Workplace Violence and Worker Well-Being: A Preliminary Cross-Sectional Study

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ABSTRACT

PURPOSE: To investigate the prevalence of workplace violence (WPV) in home health care and long-term care facilities (LTCFs) and explore the relationship between WPV and worker well-being.

METHOD: A cross-sectional survey was conducted with health care workers in an agency that provided care in homes or LTCFs. Six measures of worker well-being were collected: satisfaction with work and life, work-related rumination, work/family conflict, burnout, and turnover intention. Surveys also assessed type and frequency of WPV.

RESULTS: Seventeen participants completed surveys. Verbal abuse by patients was the most often experienced type of WPV. Employees who reported experiencing WPV had higher burnout and lower satisfaction with work and life.

CONCLUSION: WPV routinely occurs in home health care and LTCFs and appears to be related to worker well-being. Facility managers who can control WPV will likely impact the well-being of employees. [*Journal of Gerontological Nursing, 50*(11), 44-52.]

Advancements in medical care continue to lengthen the average human lifespan, increasing the need for older adult care in home health care and long-term care facilities (LTCFs). The number of long-term care patients is predicted to grow exponentially over the next two decades (Ratnayake et al., 2022). As a result, demand for home health and personal care aides is expected to increase by 22% between 2022 and 2032. In addition, approximately 684,600 positions for home health and personal care aides are expected to become available each year over the next 10 years (U.S. Bureau of Labor Statistics, 2023). In addition to the increasing need for more skilled caregivers, LTCFs face challenges keeping trained staff. According to a systematic review by Manchha et al. (2021), staff working with older adults encounter stigmas, such as unfavorable character judgment, lower value placed on their work, and negative emotional reactions to their working with older adults. This stigma can affect their psychosocial well-being and how long they intend to continue working in the field. In addition, LTCF directors face staffing challenges related to fear of coronavirus disease 2019, strict regulations, long work hours, and increasing staff resignations due to burnout (Dubé et al., 2023). Considering this increasing demand for health care providers working with older adult patients or patients with chronic conditions, ensuring these workers are protected and working in safe environments is essential to recruiting and retaining skilled health care providers.

Patients receive higher quality care and experience better outcomes

when health care providers rate their work environment as safe (Brešan et al., 2021). This safety includes psychological protection from workplace violence (WPV) in LTCFs (Havaei et al., 2022). Prominent levels of workplace stress, injuries, and high workloads directly and significantly impact caregivers' mental health (Awosoga et al., 2023; Zarska et al., 2021). Staff who reported increased acute and chronic fatigue and low inter-shift recovery levels experienced higher burnout symptoms (Yan et al., 2024). This burnout, in turn, adversely affects their quality of life, leading to increased risk of absenteeism and turnover (Awosoga et al., 2023). Not only do unfavorable working conditions increase worker stress, turnover intention, risk for workplace injury, and worker mental health, they also influence patient care outcomes, putting patients at a higher risk for falls, depression, adverse drug events, and acute hospitalizations (Zarska et al., 2021). Providing safe working environments for those working in LTCFs is essential to protect workers and patients.

WPV is one of the most common occupational hazards for health care workers in LTCFs (Kafle et al., 2022). Experiencing WPV results in loss of work time, and not all employees who have experienced it return to their jobs after the incident (Choi et al., 2020). The experience has a lasting impact on workers' work–life balance and intentions to leave their current employer (Saloniki et al., 2022), which increases overall turnover rates for facilities. WPV must be clearly defined to understand its impact. According to the World Health Organization, *WPV* is defined as "the incidents where staff were abused, threatened, or assaulted in the circumstances related to their work" (Li et al., 2020, p. 1). WPV is categorized into four types based on the relationship between the aggressor and the worker (The University of Iowa: Injury Prevention Research Center, 2001). Type I WPV involves criminal intent when an employee

experiences violence, including property damage or theft, by an entity unassociated with the employee or their client. Type II WPV is perpetrated by the patient or patient's family against the employee. Type III WPV is inflicted against the employee by another current or former coworker. Type IV WPV occurs when an employee is subjected to violence while at work by an individual with whom they are or were in a personal relationship, such as a spouse (The University of Iowa: Injury Prevention Research Center, 2001).

Type II WPV is the most common type encountered by long-term care workers (Fasanya & Dada, 2016). According to a meta-analysis study drawn from data in 2018, approximately 25% of nurses and nursing assistants have been the victim of physical violence by a patient or visitor in a general geriatric long-term care setting (Li et al., 2020). Specifically, among nursing assistants caring for patients with dementia, human bites were among the most often reported physical injuries (Ruby et al., 2023). In addition, verbal abuse was the most cited type of WPV against health care workers (Lim et al., 2022). From a meta-analysis of 47 observational studies, psychological violence, threats, and physical violence come closely after verbal abuse (Lim et al., 2022). According to the U.S. Bureau of Labor Statistics, the incidence of WPV in the health care setting has increased by 60% between 2011 and 2018 (Pinkhasov et al., 2022). Health care workers are five times more likely to be the victim of WPV in comparison to workers in other private industries (Lim et al., 2022).

WPV can perpetuate adverse physical, mental, emotional, and psychosocial effects and is detrimental to health care workers' overall well-being (Lim et al., 2022). WPV can lead to health care workers experiencing job dissatisfaction, burnout, and turnover intention (Duan et al., 2019; Mento et al., 2020). When nurses experience burnout, there is a direct association

with lower patient safety and more adverse events (Liu et al., 2019). High turnover rates in nursing homes, a direct consequence of these issues, can lead to a higher prevalence of infection citations (Loomer et al., 2022). Although burnout and turnover intention are related to work, experiences of WPV may affect overall worker well-being outside of the job (Mento et al., 2020). One study among Bangladeshi nurses found that experiencing WPV increased the incidence of self-reported depression and worsening mental health (Chowdhury et al., 2023). Given the ramifications of negative encounters in the workplace on worker well-being, the incidence of burnout, and high turnover rates on the quality of patient care, it is important to understand how WPV influences worker well-being at home and work. For this reason, the purpose of the current study was to investigate the prevalence of WPV in home health care and LTCFs and explore the relationship between WPV and worker well-being within home health care and long-term care settings.

METHOD
Study Design
To complete this quantitative, non-experimental study, we used a cross-sectional survey. The survey comprised multiple psychometrically tested instruments (El-Den et al., 2020). The University of Cincinnati Institutional Review Board (IRB) (2022-0019) approved this study.

Recruitment
Participants were recruited in person from a mid-sized LTCF in the Midwestern United States. Individuals were eligible to participate in the study if they were aged ≥18 years, worked a minimum of 20 hours per week providing direct clinical care to patients, had at least 6 months of experience working with their current employer, and had access to a computer or smartphone to complete the study surveys. The research team con-

ducted multiple rounds of onsite recruitment at two local branches of the LTCF with the help of the facility's leadership team. Directors escorted two team members per visit and introduced them to employees working on various units. The research team also spoke with employees as they arrived and left for day and night shifts. The study was briefly described to employees, and flyers were distributed, which provided inclusion criteria and an email address for employees to contact if interested. Flyers were provided to management to be displayed and distributed to employees.

With IRB approval, recruitment efforts were expanded to enroll more participants in the study. These additional efforts included posting a summary in a nationally distributed email news update to geriatric care providers by a local physician and engaging a local home health care company that distributed recruitment materials to their employees. Despite interest from several individuals, no added participants were enrolled as a result of these efforts.

Screening for eligibility in the study was conducted in two ways. The flyer had the co-investigator's contact information. Potential participants would email the co-investigator to express interest. The co-investigator would then call and screen the individual for eligibility. If eligible, the study survey link was sent via email. During in-person recruitment, potential participants were screened for eligibility. Emails were sent to all eligible employees following the visit.

Participants were offered a $40 pre-paid card as a token of appreciation. After completing the survey, the card was sent to participants' provided address (not linked to the survey).

Data Collection

Data were collected through the Research Electronic Data Capture (REDCap) app (Harris et al., 2019; Harris et al., 2009). The REDCap system sent participants an email with the hyperlink to the survey; no personal account was required. The

survey link prompted participants to complete the e-consent form first. Those who chose not to consent to participate in the study were thanked for their time and prevented from continuing with the survey in REDCap. All identifying information was stored in REDCap, password-protected, and only accessible to study personnel approved by the IRB. All data were de-identified before analysis. De-identified data were stored on the university's cloud server within password-protected accounts.

Survey Instruments

The construct of worker well-being was assessed via seven validated, Likert-scaled instruments. These included the Work-Family and Family-Work Conflict Scale (Netemeyer et al., 1996), Satisfaction With Job and Life instrument (Fisher et al., 2016), Cropley's Work-Related Rumination Questionnaire (Cropley et al., 2012), Emotional Well-Being domain of the 36-item Short Form Health Survey (SF-36) (Ware & Sherbourne, 1992), Oldenburg Burnout Inventory (Halbesleben & Demerouti, 2005), Turnover Intentions Scale (Hackett et al., 2001; Hom & Griffeth, 1991), and WPV Reporting Questionnaire (Gillespie et al., 2016). Demographic information was also collected via a questionnaire. The survey comprised 121 questions. Based on testing of study personnel, the survey was expected to take approximately 25 minutes to complete. This was done to ensure accuracy and reduce the risk of survey fatigue.

Work-Family Conflict. The Work-Family and Family-Work Conflict Scale is an 11-item scale that measures inter-role conflicts between work and family obligations. Scores range from 11 to 55, with higher scores indicating more significant conflict (Netemeyer et al., 1996).

Satisfaction With Job and Life. The Satisfaction With Job and Life instrument is a three-item tool measuring one's satisfaction with life overall, work life, and personal/family life.

Scores range from 3 to 15, with higher scores representing greater satisfaction (Fisher et al., 2016).

Work-Related Rumination. Cropley's Work-Related Rumination Questionnaire (Cropley et al., 2012) is a 15-item tool that evaluates the emotional experience of dwelling on work-related issues outside of work from which a rumination score of 5 to 75 is generated. Higher scores indicate worse rumination.

Emotional Well-Being. The SF-36 is a generic health survey that divides health into eight domains. The current study included the 10-item Emotional Well-Being domain, which asks participants to reflect on their emotional states and social behaviors over the past 4 months (Ware & Sherbourne, 1992).

Burnout. The Oldenburg Burnout Inventory is a 16-item scale that evaluates exhaustion and disengagement as symptoms of burnout syndrome (Halbesleben & Demerouti, 2005; Vandevala et al., 2017) and produces a burnout score ranging from 16 to 64, with higher scores indicating more significant burnout.

Turnover Intention. The Turnover Intentions Scale (Hackett et al., 2001; Hom & Griffeth, 1991) is a three-item tool that assesses participants' intention to quit working for their current employer in the next 12 months. Total scores range from 3 to 15, with higher scores indicating greater intention to quit.

Workplace Violence. The WPV Reporting Questionnaire is a 24-item free response scale that asks if respondents experienced one or more of the four types of WPV. The instrument is divided into four subscales focused on verbal abuse, sexual abuse, threats, and assault. Participants provided the number of violent events for each category that occurred in the preceding 90 days. The number of events was summed to provide a total score from zero to infinity (Gillespie et al., 2016).

Data Analysis

We used Microsoft Excel and R

statistical software to organize and run statistical analyses. General demographic and descriptive statistics were calculated to describe the sample population. The sample size was insufficient to analyze the risk of WPV based on demographic identities. Frequency data for WPV were converted into a dichotomous variable. Participants were divided into those who reported experiencing WPV over the preceding 3 months and those who did not. Given the small sample size, the Shapiro-Wilk test for normality was performed for results of each survey for the two groups. Where the normality assumption was supported, parametric methods were used to ensure the detection of statistical significance. Where normality was not supported, non-parametric methods alone were used. Statistical significance for the difference between the means was determined using the Welch two-sample t test as appropriate. In addition, for those who experienced WPV, an analysis of the linear correlation was completed to assess potential relationships between the frequency of WPV and scoring on each well-being parameter, which were evaluated via Pearson coefficients and R^2 values. Alpha was set at 0.05.

RESULTS

Seventeen individuals completed study procedures. Most participants were female, White, worked in long-term care, and were diagnosed with a chronic disease. Slightly more than one half of participants reported an associate degree or higher level of education. Participant demographics can be found in **Table 1**. The survey was completed in an average of 21 minutes. All participants completed the survey without evidence of attrition or lack of responsiveness due to survey length.

Participants (n = 9) reported WPV events over the preceding 3 months. The majority of WPV events were Type II, typically from the patient, and involved verbal abuse. Collectively, participants reported 56 occurrences of verbal abuse and 25 occurrences of threats of violence from patients. Two individuals reported a combined 15 events of physical assault by patients. Participants reported eight occurrences of verbal abuse from patients' visitors or family. Type III WPV was also described as two occurrences of verbal abuse from managers and 12 occurrences of verbal abuse from co-workers. Two reports of Type IV violence were described as verbal abuse from current or previous partners while at work. No sexual abuse was reported.

The Shapiro-Wilk test supported parametric analysis for all survey results. Participants who reported WPV demonstrated higher average scores on the Oldenburg Burnout Inventory (43.9 vs. 36.3), Cropley's Work-Related Rumination (43.4 vs. 37.4), and Work-Family and Family-Work Conflict Scale (27.8 vs. 22.9). They demonstrated lower average scores on the SF-36 Emotional Well-Being domain (83.0 vs. 86.7) and Satisfaction With Job and Life survey (10.6 vs. 13.3) than those who did not report WPV. Statistical significance for the difference between means was found for the Oldenburg Burnout Inventory (p = 0.04) **(Table 2)**. We calculated the effect size with Hedges' g.

Summary statistics for survey scores by WPV exposure status are shown in **Table 3**. Box plot summary of WPV and survey scores are shown in **Figure 1**. No strong correlations were found between those who experienced WPV and their survey scores. All Pearson coefficients and R^2 values representing the relationships between WPV and each of the well-being constructs' remained close to zero, dictating no correlation or good fit of the regression line (WPV and emotional well-being [r = –0.17, R^2 = 0.03]); WPV and satisfaction with job and life (r = 0.14, R^2 = 0.02); WPV and work-family conflict (r = 0.11, R^2 = 0.01); WPV and work-related rumination (r = 0.04, R^2 = 0.00); WPV and burnout (r = 0.12, R^2 = 0.01); WPV and turnover intentions (r = 0.07, R^2 = 0.01)]. In a one-tailed t test with an effect size of 1.109, α = 0.05, and a sample size of 16 (Yes to WPV = 9, No to WPV = 7), our study had 67% power to detect significance.

DISCUSSION

The purpose of the current study was to investigate the prevalence of

TABLE 1

Sociodemographic Characteristics of Participants (N = 17)

Characteristic	n (%)
Sex	
Female	15 (88)
Male	2 (12)
Race	
White	14 (82)
Black or African American	2 (12)
Hispanic or Latinx	1 (6)
Educational level	
High school	5 (29)
Practical nursing diploma	3 (18)
Associate degree	6 (35)
Bachelor's degree	2 (12)
Master's degree	1 (6)
Work setting	
Long-term care	15 (88)
Home health care	2 (12)
Workplace violence training with current employer	
Yes	11 (65)
No	6 (35)
Diagnosed with a chronic disease	
Yes	12 (71)
No	5 (29)

TABLE 2

Welch's 2-Sample *t* Test and Effect Size

Measure	Mean (*SD*) WPV ≥1	Mean (*SD*) WPV = 0	*p*	Hedges' g
Emotional well-being[a]	83.0 (7.9)	86.7 (6.6)	0.365	0.501
Burnout[b]	43.9 (7.3)	36.3 (6.2)	0.040	1.109
Work and family conflict[c]	27.8 (7.2)	22.9 (6.3)	0.157	0.721
Work-related rumination[d]	43.4 (10.4)	37.4 (6.6)	0.168	0.679
Satisfaction with job and life[e]	10.6 (3.7)	13.3 (1.7)	0.074	0.918
Turnover intention[f]	6.6 (2.9)	6.1 (3.2)	0.776	0.164

Note. WPV = workplace violence.
[a] *Measured using the 10-item Emotional Well-Being domain of the 36-item Short Form Health Survey.*
[b] *Measured using the 16-item Oldenburg Burnout Inventory, which has total scores ranging from 16 to 64, with higher scores indicating a greater degree of burnout.*
[c] *Measured using the 11-item Work-Family and Family-Work Conflict Scale, which has total scores ranging from 11 to 55, with higher scores indicating more significant conflict.*
[d] *Measured using the 15-item Cropley's Work-Related Rumination Questionnaire, which has total scores ranging from 5 to 75, with higher scores indicating worse rumination.*
[e] *Measured using the three-item Satisfaction With Job and Life instrument, which has total scores ranging from 3 to 15, with higher scores indicating greater satisfaction.*
[f] *Measured using the three-item Turnover Intentions Scale, which has totals scores ranging from 3 to 15, with higher scores indicating greater intention to quit.*

TABLE 3

Summary Statistics for Survey Scores by Workplace Violence (WPV) Exposure Status

Measure	WPV Exposure[a]	*n*
Emotional well-being	Y	8
	N	6
Burnout	Y	9
	N	7
Work and family conflict	Y	9
	N	8
Work-related rumination	Y	9
	N	8
Satisfaction with job and life	Y	9
	N	8
Turnover intention	Y	9
	N	8

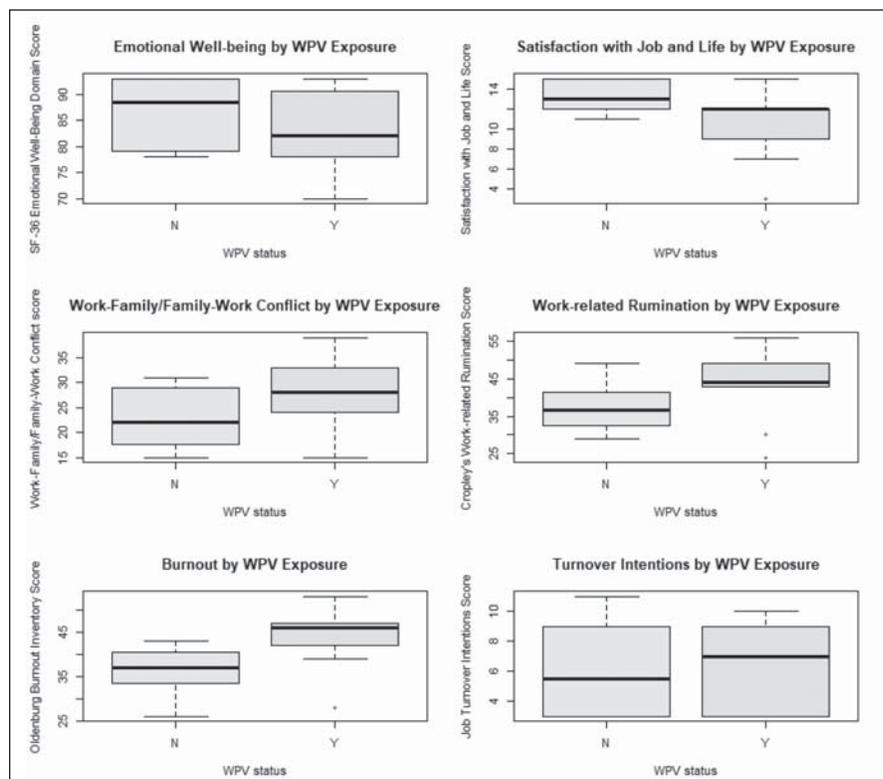[a] *Y denotes WPV ≥1; N denotes WPV = 0.*

WPV in home health care and LTCFs, and explore the relationship between WPV and worker well-being within home health care and long-term care settings. Based on our findings, WPV occurs within home health care and long-term care settings. A statistically significant difference in means was found for burnout and satisfaction with job and life scores between those who did and did not experience WPV in the preceding 3 months. This result is consistent with prior studies that demonstrate increased rates of burnout and decreased job satisfaction in workers experiencing WPV (Duan et al., 2019). Although the difference in means for each survey between those who did and did not experience WPV was not statistically significant, there was a consistency in results, which suggested an overall negative association between experiencing WPV and emotional well-being. Further research with a larger sample is needed.

Approximately 53% (*n* = 9) of participants reported experiences

of WPV, which primarily took the form of Type II WPV involving verbal abuse. This finding is consistent with previous literature regarding the prevalence and type of violence experienced in LTCFs (Fasanya & Dada, 2016). This type of violence can lead to emotional exhaustion in nurses, which has been found to impact quality of care (Kim et al., 2021). When nurses begin to experience emotional exhaustion or more symptoms of burnout, they are also more likely to experience WPV (Kim et al., 2021). Nurses are more likely to exhibit self-sacrificing behaviors, increasing the stress they manage with little margin for self-care. This stress ultimately leads to increased absenteeism (Eder & Meyer, 2021), putting them at a higher risk for burnout. Therefore, it is crucial to implement interventions to decrease feelings of fatigue and burnout.

Implementing interventions to mitigate burnout and improve health care worker well-being is more complex. Interventions, such as limiting work hours, therapy (e.g., cognitive, music, art), mindfulness training (Świtalski et al., 2022), and gratitude journals (Camero & Carrico, 2022), have been implemented to decrease burnout and improve worker well-being. However, it is not always apparent in the literature if these interventions create lasting results due to lack of baseline scores before interventions or studies lacking statistically significant results after implementation (Świtalski et al., 2022). Future interventional and randomized controlled studies are needed to test mitigation strategies for improving burnout and worker well-being.

Creating a safe work environment improves health care providers' and patients' health and well-being. Nurses are well-positioned to identify unsafe work environments, participate in training, and implement mitigation strategies to decrease WPV, ultimately improving health care worker well-being and patient care outcomes. Nurses must consider environmental, administrative, and behavioral

Figure 1. Box plots of summary data for each survey by workplace violence (WPV) exposure status.
Note. Y denotes WPV ≥1; N denotes WPV = 0.

strategies to mitigate WPV effectively (Somani et al., 2021). The environment must have equipment and safety mechanisms in place (e.g., panic buttons, security locks) (Somani et al., 2021), zero-tolerance signage, and bags prepared with restraints and personal protective equipment readily available (Shane Escue et al., 2023). Administration should possess a proactive approach to WPV and have policies and procedures for preventing, reporting, and supporting health care workers experiencing WPV. Nurses play a vital role in behavioral mitigation strategies, as they can identify and flag patients who may begin to progress through the assault cycle by watching for triggering or escalating behaviors and calling in support teams for assistance before a WPV incident occurs.

It is essential to recognize, however, that we cannot assume the direction of the relationship between reported WPV and worker well-being. Previous research has suggested that personal well-being influences the interpretation of social interactions (Heintzelman & Diener, 2019). Individuals who are less emotionally well may also be more inclined to view things negatively and thus more likely to recall WPV or interpret events as WPV. Given that the majority of WPV events described in the current study related to verbal abuse rather than the more easily defined physical abuse, this presents a complication in the interpretation of the direction of the effect. This concern would be resolved through a longitudinal component as individuals are compared with themselves in follow-up surveys. In contrast to past studies, we did not find a correlation between frequency of WPV events and burnout scores; however, this may be due to the small sample size (Fei et al., 2023).

LIMITATIONS

Despite extensive recruitment efforts, only 17 individuals participated in the current study. Therefore, a small sample size limited the study. In

addition, the sample included home health care and long-term care workers, which might limit the generalizability of findings due to the possible introduction of confounding variables specific to each work setting. Some associations may have gone undetected because of low statistical power. In addition, the SF-36 Emotional Well-Being domain survey data were incomplete for three of 17 participants, which reduced the sample size further for analysis of this critical parameter.

The study design made it subject to potential recall bias as it depended on individuals' ability to recall events over the past 3 months. Assessing WPV in 3-month intervals has been effective in other studies (Cai et al., 2023). In addition, there was the potential for fraudulent data by participants seeking financial incentives without concern for the validity of their statements. Previous studies, however, have suggested that incentives do not degrade data quality (Cole et al., 2015). Lastly, individual understandings of what constitutes WPV could have influenced results. The most common type of WPV is verbal abuse, which is also the one most subject to broad interpretation. Future studies would benefit from clearly defining each type of WPV before each set of survey questions. Conducting a longitudinal study with more data collection points and a larger sample size could mitigate this issue. Questions requiring short answers or including another source of qualitative data would have strengthened the results and provided more insight into the experience of violence in LTCFs and home health care.

IMPLICATIONS FOR PRACTICE

Empowered with the knowledge that WPV occurs in LTCFs, nurses practicing in these environments are poised to prevent and mitigate the effects of WPV through education, implementation of evidence-based practices, and research. Regarding education, violence and aggression

de-escalation and mitigation should be a top priority. Frequent education and simulations can help prepare nurses for WPV occurrences by assisting them to know how to use safety equipment (e.g., panic buttons, security locks) (Somani et al., 2021), restraints, and personal protective equipment (Shane Escue et al., 2023). Knowing how to use de-escalation techniques increased health care providers' confidence in responding to escalating behaviors (Sanders et al., 2023). Increased confidence and de-escalation techniques can prevent WPV events from occurring and create a safer work environment. Nurses can work together to develop WPV prevention plans, cultivate a safety culture, increase incident reporting, and foster team building among staff to help mitigate the harmful effects of WPV (Tilley et al., 2023).

In addition, implementing evidence-based strategies to increase worker well-being and decrease symptoms of burnout is crucial. These strategies include self-compassion, mindfulness, and self-care practices (e.g., taking breaks, seeking community, limiting media, journaling, therapy, exercise), which can increase resilience and empathy in health care workers (Hofmeyer et al., 2020). Lastly, nurses can engage in research by implementing interventions focused on improving the adverse effects of WPV. These include interventions focused on decreasing burnout, improving work–life satisfaction, decreasing work rumination, and improving work–family conflict. This research will increase the evidence-based strategies available to nurses to enhance their well-being, empathy, and compassion. As a result, work environments, patient care, and satisfaction will improve, which could decrease WPV events.

CONCLUSION

Current findings bolster the existing evidence that WPV occurs within home health care and LTCFs. The most frequent occurrence of

WPV was verbal abuse and threats of abuse directed at employees from patients they were providing care to (i.e., Type II WPV). Trends analyzed in this study show that the experience of WPV can increase feelings of burnout and decrease satisfaction with one's job and life. Due to sample size limitations, it is unclear how the experience of WPV influences overall worker well-being, but preliminary results suggest it is detrimental. Confirmation of spillover effects of WPV on worker well-being outside the job would increase the urgency to control this workplace hazard.

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