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Burnout, Compassion Satisfaction, and Intention to Quit Among Long-Term Care Nursing Assistants in the Time of COVID-19

RESEARCH

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ABSTRACT

Context: The COVID-19 pandemic has greatly exacerbated the stress and burden of those employed in long-term care (LTC) facilities due to staff shortages, increased risks on the job, and ever-changing COVID-19 protocol requirements.

Objective: This study examines potential differences in pre-COVID-19 and current COVID-19 on burnout, compassion satisfaction, job satisfaction, and intent to quit of nursing assistants employed in LTC facilities.

Methods: The sample included 81 nursing assistants employed in LTC facilities across the United States, with data collected prior to (n = 42) and during COVID-19 related shutdowns (n = 39). Participants completed the Professional Quality of Life Scale 5 (ProQOL 5), a single-item self-report measure of job satisfaction, and a two-item self-report measure of intent to quit their current employment.

Findings: Nursing assistants during COVID-19 reported a higher level of burnout and lower level of compassion satisfaction than nursing assistants pre-COVID-19. However, there were no differences in job satisfaction or intent to quit.

Limitations: The study did not measure levels of burnout and compassion satisfaction throughout the entire pandemic. No causal statements can be made regarding the impact of the pandemic on nursing assistant burnout, compassion satisfaction, job satisfaction, or intention to quit.

Implications: The results suggest there may be additional factors that influence an individual's decision to remain employed above and beyond the impacts of burnout and compassion satisfaction that may be unique to the caring professions. Future research might investigate factors that influence an individual's decision to remain employed as a nursing assistant during periods of increased stress and burnout.

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INTRODUCTION

The continuing COVID-19 pandemic due to the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has created challenges across the globe, particularly for those involved with healthcare. Long-term care (LTC) facilities are in a state of crisis, with individuals living in LTC facilities at a higher risk for more severe illness or death from the virus (Ouslander and Grabowski, 2020). As of April 1, 2023, the United States has reported over 104 million total cases and over 1.125 million deaths due to COVID-19 (Centers for Disease Control and Prevention, 2023). LTC facilities are in a state of crisis, with individuals living in LTC facilities at a higher risk for more severe illness or death from the virus (Ouslander and Grabowski, 2020). As of March 19, 2023, there were 1,591,545 confirmed resident cases and 1,596,185 confirmed employee COVID-19 cases in LTC facilities (Centers for Medicare & Medicaid Services, 2023). Additionally, 165,167 deaths from COVID-19 were reported among residents and 3,037 deaths were reported among employees of LTC facilities (Centers for Medicare & Medicaid Services, 2023). The LTC environment allows for easy transmission of the virus, due to a congregate living setting and the inability of nursing assistants to practice social distancing measures when assisting residents with activities of daily living, such as bathing, dressing, and toileting (Ouslander and Grabowski, 2020).

With the ease of viral transmission in LTC facilities, staff members experience stressors in addition to those associated with everyday tasks. One of the most notable difficulties is increased staff shortages due to illness, which can negatively impact the quality of patient care and staff morale (White et al., 2021). Other challenges experienced by LTC staff include changing COVID-19 protocols, insufficient personal protective equipment supply, and lack of COVID-19 testing (White et al., 2021).

Aside from impacts on job specific tasks and supplies, the pandemic has created emotional and psychological issues for both staff and residents. For example, residents may have increased feelings of loneliness due to limitations on visitors and social distancing or isolation policies (Mo and Shi, 2020). Throughout the pandemic, LTC staff have felt overworked, helpless, and challenged by the uncertainty of the pandemic (Mo and Shi, 2020). In addition to the increased stress of COVID-19 protocols and staffing shortages, LTC staff may be impacted psychologically by the emotional distress and deaths of residents during this time. Blanco-Donoso et al. (2021) report increased levels of secondary traumatic stress for LTC staff during the pandemic, which was exacerbated by greater exposure to resident suffering and death. The psychological impact of COVID-19 compounded with the already present job-related stressors and burnout for LTC staff will have lasting impacts throughout the pandemic. Therefore, identifying and creating the necessary supports for direct care workers is crucial.

BURNOUT

Certified nursing assistants (CNAs) and other formal or informal caregivers may experience burnout and compassion fatigue due to the high and persistent levels of stress related to providing patient care. Compassion fatigue occurs when the individual no longer feels emotionally able to respond to and manage the difficulties of caring for others (Boyle, 2015). Burnout entails physical and emotional exhaustion paired with a lack of concern or care for others (Heine, 1986). Several factors can increase compassion fatigue and burnout in formal caregivers, including inadequate staffing, dealing with physically threatening or demanding patients, and having a high workload (Jenkins and Elliot, 2004). However, many formal caregivers often believe that fatigue and burnout are part of the career (Steege and Rainbow, 2017).

Throughout the pandemic, reports of burnout levels across nursing assistants, as well as healthcare workers in general, have indicated that burnout is present and a rapidly growing occupational barrier. Studies have estimated the presence of burnout in healthcare workers to range from 17.3–45.9% (Dos Santos et al., 2020; Prasad et al., 2021). Additionally, reports of increased burnout have been accompanied by reduced feelings of personal accomplishment and increased feelings of depersonalization (Parandeh et al., 2022; Stodolska et al., 2023). While these studies shed light on burnout across the healthcare professional spectrum, few studies specifically investigate LTC nursing assistant populations.

COMPASSION SATISFACTION

Despite the potential detrimental impacts to physical and mental health, formal caregivers also experience many positive benefits from providing care to others. For example, registered nurses (RNs) and CNAs may experience compassion satisfaction, which is the pleasure derived from performing one's work well and a general positive feeling about one's ability to help others (Stamm, 2010). Predictors of compassion satisfaction in RNs include receiving meaningful recognition at work, having higher job satisfaction, and maintaining adequate sleep quality (Bellicoso et al., 2017; Hunsaker et al., 2015; Kelly, Runge and Spencer, 2015).

CAREGIVER TURNOVER

Although formal caregivers may experience compassion satisfaction, factors such as job stress, physical and emotional fatigue, feelings of depersonalization, a lack of shared employee beliefs and values, and poor organisational support, can culminate in an individual's decision to quit their job (Eltaybani et al., 2018; Lee and Jang, 2020; Lu et al., 2019; Meeusen et al., 2011). Staff

turnover refers to the proportion of an organisation's staff members that terminated employment with the organisation in a set period of time (Donoghue, 2010). Turnover of RNs and CNAs working in LTC facilities was estimated to be on average 50% for RNs and 51.2% for CNAs in 2012 (American Health Care Association, 2014). Between the beginning of the pandemic in the United States in March 2020 to November 2021, there were a reported 234,000 jobs lost within nursing homes, the most significantly impacted industry within the healthcare sector (American Health Care Association, 2021). High turnover rates result in high costs for facilities, poorer quality of resident care, and increased problematic resident behaviours (Boushey and Glynn, 2012; Lerner et al., 2014). With the ever-evolving pandemic, future trends in staff turnover and retention may be unpredictable.

JOB SATISFACTION

Job satisfaction may impact turnover rates. It refers to the degree of fulfillment and happiness employees receive from their job and is indicative of employees' ability and desire to perform their job well (Spector, 1997). Factors such as autonomy, advancement opportunity, and team cohesion may be influential for RN and CNA job satisfaction when working in LTC facilities (Lu et al., 2012; Squires et al., 2015). The impact of low job satisfaction among caregivers can be pervasive through the LTC facility. Higher rates of turnover and absenteeism, greater emotional exhaustion and burnout, and lower patient and family member satisfaction may result from low job satisfaction (Lu et al., 2012: McHugh et al., 2011).

CURRENT STUDY

The COVID-19 pandemic undoubtedly creates physical and psychological challenges for CNAs especially considering the emotional distress and death of residents in LTC facilities (Blanco-Donoso et al., 2021). Understanding the potential impacts of the pandemic on burnout and compassion satisfaction of CNAs may shed light on supports that might reduce turnover. The present study investigated potential differences in pre-COVID-19 pandemic and current COVID-19 pandemic on burnout, compassion satisfaction, intent to quit, and job satisfaction in CNAs employed at LTC facilities.

METHOD

PARTICIPANTS

Participants (N = 81) were recruited from ten LTC facilities in southwestern Ohio and various LTC and hospital settings from across the United States. Eligible participants included full- and part-time CNAs, nurse aides, and State-tested nursing assistants (STNAs) who were over the age of 18, literate, and fluent in English. The original data collection began in late February 2020 with participant recruitment from LTC facilities in southwestern Ohio. This phase of data collection yielded 39 participants. Participant recruitment difficulties began in March 2020 due to COVID-19 related limitations on collecting data in-person at facilities. Data collection efforts transitioned to an online Qualtrics survey and occurred from July 2020 to December 2020 with the southwestern Ohio LTC facilities to increase the total participants to 69. To increase the sample size, additional recruitment utilized Amazon MTurk in January and February of 2021 to collect an additional 12 participants from LTC facilities across the United States. As a result, 39 participants completed the survey prior to COVID-19 related shutdowns (referred to as pre-COVID participants) and 42 participants completed the survey during the COVID-19 related shutdowns (referred to as current COVID participants).

The sample was majority female (91.4%) and identified as White/European American (67.9%). A majority of the sample were full-time (80.2%) employed STNAs (70.4%). The mean participant age was 38 years. See Table 1 for more detailed participant demographic information.

MEASURES

Professional Quality of Life Scale 5 (ProQOL 5; Stamm, 2010)

The ProQOL 5 is a 30-item self-report measure of compassion satisfaction, burnout, and secondary traumatic stress used for helping professions, such as healthcare professionals, social service workers, teachers, and police officers (Appendix B). Individuals rate each item on a 5-point Likert-type scale ranging from 1 (*Never*) to 5 (*Very Often*). Domain scores are totaled using ten non-overlapping items for compassion satisfaction, burnout, and secondary traumatic stress. Higher scores indicate higher levels of the compassion satisfaction, burnout, or secondary traumatic stress. Due to the scope of the current study, the secondary traumatic stress score was not collected, resulting in a 20-item measure of compassion satisfaction and burnout. For the current study, the Cronbach's alpha for the Burnout scale was 0.82, and for the Compassion Satisfaction scale was 0.89, demonstrating good internal consistency reliability.

The ProQOL 5 demonstrates strong construct validity and each scale measures a distinct construct. The measure is a widely used and accepted measure of compassion satisfaction, burnout, and secondary traumatic stress in studies with helping professions (Stamm, 2010). Further, the ProQOL is one of the most commonly used measure of compassion satisfaction and fatigue in caregiving research, although limited research has been done utilizing the ProQOL with a CNA population in a LTC setting (Dreher et al., 2019; Gallardo and Rohde, 2018; Shahar et al., 2019; Yang and Kim, 2012).

CHARACTERISTICS	TOTAL PARTICIPANTS (*N* = 81)	PRE-COVID PARTICIPANTS (*N* = 39)	CURRENT COVID PARTICIPANTS (*N* = 42)
	N (%)	*N* (%)	*N* (%)
Gender			
Male	6 (7.4)	2 (5.1)	4 (9.5)
Female	74 (91.4)	37 (94.9)	37 (88.1)
Prefer not to Respond	1 (1.2)	0 (0)	1 (2.4)
Race			
Asian	3 (3.7)	2 (5.1)	1 (2.4)
Black/African American	18 (22.2)	11 (28.2)	7 (16.7)
Hispanic American or Latino/a	3 (3.7)	1 (2.6)	2 (4.8)
White/European American	55 (67.9)	24 (61.5)	31 (73.8)
Prefer not to Respond	2 (2.5)	1 (2.6)	1 (2.4)
Job Title			
Nursing Assistant	16 (19.8)	8 (20.5)	8 (19)
Certified Nursing Assistant	7 (8.6)	1 (2.6)	6 (14.3)
State Tested Nurse Aide	57 (70.4)	30 (76.9)	27 (64.3)
Other	1 (1.2)	0 (0)	1 (2.4)
Employment Status			
Full-Time	65 (80.2)	31 (79.5)	34 (81.0)
Part-Time	16 (19.8)	8 (20.5)	8 (19.0)

Table 1 Demographic Characteristics of Participants.

Job Satisfaction Survey (Scarpello and Campbell, 1983)

One self-report question, "How satisfied are you with your job in general?" was used to measure overall job satisfaction (Scarpello and Campbell, 1983, p. 584). Participants answered the job satisfaction item with a 5-point Likert-type scale ranging from 1 (*Not at All Satisfied*) to 5 (*Completely Satisfied*). A higher score on the item indicates greater job satisfaction. Scarpello and Campbell (1983) indicate a single item of overall job satisfaction is not affected by the factors that may not relate to job satisfaction for the individual. A meta-analysis of 17 studies found convergent validity between single item measures of job satisfaction and job scales (r = 0.67; Wanous et al., 1997). Single item measures of overall job satisfaction are acceptable in comparison to using longer scales.

Intention to Quit Scale

The study utilized a self-developed measure of CNA intention to quit their current employer adapted from Mobley et al. (1978). The self-report measure consisted of two items: 1) "I frequently think about quitting my current job," and 2) "I am seriously considering quitting my current job." The two items were rated on a 5-point Likert type scale ranging from 1 (*Completely Disagree*) to 5 (*Completely Agree*). The scores of the two items were totaled for a total intention-to-quit score. A higher score indicates greater intention to quit. For the current study, the Cronbach's alpha for the total intent to quit scale was 0.84, demonstrating good internal consistency reliability.

Demographics

Participants completed a demographics questionnaire. The questionnaire contained items to collect participant background information including the participant's age, sex and gender, race and ethnicity, years of experience as a CNA, and start date at the current facility.

DATA ANALYSIS

The data were analyzed using IBM SPSS Statistics (Version 26; IBM Corp, 2019). Analyses were conducted to investigate potential differences in burnout, compassion satisfaction, job satisfaction, and intent to quit among participants who completed the survey prior to COVID-19 related shutdowns (pre-COVID shutdown participants) and participants who completed the survey during COVID-19 related shutdowns (current COVID shutdown participants). Independent-samples *t*-tests were conducted to compare total burnout and compassion

satisfaction scores from the ProQOL (Stamm, 2010), job satisfaction scores, and scores on the intent to quit items of the pre-COVID and current COVID shutdown participants. To control for Type 1 error, Bonferroni adjusted alpha levels of 0.0125 (0.05/4) were used.

RESULTS

The sample included 39 pre-COVID shutdown participants and 42 current COVID shutdown participants for a total of 81 participants. There were no significant differences in age between the pre-COVID (M = 39, SD = 12.74) and current COVID shutdown participants (M = 41, SD = 12.64), $t(78) = 0.58$, $p = 0.56$. Chi-square tests of independence showed that there was no significant association between COVID group and gender, X^2 (2, N = 81) = 1.56, $p = 0.46$, race, X^2 (4, N = 81) = 2.34, p = 0.67, or job title, X^2 (3, N = 81) = 4.63, $p = 0.20$. Fisher's Exact Probability Test showed no significant association between COVID group and employment status ($p = 0.54$).

Table 2 provides descriptive data for the study measures. There were significant differences in compassion satisfaction scores for the pre-COVID (M = 43.49, SD = 5.55), and the current COVID shutdown participants ($M = 39.93$, $SD = 6.81$), $t(79) = 2.57$, $p = 0.012$, η^2 = 0.08, such that pre-COVID participants reported higher levels of compassion satisfaction compared to current COVID participants. There were significant differences in burnout scores for the pre-COVID (M = 21.10, SD = 5.92) and the current COVID shutdown participants (M = 25.85, SD = 7.28), $t(78) = -3.19$, p = 0.002, η^2 = 0.12, such that pre-COVID participants reported lower levels of burnout compared to current COVID participants. The effect size for the differences in compassion satisfaction and burnout between groups was large (Cohen, 1988).

There were no significant differences in job satisfaction scores for the pre-COVID (M = 3.54, SD = 0.99) and the current COVID shutdown participants (M = 3.12, SD = 1.38), $t(79) = 1.56$, $p = 0.12$. There were no significant differences in intent to quit scores for the pre-COVID (M = 4.79, SD = 2.58) or the current COVID shutdown participants (M = 5.40, SD = 2.64), $t(79) = -1.05$, $p = 0.30$.

SCALE	PARTICIPANT SCORES *M (SD)*
Professional Quality of Life 5 (ProQOL 5)	
Burnout	23.54 (7.03)
Compassion Satisfaction	41.64 (6.45)
Job Satisfaction	3.32 (1.22)
Intent to Quit	
Frequently Think of Quitting Job	2.69 (1.38)
Seriously Considering Quitting Job	2.42 (1.43)
Total Intent to Quit Score	5.11 (2.61)

Table 2 Means and Standard Deviations of Study Variables.

DISCUSSION

The present study examined differences of burnout, compassion satisfaction, job satisfaction, and intent to quit of CNAs in LTC facilities prior to and during COVID-19 shutdowns. CNAs reported significantly higher burnout and lower compassion satisfaction scores during COVID-19 shutdown as compared to CNAs before the onset of the pandemic. Scores of compassion satisfaction were in the "high" range prior to the pandemic and in the "moderate" range during the pandemic (Stamm, 2010). Burnout scores were in the "low" range prior to the pandemic and in the "moderate" range during the pandemic (Stamm, 2010). Previous studies utilizing the ProQOL have found the average score of compassion satisfaction to be 45.11 and 22.32 for burnout (Zhang et al., 2017). However, previous studies have utilized samples of registered nurses as opposed to nursing assistants. Regardless, the results tend to mirror previous trends in levels of compassion satisfaction and burnout prior to the pandemic. The study results are similar to other recent reports demonstrating increased levels of stress and burnout among various healthcare professions throughout the world (Lasalvia et al., 2021; Maunder et al., 2021; Prasad et al., 2021).

Studies examining risk factors for increased burnout have found that healthcare workers who are younger, have limited social supports, have increased perceived threat of coronavirus infection, and work longer periods of time in quarantine conditions are more susceptible to increased levels of burnout (Galanis et al., 2021). With regard to age specifically, the study sample is younger than the average age of 41 years for CNAs in the United States (Zippia, 2022). As such, participants may have elevated levels of burnout as they are younger. Further, the evidence of gender differences for burnout is variable, as studies have reported that women report greater emotional exhaustion, whereas men tend to report greater depersonalization (Galanis et al., 2021). The study sample was 91.4% female, which may account for the elevated levels of burnout. However, the individual aspects of burnout, such as emotional exhaustion versus depersonalization, were not measured in the current study. Beyond age and gender, racial backgrounds may have also impacted the current results. Prasad et al. (2021) found that Black and Latinx healthcare workers reported higher levels of stress compared to White workers. While the current study sample is majority White (67.9%), the percentage of Black nursing assistants

(22.2%) is higher than the national average (9.1%; Zippia, 2022), although the percentage of Latinx nursing assistants (3.7%) is lower than the national average (13.9%; Zippia, 2022). The differences in the distribution of races of nursing assistants may also partially account for the elevated levels of burnout. Impacts of burnout can be detrimental to both the CNAs and residents at the LTC facilities. The negative outcomes of nursing assistant burnout may include poorer quality of care and patient safety, medication errors, and increased intention to quit (Dall'Ora et al., 2020). Regardless of the direct or indirect impacts of burnout, the pandemic creates an ever-growing mountain of challenges that CNAs and LTC facilities may not be able to continue to climb. Identifying protective factors of burnout, and how employers can foster these, will be necessary to reduce burnout and turnover rates within LTC facilities. Further, it may be potentially more important to investigate how the factors may evolve throughout the pandemic.

Additionally, there were no significant differences in job satisfaction or intent to quit. Previous studies have found job satisfaction to be positively correlated with compassion satisfaction and negatively correlated with burnout (Kelly and Lefton, 2017; Palazoglu and Koc, 2019). The results of the current study are in contrast to a recent meta-analysis reporting that nurses' intention to quit levels increased during the pandemic compared to prior to the pandemic, although the study examined nurses as opposed to nursing assistants (Falatah, 2021). Reports from LTC facilities across the country indicate the presence of staffing shortages and increased turnover rates throughout the pandemic (Spanko, 2021). Several factors have been reported to contribute to nursing staff decisions to quit or stop working during the pandemic, including lack of sufficient personal protective equipment, fear of contracting the virus, increased income through unemployment payments, and an increased need to stay home to provide childcare (Emanuel, 2020; Xu et al., 2020). Although some LTC facilities have offered incentives, such as increased pay, to retain nursing staff, turnover rates remain high (Regan, 2021). The high turnover rates and staffing shortages in LTC facilities will likely remain a problem throughout the pandemic unless efforts are taken to better support the physical safety, financial well-being, and overall well-being of nursing staff.

However, the current study may suggest that there are additional factors that influence CNAs to have stable job satisfaction and intent to quit despite increasing levels of burnout and decreasing levels of compassion satisfaction during the pandemic. Cimarolli et al. (2022) reported that higher quality of employer communication and more optimal preparedness mediated the relationship between COVID-19-related stressors and nursing home employees' intentions to quit. Further, the researchers found that employees who resigned during the pandemic did not experience significantly higher or lower levels of stressors (i.e., concerns of infection, increased work demands, lack of childcare, etc.) than those who remained employed. In a study of healthcare workers working during the pandemic, reports of feeling valued by one's organisation was a protective factor of one's intent to quit their current job (Sinsky et al., 2021).

Further, increased levels of information and in-service trainings as opposed to information shared via electronic platforms or pamphlets, may also help to reduce levels of stress within nursing assistants (Travers et al., 2020). Together, this perhaps suggests that intention to quit may be more influenced by facility level factors, such as supervisor communication, than COVID-19 related stressors by themselves.

Aside from the physical impacts of the pandemic on facilities, staff, and residents, the emotional toll of witnessing deaths of residents and staff members due to coronavirus has created an additional wellspring of strain and distress for CNAs. While resident death is not a novel phenomenon within LTC facilities, the ongoing pandemic has likely increased CNA exposure to resident death. Boerner et al. (2017) suggest that increased grief symptoms are associated with increased burnout, particularly as related to feelings of depersonalisation (Anderson, 2008; Boerner et al., 2017). Further, while having coworker support may at first glance seem to be a protective factor for burnout, it may instead exacerbate feelings of burnout and emotional exhaustion as sharing frustrations with coworkers may ultimately reinforce a negative workplace environment, thus increasing burnout (Boerner et al., 2017). The continuous experiences of grief, compounded by the overwhelming nature of the changing pandemic, create an ongoing need to emotionally support CNAs. While grief may be an unavoidable emotional response for CNAs during the pandemic, supervisors and facilities will need to consider appropriate resources and supports to try to reduce the impact of grief on burnout and general CNA well-being. One area that employers might begin with is how CNAs and other staff members are notified about a resident death. Finding an empty bed upon arrival to work can be shocking for the CNA and in some cases may be interpreted as unprofessional (Barooah et al., 2015). Alternative methods such as a phone call prior to the CNA's shift to inform them of a resident death may be a more positive experience, as it conveys a recognition of the CNA's relationship to the resident (Barooah et al, 2015). As the pandemic has limited who is allowed to visit LTC facilities and thus may limit family member visitation, CNAs may ultimately be the most significant relationship a resident has at the end of their life. Fostering an environment that recognizes, appreciates, and supports the relationships between CNAs and residents may in turn help facilitate positive grief reactions.

LIMITATIONS

There are several limitations of the current study. First, we did not measure turnover rates of CNAs throughout the pandemic and cannot offer conclusive statements regarding how many participants remained employed throughout the pandemic. Further, as the study sample drew largely from southwestern Ohio LTC facilities, generalisability of the results is limited. Additionally, the study used self-report data, which can result in response bias or participants responding inaccurately or falsely to the questions. Despite these concerns, self-report methods allow researchers to accumulate participant data efficiently and are widely used in psychological research (Paulhus and Vazire, 2007). Finally, the current COVID data was collected in mid to late 2020 through early 2021. Since that time, the pandemic has undergone many waves of changes, including new variants, the creation of vaccines, and changes in safety protocols. As such, the current results may not reflect the experiences of CNAs during the pandemic as a whole, but rather the experiences of CNAs during the beginning phases of the pandemic. Regardless, the current results shed light on areas of potential growth for CNA supports.

CONCLUSION

The current study found that the level of CNA burnout in LTC facilities was significantly higher during the COVID-19 pandemic compared to before the pandemic. The study also found that the level of CNA compassion satisfaction in LTC facilities was significantly lower during the COVID-19 pandemic compared to before the pandemic. Despite these differences, no significant differences in intention to quit or job satisfaction were found between the pre-pandemic and current pandemic CNAs. Employers across the United States have offered a variety of incentives to reduce the already high levels of turnover within LTC facilities. However, additional supports may be needed, including improved grief supports and more empowering work environments. As the current study only utilized the compassion satisfaction and burnout subscales of the ProQOL, future research may also utilize the secondary traumatic stress subscale to investigate potential impacts of the pandemic on traumatic stress responses. Additionally, more research is needed to investigate factors that influence a CNA's decision to remain employed or to quit during the pandemic. Regardless of the specific research questions, additional research of CNA experiences in LTC facilities is needed to further understand and prevent turnover.

ETHICS AND CONSENT

The Xavier University Institutional Review Board approved this study (IRB Approval #19-070).

COMPETING INTERESTS

The authors have no competing interests to declare.

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