Workplace Violence in Healthcare Settings

Brianna Lombardi, Emily McCartha, Connor Sullivan, Erin Fraher

Rapid Response August 2022

I. Literature Review

Workplace violence (WPV) is a documented experience that affects those that work within healthcare settings. WPV is described by the Occupational Safety and Health Administration (OSHA) as "any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site. It ranges from threats and verbal abuse to physical assaults and even homicide." The Joint Commission (2021a) defines WPV as "[a]n act or threat occurring at the workplace that can include any of the following: Verbal, written, or physical aggression; threatening, intimidating, harassing, or humiliating words or actions; bullying, sabotage, sexual harassment; or physical assaults involving staff, licensed practitioners, patients, or visitors". Research examining WPV most often focuses on patient-to-health-worker violence—described as Type II violence - in which a customer or patient acts verbally or physically violent against a healthcare worker (Phillips, 2016 citing Howard 1996 and Peek-Asa et al. 1997; Vellani, 2014). But WPV also includes worker-to-worker harassment and violence. According to Li et al. (2020), one in five health care professionals, worldwide, experience WPV by a patient or visitor annually. Stated differently, the pooled, one-year prevalence of WPV in the healthcare workforce by patients or visitors is 19.33%, based on data from 2000 to 2018 (Li et al., 2020).

Rate of WPV in the US. In the US, the healthcare workforce (HCW) accounts for 14% of all workers (Laughlin et al., 2021 citing US Census Data), however they experience roughly 75% of all nonfatal, intentional, workplace injuries (Hawkins & Ghaziri, 2022 citing 2020 BLS data). Using 2018 data, the Bureau of Labor Statistics (BLS) estimates 10.4 non-fatal, intentional injuries occurred for every 10,000 workers in health and social care settings (BLS, 2020). Nursing assistants experience the most intentional, nonfatal, workplace injuries, which require workers to take time off from work, of any occupation in the entire country (BLS, 2021). A study assessing six years of BLS data trends found Black health care support workers and practitioners experienced injury rates three times higher than White workers in the US (Hawkins & Gharizi, 2022).

Self-reported surveys of the HCW find higher rates of WPV than do national datasets. A 2011 national survey of emergency department physicians found that 75% of respondents reported experiencing verbal threats, 21% experienced physical assaults, 5% experienced confrontations outside the workplace, and 2% experienced stalking (Behnam et al., 2011). In a survey covering the period from February to May in 2020, nurses reported experiencing physical violence and verbal abuse at 44.4% and 67.8% respectively, (Byon et al., 2021). A 2015 survey found 61% of home care workers reported experiencing WPV annually (Phillips, 2016 citing Hanson et al., 2015).

This work is funded through HRSA Cooperative Agreement #U81HP26495: Health Workforce Research Centers Program.

Carolina Health Workforce Research Center
Program on Health Workforce Research & Policy
Cecil G. Sheps Center for Health Services Research
University of North Carolina at Chapel Hill
http://www.healthworkforce.unc.edu

Rate of International WPV. WPV is not unique to the United States. Extensive research examining WPV internationally also exists. A systematic review and meta-analysis assessing data up to 2018 (pre-pandemic) revealed 61.9% of the HCW reported exposure to some form of WPV (Liu et al., 2019) From the same study, the analysis found 42.5% of the HCW reported non-physical violence exposure (e.g., verbal abuse, threats, and sexual harassment) and 24.4% reported experiencing physical violence in the last year. Similarly, the 2016 European Working Conditions Survey (EWCS) reported that of the 43,850 survey participants from 35 European countries, 36% of the individuals who provide healthcare services experienced verbal violence, humiliating behavior, and tyranny, and 7% were exposed to physical violence (Parent-Thirion et al., 2016).

Literature Review of WPV for HCW Research Since the Onset of COVID-19

Recent reports, commentaries, and news articles suggest WPV for HCW has increased since the beginning of the Covid-19 pandemic (after March 2020; Dey et al., 2022; Larkin, 2021; McKay et al., 2020; Rodriguez-Bolanos et al., 2020; Semple, 2020; Tiesman et al., 2022; White, 2020). The BLS, which tracks rates of non-fatal workplace related injuries and illnesses through the Survey of Occupational Illness and Injuries, released a report indicating injuries and illnesses that resulted in at least one day missed from work *at least doubled* for workers in hospitals, ambulatory medical settings, and nursing homes and residential care facilities since the pandemic began (BLS, 2021). Peer-reviewed and gray literature regarding WPV for HCW, using data from March 2020 onward, also suggests WPV increased during the pandemic. A review of both bodies of literature follows in the next sections.

Peer-Reviewed Literature on WPV and COVID-19. Two systematic reviews regarding the impact of COVID-19 on WPV for HCW have been published (Chirico et al., 2022; Ramzi et al., 2022). Both reviews were international in scope. The studies primarily provide demographic and descriptive data on what type of healthcare workers experience which type of violence by setting. Chirico et al. (2022) reviewed 16 articles, two of which were based in the USA, and found most studies reported evidence of WPV, both physical and psychological (verbal and non-verbal), perpetrated by personal (family members, friends, neighbors) and/or professional relationships (e.g., co-workers, patients' relatives, strangers) against healthcare workers. Male-gendered, young, and less experienced healthcare workers that directly interacted with patients infected with COVID-19 were the most likely groups to experience WPV perpetrated by patients or their families. Ramzi et al., (2022) reviewed 17 studies, only one which was based on US HCW. This review estimated the prevalence of WPV across participants in the 17 studies was 47% with physical and psychological violence reported at 17% and 44% respectively for the HCW within the reviewed studies. Ramzi et al. referenced Byon et al. (2021) as the US-based study and Chirico used the Byon study as well McGuire et al. (2022).

In our review of the peer-reviewed, published literature (based on key word searches in Google Scholar and PubMed, as well as citation chaining of systematic reviews), we found seven studies outside of the systematic reviews, published on WPV in the HCW that collected data after the beginning of the pandemic (after March 2020) in the US. (See Table 1 for a summary of these studies.)

The research supports the reports that health workers treating COVID-19 patients experienced more WPV than those that did not (Byon et al., 2021; McGuire et al., 2022) and that WPV during the pandemic increased (McGuire et al., 2022, Ward et al., 2022) or intensified (El Ghaziri et al., 2022). Workers in emergency department or hospital settings tended to experience more WPV than those who were not in those settings during the pandemic (Chirico et al., 2022;). Inpatient workers experienced more WPV than outpatient healthcare workers (Pinkhasov et al., 2022).

These articles also highlight the challenge of studying WPV. In three of the studies, respondents described underreporting the experience of WPV. Nurses felt it was harder to report WPV during the pandemic (Byon et al., 2021). In a study of one hospital, half of the staff that responded to the survey and indicated they experienced WPV but did not report it to hospital management (Pinkhasov et al., 2022). A qualitative study of certified nurse assistants (CNAs) in a long-term care facility, stated they did not report WPV because they did not feel supported by the administration to do so (Xiao et al., 2021).

Table 1: Studies of Workplace Violence in the US Healthcare Workforce During the Pandemic (data post March 2020)

Setting or Profession	Methods	Main Findings
Byon, H. D., Sagherian, K., Kim, Y., Lipscomb, J., Crandall, M., & Steege, L. (2021). Nurses' experience with type II workplace violence and underreporting during the COVID-19 pandemic. *Workplace Health & Safety*, 21650799211031233.		
Registered Nurses	Utilized SAFE-CARE survey conducted between May 27, 2020, and June 25, 2020 of RNs – looking at Type II (customer-on-worker) workplace violence (WPV) Survey used convivence sampling (social media links) and snowball sampling (colleagues sending to each other) (n=373)	Between February and May/June 2020, 44.4% and 67.8% of nurses reported experiencing physical violence and verbal abuse, respectively. Nurses providing care for patients with COVID-19 experienced more ***physical violence*** than nurses who did not care for these patients. 1 in 10 nurses felt reporting the incident was more difficult during the pandemic
El Ghaziri, M., Johnson, S., Purpora, C., Simons, S., & Taylor, R. (2022). Registered nurses' experiences with incivility during the early phase of COVID-19 pandemic: Results of a multi-state survey. *Workplace Health & Safety*, *70*(3), 148-160.		
Registered Nurses	Survey data (open and closed questions) collected June- September 2020 via an online survey sent through 3 major nurse unions or associations (CA, MA, NH, WA) (n=526)	More than 1/3 of RN respondents experienced greater incivility at work during the COVID-19 outbreak than before the pandemic (37.4%), and almost half (45.7%) said they witnessed more incivility than before the pandemic
McGuire, S. S., Gazley, B., Majerus, A. C., Mullan, A. F., & Clements, C. M. (2022). Impact of the COVID-19 pandemic on workplace violence at an academic emergency department. *The American Journal of Emergency Medicine, 53*, 285-e1.		

Emergency department in one academic hospital	Mixed methods: survey data and descriptive information in medical records Pre-post survey (April 2020 and Nov 2020) of multi-disciplinary staff (n=480)	Study found a positive association between the monthly COVID-19 case rate and rate of violent ED incidents (r = 0.24). Violent incidents increased overall during the pandemic (2.53 incidents per 1000 visits) compared to the 3 months prior (1.13 incidents per 1000 visits, p < .001), and the previous year (1.24 incidents per 1000 patient visits, p < .001). 80.3% of respondents indicated they had been verbally abused in the preceding six months pre/early-pandemic, compared to 188 85.1% mid/late-pandemic

Pinkhasov, A., Filangieri, C., Rzeszut, M., Wilkenfeld, M., Akerman, M., Divers, J., ... & Peltier, M. R. (2022). The effect of abuse and mistreatment on healthcare providers (TEAM): a survey assessing the prevalence of aggression from patients and their families and its impact. *Journal of Occupational and Environmental Medicine*, *64*(3), e136-e144.		
All HCW at a Community Teaching Hospital	Survey sent to all health care providers at a specific hospital (n=1607)	88% of inpatient staff reported experiencing different types of aggression compared to 82% in outpatient setting. Almost half did not report it to their supervisor. A third of all responders indicated negative effects on mental health. Negative impacts on productivity and patient care were reported.
Ward, J. A., Stone, E. M., Mui, P., & Resnick, B. (2022). Pandemic-related workplace violence and its impact on public health officials, March 2020–January 2021. *American Journal of Public Health, 112*(5), 736-746		
Public Health Officials	Mixed methods approach, combining media content and a national survey of local health departments (LHDs) in the United States, to identify harassment against public health officials from March 2020 to January 2021	Results suggest increased harassment of PH Officials led to increased departures. From March 2020 to January 2021, a total of 256 events or actions, including 120 resignations, 58 retirements, 20 firings, 24 other departures, and 34 threatened nondepartures, were identified in media reports. These cases represented 42 states, involving 51 SHD and 205 LHD officials. Also found a sustained spike in retirements beginning in May 2020 and a bimodal curve of resignations, peaking in July 2020 and again in December 2020
Xiao, C., Winstead, V., Townsend, C., & Jablonski, R. A. (2021). Certified Nursing Assistants' Perceived Workplace Violence in Long-Term Care Facilities: A Qualitative Analysis. *Workplace Health & Safety*, 69(8), 366-374.		
Certified Nursing Assistants in Long-Term Care Facilities	Qualitative inquiry – semi-structured interviews with CNAs in Alabama (n=10)	CNAs felt workplace violence was part of the job or environment and that work has to be done in spite of violence because it is required They did not feel supported administratively either due to a lack of communication or dismissal of violence they experienced

Zebrak, K., Yount, N., Sorra, J., Famolaro, T., Gray, L., Carpenter, D., & Caporaso, A. (2022). Development, Pilot Study, and Psychometric Analysis of the AHRQ Surveys on Patient Safety Culture™(SOPS®) Workplace Safety Supplemental Items for Hospitals. *International Journal of Environmental Research and Public Health, 19*(11), 6815.		
Hospitals	Study sought to develop and test survey items to be used in conjunction with the Agency for Healthcare Research and Quality (AHRQ) Surveys on Patient Safety Culture™ (SOPS®) Hospital Survey to assess how the organizational culture in hospitals supports workplace safety for providers and staff in response to WPV during COVID-19 7037 responses from providers at 28 hospitals	Almost 1/3 of providers reported experiencing at least one symptom of work stress or burnout and that stress or burnout was related to lower protection from workplace hazards and lower support for workplace safety from various levels within their organizations.

One study using data collected after the beginning of the pandemic was from the Agency for Healthcare Research and Quality (AHRQ) Surveys on Patient Safety Culture (SOPs; Zebrak et al., 2022). AHRQ was piloting supplemental items on workplace safety for hospitals that included estimates of prevalence for WPV and burnout from the respondents. The pilot study sample contained 7,037 participants from 28 U.S. hospitals across 16 states in summer 2021. Hospitals were purposely selected to vary by several characteristics, though were not representative of all U.S. hospitals. According to this pilot answered by healthcare staff 6,684 participants had complete data and 41% of the sample reported physical violence from patients to staff occurred. Verbal aggression was a problem for a majority of the sample (i.e., 55%). Additionally, 9% reported peer-to-peer physical aggression, while 26% reported verbal aggression among colleagues. Regarding burnout, 32% reported some magnitude of feeling burned out, which is consistent with Ham et al. (2022).

Gray Literature on WPV and COVID-19. Some of the work documenting the uptick in WPV since the start of COVID-19 exists in the gray literature—conducted by professional associations and organizations. For example, National Nurses United compiled survey results on WPV in the COVID-19 pandemic from nurses across all states and District of Columbia between November 2020-October 2021 (n=1,340). Of those that responded to the survey, 64% reported experienced verbal aggression and 38% reported physical aggression. Only 19% reported not experiencing some form of aggression or harassment at work. Of those experiencing workplace violence, 59% experienced increased mental health needs, 26% percent reported difficulty continuing to work in the same environment following the incident, 22% took time off from work, and 16% changed or left their job (National Nurses United, 2021).

Similarly, a survey of licensed RNs in Massachusetts asked about WPV was conducted in 2019, 2021, and 2022 (Massachusetts Nursing Association, 2022). This survey sponsored by the Massachusetts Nursing Association, was conducted by a third party who randomly selected potential respondents from the nurses registered with the Massachusetts Board of Registration in Nursing. Of these respondents, 33% reported WPV was a “major challenge” in 2021 when asked to “Please rate the challenge each presents to you in your job on a scale of major challenge, minor challenge, or not much of a challenge”, as compared to 17% reporting WPV as a major challenge in 2019.

Another study of one state's nursing workforce found a significant experience of WPV, yet there was limited ability to understand how WPV may have increased since the beginning of the pandemic. The 2020 and 2021 Survey of Michigan Nurses conducted by the Michigan Public Health Institute and supported by the Office of Nursing Safety and Workforce Planning at the Michigan Department of Health and Human Services surveyed Michigan nurses on experiences of WPV that coincided with the beginning of the pandemic (Michigan Public Health Institute, 2020; 2021). A total of N = 38,242 nurses participated in the 2021 survey; N = 40,821 nurses completed the 2020 survey. In 2020, 36% of registered nurses and 25% of LPNs experienced WPV in the past year. In 2021, 34% of RNs and 24% of LPNs reported WPV in the past year. The Survey of Michigan Nurses also inquired why nurses left the workforce. In 2020, a total of 5,747 respondents indicated they were no longer employed as a nurse. From those no longer working, 4.5% of those stopped due to violence/safety issues and 16.6% stopped because of burnout/stress. In 2021 rates of leaving nursing due to violence were slightly lower (i.e., 4.2% of 6,246), while leaving due to burnout increased (i.e., 21.9%).

Overview of Research on WPV for HCW Prior to the COVID-19 Pandemic

There is significant work published on WPV for the HCW. Even prior to the pandemic, the BLS reported a 60% increase in WPV for HCW from 2011 to 2018 (BLS, 2020). Studies describe the prevalence and type of violence experienced, the reporting mechanisms available to healthcare workers, how reports of WPV may differ by profession or setting, and the impact on WPV for the HCW. We identified more than 16 *systematic literature reviews and meta-analyses* published summarizing work of the last 15 years (See Table 2).

Most of the systematic reviews jointly summarize both domestic and international health settings. The published systematic reviews and meta-analyses include occupational-specific examinations of WPV for nurses (Edward et al., 2014; Zhang et al., 2021), physicians (Nowrouzi et al., 2019), and home health workers (Byon et al., 2020), and vary by settings including emergency departments (Aljohani et al., 2021; Taylor et al, 2011) and psychiatric hospitals (Odes et al., 2021).

In a systematic review of 100 WPV articles, Mento et al. (2020) identified the settings in which WPV most occurs are: psychiatric departments, emergency services, and geriatric units. The findings across settings support the profession-based rates of reported WPV. Healthcare workers who interact with patients in crisis or compromised mental health states as well as those with the most hands-on time are more likely to experience WPV from those patients (Jang et al., 2022; Odes et al., 2021).

Table 2: Systematic Reviews: Workplace Violence in Healthcare Settings Using Data Prior to March 2020	
Year	**Citation**
2011	Taylor, J. L., & Rew, L. (2011). A systematic review of the literature: workplace violence in the emergency department. *Journal of clinical nursing*, *20*(7-8), 1072-1085.
2014	Edward K.L., Ousey K., Warelow P., Lui S. (2014). Nursing and aggression in the workplace: a systematic review. *British Journal of Nursing, 23*(12):653-9.
2014	Lanctôt, N., & Guay, S. (2014). The aftermath of workplace violence among healthcare workers: A systematic literature review of the consequences. *Aggression and violent behavior*, *19*(5), 492-501.
2016	Phillips, J. P. (2016). Workplace violence against health care workers in the United States. New England journal of medicine, 374(17), 1661-1669.
2019	Nowrouzi-Kia, B., Chai, E., Usuba, K., Nowrouzi-Kia, B., & Casole, J. (2019). Prevalence of type II and type III workplace violence against physicians: A systematic review and meta-analysis. *The International Journal of Occupational and Environmental Medicine*, 10(3), 99.
2019	Liu, J., Gan, Y., Jiang, H., Li, L., Dwyer, R., Lu, K., ... & Lu, Z. (2019). Prevalence of workplace violence against healthcare workers: a systematic review and meta-analysis. Occupational and environmental medicine, 76(12), 927-937
2019	Nowrouzi-Kia, B., Chai, E., Usuba, K., Nowrouzi-Kia, B., & Casole, J. (2019). Prevalence of type II and type III workplace violence against physicians: A systematic review and meta-analysis. *The International Journal of Occupational and Environmental Medicine, 10*(3), 99.
2020	Byon, H. D., Lee, M., Choi, M., Sagherian, K., Crandall, M., & Lipscomb, J. (2020). Prevalence of type II workplace violence among home healthcare workers: a meta-analysis. American journal of Industrial Medicine, 63(5), 442-455.
2020	Li, Y. L., Li, R. Q., Qiu, D., & Xiao, S. Y. (2020). Prevalence of workplace physical violence against health care professionals by patients and visitors: a systematic review and meta-analysis. *International Journal of Environmental Research and Public Health*, *17*(1), 299.
2020	Mento, C., Silvestri, M. C., Bruno, A., Muscatello, M. R. A., Cedro, C., Pandolfo, G., & Zoccali, R. A. (2020). Workplace violence against healthcare professionals: A systematic review. Aggression and violent behavior, 51, 101381.
2020	Pariona-Cabrera, P., Cavanagh, J., & Bartram, T. (2020). Workplace violence against nurses in health care and the role of human resource management: A systematic review of the literature. *Journal of Advanced Nursing*, *76*(7), 1581-1593.
2021	Aljohani, B., Burkholder, J., Tran, Q. K., Chen, C., Beisenova, K., & Pourmand, A. (2021). Workplace violence in the emergency department: a systematic review and meta-analysis. Public Health, 196, 186-197.
2021	Giménez Lozano, J. M., Martínez Ramón, J. P., & Morales Rodríguez, F. M. (2021). Doctors and nurses: a systematic review of the risk and protective factors in workplace violence and burnout. *International Journal of Environmental Research and Public Health*, *18*(6), 3280.
2021	Odes, R., Chapman, S., Harrison, R., Ackerman, S., & Hong, O. (2021). Frequency of violence towards healthcare workers in the United States' inpatient psychiatric hospitals: A systematic review of literature. International journal of mental health nursing, 30(1), 27-46.
2021	Zhang, J., Zheng, J., Cai, Y., Zheng, K., & Liu, X. (2021). Nurses' experiences and support needs following workplace violence: A qualitative systematic review. *Journal of Clinical Nursing*, *30*(1-2), 28-43.
2022	Chakraborty, Sayantan, Saidur Rahman Mashreky, & Koustuv Dalal. (2022) Violence against physicians and nurses: a systematic literature review. Journal of Public Health: 1-19.

Research on the Influence of WPV and Burnout or Attrition for HCW

Exposure to WPV can result in negative professional, personal or health-related outcomes for HCW (Hanson et al., 2015; Lanctôt & Guay, 2016; Phillips, 2016): this includes symptoms of Post-Traumatic Stress Disorder (PTSD), anxiety and/or depression (Ham et al. 2022, Lanctôt & Guay, 2016), sleep disorders (Magnavita et al. 2019), and emotional exhaustion (Hacer & Ali, 2020, Buran & Altin, 2021). Some of the research suggests negative health outcomes from WPV can lead to burnout. Burnout is a prevalent topic in the news and current HCW research, but it is not always linked with WPV nor to turnover or attrition.

Dyrbye et al. (2017) assessed cross-sectional studies and found that physicians reporting burnout have a 200 percent increase in the odds of intending to leave their professional work, but this study was conducted outside the lens of WPV. Shah et al. (2021) analyzed cross-sectional survey data of 50,000 RNs in the US and found that of the nurses leaving their current employment (9.5%), 31.5% reported doing so because of burnout. Ham et al. (2022) investigated the direct link between WPV, burnout, and eventual mental health outcomes. Based on data from 2017-2018 of 611 clinical psychiatric staff, Ham et al. found that "critical events" including assault from patients were significant predictors of both burnout and posttraumatic stress disorder symptomology in a path model analysis. The study describes how burnout results both from situations like WPV, witnessing critical events, and the long-term emotional and physical stress of occupations such as healthcare. But the study did not connect burnout to exit or attrition.

Data on healthcare workforce exit or attrition is often survey-based and reflects *intent to leave* versus rates of actual exit (Williams et al., 2020). For example, a study of Latin American, front-line, health professionals of which 70.8% of the 3,500 respondents were physicians, 6% were nurses, and 13.2% were other health team members, found of those that reported experiencing WPV, half considered switching tasks and a third considered leaving the profession (Garcia-Zamora et al. 2022). One study from our review of gray literature identified turnover due to WPV—the Survey of Michigan Nurses found in 2020 4.5% stopped working due to violence/safety issues and in 2021 4.2% stopped due to violence/safety. (Michigan Public Health Institute, 2020; 2021). Therefore, the current research indicates WPV likely leads to burnout or a desire to switch tasks or leave jobs, however, the data or studies to support this are limited.

Ward et al. (2022) may have come the closest in the peer-reviewed literature to tying WPV for the health workforce to job exit during the COVID-19 pandemic. The study found spikes of exits (e.g., retirements, resignations other departures) of public health officials at the state and local level in July and December 2020. Of those that left, 36% reported experiencing harassment at their job of some kind. However, the healthcare officials in this study were appointed or hired within state or local health departments that operate within a political environment. Therefore, the types of harassment reported may differ from front-line healthcare workers (e.g., online harassment via social media). Nonetheless, it suggests violence or harassment can lead to exit and turnover and did so during the pandemic.

Despite the undoubted presence of burnout caused by conditions resulting from the pandemic in the healthcare workforce and the relationship between burnout and WPV (Hacer & Ali, 2020; Buran & Altin, 2021; Ham et al., 2022), research has struggled to understand the causal pathways between WPV, burnout, and attrition or exit within the HCW during the COVID-19 pandemic. Future research would benefit from identifying data sources that contain information about the cause of exit or attrition and the specific events that lead to burnout and stress.

This project was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under Cooperative Agreement #U81HP26495, Health Workforce Research Centers Program. The information, content and conclusions are those of the authors and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

References

Aljohani, B., Burkholder, J., Tran, Q. K., Chen, C., Beisenova, K., & Pourmand, A. (2021). Workplace violence in the emergency department: a systematic review and meta-analysis. *Public Health*, *196*, 186-197.

American Hospital Association. (2022). Workforce and Workplace Violence Prevention. https://www.aha.org/workplace-violence

American Hospital Association. (2016). Hospitals Against Violence Initiative. https://www.aha.org/hospitals-against-violence/human-trafficking/workplace-violence

Arnetz, J. E., Hamblin, L., Ager, J., Luborsky, M., Upfal, M. J., Russell, J., & Essenmacher, L. (2015). Underreporting of workplace violence: comparison of self-report and actual documentation of hospital incidents. *Workplace Health & Safety*, *63*(5), 200-210.

Behnam, M., Tillotson, R. D., Davis, S. M., & Hobbs, G. R. (2011). Violence in the emergency department: a national survey of emergency medicine residents and attending physicians. *The Journal of emergency medicine*, *40*(5), 565-579.

Byon, H. D., Sagherian, K., Kim, Y., Lipscomb, J., Crandall, M., & Steege, L. (2021). Nurses' experience with type II workplace violence and underreporting during the COVID-19 pandemic. *Workplace Health & Safety*. https://doi.org/10.1177/21650799211031233

Byon, H. D., Lee, M., Choi, M., Sagherian, K., Crandall, M., & Lipscomb, J. (2020). Prevalence of type II workplace violence among home healthcare workers: a meta-analysis. *American journal of industrial medicine*, *63*(5), 442-455.

Buran, F., & Altın, Z. (2021). Burnout among physicians working in a pandemic hospital during the COVID-19 pandemic. *Legal Medicine*, *51*, 101881.

Bureau of Labor Statistics. (2020). Fact Sheet | Workplace Violence in Healthcare, 2018. https://www.bls.gov/iif/oshwc/cfoi/workplace-violence-healthcare-2018.htm

Bureau of Labor Statistics, US Department of Labor. News Release: Employer-Reported Workplace Inuries and Illnesses – 2020. November 3, 2021. Employer-Reported Workplace Injuries and Illnesses – 2020 (bls.gov)

Chakraborty, S., Mashreky, S. R., & Dalal, K. (2022). Violence against physicians and nurses: a systematic literature review. *Journal of Public Health*, 1-19.

Chirico, F., Afolabi, A. A., Stephen, O., Ilesanmi, G. N., Ferrari, G., Szarpak, L., ... & Magnavita, N. (2022). Workplace violence against healthcare workers during the COVID-19 pandemic: A systematic review. *J Health Soc Sci*, *7*(1), 14-35.

Dey, A. K., Hay, K., & Raj, A. (2022). Strengthening health systems in crisis due to COVID-19 requires ending violence against female healthcare workers. EClinicalMedicine, 50.

Dyrbye, L. N., Trockel, M., Frank, E., Olson, K., Linzer, M., Lemaire, J., ... & Sinsky, C. A. (2017). Development of a research agenda to identify evidence-based strategies to improve physician wellness and reduce burnout. Annals of Internal Medicine, 166(10), 743-744.

Edward K.L., Ousey K., Warelow P., Lui S. (2014). Nursing and aggression in the workplace: a systematic review. *British Journal of Nursing, 23*(12):653-9.

El Ghaziri, M., Johnson, S., Purpora, C., Simons, S., & Taylor, R. (2022). Registered nurses' experiences with incivility during the early phase of COVID-19 pandemic: Results of a multi-state survey. *Workplace Health & Safety*, *70*(3), 148-160.

Ferracuti, S., Barchielli, B., Napoli, C., Giannini, A. M., & Parmigiani, G. (2022). Managing and preventing acts of violence against health workers: results of a review evaluating hospital control procedures. *Journal of aggression, conflict and peace research*, *14*(2), 100-111.

Garcia-Zamora, S., Pulido, L., Miranda-Arboleda, A. F., Garcia, D. E., Perez, G., Priotti, M., ... & Baranchuk, A. (2022). Aggression, micro-aggression, and abuse against Health Care Providers during the COVID-19 pandemic. A Latin American Survey. *Current problems in cardiology*, 101296.

Geoffrion, S., Hills, D. J., Ross, H. M., Pich, J., Hill, A. T., Dalsbø, T. K., ... & Guay, S. (2020). Education and training for preventing and minimizing workplace aggression directed toward healthcare workers. Cochrane database of systematic reviews, (9).

Giménez Lozano, J. M., Martínez Ramón, J. P., & Morales Rodríguez, F. M. (2021). Doctors and nurses: a systematic review of the risk and protective factors in workplace violence and burnout. *International journal of environmental research and public health*, *18*(6), 3280.

Hacer, T. Y., & Ali, A. (2020). Burnout in physicians who are exposed to workplace violence. *Journal of forensic and legal medicine*, *69*, 101874.

Ham, E., Seto, M. C., Rodrigues, N. C., & Hilton, N. Z. (2022). Workplace stressors and PTSD among psychiatric workers: The mediating role of burnout. *International journal of mental health nursing*. https://doi.org/10.1111/inm.13015

Hanson, G. C., Perrin, N. A., Moss, H., Laharnar, N., & Glass, N. (2015). Workplace violence against homecare workers and its relationship with workers health outcomes: a cross-sectional study. *BMC public health*, *15*(1), 1-13.

Hawkins, D., & Ghaziri, M. E. (2022). Violence in Health Care: Trends and disparities, bureau of labor statistics survey data of occupational injuries and illnesses, 2011–2017. *Workplace Health & Safety*, *70*(3), 136-147.

Jang, S. J., Son, Y. J., & Lee, H. (2022). Prevalence, associated factors and adverse outcomes of workplace violence towards nurses in psychiatric settings: A systematic review. *International journal of mental health nursing*, *31*(3), 450-468.

The Joint Commission. (2021a). Workplace Violence Prevention Standards. https://www.jointcommission.org/-/media/tjc/documents/standards/r3-reports/wpvp-r3-30_revised_06302021.pdf

The Joint Commission. (2021b). Workplace violence prevention compendium of resources. https://www.jointcommission.org/resources/patient-safetytopics/workplace-violence-prevention/compendium-of-resources/

Kumari, A., Sarkar, S., Ranjan, P., Chopra, S., Kaur, T., Baitha, U., ... & Klanidhi, K. B. (2022). Interventions for workplace violence against health-care professionals: A systematic review. Work, (Preprint), 1-13.

Lanctôt, N., & Guay, S. (2014). The aftermath of workplace violence among healthcare workers: A systematic literature review of the consequences. *Aggression and violent behavior*, *19*(5), 492-501.

Larkin, H. (2021). Navigating attacks against health care workers in the COVID-19 era. *JAMA*, *325*(18), 1822-1824

Laughlin, L., Anderson, A., Martinez, A., & Gayfield, A. (2021). Million employed in health care fight against COVID-19. Who Are Our Health Care Workers? (census.gov)

Li, Y. L., Li, R. Q., Qiu, D., & Xiao, S. Y. (2020). Prevalence of workplace physical violence against health care professionals by patients and visitors: a systematic review and meta-analysis. *International journal of environmental research and public health*, *17*(1), 299.

Liu, J., Gan, Y., Jiang, H., Li, L., Dwyer, R., Lu, K., ... & Lu, Z. (2019). Prevalence of workplace violence against healthcare workers: a systematic review and meta-analysis. *Occupational and environmental medicine*, *76*(12), 927-937

Magnavita, N., Di Stasio, E., Capitanelli, I., Lops, E. A., Chirico, F., & Garbarino, S. (2019). Sleep problems and workplace violence: a systematic review and meta-analysis. Front Neurosci. 2019; 13: 997.

Mento, C., Silvestri, M. C., Bruno, A., Muscatello, M. R. A., Cedro, C., Pandolfo, G., & Zoccali, R. A. (2020). Workplace violence against healthcare professionals: A systematic review. *Aggression and violent behavior*, *51*, 101381.

McGuire, S. S., Gazley, B., Majerus, A. C., Mullan, A. F., & Clements, C. M. (2022). Impact of the COVID-19 pandemic on workplace violence at an academic emergency department. *The American Journal of Emergency Medicine*, *53*, 285-e1.

McKay, D., Heisler, M., Mishori, R., Catton, H., & Kloiber, O. (2020). Attacks against health-care personnel must stop, especially as the world fights COVID-19. The Lancet, 395(10239), 1743-1745.

Massachusetts Nurses Association (2022). Survey of the State of Nursing in Massachusetts. https://www.massnurses.org/files/file/State%20of%20Nursing%20Memo%20-%204_26_22%20(003)%20Beacon%20Research.pdf

Michigan Public Health Institute (MPHI). (2020). 2020 Survey of Michigan Nurses Survey Summary Report. https://www.michigan.gov/-/media/Project/Websites/mdhhs/Folder4/Folder12/Folder3/Folder112/Folder2/Folder212/Folder1/Folder312/MI_Nurse_Survey_Report_2020_final.pdf?rev=01e7ee9b0c06481e830a2b5a9cd13049

Michigan Public Health Institute (MPHI). (2021). 2020 Survey of Michigan Nurses Survey Summary Report. https://minurse.org/survey/past%20reports/MI%20Nurse%20Survey%20Report%202021%20Final.pdf

National Institute for Occupational Safety and Health (April 10, 2020). What is workers' compensation? – CWCS. National Institute for Occupational Safety and Health. https://www.cdc.gov/niosh/topics/workercomp/cwcs/definition.html.

National Nurses United (2021). Workplace violence and Covid-19 in health care: How the hospital industry created an occupational syndemic. https://www.nationalnursesunited.org/workplace-violence-and-covid-19-health-care

Nowrouzi-Kia, B., Chai, E., Usuba, K., Nowrouzi-Kia, B., & Casole, J. (2019). Prevalence of type II and type III workplace violence against physicians: A systematic review and meta-analysis. *The International Journal of Occupational and Environmental Medicine, 10*(3), 99.

Odes, R., Chapman, S., Ackerman, S., Harrison, R., & Hong, O. (2022). Differences in Hospitals' Workplace Violence Incident Reporting Practices: A Mixed Methods Study. *Policy, Politics, & Nursing Practice*, *23*(2), 98-108.

Odes, R., Chapman, S., Harrison, R., Ackerman, S., & Hong, O. (2021). Frequency of violence towards healthcare workers in the United States' inpatient psychiatric hospitals: A systematic review of literature. *International journal of mental health nursing*, *30*(1), 27-46.

Parent-Thirion, A., Biletta, I., Cabrita, J., Vargas Llave, O., Vermeylen, G., Wilczyńska, A., & Wilkens, M. (2016). Sixth European working conditions survey–overview report.

Pariona-Cabrera, P., Cavanagh, J., & Bartram, T. (2020). Workplace violence against nurses in health care and the role of human resource management: A systematic review of the literature. *Journal of Advanced Nursing*, *76*(7), 1581-1593.

Peek-Asa, C., Howard, J., Vargas, L., & Kraus, J. F. (1997). Incidence of non-fatal workplace assault injuries determined from employer's reports in California. *Journal of Occupational and Environmental Medicine*, 44-50.

Pinkhasov, A., Filangieri, C., Rzeszut, M., Wilkenfeld, M., Akerman, M., Divers, J., ... & Peltier, M. R. (2022). The effect of abuse and mistreatment on healthcare providers (TEAM): a survey assessing the prevalence of aggression from patients and their families and its impact. *Journal of Occupational and Environmental Medicine*, *64*(3), e136-e144.

Phillips, J. P. (2016). Workplace violence against health care workers in the United States. *New England journal of medicine*, *374*(17), 1661-1669.

Ramzi, Z. S., Fatah, P. W., & Dalvandi, A. (2022). Prevalence of workplace violence against healthcare workers during the COVID-19 pandemic: a systematic review and meta-analysis. *Frontiers in psychology*, *13*.

Rodríguez-Bolaños, R., Cartujano-Barrera, F., Cartujano, B., Flores, Y. N., Cupertino, A. P., & Gallegos-Carrillo, K. (2020). The urgent need to address violence against health workers during the COVID-19 pandemic. Medical care, 58.

Semple K. "Afraid to be a nurse": health workers under attack. The New York Times. April 27, 2020

Shah, M. K., Gandrakota, N., Cimiotti, J. P., Ghose, N., Moore, M., & Ali, M. K. (2021). Prevalence of and factors associated with nurse burnout in the US. *JAMA network open*, *4*(2), e2036469-e2036469.

Small, T. F., Gillespie, G. L., Kean, E. B., & Hutton, S. (2020). Workplace violence interventions used by home healthcare workers: an integrative review. Home healthcare now, 38(4), 193-201.

Souza, K., Steege, A. L., & Baron, S. L. (2010). Surveillance of occupational health disparities: challenges and opportunities. *American journal of industrial medicine*, *53*(2), 84-94.

Steege, A. L., Baron, S. L., Marsh, S. M., Menéndez, C. C., & Myers, J. R. (2014). Examining occupational health and safety disparities using national data: A cause for continuing concern. *American journal of industrial medicine*, *57*(5), 527-538.

Taylor, J. L., & Rew, L. (2011). A systematic review of the literature: workplace violence in the emergency department. *Journal of clinical nursing*, *20*(7-8), 1072-1085.

Tiesman, H., Marsh, S., Konda, S., Tomasi, S., Wiegand, D., Hales, T., & Webb, S. (2022). Workplace Violence During the COVID-19 Pandemic: March–October, 2020, United States. *Journal of Safety Research*.

Toussaint, M., Ramirez, M. R., Peek-Asa, C., Saftlas, A., & Casteel, C. (2019). Workplace violence victimization in young workers: An analysis of the US National Crime Victimization Survey, 2008 to 2012. *American journal of industrial medicine*, *62*(8), 691-700.

Vellani K.H. (2014). The 2014 IHSSF crime survey. J Healthc Prot Manage 30:28-35.

Ward, J. A., Stone, E. M., Mui, P., & Resnick, B. (2022). Pandemic-related workplace violence and its impact on public health officials, March 2020–January 2021. American journal of public health, 112(5), 736-746.

Wassell, J. T. (2009). Workplace violence intervention effectiveness: A systematic literature review. Safety Science, 47(8), 1049-1055.

Williams, E. S., Rathert, C., & Buttigieg, S. C. (2020). The personal and professional consequences of physician burnout: a systematic review of the literature. *Medical Care Research and Review*, *77*(5), 371-386.

Wirth, T., Peters, C., Nienhaus, A., & Schablon, A. (2021). Interventions for workplace violence prevention in emergency departments: a systematic review. International journal of environmental research and public health, 18(16), 8459.

White, D. (2020, April 13). Slashed tires and violence: Healthcare workers face new dangers amid COVID-19 battle. The Miami Herald. https://www.miamiherald.com/news/coronavirus/article241967281.html

Xiao, C., Winstead, V., Townsend, C., & Jablonski, R. A. (2021). Certified Nursing Assistants' Perceived Workplace Violence in Long-Term Care Facilities: A Qualitative Analysis. Workplace Health & Safety, 69(8), 366-374.

Zebrak, K., Yount, N., Sorra, J., Famolaro, T., Gray, L., Carpenter, D., & Caporaso, A. (2022). Development, Pilot Study, and Psychometric Analysis of the AHRQ Surveys on Patient Safety Culture™(SOPS®) Workplace Safety Supplemental Items for Hospitals. *International Journal of Environmental Research and Public Health*, *19*(11), 6815.

Zhang, J., Zheng, J., Cai, Y., Zheng, K., & Liu, X. (2021). Nurses' experiences and support needs following workplace violence: A qualitative systematic review. *Journal of clinical nursing*, *30*(1-2), 28-43.