotland during the COVID-19 pandemic.

A cross-sectional mixed methods approach was used to address the study aim. The Consolidated Criteria for Reporting Qualitative Research (COREQ) were used to direct the study design (Tong et al., 2007). An online survey was distributed to understand levels of stress and coping and to provide a link for participants to contact the research team to take part in virtual one-to-one interviews. The qualitative component was essential to capture the stress and coping experiences of HCWs. Qualitative research aims to capture the rich experiences and perspectives of participants and was therefore

an essential approach to our enquiry (Parahoo, 1997). Virtual one-to-one interviews were deemed most suitable due to the sensitive nature of the topic and the reduced practicalities of arranging access to an individual as opposed to a group of HCWs at the same time.

## 2.2 | Ethical issues

Ethics approval was obtained from the Universities Research Ethics Committee (ETH2021-0599). The participants' employer supported the various recruitment strategies described below; however, study participation was entirely voluntary. Informed consent was obtained prior to survey administration and one-to-one interviews. Given that the subject of stress and coping experiences during the COVID-19 pandemic might engender distress process consent was employed during interview, with participants free to stop at any point. Signposting to mental health resources was provided within the patient information leaflet and was reiterated as required during interview. We also utilized a debrief buddy system for researchers to support each other after distressing interviews.

## 2.3 | Recruitment of participants

All HCWs employed by a private Care Home Group (owners of 26 care homes in Scotland) between January and May 2021 were invited to participate. Balhousie Group employ approximately 900 personnel, although during recruitment they estimated 50% of their workforce were absent due to shielding and or sickness. Three recruitment strategies were deployed. First, information about the study was shared via the organization's newsletter using a QR code. Second, to capture those who might not read the newsletter, posters were sent to Care Home Managers to display in prominent areas. Third, a short promotional video clip was created and displayed on digital hand sanitizers within the care homes. All strategies linked potential participants to a secure web link, containing an online participant information sheet (PIS) and contact details of the research team to answer any questions. Electronic consent was obtained prior to completing the survey. Survey respondents wishing to participate in an interview were directed to a separate web link where they could leave their contact details (email or telephone) for researchers to get in touch.

## 2.4 | Data collection

Data were collected between January and May 2021. The online survey consisted of 11 demographic and work variables, the 14-item perceived stress scale (PSS) and the 26-item coping self-efficacy scale (CSE). The PSS is a valid, reliable and brief measure of a person's appraisal of their stress (Cohen et al., 1983; Lee, 2012). The scores can range from low stress (0–18), moderate stress (19–37) to high stress (38–56). Items were rated from Never (0) to Very Often

(4) based on their experiences over the previous month. The CSE is also a valid and reliable scale that provides a measure of a person's perceived ability to cope effectively with life challenges. It has been used to predict positive work outcomes, specifically, job satisfaction and job performance (Chesney et al., 2006). The 26-item CSE is rated on an 11-point scale from cannot do at all (0) to certainly can do (10). Higher scores indicate greater self-efficacy coping. Individual interviews conducted via Microsoft Teams further explored the experiences and perceptions of what contributed to HCWs' stress and what enabled coping whilst working in a care home during the COVID-19 pandemic (Coates, 2004). An open-ended interview guide was designed to standardize the process whilst still enabling individual responses (see Appendix A for Interview Guide). The interview guide was pilot-tested with a work colleague before finalizing.

## 2.5 | Data analysis

### 2.5.1 | Quantitative

Quantitative data from the questionnaires were entered into the Statistical Package for Sciences (SPSS) version 26 (IBM Corporation, 2015). Descriptive statistics (frequencies and proportions) were calculated to report on the samples' demographic and work-related characteristics. In addition, the mean (SD) PSS score and the frequency and proportion of residents in each category (low, medium and high) were calculated, as well as the mean (SD) CSE score. To examine demographic differences between groups the study variables were dichotomized thus: age ( $\leq 44$ ,  $\geq 45$ ), care responsibilities (Yes, No), own health issues (Yes, No), job title (senior carer and/or below, nurse and/or above) and education (diploma and below, degree or above).

Independent *t*-tests were conducted to determine differences in PSS and CSE scores. Significance was set at  $p < .5$ , and all tests were two-tailed. Two authors (MS, LM) conducted the quantitative analysis.

### 2.5.2 | Qualitative

Interview recordings were transcribed verbatim and analysed thematically (Braun & Clarke, 2006). Data from transcriptions were copied and pasted into two Microsoft Excel Sheets (one for stress and one for coping) by AM and checked for accuracy by MB and stored in SharePoint (a web-based collaborative platform hosted by the University). First, 4 members of the team (MB, CC, AM, RM) independently read and re-read the transcripts and familiarized themselves with the data. One pair analysed stress data and the other pair analysed coping data. Each pair analysed each transcript, coding every segment of the text and copying and pasting the data into Excel with new tabs created for initial codes. Next, the whole team met over a series of three meetings to interrogate the coded data and to generate initial themes. Then we reviewed these initial themes by

reading the associated data and considered the adequacy of supporting data, thus enabling themes to be defined. Finally, we agreed the named themes through reaching consensus with all members of the data analysis team. We also created a visual schemata for both stress and coping themes.

### 3 | RESULTS

#### 3.1 | Quantitative findings

Fifty-two HCWs completed the online survey (52/450 = 12% response rate). Table 1 shows frequencies and percentages of the participants characteristics. Most participants were female (90.4%) across a range of ages and comprised 44% managers/nurses and 56% carers (32.7% carers and 23.1% senior carers). Over a quarter (26.9%) of participants had personal health issues, with 19% reporting mental health issues. Additionally, 50% of participants had caring responsibilities at home.

The mean score for the PSS was 39.75 ( $SD = 9.9$ ), highlighting a high average stress score. The mean score for the CSE was  $M = 150.6$  ( $SD = 57.7$ ) which suggests a moderate level of coping. Both scales exhibited high Cronbach's alpha scores (PSS  $\alpha = .899$ ) and (CSE  $\alpha = .963$ ) indicating high internal reliability. Demographic and work-related variables are presented in Table 2. Five different

TABLE 1 Descriptive statistics of sample  $N = 52$

Variable	Response range	Frequency	%
Age	16–24 years	5	9.6
	25–44 years	24	46.2
	45–64 years	22	42.3
	65+ years	1	1.9
Gender	Female	47	90.4
	Male	4	7.7
	Prefer not to say	1	1.9
Job title	Carer	17	32.7
	Senior Carer	12	23.1
	Nurse	5	9.6
	Manager	18	34.6
Own health	Long-term condition (LTC)	7	13.5
	Disability	1	1.9
	Mental health (MH) condition	10	19.2
	None	38	73.1
Caring at home	Children under 18	22	42.3
	Care for LTC	5	9.6
	Care for disability	3	5.8
	Care for MH condition	3	5.8
	None	26	50

demographic variables were identified in relation to stress and coping (age <44 years vs 45+ years; education for those with a diploma and below compared to those with a degree or above; own health concerns versus no health concerns; caring responsibilities versus no care responsibilities and job title). The single variable for which there was a significant difference was the CES score for own health issue versus no health concerns. Participants with no health concerns had an average coping score of 0.11 points (95% CI, 0.79–0.82) higher than the group with their own health concerns. This infers that the absence of personal health issues was associated with higher levels of coping.

#### 3.2 | Qualitative findings

Thirteen HCWs participated in in-depth individual interviews. Most participants were female (81.8%), aged between 25–44 years (63.6%) and 45–64 years (36.4%). Participants openly shared their experiences of working in a care home during the COVID-19 pandemic enabling understanding of their experience of both stress and coping. The average duration of interviews was 21 min. Whilst many themes and subthemes were supported by multiple quotations only key quotes are used for brevity.

#### 3.3 | What were HCWs experiences of stress?

Analysis of the data generated four themes depicting what created or contributed to HCWs' stress: 1. personal factors, 2. changed care environment, 3. amplified scrutiny and 4. psychological responses. All four themes were underpinned by the theme of ongoing change and uncertainty consequent of living and working during the COVID-19 pandemic (see Figure 1: Visual Schemata of Stress).

### 4 | PERSONAL FACTORS

Findings showed that participants experienced high stress levels which were influenced by personal circumstances, characteristics and physical impacts; these were impacted by continual changes and subsequent uncertainty in both the workplace and everyday living during the pandemic. All personal factors were unique to each participant in terms of their private life, relationships and values. However, the sub-themes were necessary to highlight the different components of personal factors evident in the data.

#### 4.1 | Personal circumstances

Participants described the restrictions imposed by the pandemic and the competing demands in their everyday lives as a source of stress. This included their parenting roles with responsibility for home schooling and dealing with the impact of the lockdown restrictions

TABLE 2 Independent t-test demographic differences

Demographics	CSE			PSS					
	N	M	SD	t (df 50)	p	M	SD	t (df 50)	p
Age									
Under 44	29	142.9	58.99363	-1.08	.283	41.5172	9.73440	1.46	.149
45 and above	23	160.4	55.7941			37.5217	9.79271		
Caring									
Caring responsibilities	27	144.2593	65.19768	-0.83	.409	40.2593	8.74244	0.38	.703
No care responsibilities	25	157.6400	48.73558			39.2000	11.11680		
Health									
Health issues	14	117.7143	55.93874	-2.64	.011*	43.0714	10.62989	1.49	.142
No health issues	38	162.8421	54.11026			38.5263	9.42606		
Job title									
Senior carer and below	29	137.0690	61.32986	-1.96	.055	41.5517	10.61867	1.49	.141
Nurse and above	23	167.8696	48.78553			37.4783	8.52200		
Education									
Diploma and below	38	151.8947	60.20182	0.24	.807	38.5526	10.85705	-1.45	.151
Degree and above	14	147.4286	52.29019			43.0000	5.57467		

\*Significant difference <0.05.

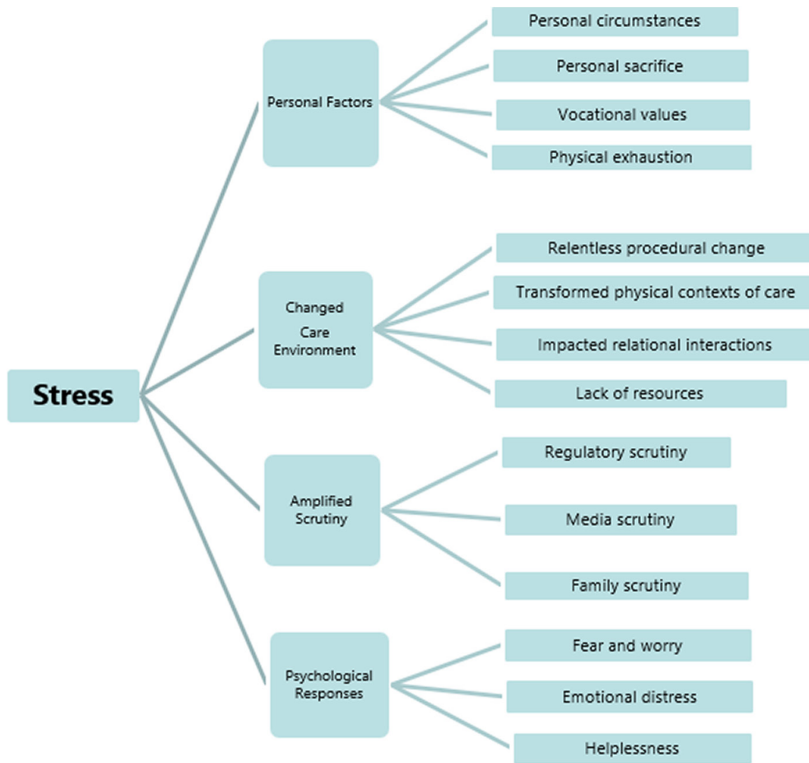


FIGURE 1 Visual schemata of stress

## Change and Uncertainty

on society and everyday life, such as children not being able to socialize, and young adults prevented from attending colleague or university.

It has been quite rotten, to be honest. One thing after another. Eh. Well, just having the kids home schooled all through the pandemic. I've got three, my son he left school. He couldn't access anything. So, it was it a nightmare.

P5

At times this left individuals feeling isolated and overwhelmed, subsequently contributing to their stress. Restrictions of everyday activities would likely limit access to social support in times of need.

I've just locked myself in; I'm either in my house or I have to go to the shop, which I limit that and then I just go to my work.

P6

### 4.2 | Personal sacrifice

Participants spoke of their commitment to work through the pandemic and how this affected them personally. Some participants made significant personal sacrifices to enable them to continue working in the care home setting. Some depicted lost precious time lost with family when trying to mitigate the COVID-19 risk to their

loved ones and residents which provoked stress. Decisions were made whilst not knowing the longevity of the situation.

I lost 7 months with my daughter (went to live with another relative) so I could keep me safe, them safe and my residents safe. I'll never get those 7 months back.

P9

### 4.3 | Vocational values

Despite individual values and vocation providing a sense of duty to keep working during the pandemic, these also contributed to HCWs' experience of stress. Placing residents' needs first came at a personal cost which contributed to stress.

I had said to myself from day one, I would never not go and care for my residents. That's just not me. I wouldn't. I wouldn't put myself before them...I've been in this job for 10 years, and I'm not going to let some virus take away what my life is really, I've put my life into this job.

P6

### 4.4 | Physical exhaustion

Several participants reported being exhausted from working tirelessly throughout the pandemic.

My work actually had the virus, it was in there for about 8 weeks, and it was just, I mean, we were all like, exhausted, we were like, the staff were dropping like flies, we were losing residents that still had a fair amount of life left in them and it was just, it was awful. I worked a lot more hours than I normally would because of staff sickness and stuff like that. So, I was pretty much run to the ground.

P6

The impact of tiredness caused stress to develop into distress.

It's running on empty now, you know I'll get family members, you know, saying you look exhausted. And you think well, yeah, that's because I am, that's because you're not quite yourself, you're not sounding yourself or because I feel like I've got the weight of the world on my shoulder sometimes.

P2

## 5 | CHANGED CARE ENVIRONMENT

The COVID-19 provoked constant change transforming the care home environment beyond recognition, conceptualized through four subthemes: 1. relentless procedural change, 2. transformed physical contexts of care, 3. impacted relational interactions and 4. lack of resources. Care home environments were transformed due to infection control procedures from being homely to being clinical. The changed physical care home environment and limited resources influenced relational care interactions, which HCWs found stressful.

### 5.1 | Relentless procedural change

The constant changes to guidelines, protocols and policies from government and other agencies in response to emerging evidence caused anxiety and apprehension, leading to stress. Limited time to adjust and make sense of new ways of working ultimately created stress and anxiety for HCWs. During these times of ongoing change staff were seeking certainty. However, constant changes prevented the much-needed reassurance and stability.

It was hard going because we were getting a lot of changes thrown at us, we were having to wait on government announcements before our head office would decide what was happening, that type of thing. The first 3 weeks were very much, you know, every hour, everything was changing.

P1

I think that things change so quickly that you never really understand where you are.

P13

And when our protocol has changed, and that has been that has been really difficult and well not difficult. I've just been, it just causes anxiety, you know, when we're changing a way that we've worked for a short time.

P7

### 5.2 | Transformed physical contexts of care

Whilst HCWs recognized the need for stringent infection control measures the shift from providing care in a homely environment (pre-pandemic) to operating within a clinical and sterile setting was distressing for staff. Staff associated the provision of person-centred care with being able to provide a homely environment with residents' personal belongings.

...the whole home was stripped, stripped bare so that we can clean and, like get it all fresh and got up to the point where we changed everything... You know, getting rid of all that the home basically went from like a nice cosy home to like a clinical home

P6

Healthcare workers voiced concerns about perceived negative impacts of personal protective equipment (PPE) on communication practices and the depersonalization of care, believing it generated fear in some residents, especially for those with cognitive issues. Wearing PPE was seen as a barrier to person-centred care due to lack of physical touch, also impacting recognition of staff especially for residents with cognitive challenges.

They (residents) don't understand. They're so frightened of us walking in with full PPE all the time. You know, there's no...there's no personalisation anymore. It's just it's very clinical.

P5

The responsibility of enforcing restrictions to maintain physical distancing within the home was challenging especially for residents with cognitive impairments.

How do you isolate residents with dementia, when they can't understand what is happening, what's going on? They're ill. So therefore, they're even more confused.

P12

### 5.3 | Impacted relational interactions

Relational interactions and care were adversely affected as a direct consequence of the infection control procedures. Participants had to deal with the impact of the restrictions on both residents and

their families. Families being separated from loved ones in such worrying circumstances created further feelings of stress and distress in HCWs.

It has been very difficult as far as that's concerned. Zoom and Skype just aren't the same for them. I can appreciate that. It's very difficult. I totally understand. This is the most precious cargo that family have, and they have not seen them for months, it's awful.

P4

Providing end-of-life care whilst adhering to infection control procedures disrupted person-centred care. These disconnects between ethical values in relational care appeared to extend stress into moral distress and trauma for some HCWs. This included barriers to physical care and allowing relatives to visit.

The bit I found traumatic was that we had people who had passed away that weren't COVID positive, but families weren't allowed in. Sitting with someone with all your PPE on it just feels horrible. When undertakers came in there was nothing personal about it at all. You know putting a mask on someone that is already dead, it was horrible.

P5

## 5.4 | Lack of resources

Lack of resources had a significant impact on HCWs' ability to cope with the increased demands of additional tasks and care needs. This in part was due to reduced staffing levels as a direct effect of COVID-19 on staff sickness, self-isolation and shielding. Staff felt unable to give their usual quality of care due to reduced resource and this subsequently created stress.

We were working with a skeleton staff just because of you know, people isolating, and schools, no childcare, different things. And so there has been hard times for them.

P7

Again, lack of staff resource intensified HCWs' distress when providing care to dying residents.

It was probably the most traumatic day I've had throughout COVID, managing so many deaths in such a short period of time with a staff team that is not what we usually would have.

P8

Moreover, the prioritization of resource to the NHS was keenly felt by participants.

So, where everybody flocked, again, to the NHS to support and volunteer. And, you know, the nurse banks flourished. We were again in the dark going, hello, can somebody come and help us?

P13

## 6 | AMPLIFIED SCRUTINY

A fundamental challenge that HCWs faced was a multi-faceted and amplified external scrutiny from a wide range of external sources, including 1. regulatory bodies, 2. the media and 3. residents' families. Amplified scrutiny was driven and intensified by the enforced and relentless changes to the contexts of care depicted above.

### 6.1 | Regulatory scrutiny

Whilst the need for scrutiny was recognized and, in part, welcomed, this appeared fragmented placing additional stress on staff. Additionally, participants believed that regulatory bodies were not taking workload and operational care delivery demand into consideration and thus scrutiny by regulators was perceived as unrealistic and punitive, as opposed to being supportive.

The scrutiny has been unbelievable. So Public Health Scotland are coming in saying one thing, the partnerships are coming in, the care inspector is coming in, the NHS is coming in, so leadership has actually been about juggling all these people coming in making almost unreasonable and unrealistic demands that sometimes people sometimes forgetting these are residents' homes.

P12

I think sometimes, sometimes when people are already working in extremely challenging situations to come in with a big stick, and say, you know, say something like your bins in the wrong place.

P8

The constant and rapid changes of rules and regulation also exacerbated the fear of litigation experienced by HCWs; it was very real and very distressing.

And I think just because everyone's on tenterhooks as well, last year you know about litigation or, you know, the Procurator Fiscal's (similar to Coroner in England) going to be investigating all the deaths in the care homes and, you know, even that just sends shivers down your spine!

P2



## 6.2 | Media scrutiny

Media portrayal of care homes during the pandemic resulted in stressful experiences for HCWs. Participants felt care homes were constantly derided in contrast with the elevation of the NHS, generating feelings of distress and devaluation. Stories from the media were picked up by residents and their families causing further fear and anxiety.

It actually made me feel quite down because it was like the NHS was getting praised but we were getting slated. We're working under worse conditions and it's not our fault that at the start a lot of things were unclear.

P5

The negative media portrayal of the care home environment not only impacted on HCWs but also distressed residents' families. Families' fears were unable to be managed as they were unable to visit and see evidence to the contrary. Families' distress adversely impacted on staff stress.

The effect that media has had on the workforce... it's all about the NHS and how they're fantastic, you know, national hero service and all this kind of, and they very much felt disregarded, because all you would read in the paper is how terrible care homes are, don't put your loved one in a care home, you know, all that kind of thing.

P8

## 6.3 | Family scrutiny

Participants felt an intense sense of care and duty towards residents' families and empathy in relation to visiting restrictions. Conflicting information from differing media sources was often confusing. Staff had to relay this information and enforce official regulations which caused further distress to residents and their families. Some family members responded in negative ways to staff which compounded HCWs' stress.

They were just wanting to see their family, they are just as worried as we are with regards to how they were going to be looked after, staffed you know, we totally understood that, but it was a lot of extra pressure that we didn't really need at the time.

P6

The differing restrictions across the UK and the company's own policy of cautious re-opening caused confusion for relatives. Participants described that explaining and enforcing rules to relatives was challenging and caused conflict at times. Moreover, continual change and uncertainty around enforced restrictions exacerbated confusion and risk of conflict.

We did open up and then the lockdown, so we had to close up again. And then we started off with window visits. And like us as a company, obviously we follow guidelines, but then the company set their own rules. And then it's and then the family say, look, I heard on the TV, blah, blah, blah. And so, you explain its a guideline, the rule is, it's not kind of set-in stone. And then obviously the mix up because obviously sometimes the Scottish Government is different to the English, we were slightly behind them in opening up and things and so explaining it all to them, but no we're doing it this way.

P10

## 7 | PSYCHOLOGICAL RESPONSES

The pervasive uncertainty of the COVID-19 pandemic was evident and created fear and worry, emotional distress and, at times, a sense of helplessness.

### 7.1 | Fear and worry

The uncertainty of working with a novel virus, the threat to their own health, colleagues, residents and families and the public, caused ongoing feelings of fear and worry amongst HCWs.

To start with I was feeling scared because nobody knew anything.

P5

It's that fear of, you know, a lot of the staff have spent a year in fear.

P8

Fear was particularly apparent for those in leadership positions with responsibility for keeping others safe:

It's a huge responsibility as a manager, you know, keeping everybody safe and well, not just your residents, you know, your staff and their families. And, you know, you've got workers that are pregnant, and, you know, workers with a cancer diagnosis and so you've got all the usual strains and stresses of the job, which are really difficult even under normal circumstances.

P2

Staff were also deeply concerned for the well-being of their own family members as well as residents and their relatives.

It's worrying for families I mean, you know, I've got, you know, my own family, grandparents that are still alive, but I've also got my own staff, my residents as well to think about, and obviously their families so it is a worrying time.

P1

receive just basic, basic care, and you know, that's not us, that's just, it was so upsetting to feel that you're wanting to do more, but you just you could only do the best you could you know, we were going home at night. I wasn't sleeping. I mean, it was it was awful.

P6

## 7.2 | Emotional distress

Emotional distress was experienced due to inherent uncertainty posed by the pandemic, the extremely pressurized work environment and the high risks faced daily for COVID-19 transmission.

I think they really need to look at the people that have had to work through all this and the hours and all the uncertainty we have worked through, it has taken a toll. And I think once things go back to normal, we've all had a lot of people off with stress and anxiety. Because, at the moment, we're all, well personally I'm running on empty.

P5

At times I couldn't sleep like, you know, it was just like I said, every time I shut my eyes, I was seeing stuff, seeing the images and the buzzers, you were hearing them in your sleep. And it was just, it was hard. But it's a lot better now.

P6

Some participants had not realized the enormity of the impact until they were discussing their experiences and subsequently becoming tearful during the interview.

Oh, my goodness, so it has been stressful. And actually, I don't think I realised till I was talking to you how it does impact. It's with us all the time.

P12

## 7.3 | Helplessness

Feelings of helplessness as a direct result of relentless stress compounded by uncertainty caused by the pandemic were evident in participants' responses. Where there were continuous stressful experiences with little or no control then some HCWs experienced a sense of helplessness.

Yeah. I mean, the workload just, I mean, in a normal day, our jobs are quite hard as it is like we're having to, you know, make sure that we're giving the best care possible. And it got to a point where people would only

## 7.4 | What were HCWs' experiences of coping?

All participants described positive experiences of coping whilst working during the COVID-19 pandemic. Analysis of the data generated three themes depicting how HCWs coped: 1. personal factors, 2. organizational culture and 3. safety and security. These were underpinned by relational interactions. The relationships within family networks, between each other as co-workers and with managers and leaders within the organization appeared to provide a source of stability and support to enable coping themes (see [Figure 2](#) Visual Schemata of HCWs experience of coping).

## 8 | PERSONAL FACTORS

Participants reported a range of personal factors that influenced coping. Again, there was a range of personal relationships, individual personalities and behaviours which aided or enabled the HCWs to cope with the pressures of working in care home during the pandemic. This included their degrees of optimism, personal relationships and daily habits that helped their psychological well-being.

### 8.1 | Individual traits

Participants shared experiences of their coping styles which were linked to their individual personality traits, such as extraversion and conscientiousness. Participants also expressed experiences which incorporated both problem-focused and emotional coping. Some participants displayed dispositional optimism in their cognitive appraisals as a means to reduce the perceived COVID-19 threat thereby enhancing coping.

I'm a talker so I'm not too bad. Talking and getting everything out, rather than bottling everything up.

P5

I just think every day is a new day sort of thing.

P1

Humour was also seen as a strength of character to buffer stress and was frequently referred to in participants' experiences. Humour amongst colleagues and residents also reinforced connections with peers and helped participants and others feel good.

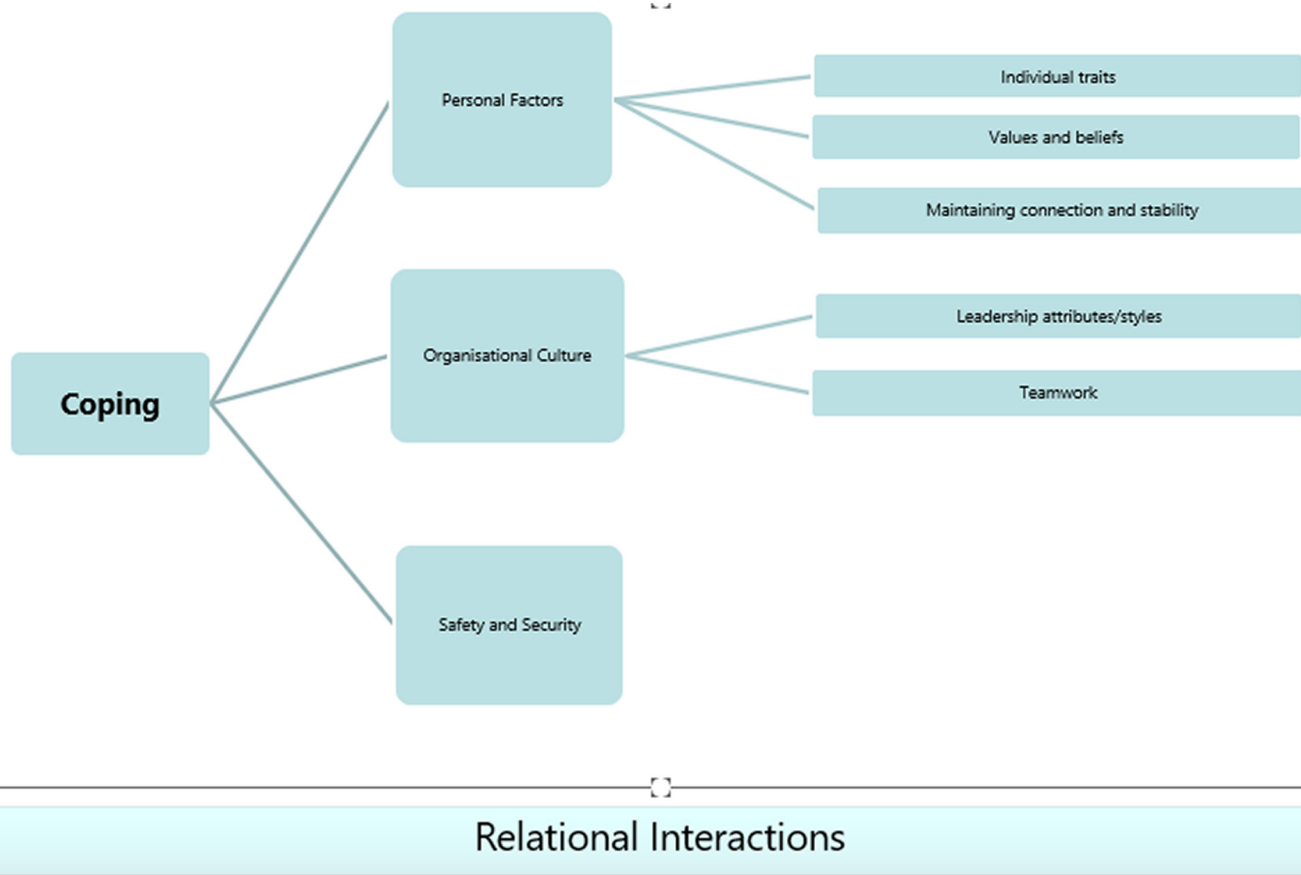


FIGURE 2 Visual schemata of HCWs coping experience

You've got to have a laugh. Honestly you have just got to have a laugh. It's a very serious job, taking care of people but playing bingo, karaoke, dominoes you know, you just need to be able to have a laugh and a sing song and get Alexa on. And that's how I've coped. Yesterday we had a laugh, and it was brilliant.

P9

Just being able to smile and have a laugh with each other that's really helped everyone.

P11

## 8.2 | Values and beliefs

Coping experiences were often shared in relation to participants' values and beliefs about their ability to get on with their everyday living and working. There was a real sense of pragmatic resilience, the need to adapt to the current situation in a practical way. Values and beliefs were also explained as being positively influenced by relational interactions. There was also recognition that just "getting on with it" may not be the best strategy for long-term coping. There was a perception that once given space

for reflection to process there may be a delayed adverse psychological response.

It is what it is you know, and we just have to tackle it head on.

P1

So, it's like just keep going, keep going, keep going. And then when it's all over we'll sit, and we'll think, and we'll reflect, and we'll come to terms with all this because I think once the floodgates of this is opened it's going to be hard for some people.

P2

Inherent within participants' values and beliefs was a strong sense of altruism and duty to their residents and job. HCWs described transforming their own stressful thoughts and feelings by helping others and reminding themselves of their primary purpose. In many instances, the needs of residents and their families were prioritized above HCWs' own well-being.

I think as a nurse it's just in you to be like, I need to be at my work, and I need to be available if anybody

needs me sort of thing. So, I think that's what's kept me going, I've got a duty of care to my residents and my staff...It's not, it's not a 9-5 job, it's something we dedicate our lives to.

P7

These altruistic values were linked to a sense of purpose. A strong sense of purpose appeared to give meaning to participant's lives and the challenges of living and working during the COVID-19 pandemic, which helped mitigate stress. The importance of their work and the significance of the care they provided to residents were exemplified during the pandemic.

I think I've felt really proud that, you know that I'm a key worker and that my role in this, in my community, in my world is really important.

P2

I know it's your job normally, but it feels more rewarding, does that make sense? ...As if it's had extra purpose, obviously you were helping them, every day as normal but that extra load of protecting them and getting them through this.

P10

### 8.3 | Maintaining connection and stability

Participants described regular activities that provided structure, certainty, and an outlet from the stressful experiences during unprecedented change and uncertainty imposed by the pandemic. Habits and routines mostly included being outdoors and creating opportunities for social interactions within the pandemic restrictions:

Clearing my head, I'd take the dogs, I've got two great big Labradors and I just go away up into the countryside just to clear the air.

P5

Participants described families (spouses, children, parents and in-laws) as a crucial source of support which fostered coping. Some participants described physically relocating to live with or be nearer to family members to maintain a sense of connectedness and safety.

I've got my husband and my two kids.... I've got them for support. And my mum as well, she knows what I'm going through, I've got a good family network around me.

P1

So, I went to be closer to my mum. So, I've had a lot more support since I moved back here, I'd say, than I did in the first 6 months.

P3

## 9 | ORGANIZATIONAL CULTURE

Participants shared experiences of a positive and supportive workplace underpinned by positive leadership behaviour and a sense of comradery which helped them to cope.

### 9.1 | Leadership attributes/styles

The culture was experienced as open and included accessible leadership which enabled staff to feel supported throughout the pandemic. HCWs described accessible leadership from immediate line managers to the Chief Executive which helped staff to cope. The following theme describes the leadership attributes and styles evidenced in the data with a strong connection to relational interactions at all levels.

I'm not short on giving them the praise when they do something right, you know, now, I will always go and, you know, say to them...well done, today was a hard shift, you know, and, you know, sort of thing, but yeah, they're nothing short of amazing, because they've done a brilliant job.

P1

There was an awareness of the connection between keeping staff motivated and a high quality of resident care. Motivating staff was an example of how the leadership approach supported coping.

I just, I want to keep my guys' spirits high, because ... you know, if their spirits are high, my residents' spirits are high.

P1

Participants expressed experiences aligned to authentic leadership due to managers leading by example and being compassionate with staff as they could resonate and empathize with their situation. Demonstrating this compassion formed strong connections between staff and managers as reciprocal trust created certainty during times of rapid and constant change.

Letting them cry when they need to cry, when they were scared when people started testing positive and just guiding them when we were short of staff, as to what was key duties, what wasn't key duties.

P5

I try to adopt and approach where they follow me, like we all get through the day together as a team.

P6

Participants perceived that the supportive culture expanded beyond local managers to leaders of the organization.

You need to give them support, and all the rest of the as a group itself have been extremely supportive of, not just me as manager, but to the staff in that as well, in making sure they've got the tools that they need, then, you know, giving them the training, and things like that, and that's come right from our chairman.

P1

## 9.2 | Teamwork

The perceptions of authentic leadership, and the urgent call to action created by the pandemic, reinforced a strong sense of teamwork and comradery which helped HCWs cope with the continued changes to workplace practices and environment. Experiences expressed within this theme included team cohesiveness and cooperation, social support (including virtual socializing) and a strong sense of family.

Having each other, just helping each other, and I don't think any of us would cope if we didn't have each other to keep each other going. It really has probably been one of the main things that has kept us putting one foot forward every day, it's just having the support of your colleagues and we're all in this together and we're all feeling the same and facing the same.

P2

The underpinning thread of positive relational interactions occurred frequently and was incorporated throughout the organizational culture theme. The relationship of team members extended beyond the workplace. Participants felt that there was a strong sense of loyalty to each other and of the necessity to support each other through the everyday challenges of life. This included talking about their feelings and sharing experiences of family life, which and was an important aspect to increase participants perceptions of coping.

Everyone's pulled together and been there for each other. I would say it brought us all a lot closer obviously what we've been through and, as a whole, I would say it brought the whole team a lot closer together, kind of more of a family.

P10

Participants seemed to capitalize on virtual socializing within and out with the work environment to stay connected during the pandemic.

We've got social media pages where we can post photos and things like if we've done anything within the home and get a thank you and just those words of support have been great as well.

P5

This sense of family was also evident in relation to how HCWs considered residents. At times, participants viewed themselves as "surrogate" family in the absence of visitors. This commitment to caring for residents as family was also connected with HCWs sense of purpose and vocation.

Trying to keep residents aware of what's going on without scaring them, trying to comfort them because they couldn't see family members, trying to cope, things like that. I go round the residents every day and speak to them all. We've obviously taken on the role of family members in the home, trying to comfort them and entertain them and try to keep them upbeat.

P9

## 10 | SAFETY AND SECURITY

Participants described how personal- and work-based policies provided a framework to manage uncertainty created during the pandemic. Adhering to the rules provided reassurance and confirmation that HCWs were delivering the best possible care safely. The use of PPE, testing and vaccination helped reduce staff's perceptions of the perceived threat of COVID-19 and offered some sense of security.

It's important to understand that I've done everything online, apart from going to work and filling the car with diesel, we don't leave the house very often, to ensure that we're keeping safe.

P6

We get our weekly tests and everything which is reassuring. I'd rather have that and be working and get the test and know that I am clear.

P3

Additional resource also provided a layer of safety and security. Some care homes were able to recruit COVID-19 co-ordinators to help manage many of the additional administrative tasks created by the pandemic. This helped care home managers cope with the additional administrative burden.

I do have two COVID co-ordinators in post which has been so useful and has taken a lot of pressure off myself and the administrator.

P7

## 11 | DISCUSSION

This study revealed that HCWs have experienced high levels of stress whilst working in a care home setting during the COVID-19

pandemic. Consistent with Lazarus & Folkman's (1986) definition of psychological stress the findings of this study suggest that, firstly, the cognitive appraisal of the COVID-19 threat to the individual HCWs in the study was high, and, secondly, the average score for coping was moderate suggesting good levels of resilience within this study population. Whilst high levels of stress were to be expected in this workforce a key finding was their good coping skills. A key source of stress was the changes to the care home environment which were necessary to reduce the transmission of COVID-19, creating a clinical as opposed to a homely environment. HCWs described care as depersonalized due to the wearing of PPE and other infection-reducing behaviours. The challenges of maintaining a therapeutic relationship were exacerbated for residents who lacked capacity to understand the necessity of the measures. A study exploring the impact of COVID-19 on HCWs providing end-of-life care in a hospital context reported that the use of PPE restricted the ability of HCWs to communicate and retain empathic human interaction (Mitchinson et al., 2021). When care delivery is at odds with HCWs' values and beliefs it can result in moral injury, with subsequent stress, anxiety, depression and even post-traumatic stress disorder (Cabarkapa et al., 2020). Moral injury is said to be present when there is a perceived betrayal of what is morally right in a high stake situation (Cartolovni et al. Čartolovni et al., 2021). The experiences of HCWs in this study suggest that some may have experienced moral injury because of the disconnect between infection control measures and their personal and professional caring values.

Another key change to relational interactions was the impact of restricted visiting for the relatives of residents. Staff stress was, on occasions, elevated to distress as they complied with visiting restrictions even when these clashed with their values, such as the absence of relatives at end-of-life care. The emotional labour of such ethical dissonance has been associated with HCWs burnout (Rapp et al., 2021). A survey of care home managers reported a negative impact of visiting rules on HCWs mental health and well-being (Rajan & Mckee, 2020).

The continual changing of policies was described as a stressful experience by HCWs in this study. HCWs were having to navigate the rapidly changing guidance and conditions to make important care delivery decisions. Devi et al. (2020) further explain that whilst local and central governments were changing their policies to promote patient safety, it often resulted in duplication of effort for an already overstretched workforce and, as a result, risked jeopardizing resident care. The stress of scrutiny was further compounded in this study as inspections were perceived as uncoordinated and from multiple external agencies. HCWs experienced inspections to be judgemental rather than facilitative and not always fitting the care home context.

A key mediator of stress and coping is how the individual perceives the threat (Lazarus & Folkman, 1986, p63). For example, those who appraised the situation positively, or at least with a reduced threat (people can survive COVID-19) experienced coping. Participants in this study shared experiences and perceptions of optimism, self-care

routines and a sense of humour aiding their ability to cope. An optimistic outlook and self-care habits have been recognized as important contributors of resilience (Connor & Davidson, 2003). Humour has been identified as a coping strategy during the COVID-19 pandemic, with those reporting the use of humour as experiencing less anxiety (Kar et al., 2021; Rothermich et al., 2021).

The experiences of HCWs included evidence of both emotion- and problem-focused coping. HCWs described altering their emotional response to the pandemic by reflecting on their personal values about work and reaffirming their sense of duty and purpose. Other studies have found that a shared purpose and a sense of duty have helped HCWs cope with working through the pandemic (Chen et al., 2021). Whilst HCWs could not take any action to resolve the problem of COVID-19 they did describe experiences of problem-focused coping to reduce the impact and subsequently help them cope with the consequences. For example, they described habits and routines to keep mentally well such as walking, increasing family support by relocating their homes, and many practical measures such as wearing PPE and social distancing. A survey of stressful events amongst the US public during COVID-19 also noted that both problem and emotion-based coping were utilized (Jean-Baptiste et al., 2020).

Relational interactions were foundational to all coping themes and subthemes within this study, including family and workplace relationships. Participants explained how close family relationships had helped them cope whilst working in a care home during the pandemic. This also extended to keeping in touch with friends and family through phone calls, social media or virtually, especially when individuals were isolating or shielding. Recent research has shown HCWs who are in long-term relationships and those with children have reduced rates of stress, anxiety and depression (Elbay et al., 2020). Families, to varying degrees, provide social support and this has been correlated with lower rates of burnout (Kannampallol et al Kannampallil et al., 2020). It has been acknowledged that requirements for social distancing due to the pandemic have made it challenging for HCWs to spend time with their loved ones, but it is important that staff are encouraged to maintain social connections through digital means and video calls (Chor et al., 2021).

A number of those in management positions demonstrated authentic leadership styles which supported HCWs' ability to cope. Authentic leadership is recognized as fostering a sense of community, encouraging staff to be kind to themselves and providing emotional space to strengthen the team and help regulate difficult feelings (Hofmeyer & Taylor, 2021). This was evident in this study as there were multiple experiences shared of leaders providing emotional support. Havaei et al. (2021) highlight that managers have faced a challenging task in demonstrating effective leadership through the pandemic, whilst managing the safety and well-being of staff and residents. Transformational leadership (Zhang et al., 2012) is also critical in crisis situations, and care home managers in this study demonstrated this by maintaining regular lines of communication with staff and keeping them informed of policy changes and safety protocols.

## 11.1 | Limitations

The most important limitation of this study is the sample size and poor response rate in relation to the survey data. There is a risk of non-response bias from those who did not participate which limits the generalizability of the findings. Similarly, the representativeness of the sample is also an important consideration. For example, approximately half of respondents were staff nurses even though the ratio of staff nurse to support worker is approximately 1:10 in this study's setting. However, there appeared little differences in the experiences of stress and coping between carers and nurses. Despite these limitations, to our knowledge, this is the first study carried out in care homes to explore the stress and coping experiences of HCWs during COVID-19 and the results provide an insightful view of their experiences.

## 12 | CONCLUSION

There is a risk that HCWs' stress extends into distress and other psychological health problems. This study identified important factors which contributed to HCWs' stress and coping within a care home context. Whilst some of our findings are echoed in the existing literature our key contribution was shining a light on the experiences of HCWs in the care home context. Our study highlights the importance of tailoring generic infection-reducing strategies to a care home environment to take cognizance of the fact that these contexts are people's homes as opposed to hospitals and that many residents have impaired cognition. Additionally, the study acknowledges the strong sense of family within this community and how this aided coping. The benefit of creating a sense of family could be realized in other care environments. This study provides an opportunity to acknowledge and act on these findings to reduce further physical and mental health impact on staff and to commend their efforts and commitment during this crisis.

- COVID-19 guidance and scrutiny should be tailored to the care home setting, taking cognizance of residents with reduced cognitive function, thus avoiding the perception of a "tick box" mentality and enhancing person-centred care.
- A values-based approach to support would likely be beneficial given the challenges of ethical dilemmas experienced by HCWs during the COVID-19 pandemic.
- Developing and exemplifying the strong sense of family would be useful for other care contexts.

### AUTHOR CONTRIBUTIONS

MB was the Principal Investigator. The study was designed by MB, MS, CC, LM and LD. MB obtained ethical approval. MB, CC, LD and AM aided recruitment. MS, MB, CC and LM designed the online questionnaire. MB and AM designed and piloted the interview schedule. AM conducted the online interviews and transcribed them. MB, CC, RM, AM and LM conducted the qualitative data

analysis. MS conducted the quantitative analysis. MB drafted the paper and all authors contributed to revisions and agreed the final version.

All authors have agreed on the final version and meet at least one of the following criteria [recommended by the ICMJE (<http://www.icmje.org/recommendations/>)]:

- substantial contributions to conception and design, acquisition of data or analysis and interpretation of data;
- drafting the article or revising it critically for important intellectual content.

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### CONFLICT OF INTEREST

LD is employed as the Clinical Care Quality Manager with the Balhousie Care Group. LD was not involved in any data collection or analysis. There are no other conflicts of interest from the other authors.

### DATA AVAILABILITY STATEMENT

Data are unavailable due to privacy/ethical restrictions. The data that support the findings of this study are unavailable as ethical approval was sought and granted for initial data collection only. The sensitivity of the data prohibits its further sharing and use.

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## APPENDIX A

### A.1 | INTERVIEW GUIDE

#### A.1.1. | Facilitation experiences

What are your thoughts about the current COVID-19 pandemic?

Can you tell me about your experiences of working in a care/nursing home during the COVID-19 pandemic?

How did you feel working during the pandemic?

Can you tell me specifically what your job role involves?

Are there aspects of your job which allow you to work independently?

How would you describe the team in which you work?

Can you tell me about what social support you have?

Were you exposed to events at work or home that you would describe as traumatic?

How would you describe leadership at work?

What has worked well for you and your colleagues to cope during the COVID-19 pandemic?

What has hindered coping or created stress for you and your colleagues during the COVID-19 pandemic?

Is there anything else you want to share with us about your experience of working in a care/nursing home during the covid-19 pandemic?

Do you have any questions for me?

Thank the participant for their time and willingness to participate in the project.

Stop the recording.