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Physical and psychological consequences for nurses affected by workplace violence: a scoping review

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Abstract

Background Workplace violence (WPV) represents a major threat to nurses' health and safety, leading to significant psychological and physical consequences. Despite widespread documentation of its prevalence, evidence on the specific outcomes affecting registered nurses (RNs) remains fragmented and has not been systematically synthesized. The findings of this review extend the current understanding of WPV by demonstrating its cumulative effects on individual RNs, workplace dynamics, and the sustainability of healthcare organizations. They also reveal critical gaps in the literature, particularly regarding longitudinal data, intervention strategies, and the evaluation of organizational policies. These insights provide the foundation for a detailed discussion of the implications of WPV for nursing practices, workforce stability, and health system resilience.

Aim The aim of this scoping review was to identify and map the available evidence on the psychological and physical consequences of WPV among RNs, with particular attention to short- and long-term outcomes and differences across clinical and cultural contexts.

Method This scoping review was conducted following the PRISMA-ScR and JBI guidelines. Studies in English, published between January 2020 and March 2025, with quantitative, qualitative, and mixed-methods designs were included. Searches were conducted in PubMed, CINAHL, PsycINFO, Web of Science, and Scopus, complemented by gray literature sources (Google Scholar, ProQuest Dissertations & Theses) and stakeholder consultation. The search strategy, developed with the support of librarians and healthcare experts, combined controlled vocabulary and keywords and was adapted to each database via the SR Accelerator, which is based on the PCC framework (population, concept, context). Source selection, data extraction, and data synthesis followed the JBI approach.

Results A total of 5,598 relevant articles were identified, 15 of which met the inclusion criteria. Psychological violence was the most frequently reported form, with outcomes including anxiety, fear, posttraumatic stress, depression, reduced resilience, and cognitive impairments. The physical consequences included sleep disturbances, chronic fatigue, and musculoskeletal pain. Workplace violence emerged as a significant determinant of job satisfaction and turnover intention, with lower job satisfaction mediating up to 44% of the effect of violence on nurses' intention to leave. Exposure to WPV also contributes to burnout, emotional exhaustion, and feelings of insecurity, highlighting

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gaps in organizational support and preventive strategies. Important knowledge gaps remain regarding long-term outcomes and cross-context comparisons.

Conclusion WPV compromises not only nurses' psychological and physical well-being but also their organizational climate, quality of care, and patient safety. The lack of adequate postincident institutional support and the underestimation of the problem further exacerbate its impact. Integrated strategies for prevention, monitoring, and management are urgently required, including standardized protocols, targeted training, and accessible psychological support systems. At the same time, further research is needed to explore long-term physical and psychological outcomes and to evaluate the effectiveness of institutional interventions aimed at sustaining resilience and safeguarding patient safety.

Keywords Workplace violence, Registered nurse, Psychological consequences, Emotional distress, Physical consequences, Burnout, Job satisfaction, Turnover intention, Organizational culture

Introduction

Workplace violence (WPV) against registered nurses (RNs) is recognized internationally as a serious threat to public health and the safety of healthcare workers, negatively affecting the quality of care and the sustainability of healthcare systems [1, 2]. The emergence of the COVID-19 pandemic has further amplified this phenomenon, leading to an increase in incidents of aggression toward healthcare workers and the need for urgent prevention and management measures [3, 4]. Nurses are disproportionately affected, as it is one of the categories most exposed to physical and verbal aggression from patients, family members, or colleagues [5–9], as nurses interact with many different types of patients [10]. The frequency and intensity of violence exposure in nursing rivals are observed in traditionally high-risk occupations such as law enforcement [11].

Incidents of violence constitute a significant public health problem [1]. According to the WHO, WPV includes any incident in which staff are abused, threatened, or assaulted within their work environment; such an event poses an explicit or implicit risk to their safety, well-being, or health [1]. The European Agency for Safety and Health at Work includes the following behaviours: insults and uncivil behaviour; threats; forms of physical aggression; psychological aggression that jeopardize the health, safety, and well-being of the individual; and the presence of a racial or sexual component [2].

Numerous studies indicate that experiences of WPV in healthcare settings have significant physical and psychological consequences for nursing staff, such as anxiety disorders, depressive symptoms, burnout, and alterations in social functioning [12, 13]. Violence exposure not only affects psychological well-being but also compromises operational efficiency, increasing the time needed for care activities and delaying essential nursing tasks [14]. More recently, Arnetz and colleagues analysed the phenomenon of cognitive impairment among RNs exposed to episodes of WPV and reported that 74% of the sample reported some form of cognitive impairment, with a higher incidence of memory and attention processes. These cognitive impairments have direct implications for both patient safety and care quality [15].

Beyond individual-level consequences, the epidemiological dimension that explains the impact of violence on RNs, it is also essential to consider the epidemiological dimension of the phenomenon, since the spread and frequency of incidents affect the extent of individual and organizational consequences. Epidemiological studies have revealed consistently high prevalence rates of WPV against RNs. Among a large sample of nearly 2,000 Italian nurses, 32.4% reported WPV exposure in the preceding year [16]. Among triage nurses, violence exposure elicits emotional reactions, including anger (25%), irritation (16.7%), and feelings of lack of support (4.2%) [10]. The magnitude of the problem is further illustrated by U.S. data showing that approximately three-quarters of over 5,000 surveyed RNs experienced at least one WPV episode annually, predominantly verbal abuse (54.2% from patients, 32.9% from visitors) but also physical aggression (29.9% from patients) [17]. Data collected through surveys and retrospective database reviews revealed that approximately three-quarters of RNs had experienced at least one episode of WPV in the previous year, mainly in the form of verbal abuse (54.2% from patients and 32.9% from visitors) but also including episodes of physical aggression (29.9% from patients and 3.5% from visitors). The most frequent types of violent behaviour include shouting, insults, shoving, and physical acts such as scratching or kicking [17].

The multifaceted impact of WPV extends to both immediate and long-term professional outcomes. Indonesian nurses (n = 247) experiencing WPV alongside high workloads reported significantly reduced job satisfaction, even as pandemic-related pressures decreased [18]. These experiences can lead to memory suppression and avoidance behaviours [19] while simultaneously contributing to increased turnover, burnout, and reduced productivity [20].

Although the international literature has documented this phenomenon with increasing attention in recent years, there is still a lack of systematic reviews capable of providing a comprehensive mapping of the available evidence regarding the consequences of WPV on RNs, both in physical and psychological terms. Existing reviews have focused primarily on prevalence rates and preventive interventions [7], while comprehensive synthesis of WPV consequences across physical, psychological, and professional domains remains limited. No scoping review has systematically mapped the full spectrum of impacts on nurses' well-being and career trajectories.

This scoping review aims to systematically map existing evidence on WPV consequences for RNs across three domains: physical health outcomes, psychological well-being, and professional impacts, including turnover and job satisfaction.

Aim

This scoping review aims to map and synthesize evidence on the physical and psychological consequences of WPV against RNs. Specifically, it seeks to:

a) Map the existing quantitative and qualitative research on the consequences of WPV in nursing settings;
b) Identify gaps in the available literature;
c) Identify priorities for future research and knowledge translation [21].

The review questions are as follows: What does current evidence reveal about the physical and psychological consequences of WPV against RNs, and how do these experiences influence nurses' attitudes, professional commitment, turnover, and burnout?

The findings will inform future research priorities and support evidence-based decision-making for stakeholders addressing WPV in nursing.

Method

We conducted the scoping review according to Joanna Briggs Institute's (JBI) revised guidelines for scoping reviews [22, 23]. This design review methodology was further refined, and corresponding guidance was developed by a working group from JBI and the JBI Collaboration (JBIC) [21, 23] and the Preferred Reporting Items for Scoping Reviews (PRISMA-ScR) [24–26]. The protocol was prospectively registered on the Open Science Framework (April 19, 2025; https://osf.io/785qd) [23, 27].

The scoping review approach was selected to systematically map the breadth and nature of evidence on WPV consequences, identify knowledge gaps, and inform future research directions [24, 28].

Two qualitative studies were included. Their extracted findings were coded and grouped thematically. No data transformation was performed. In line with the JBI approach to mixed-method systematic reviews, a convergent synthesis was adopted, whereby qualitative and quantitative evidence were analysed separately and then integrated narratively to provide a comprehensive understanding of WPV outcomes [21].

Ethical approval was not required for this review, as it involved the synthesis of previously published literature and did not include primary data collection involving human participants. Clinical trial number: Not applicable.

Search strategy and study selection

The search strategy for this review was informed by the PCC mnemonic (population, concept, and context). This framework was applied during the formulation of the research question and guided the definition of the inclusion and exclusion criteria. Together, these elements determine the scope of the search terms and structure the subsequent processes of literature search and screening (Table 1) [24, 25].

The population of interest in this review consisted of qualified RNs of all ages and levels of professional experience who were employed in frontline roles across diverse healthcare contexts, including hospital and community-based settings. No restrictions were applied to clinical specialty or employment status. However, only RNs with documented WPV exposure were eligible. Exclusion criteria applied to nursing students; other categories of healthcare workers, such as nursing assistants or auxiliary staff; and nurses primarily engaged in administrative,

Table 1 Population, Concept, and context (PCC)

Population	This review will consider female and male nurses of all ages and levels of work experience, who are employed in different healthcare contexts, including hospital and community-based settings. The focus is on qualified and registered nurses who have been exposed to violent experiences in their workplace, without restriction on clinical specialty or employment status.
Concept	The central concept of this scoping review is to explore the consequences associated with workplace violence (WPV), both physical and psychological, affecting nurses in their professional environment. Attention is directed toward the range of potential outcomes, including psychological well-being, job satisfaction, professional identity, and overall health, with the aim of mapping how such incidents influence nurses' personal and professional trajectories.
Context	The review will include evidence from any geographical location and from diverse healthcare environments, encompassing primary, secondary, and tertiary care. No restrictions will be placed on the type of healthcare facility, to provide the broadest possible understanding of the effects of WPV on nurses across different cultural and organizational contexts.

research, or leadership positions without direct patient care responsibilities. Furthermore, individuals who had not experienced WPV, whether physical or psychological, were excluded from the scope of this review. The central concept was WPV directed against RNs, which involves examining both individual-level consequences (psychological wellbeing, stress, anxiety, depression, posttraumatic symptoms, resilience, professional identity) and organizational outcomes (job satisfaction, turnover intention, absenteeism, care quality). This framework captured the multidimensional impact of WPV across individual and system levels. Studies involving mixed healthcare professional groups were excluded unless nurses were analysed separately.

An iterative consultation process with a research librarian refined the search strategy to maximize sensitivity and precision. The following electronic databases were searched for relevant studies from January 2020 to March 2025: PubMed, CINAHL, PsycINFO, Web of Science and Scopus. Searches were also conducted via Google Scholar and ProQuest Dissertations & theses gray literature databases. Each article in English that met the inclusion criteria was then selected. The search was launched in March 2025, with a restriction applied to the publication date of the last five years [29]. Searches were limited to publications from 2020 to 2025 to capture evidence from the post-COVID-19 period, during which significant organizational and regulatory changes affected WPV patterns in healthcare [4, 9].

Once the initial exploratory search was conducted, a comprehensive search strategy of keywords and MeSH terms was developed for Ovid. The terminology identified within the titles and abstracts of potentially relevant studies, along with the controlled vocabulary and index terms assigned in the respective databases, was systematically reviewed and incorporated into the search strategy. This process ensured that the strategy was sensitive to variations in wording across different sources and disciplines. In accordance with the PCC framework, keywords and MeSH headings were selected to reflect the population of interest (RNs exposed to WPV), the central concept (physical and psychological consequences of WPV), and the context (healthcare settings across primary, secondary, and tertiary care). An example of some keywords and terms is presented below in Table 2. The search strategy is detailed in Appendix A.

The search strategy, including keywords and index terms, was independently reviewed by a university librarian and three coauthors to ensure accuracy and comprehensiveness. The search terms were adapted for each database to account for differences in indexing. Furthermore, the reference lists of all included studies were screened to identify any additional eligible publications. Search strategies were adapted for each database via the Systematic Review Accelerator tool to ensure consistency and minimize translation errors [30].

Three reviewers independently screened titles and abstracts via Rayyan software, with conflicts resolved through consensus discussion [31, 32].

The search identified 5.598 studies (Fig. 1) [26]. After 2.212 duplicates in Rayyan were removed, 3.386 articles underwent title and abstract screening. Nineteen full-text articles were assessed for eligibility, 15 of which met the inclusion criteria and were included in this review.

Conflicts were resolved through discussion between the reviewers, with a third reviewer consulting when consensus could not be reached. The reasons for the exclusion of full-text papers are shown in Fig. 1: PRISMA flow diagram.

Data charting

The data extraction process in this scoping review was conducted following the charting approach, aimed at generating a descriptive synthesis of the available evidence [25]. The preliminary research protocol was developed to define the extraction procedures and variables of interest, in alignment with the review question [29]. A tailored data charting form was created to capture key variables, including the author, publication details, study characteristics, and findings (Table 3). Variables were initially selected by the first author and subsequently validated through discussion with two coauthors and then discussed and validated with two coauthors to ensure methodological consistency and completeness.

Table 2 Examples of search keywords and mesh terms for MEDLINE (Ovid)

Population	(nurse OR nurs* OR registered nurse OR registered nurs*/OR exp nursing/OR nursing staff/OR exp nursing services/OR exp nursing staff, hospital)
Concept	(workplace violence OR violence/OR aggression OR aggressive behavior OR aggressiveness OR OR violent behavior OR aggressive behaviour OR violent behaviour) AND (burnout OR burn out OR burn-out OR career burnout OR stress psychological OR depression OR anxiety OR occupational stress OR job retention OR work retention OR skill* retention OR personnel retention OR employee retention OR staff retention OR retain* staff OR retain* employ* OR job satisfaction OR work satisfaction OR employ* OR career mobility OR career pathway* OR career intention* OR personnel turnover* OR staff turnover* OR employee turnover* OR career mobility OR job securit* OR employment securit* OR quit* profession* OR mov* job* OR job trans* OR work trans*OR absenteeism)
Context	(primary health care OR/hospitals OR hospital* OR general hospital* OR community hospital* OR teaching hospital* OR/critical care OR ambulatory care OR long-term care OR psychiatric care OR emergency care)

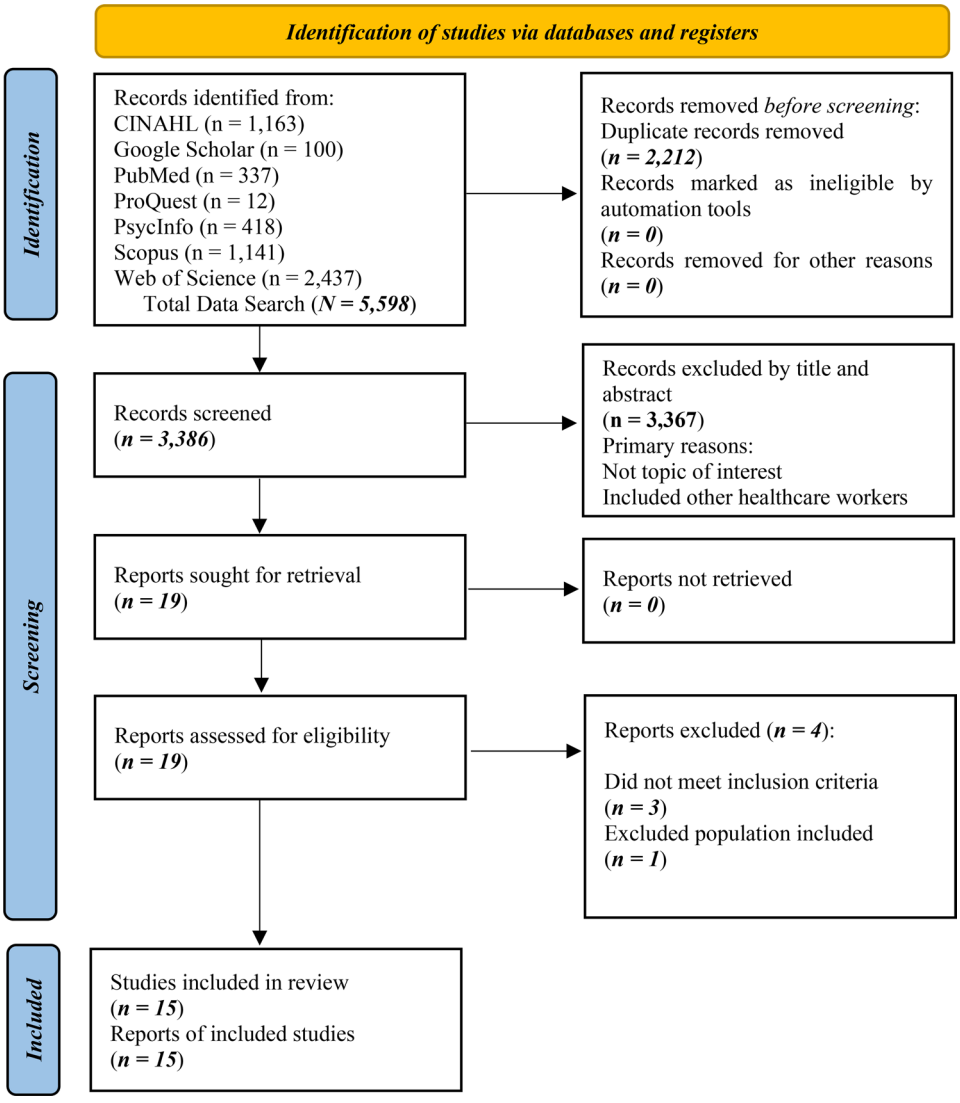

Fig. 1 PRISMA flow diagram

Results

Table 4 provides a summary of the characteristics of the studies included in this scoping review. The 15 included studies were published between 2020 and 2025: 2020 ($n = 3$), 2022 ($n = 2$), 2023 ($n = 4$), 2024 ($n = 5$), and 2025 ($n = 1$). No studies from 2021 met the inclusion criteria.

The majority of studies were conducted in Brazil and the United States, each with three studies representing 20% (Brazil: S2, S3, S15; USA: S1, S7, S8). Taiwan and China each followed, accounting for 13.3%, on the basis of two studies each (Taiwan: S4, S13; China: S6, S10). The Netherlands, Turkey, South Korea, South Korea and Hong Kong combined, and Japan each contributed a single study, collectively accounting for 33.4% (S5, S9, S11, S12, S14).

The studies included in this review presented a variety of methodological approaches, although the majority relied on quantitative cross-sectional designs. Specifically, eight studies adopted this methodology (S2, S4, S6, S8, S9, S11, S13, and S14) and aimed to examine the associations between WPV and outcomes such as burnout, turnover intention, and psychological well-being. In contrast, two studies (S7, S15) utilized a descriptive cross-sectional design, focusing primarily on the prevalence and descriptive correlates of WPV. Moreover, one study (S12) adopted a cross-sectional correlational approach, comparing data across South Korea and Hong Kong. Additionally, one study (S10) incorporated a propensity score matching technique within a cross-sectional framework to strengthen the internal validity of the findings.

In addition to cross-sectional approaches, the review also identified two qualitative descriptive studies (S1, S3) that explored the subjective experiences of nurses, providing insights into the outcomes of workplace assaults

Table 3 Summary of included studies. Characteristics of the 15 studies included in the scoping review

Summary of included studies					
Article title / Journal	**Country / Year / Author**	**Study design**	**Sample size**	**Measurement / Instrument**	**Key findings**
S1) Qualitative analysis of workplace assault outcomes from the perspectives of emergency nurses Journal of Emergency Nursing	United States of America Gillespie GL, Berry P. (2023)	Qualitative descriptive study	*n* = 167	Open-ended narrative questionnaire analyzed via conventional content analysis	Workplace assaults against emergency department nurses produce multidimensional consequences extending beyond the affected staff members. The qualitative study identified four main impact categories: effects on patients/visitors (removal, arrest, restraints), consequences for nurses (physical harm, psychological disturbances, lack of support), workplace impacts (variable security interventions), and care delivery effects (reduced productivity, concentration difficulties). Despite the frequency of episodes, post-assault psychological support was nearly nonexistent [33]
S2) Burnout syndrome and workplace violence among nursing staff: a cross-sectional study São Paulo Medical Journal	Brazil Tsukamoto SAS, Galdino MJQ, Barreto M C, Martins JT. (2022)	Cross-sectional study	*n* = 242	(1) Survey Questionnaire Workplace Violence in the Health Sector (OMS, ICN, ILO) (2) Maslach Burnout Inventory – General Survey (MBI-GS), validated Brazilian version	The study conducted in a Brazilian university hospital investigated the association between workplace violence and burnout syndrome. Results show that exposure to physical violence, verbal abuse, and concerns about the possibility of experiencing violence are significantly correlated with high levels of emotional exhaustion, depersonalization, and low professional accomplishment. These effects manifest even in the absence of recent episodes, suggesting that risk perception alone can compromise psychological well-being [34]
S3) Workplace violence and professional quality of life among primary care nurses Acta Paulista de Enfermagem	Brazil Fabri NV, Martins JT, Galdino MJQ, Ribeiro RP, Moreira AAO. (2022)	Quantitative, cross-sectional and analytical study	*n* = 101	(1) Survey Questionnaire Workplace Violence in the Health Sector (OMS, ILO, ICN) (2) Professional Quality of Life Scale (ProQOL-V), validated Brazilian version	The study analyzed the association between workplace violence and professional quality of life among nurses in Primary Health Care Units in Brazil. Results show a significant prevalence of verbal violence (65.3%), followed by moral harassment (29.7%) and physical violence (17.8%). Low compassion satisfaction was found in 54.5% of participants, while high burnout and post-traumatic stress affected 58.4% and 57.4% respectively. Compassion satisfaction was associated with the presence of moral harassment, encouragement to report violence, and the existence of consequences for aggressors. Post-traumatic stress was correlated with physical violence and the lack of standard reporting procedures. and more supportive work environments [35]
S4) Effect of workplace violence on turnover intention: the mediating roles of job control, psychological demands, and social support INQUIRY: The Journal of Health Care Organization, Provision, and Financing	Taiwan Yeh TF, Chang YC, Feng WH, Sclerosis M, Yang C C. (2020)	Cross-sectional quantitative study	*n* = 198	(1) Workplace Violence in the Health Sector Country Case Studies Research Instruments – Survey Questionnaire (ILO, ICN, WHO, PSI) (2) Chinese version of the Job Content Questionnaire (C-JCQ) (3) Mobley Turnover Intention Scale	The study involved clinical nurses from two regional university hospitals in Taiwan, aiming to analyze the relationship between workplace violence and intention to leave the job. Data show that 46.7% of participants experienced at least one episode of violence, with a prevalence of verbal abuse (70.7%), followed by physical violence (27.3%), sexual harassment (24.7%), and bullying (14.1%). The main sources of external violence were patients' family members (79.8%), while among internal sources, physicians emerged (43.9%). The analysis revealed that workplace violence is positively correlated with intention to leave the job, and this relationship is mediated by increased psychological demands and reduced perceived social support. Job control showed a significant correlation but did not have a direct mediating effect [36]

Table 3 (continued)

Summary of included studies					
Article title / Journal	**Country / Year / Author**	**Study design**	**Sample size**	**Measurement / Instrument**	**Key findings**
S5) Exploring the consequences of aggressive experiences on psychiatric nurses: a real-time assessment study Perspectives in Psychiatric Care	Netherlands Weltens I, Drukker M, van Amelsvoort T, Domen P, Bak M. (2024)	Observational study using ESM (Experience Sampling Method)	*n* = 29	Data collection: PsyMate™ app installed on mobile devices Measures: (1) Semi-structured questionnaires on emotions, sleep, work context and presence of aggressive episodes (2) Likert scales to assess positive/negative affects, sleep quality, safety perception and use of de-escalation techniques (3) Final debriefing questionnaire	The study involved psychiatric nurses working in a HIC (High Intensive Care) unit in the Netherlands, aiming to analyze in real-time the behavioral and emotional consequences of workplace aggression episodes. Using the Experience Sampling Method (ESM), participants responded to 16 daily notifications for one week, both during work and at home. Fifty-three aggression episodes were recorded, of which 48% were verbal, 28% physical, and 15% against objects. Participants' morning responses (regarding sleep, motivation, and mood) showed no statistically significant associations with the presence of a working day, the number of hospitalized patients, or the occurrence of aggressive episodes. Social behavior and sleep quality were also not affected by aggression episodes. The most frequently used de-escalation techniques were direct contact with the patient and active listening [37]
S6) The impact of psychological violence in the workplace on turnover intention of clinical nurses: the mediating role of job satisfaction BMC Nursing	China Luo Y, Zhang M, Yu S, Guan X, Zhong T, Wu Q, Li Y. (2024)	Cross-sectional quantitative study	*n* = 206	(1) Psychological violence: Workplace Psychologically Violent Behaviours Instrument (WPVB) by Yildirim (2008) (2) Job satisfaction: McCloskey/Mueller Satisfaction Scale (MMSS) (3) Turnover intention: Turnover Intention Scale by Brough & Frame (2004)	The study involved clinical nurses from a tertiary hospital in Guangzhou, China, aiming to analyze the effect of psychological workplace violence on turnover intention, considering job satisfaction as a mediating variable. Results show that 41.75% of participants reported significant exposure to psychological violence, with higher scores among those working over 40 h per week. The analysis revealed a negative correlation between psychological violence and job satisfaction and a positive correlation between psychological violence and turnover intention. Job satisfaction was in turn negatively correlated with intention to leave the job. Structural equation modeling confirmed that job satisfaction partially mediates the effect of psychological violence on turnover intention, accounting for 43.97% of the total effect [38]
S7) The impact of patient assaults and aggressive behaviors on nursing personnel's stress, well-being, and intention to leave post–COVID-19 pandemic The Journal of Nursing Administration	United States of America Chipps E, Weaver SH, Wood T, Sinnott LT, McCarthy K (2024)	Descriptive cross-sectional study	*n* = 432	(1) Prevalence of aggression: Perception of Prevalence of Aggression Scale (POPAS) (2) Work-related stress: Devilliers, Carson, and Leary Stress Scale (DCL) – "patient demands" subscale (3) Professional engagement: Utrecht Work Engagement Scale (UWES) (4) Psychophysical well-being: RAND Short Form 36 (SF-36) (5) Turnover intention: Intent to Leave Scale (3 items)	The study involved nurses, technicians, and assistants employed in general medicine, mental health, and emergency departments across three U.S. healthcare systems. Data show that 74% of participants experienced frequent verbal assaults, while 41% reported episodes of threatening physical behavior. Verbal assaults were more common in emergency departments, which also recorded the highest incidence of destructive aggression, severe self-harm, suicide attempts, and sexual intimidation. Exposure to these behaviors is associated with lower mental health scores, greater work-related stress, reduced professional engagement (particularly in the dedication dimension), and increased intention to leave the job. The increase in post-pandemic aggression was significant across all departments, with a widespread perception of faster escalation of aggressive behaviors by patients [39]
S8) Workplace violence, work-related exhaustion, and workplace cognitive failure among nurses: a cross-sectional study Journal of Advanced Nursing	United States of America Arnetz JE, Baker N, Arble E, Arnetz BB. (2025)	Cross-sectional quantitative study	*n* = 505	(1) Workplace violence: two categorical items (physical and non-physical violence), questions on source, injuries, and absences (2) Work exhaustion: Work-related Exhaustion Subscale of the Quality Work Competence (QWC) questionnaire (3) Protective factors: - Workplace Efficiency Scale (4 items) - Competence Development Scale (4 items) 4. Cognitive failure: Workplace Cognitive Failure Scale (WCFS) 15 items divided into three subscales (memory, attention, action)	The study involved nurses from a U.S. state to analyze the relationship between workplace violence exposure, work exhaustion, and cognitive failures during professional activity. 39.3% of participants reported episodes of physical violence and 63.7% of non-physical violence (verbal aggression, threats, bullying). Data show that both forms of violence are associated with higher levels of work exhaustion, which in turn correlates with higher cognitive failure scores in the dimensions of memory, attention, and action. Physical violence showed a significant direct effect only on the "action" dimension of cognitive failure, while the effects of other variables (non-physical violence, work efficiency, skill development) were significant only indirectly, mediated by exhaustion. 74% of nurses reported at least one symptom of cognitive failure at work [15]

Table 3 (continued)

Summary of included studies					
Article title / Journal	**Country / Year / Author**	**Study design**	**Sample size**	**Measurement / Instrument**	**Key findings**
S9) Workplace violence and nurses' psychological well-being: the mediating role of burnout and the moderating role of psychological resilience Archives of Psychiatric Nursing	Turkey Kolutek R, Erkutlu H, Chafra J. (2024)	Cross-sectional quantitative study	*n* = 945	(1) Workplace violence: Exposure to Violence Scale (Itzhaki et al., 2018) 4 items on Likert scale (2) Psychological well-being: Flourishing Scale (Diener et al., 2010) 8 items (3) Burnout: Copenhagen Burnout Inventory, 7 items (4) Psychological resilience: Connor-Davidson Resilience Scale (CD-RISC) 8 items	The study involved nurses from 15 hospitals in Turkey, aiming to analyze the relationship between workplace violence exposure and psychological well-being, considering burnout as a mediator and psychological resilience as a moderator. Results show that 61.3% of participants experienced at least one episode of workplace violence in the past year. The analysis revealed a negative correlation between violence and psychological well-being, and a positive correlation between violence and burnout. Furthermore, psychological resilience significantly moderated the relationship between violence and well-being: participants with high levels of resilience showed less negative impact on psychological well-being compared to those with lower resilience. All variables were strongly intercorrelated [40]
S10) Impact of workplace violence against psychological health among nurse staff from Yunnan-Myanmar Chinese border region: propensity score matching analysis BMC Nursing	China Ding C, Li L, Li G, Li X, Xie L, Duan Z. (2023)	Cross-sectional study with propensity score matching	*n* = 1,774	(1) Workplace violence: Chinese version of Workplace Violence Scale (WVS) 5 dimensions (physical aggression, emotional abuse, threats, verbal harassment, sexual abuse) (2) Sleep quality: Single-item Sleep Quality Scale (SQS) (3) Anxiety: Generalized Anxiety Disorder-7 (GAD-7) (4) Depression: Patient Health Questionnaire-9 (PHQ-9) (5) Loneliness: Three-Item Loneliness Scale (6) Perceived cognitive deficits: Perceived Deficits Questionnaire (PDQ-5) (7) Resilience: Connor-Davidson Resilience Scale 10 items (CD-RISC-10) (8) Social support: Multidimensional Scale of Perceived Social Support (MSPSS)	The study involved nurses from 18 public hospitals in the border region between Yunnan and Myanmar, China. Through Propensity Score Matching analysis, the association between workplace violence exposure and various mental health indicators was examined. Results show that 31.5% of participants experienced at least one episode of workplace violence in the past year. Nurses exposed to violence reported significantly worse scores in terms of sleep quality, anxiety and depressive symptoms, loneliness, perceived cognitive deficits, resilience, and social support. The analysis revealed significant differences between pre and post matching groups, confirming the effectiveness of the PSM method in controlling confounding factors [41]
S11) Effects of emergency nurses' experiences of violence, resilience, and nursing work environment on turnover intention: a cross-sectional survey Journal of Emergency Nursing	South Korea Park JE, Song MR (2023)	Descriptive cross-sectional study	*n* = 100	(1) Violence experiences: questionnaire by Yeon et al. (2008) 20 items on frequency and severity of violence by patients and caregivers (2) Resilience: scale by Park & Park (2015) 30 items on 1–4 Likert scale (3) Work environment: Korean version of the Practice Environment Scale of the Nursing Work Index 29 items, 5 subdimensions (4) Turnover intention: scale by Michaels & Spector (1982) 3 items on 1–5 Likert scale	The study involved emergency department nurses from four regional medical centers in South Korea, aiming to analyze the combined effect of violence experience, resilience, and nursing work environment on intention to leave the job. Data show that the most frequent forms of violence were verbal abuse by patients (mean 2.61) and caregivers (mean 2.49), followed by psychological and physical violence. Female nurses reported higher turnover intention scores compared to males. Participants with greater seniority in emergency departments showed higher levels of intention to leave the job. The variables that most influenced turnover intention were resilience (negatively), frequency of violence by patients (positively), and perception of leadership and support from nursing managers (negatively) [42]

Table 3 (continued)

Summary of included studies					
Article title / Journal	**Country / Year / Author**	**Study design**	**Sample size**	**Measurement / Instrument**	**Key findings**
S12) Post-traumatic responses to workplace violence among nursing professionals: a collaborative and comparative study in South Korea and Hong Kong BMC Nursing	South Korea e Hong Kong Hong S, Nam S, Wong JYH, Kim H. (2023)	Cross-sectional correlational study	*n* = 471	(1) Workplace violence: dichotomous question (2) Violence perception: trivialization of Workplace Violence Scale (3) Attitudes toward aggression: Perception of Aggression Scale (POAS) (4) Coping strategies: Brief COPE Inventory (5) Post-traumatic cognitions: Post-Traumatic Cognitions Inventory (PTCI) (6) Post-traumatic stress: PTSD Checklist Civilian Version (PCL-C) (7) Post-traumatic growth: Post-Traumatic Growth Inventory (PTGI) (8) Negative emotional state: Depression Anxiety Stress Scales Short Form (DASS-21)	The study involved nurses (319 in South Korea and 152 in Hong Kong) aiming to compare the prevalence of workplace violence, associated factors, and post-traumatic responses between the two contexts. 30.7% of South Korean nurses and 31.6% of Chinese nurses in Hong Kong reported experiencing workplace violence in the past year. Exposed participants showed lower perception of violence severity and greater tendency to consider it part of the job. Differences between the two groups also emerged in coping strategies and post-traumatic stress levels: South Korean nurses reported higher scores for stress, depression, and avoidance symptoms compared to their Hong Kong colleagues. Attitudes toward aggression and coping modalities were significant variables in the association with violence exposure [43]
S13) The effect of multiple types of workplace violence on burnout risk, sleep quality, and leaving intention among nurses Annals of Work Exposures and Health	Taiwan Pien LC, Cheng Y, Lee FC, Cheng WJ. (2024)	Cross-sectional quantitative study	*n* = 1,742	(1) Workplace violence: Single question on 4 types of violence (physical, verbal, psychological, sexual harassment) (2) Burnout: Chinese version of the Copenhagen Burnout Inventory (C-CBI) 5 items for personal burnout, 6 for patient-related burnout (3) Sleep quality: single item on sleep difficulties (1–5 Likert scale) (4) Intention to leave work: Turnover Intention Scale (3 items, 1–5 scale) (5) Working conditions: Job Content Questionnaire (C-JCQ) for job control and psychological demands Workplace Justice Scale (9 items)	The study involved hospital nurses in Taiwan, aiming to analyze the association between different types of workplace violence and three outcomes: burnout risk, sleep quality, and intention to leave work. 66.7% of participants reported at least one episode of violence in the past year, and 26.9% experienced both physical and non-physical violence. Mean scores for personal burnout and patient-related burnout were significantly higher among those who experienced non-physical violence (55.55 and 43.27) and those who experienced multiple violence (55.79 and 44.33), compared to those who experienced no violence (44.93 and 34.11). Sleep quality was also worse (mean 2.56) and turnover intention higher (mean 8.43) among those who experienced multiple violence. Multivariate analysis showed that exposure to multiple forms of violence significantly increases the risk of personal burnout (OR = 2.12), patient-related burnout (OR = 2.36), poor sleep quality (OR = 1.95), and high turnover intention (OR = 1.80), compared to those who experienced no violence. Furthermore, unfavorable working conditions such as low job control, high psychological demands, and low organizational justice were more frequent among nurses exposed to non-physical or multiple violence [44]

Table 3 (continued)

Summary of included studies					
Article title / Journal	**Country / Year / Author**	**Study design**	**Sample size**	**Measurement / Instrument**	**Key findings**
S14) Workplace violence and its effects on burnout and secondary traumatic stress among mental healthcare nurses in Japan International Journal of Environmental Research and Public Health	Japan Kobayashi Y, Oe M, Ishida T, Matsuoka M, Chiba H, Uchimura N. (2020)	Cross-sectional quantitative study	n = 599	(1) Workplace violence: questionnaire adapted from WPV in the Health Sector Country Case Studies Research Instruments (ILO/ICN/WHO/PSI) (2) Burnout, secondary traumatic stress, professional satisfaction: Professional Quality of Life Scale (ProQOL) validated Japanese version (3) Psychological well-being: WHO-5 Well-Being Index (4) Psychological distress: Kessler Six-Item Scale (K6) (5) Alcoholism: Alcohol Use Disorder Identification Test (AUDIT) (6) Anger reactions: Dimensions of Anger Reaction-5 (DAR-5) translated version	The study involved nurses and nursing assistants employed in eight psychiatric facilities in the Kyushu region, Japan, aiming to analyze the prevalence of workplace violence and its association with burnout and secondary traumatic stress. 44.7% of participants reported experiencing at least one episode of workplace violence in the preceding 12 months, with a prevalence of verbal (62.3%) and physical violence (60.4%). Mean scores for burnout (26.5) and secondary traumatic stress (13.6) were significantly higher among participants exposed to violence compared to those not exposed (24.4 and 10.6 respectively). However, multivariate analysis revealed that only burnout is significantly associated with experienced violence (OR = 1.99), while secondary traumatic stress showed no direct association. Mean resilience score was not directly measured, but professional satisfaction (compassion satisfaction) was lower among exposed subjects (23.5 vs. 25.2), suggesting reduced adaptive capacity [45]
S15) Physical violence and verbal abuse against nurses working with risk stratification: characteristics, related factors, and consequences Revista Brasileira de Enfermagem	Brazil Ceballos JB, Frota OP, Nunes HFSS, Ávalos PL, Krügel CC, Ferreira Jr, MA, Teston EF. (2020)	Descriptive cross-sectional study	n = 80	Workplace violence: Questionnaire adapted from Morais Filho (2009), composed of two sections: Part 1: sociodemographic data, violence perception, risk factors Part 2: physical and verbal violence experiences in the past 12 months (frequency, aggressor, consequences, actions taken)	The study involved nurses employed in risk assessment in emergency services in Campo Grande, Brazil, aiming to analyze the characteristics, associated factors, and consequences of physical and verbal workplace violence. 90% of participants experienced at least one episode of verbal abuse, while 17.5% reported episodes of physical violence in the past year. The main aggressors were patients (100% of physical violence cases) and their companions (86.1% of verbal abuse cases). Women showed a 5.83 times higher probability of experiencing verbal violence compared to men (p = 0.026), while nurses with less than five years of experience showed a 74% lower probability of experiencing physical violence (p = 0.029). The most frequent consequences were sadness (15.8%) and fear of the aggressor (15.3%) for verbal abuse, and stress (22.2%) and fear (22.2%) for physical violence. Mean perceived workplace safety score was significantly lower among victims of physical violence (p = 0.017) [46]

Data extracted include: article title and journal, country of origin, publication year, authors, study design, sample size, measurement instruments used, and key findings related to the physical and psychological consequences of workplace violence against registered nurses

Table 4 Factors associated with workplace violence consequences and nursing outcomes

Categories /Factors reported	Supporting studies
Physical and Psychological Health Consequences: Studies that examined the direct health impacts of workplace violence on nurses, including physical injuries and a range of psychological outcomes (e.g., anxiety, depression, PTSD symptoms, sleep disturbances)	S1, S2, S3, S5, S7, S8, S9, S10, S12, S13, S14
Burnout and Professional Exhaustion: Studies that explored the relationship between workplace violence exposure and core dimensions of burnout, including emotional exhaustion, depersonalization, and reduced professional accomplishment	S2, S3, S4, S8, S13, S14
Adverse Emotional Responses: Studies that explored the spectrum of negative emotional reactions triggered by workplace violence, including fear, hostility, frustration, sadness, and feelings of helplessness	S1, S2, S3, S7, S10, S15
Turnover Intention and Job Satisfaction: Studies that analysed how workplace violence affects nurses' intention to leave their position, overall job satisfaction, career commitment, and organizational stability	S4, S6, S7, S9, S11, S13, S15
Organizational and Professional Development: Studies that examined initiatives aimed at staff growth and support, including education, mentoring, workplace improvement, and organizational strategies to strengthen resilience, support mental well-being, and promote retention	S1, S6, S9, S11, S14, S15

and professional quality of life. Notably, one study (S5) employed a distinct methodological approach by using an observational design with the experience sampling method (ESM), enabling the real-time capture of aggressive experiences among psychiatric nurses.

Overall, while cross-sectional methodologies predominated, considerable methodological heterogeneity was evident. This mixture of quantitative, qualitative, and innovative observational methods highlights both the complexity of WPV research and the importance of integrating multiple perspectives to comprehensively assess its impact on nursing staff.

In the reviewed studies, the majority (86.6%) used online survey instruments for data collection (S2, S3, S4, S6, S7, S8, S9, S10, S11, S12, S13, S14, and S15). One study (6.7%) used postal questionnaires with paper copies mailed to participants (S1). Additionally, one study (6.7%) employed mobile technology via the experience sampling method with a smartphone application for real-time data collection (S5). No face-to-face interviews or focus groups were identified in the reviewed studies.

The 15 studies reviewed varied in their sample sizes, ranging from as few as 29 RNs in the Netherlands (S5) to as many as 1,774 RNs from China (S10). Notably, the nurses who participated in these studies held a minimum of a bachelor's degree and were registered with the relevant governing bodies (S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S13, S14, S15).

Several studies placed particular emphasis on the requirement that participants have direct experience with WPV episodes to meet their inclusion criteria, establishing specific temporal reference periods for such episodes. Study S1 required RNs to report WPV episodes experienced in the last 30 days, whereas studies S2, S3, S13, and S15 extended the observation period to the last 12 months. One study (S4) did not specify temporal limits and focused instead on providing a detailed description of the administered questionnaire structure for WPV assessment. In contrast, the methodological approach of S5 differed significantly. This study recruited all nurses working in the high-intensity care (HIC) unit of a large mental institution in Maastricht, Netherlands, without focusing on previous WPV episodes. Instead, it involved experimenting with the use of a PsyMate™ smartphone application for real-time data collection. Studies S6, S7, S9, S10, S12, and S14 did not impose specific temporal constraints regarding experienced WPV episodes; however, they established other inclusion criteria: study S6 highlighted that the majority of participants were women (96.6%), study S7 required participants to have been working for at least 6 months, and study S12 excluded nurses hired within the last 6 months. Study S8 included exclusively RNs and advanced practice registered nurses (APRNs) registered with the Michigan Organization of Nurse Leaders (MONL) and the Coalition of Michigan Organizations of Nursing (COMON). Particularly relevant was the approach of Study S11, which specifically included nurses who had at least one documented experience of WPV. Study S14 expanded the sample to include both RNs and nursing assistants, analysing the phenomenon of violence in both professional categories. Given that the authors reported data separately for each professional group, we were able to extract and include only the data pertaining to registered nurses, in accordance with our inclusion criteria.

Studies have documented diverse consequences of WPV across individual, organizational, and patient care domains (Table 4). Key findings are synthesized below by consequence type. Most studies (70%) have examined specific factors while also measuring job satisfaction, turnover intention, or other related physical and psychological conditions.

The categories identified included several types of consequences. These included consequences of assaults on patients and visitors, such as eviction from the emergency department, use of restraints, or referral to law enforcement (S1); effects on healthcare workers, including physical and psychological outcomes and the need

for peer support or debriefing (S1); impacts on the workplace, such as police or security involvement and visitor reactions (S1); and consequences for patient care and work productivity (S1).

Other studies highlighted significant associations between exposure to violence and emotional exhaustion, depersonalization, and reduced professional accomplishment (S2); the prevalence of various forms of violence (verbal abuse, psychological harassment, physical aggression, sexual harassment, and racial discrimination) linked to burnout, posttraumatic stress, and compassion satisfaction (S3); and the complexity of the relationship between WPV and turnover intention (S4).

Additional findings included sleep quality and physical fatigue, which are not always significantly related to aggressive incidents (S5); correlations between psychological violence, job satisfaction, and turnover intention, with job satisfaction partially mediating the relationship (S6); increases in verbal, psychological, and physical assaults during the pandemic, with strong impacts on mental health and the intent to leave (S7); physical violence as a predictor of workplace cognitive failure, which is mediated by work-related exhaustion (S8); and a protective role of psychological resilience in moderating the effects of violence (S9).

Further studies documented the impact of WPV on sleep quality, anxiety, depression, loneliness, perceived cognitive deficits, and reduced social support (S10); the importance of resilience, frequency of violence, and managerial support as predictors of turnover intention (S11); associations between WPV and posttraumatic responses (S12); worse outcomes for RNs experiencing multiple types of violence, including higher burnout, poor sleep quality, and greater intention to leave (S13); the cumulative and long-lasting stress effects of WPV, particularly in psychiatric settings (S14); and gender- and experience-related differences, with female nurses and less experienced staff being more vulnerable to violent incidents and their consequences (S15).

Discussion

This scoping review of 15 studies across 8 countries reveals that WPV consequences extend far beyond immediate physical injury, encompassing persistent psychological distress, professional burnout, and organizational instability. The cumulative evidence demonstrates that WPV fundamentally threatens both individual nurses' well-being and healthcare system sustainability. While cross-sectional designs predominated, the methodological diversity identified, including large-scale surveys, qualitative studies, and real-time observational approaches, reflects the multifaceted nature of WPV research. This heterogeneity, however, also reveals limitations in causal inference and longitudinal understanding.

The evidence consistently reveals bidirectional relationships between WPV exposure and adverse outcomes: violence directly causes psychological distress and burnout, which in turn increase vulnerability to future violence through impaired cognitive function and reduced coping capacity. Consequences manifested across multiple domains: immediate physical injuries and acute psychological distress (anxiety, depression, PTSD) were accompanied by longer-term professional impacts, including burnout, diminished career commitment, and compromised care quality. Notably, psychological and professional consequences often persist even after physical injuries have healed. These impacts varied systematically by context: emergency and psychiatric settings presented higher violence rates, whereas strong managerial support and individual resilience buffered negative effects. Higher rates were reported in 6 of the 15 included studies (S1, S5, S7, S11, S14, S15) with comparisons typically internal to departments or service types. Emergency and psychiatric nurses experienced high prevalence of verbal and physical violence (ranging from 48% to 90%), accompanied by psychological effects such as emotional exhaustion, stress, fear, reduced job satisfaction, and in some cases increased turnover intention. Female nurses and those with less experience demonstrated increased vulnerability.

The following sections discuss these findings organized by consequence domain (psychological, physical, professional), examine methodological limitations, and identify priorities for future research and intervention development.

Physical and psychological health consequences

Before examining specific psychological outcomes, it is important to note that several studies differentiated the impacts of various forms of WPV. Physical aggression was more frequently associated with acute injuries and post-traumatic stress symptoms, whereas verbal abuse and threats showed stronger associations with emotional exhaustion, cognitive impairments, and reduced job satisfaction [33–37].

These patterns indicate that different types of violence exert distinct effects across physical, psychological, and professional domains.

Psychological consequences

Gillespie and colleagues documented a high prevalence of negative psychological effects following episodes of violence, reported by 58.7% of participants [33]. The most common reactions included anxiety, fear, frustration, anger, and feelings of helplessness. Some nurses reported feelings of embarrassment and guilt, often believing that they were partly responsible for the violent episode.

Furthermore, several nurses reported fears of aggression outside the workplace [33].

Consistent with these findings, Fabri and colleagues reported high levels of posttraumatic stress in 57.4% of participants, which was significantly associated with episodes of physical violence [35]. A notable finding was the widespread use of psychotropic drugs among 68.3% of participants.

In addition to posttraumatic stress, Arnetz and colleagues highlighted that work exhaustion acts as a central mediator between exposure to violence and cognitive failure, such as memory errors, distractions, and inappropriate actions [15].

Ding and colleagues demonstrated a direct and significant impact of violence on nurses' psychological well-being [36]. Nurses who experienced WPV reported cognitive deficits, including difficulties with concentration, memory, and planning. These impairments pose significant risks to clinical safety [38].

Consistent with these findings, Hong and colleagues reported a high prevalence of WPV among RNs in South Korea and Hong Kong, demonstrating a close correlation with posttraumatic stress symptoms [39]. Both groups reported self-blame and negative self-cognition.

Pien and colleagues reported that WPV was associated with significantly compromised sleep quality among nurses, resulting in difficulty falling asleep, frequent awakenings, and nonrestorative sleep [37].

According to Kobayashi and colleagues, exposure to WPV was associated with significant mental health impairment, with lower scores on the WHO-5 psychological well-being index and higher scores on the K6 distress scale [40].

The psychological consequences of WPV are widespread and pervasive, manifesting through posttraumatic stress, anxiety, depression, and cognitive impairments affecting memory and concentration. The high prevalence of psychotropic medication use underscores the severity and chronicity of these effects. These outcomes extend beyond the workplace, influencing nurses' perceptions of safety in their daily lives.

Physical consequences

The physical consequences represent another critical aspect. In the study by Gillespie and colleagues, 16.2% of participants had suffered injuries, ranging from minor injuries (nosebleeds, lacerations, muscle pain) to more serious trauma [33]. Similarly, Tsukamoto and colleagues emphasized that violence causes both direct physical harm, which impacts daily work capacity, and indirect consequences [34]. These include physical and mental illness, social isolation, and increased intention to leave the profession.

Kolutek and colleagues documented various somatic symptoms and chronic conditions associated with WPV exposure [41]. Gastrointestinal disorders, muscle pain, weight fluctuations, insomnia, hypertension and, in the most severe cases, chronic conditions such as diabetes and cardiovascular disease were described.

A study by Hong and colleagues, while not providing data on specific injuries, noted that violence is often perceived as a normal phenomenon, contributing to its underestimation and underreporting [39].

The physical consequences of WPV include both acute injuries (lacerations, musculoskeletal trauma) and chronic conditions associated with prolonged exposure, such as gastrointestinal disorders, chronic pain, sleep disturbances, and cardiovascular diseases. The normalization of violence in healthcare settings contributes to underreporting and inadequate documentation of injuries, masking the true extent of this occupational hazard.

Burnout and professional exhaustion

Several studies included in this review investigated the relationship between WPV and burnout, highlighting both direct and indirect mechanisms through which experiences of violence affect the emotional well-being of RNs.

A study by Tsukamoto and colleagues revealed a strong association between WPV and symptoms of burnout, particularly emotional exhaustion and depersonalization [34]. Nurses exposed to physical violence, verbal abuse, or fear of violence were at significantly greater risk of developing emotional exhaustion. This condition is characterized by chronic fatigue and a reduced ability to manage emotional demands. Verbal abuse increased the risk of emotional exhaustion more than threefold and increased the risk of depersonalization by approximately 2.5-fold, whereas physical violence increased the risk threefold for both dimensions.

A study conducted by Fabri and colleagues, based on the ProQOL-V scale, revealed that 58% of nurses reported high levels of burnout; the sample consisted of 88.6% nurses, and burnout was significantly associated with various forms of violence, including verbal, physical, moral, sexual, and racial abuse [35]. This suggests that although burnout is highly prevalent, it may also stem from broader structural and organizational factors. In the same study, however, more than half of the participants reported high levels of secondary traumatic stress, which was significantly associated with physical violence and the absence of reporting procedures. This condition, although distinct from burnout, could amplify its effects [35].

Consistently, Te-Feng and colleagues explored indirect pathways linking WPV to professional burnout

[42]. By applying conservation of resources theory, the authors highlighted that WPV increases psychological demands such as workload, pressure, and interpersonal conflicts. These factors consume emotional resources and promote emotional exhaustion.

In a 2025 study, Arnetz and colleagues confirmed that both physical and verbal violence are significant predictors of burnout, with psychological forms such as verbal abuse and threats having a particularly marked impact [15]. Exhaustion, in turn, was found to be the strongest direct predictor of cognitive failure (memory, attention, action), with significant implications for safety and quality of care. Similarly, Pien and colleagues assessed burnout using the Copenhagen Burnout Inventory, distinguishing between personal exhaustion and patient-related burnout [37]. Approximately 43% of the participants reported high levels of personal exhaustion, and more than half reported patient-related burnout. Verbal abuse doubled the likelihood of both forms of burnout, whereas multiple forms of abuse (physical and verbal) further increased the degree of risk.

Finally, Kobayashi et al. confirmed this association in a large sample and reported that nearly half of nurses had experienced violence in the past 12 months. Multivariate analyses revealed that those who had experienced WPV had an almost twofold increased risk of burnout [40].

Overall, these results indicate that WPV contributes to burnout development through multiple pathways. In addition to direct exposure to violent episodes, indirect mechanisms include organizational context factors, reporting system availability, and social support access.

Adverse emotional responses

Several studies have shown that WPV elicits a wide spectrum of adverse emotional responses among RNs, with profound implications for both personal well-being and professional performance. The evidence highlights a recurring pattern of anxiety, fear, and insecurity, often accompanied by frustration, anger, humiliation, and self-blame, sometimes extending beyond the workplace into intrusive thoughts and reduced emotional support [33]. Consistent with these findings, high levels of posttraumatic stress and persistent anxiety have been observed, with nearly 60% of RNs reporting traumatic symptoms such as nightmares and hypervigilance [34, 35, 38]. Other studies have further linked WPV to clinically significant levels of anxiety and depression, along with diminished resilience and perceived social support, underscoring the cumulative psychological burden [36, 43]. Emotional consequences such as sadness, fear, and low self-esteem, reported by up to one in five nurses, confirm the pervasive and long-lasting nature of this impact [44]. Overall, the evidence indicates that WPV not only undermines nurses' mental health but also compromises their ability to provide safe and effective care.

Turnover intention and job satisfaction

WPV represents a significant determinant of turnover intention and job satisfaction among RNs, with direct implications for workforce stability and organizational performance. The evidence consistently indicates that exposure to violence, particularly psychological violence, substantially increases turnover intention, with a concrete prevalence ranging between 23% and 29% of RNs [37, 45]. WPV depletes psychological and emotional resources, heightens occupational stress and insecurity, whereas limited social support and reduced job control act as aggravating factors that reinforce the desire to leave [37, 38, 42]. Job satisfaction emerges as a critical mediator: lower levels are systematically associated with greater turnover intention, explaining up to 44% of the overall effect of violence on resignation intention [45]. Aggressive incidents diminish emotional well-being, engagement, and perceived organizational justice, thereby fostering burnout and demotivation [41, 43, 46]. Qualitative evidence further highlights that insecurity, fear, sadness, and frustration undermine professional retention, particularly in contexts where institutional prevention and support mechanisms are lacking [44]. Overall, WPV not only erodes job satisfaction but also triggers a vicious cycle of stress, burnout, and disengagement, ultimately increasing nurses' turnover intention.

Organizational and professional development

WPV not only has immediate effects on RNs but also has organizational weaknesses that affect professional development. Postincident support has been shown to be largely insufficient, with only 1.2% of nurses receiving debriefing or supportive care, highlighting limited institutional attention to psychological recovery [33, 45]. In terms of prevention, 61.5% of RNs reported having received training, although its usefulness was not consistently acknowledged. These shortcomings also impact productivity, as 23.4% of respondents reported a decline in workflow following violent episodes [33].

In addition to organizational aspects, studies have explored the implications for professional development. Proactive coping has been associated with greater resilience and lower turnover intention, whereas peer support remains limited, with only 25.7% receiving physical support and even less emotional support [41]. Nurse managers play a crucial role in

fostering resilient environments and encouraging incident reporting [41], whereas nursing leadership has been shown to directly influence job satisfaction and turnover intention [46]. Moreover, the lack of concrete institutional actions and the underestimation of the problem compromise the organizational climate, fuelling frustration and diminishing professional motivation [44].

In conclusion, WPV represents a structural and cultural barrier to the professional development of nurses, undermining both individual well-being and organizational efficiency.

Limitations

Among the included studies, cross-sectional designs were frequently employed, which restricts the possibility of inferring causal relationships and may constrain the interpretation of findings. Furthermore, the geographical distribution of the studies was uneven: while research was represented from multiple countries, there was a limited presence of European studies, thereby reducing the generalisability of the findings to this context.

Conclusion

This scoping review highlights WPV as a persistent and multifaceted threat to nurses' health, with significant psychological and physical consequences. In this review, psychological violence emerged as the most frequently reported form, with common outcomes including anxiety, fear, posttraumatic stress, and depressive symptoms, as well as somatic effects such as sleep disturbances and chronic fatigue. Nevertheless, significant gaps persist in the literature, particularly regarding long-term outcomes and variations across clinical and cultural contexts.

The findings emphasize that WPV not only undermines nurses' individual well-being but also affects their organizational climate, quality of care, and patient safety. A lack of postincident institutional support and the underestimation of the problem by healthcare organizations emerge as critical issues that exacerbate the impact of violence, reduce resilience and increase the risk of professional attrition.

Considering these results, there is an urgent need to develop integrated strategies for WPV prevention, monitoring, and management, including targeted training, standardized protocols, and accessible psychological support systems. At the same time, further research is needed to investigate long-term physical and psychological consequences and assess the effectiveness of support interventions. A structured institutional commitment is essential to preserve nurses' psychological resilience and maintain the quality and safety of healthcare delivery.

Appendix A- Search strategy: Keywords and terms

PubMed < January 1, 2020, to March 28, 2025>.

Search Number	Search terms	Number retrieved
1	Registered Nurses	(77,149)
2	exp Nursing Service, Hospital OR exp Nursing OR exp Nursing Staff OR exp Nursing Services OR exp Nursing Staff, Hospital OR exp Nursing Stations	(3,049)
3	Nurs*	(334,079)
4	1 OR 2 OR 3	(1.273,179)
5	Aggression	(309,593)
6	Aggressive Behavior	(69,895)
7	Aggressiveness	(309,725)
8	Workplace Violence	(18,974)
9	Violent Behavior	(14,493)
10	Aggressive Behaviour	(71,200)
11	Violent Behavior	(14,493)
12	5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11	(323,335)
7	Job Satisfaction	(39,316)
8	Burnout	(34,188)
9	Follow-up	(55,701)
10	Intention-to-leave	(719,417)
11	Psycholog*	(125,494)
12	Consequence*	(12.871,672)
13	Impact	(2.087,772)
14	Stress	(1.403,347)
15	Well-being	(10.725,099)
16	Turnover	(204,778)
17	Distress	(213,984)
18	Anger	(1,105)
19	Anxiety	(379,555)
20	Depression	(20,701)
21	Fear	(116,941)
22	Frustration	(26,005)
23	Guilt	(15,180)
24	Hate	(1,991)
25	Hostility	(20,618)
26	Loneliss	(197,418)
27	Sadness	(8,996)
28	Health[ti]	(882,926)
29	Staff	(340,440)
30	Development	(7.230,488)
31	Physical Injuries	(204,838)
32	Morale	(241,576)
33	7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32	(15.173,794)
34	4 AND 12 AND 33	***1,105***

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Author contributions
DCan: Conceptualization, Methodology, Data Curation, Formal Analysis, Writing – Original Draft, Supervision, Validation, Project Administration, Guarantor. PF: Conceptualization, Methodology, Supervision, Validation, Writing – Original Draft, Writing – Review & Editing. SR: Conceptualization, Methodology, Writing – Review & Editing. IS: Investigation, Data Curation, Formal Analysis. DCal: Investigation, Data Curation, Formal Analysis.

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Data availability
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Declarations

Ethical approval and consent to participate
Ethical approval was not required for this scoping review, as it is based entirely on analysis of previously published literature. No human participants were directly involved; therefore, informed consent was not applicable. The protocol was registered on OSF (https://osf.io/785qd).

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

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References

1. World Health Organization. Workplace violence in the health sector: country case studies research instruments. Geneva: WHO; 2002. https://www.who.int/violence_injury_prevention/violence/activities/workplace/en/EuropeanAgencyforSafetyandHealthatWork.
2. EU-OSHA. Workplace violence and harassment: a European picture. 2011. https://osha.europa.eu/en/publications/workplace-violence-and-harassment-european-picture/view.
3. Vellani KH. Healthcare Crime Survey. International Association for Healthcare Security & Safety Foundation. 2019. https://iahssf.org/assets/2019-Healthcare-Crime-Survey-IAHSS-Foundation.pdf.
4. McGuire SS, Gazley B, Majerus AC, Mullan AF, Clements CM. Impact of the COVID-19 pandemic on workplace violence at an academic emergency department. Am J Emerg Med. 2022;53:285.e1-285.e5. https://doi.org/10.1016/j.ajem.2021.09.045.
5. Spector PE, Zhou ZE, Che XX. Nurse exposure to physical and nonphysical violence, bullying, and sexual harassment: a quantitative review. Int J Nurs Stud. 2014;51(1):72–84. https://doi.org/10.1016/j.ijnurstu.2013.01.010.
6. Ferri P, Silvestri M, Artoni C, Di Lorenzo R. Workplace violence in different settings and among various health professionals in an Italian general hospital: a cross-sectional study. Psychol Res Behav Manag. 2016;9:263–75. https://doi.org/10.2147/PRBM.S114870.
7. Liu J, Gan Y, Jiang H, Li L, Dwyer R, Lu K, Yan S, Sampson O, Xu H, Wang C, Zhu Y, Chang Y, Yang Y, Yang T, Chen Y, Song F, Lu Z. Prevalence of workplace violence against healthcare workers: a systematic review and meta-analysis. Occup Environ Med. 2019;76(12):927–37. https://doi.org/10.1136/oemed-2019-105849.
8. Lombardi B, Jensen T, Galloway E, Fraher E. Trends in workplace violence for health care occupations and facilities over the last 10 years. Health Aff Sch. 2024;2(12):qxae134. https://doi.org/10.1093/haschl/qxae134.
9. Armstrong D. Health workforce issues and challenges in the postpandemic era. Health Aff Sch. 2025;3(1):qxae168. https://doi.org/10.1093/haschl/qxae168.
10. Ferri P, Stifani S, Accoto A, Bonetti L, Rubbi I, Di Lorenzo R. Violence against nurses in the triage area: A Mixed-Methods study. J Emerg Nurs. 2020;46(3):384–97. https://doi.org/10.1016/j.jen.2020.02.013.
11. Goormans I, Verbouw A, Vandeviver C. More than just a scratch: A scoping review on physical and psychological consequences of violence against Police. Trauma Violence Abuse. 2024;25(3):2535–51. https://doi.org/10.1177/15248380231218290.
12. Hilton NZ, Addison S, Ham E, Rodrigues CN, Seto MC. Workplace violence and risk factors for PTSD among psychiatric nurses: systematic review and directions for future research and practice. J Psychiatr Ment Health Nurs. 2022;29(2):186–203. https://doi.org/10.1111/jpm.12781.
13. Wang J, Zeng Q, Wang Y, Liao X, Xie C, Wang G, Zeng Y. Workplace violence and the risk of posttraumatic stress disorder and burnout among nurses: a systematic review and meta-analysis. J Nurs Manag. 2022;72854–68. https://doi.org/10.1111/jonm.13809.
14. Roche M, Diers D, Duffield C, Catling-Paull C. Violence toward nurses, the work environment, and patient outcomes. J Nurs Scholarsh. 2010;42(1):13–22. https://doi.org/10.1111/j.1547-5069.2009.01321.x.
15. Arnetz JE, Baker N, Arble E, Arnetz BB. Workplace violence, work-related exhaustion, and workplace cognitive failure among nurses: A cross-sectional study. J Adv Nurs. 2025;81(1):271–85. https://doi.org/10.1111/jan.16217.
16. Bagnasco A, Catania G, Pagnucci N, Alvaro R, Cicolini G, Dal Molin A, Lancia L, Lusignani M, Mecugni D, Motta PC, Watson R, Hayter M, Timmins F, Aleo G, Napolitano F, Signori A, Zanini M, Sasso L, Mazzoleni B. Protective and risk factors for workplace violence against nurses: A cross-sectional study. J Clin Nurs. 2024;33:4748–58. https://doi.org/10.1111/jocn.17169.
17. Speroni KG, Fitch T, Dawson E, Dugan L, Atherton M. Incidence and cost of nurse workplace violence perpetrated by hospital patients or patient visitors. J Emerg Nurs. 2014;40(3):218–28. https://doi.org/10.1016/j.jen.2013.05.014. quiz 295.
18. Sulistyowati D, Handiyani H, Kurniawan MH, Syukrini RD, Turyatiningsih. Exploring the aftermath: work demands, workplace violence, and job satisfaction among nurses in a public hospital in the post-COVID-19 era. Belitung Nurs J. 2023;9(5):448–56. https://doi.org/10.33546/bnj.2731.
19. Alamri M, Almalki W, Almagthly NT, Al-Harbi KM, Almutairi MH. Assessment of psychological consequences of violence in psychiatric nurses. Cureus. 2023;15(10):e48025. https://doi.org/10.7759/cureus.48025.
20. Oludare TR, Kotronoulas G. Determinants and consequences of workplace violence against hospital-based nurses: a rapid review and synthesis of international evidence. Nurs Manag (Harrow). 2022;30. https://doi.org/10.7748/nm.2022.e2056.
21. Aromataris E, Lockwood C, Porritt K, Pilla B, Jordan Z, editors. JBI Manual for Evidence Synthesis. JBI; 2024. Available from: https://synthesismanual.jbi.global. https://doi.org/10.46658/JBIMES-24-01.
22. Lizarondo L, Stern C, Carrier J, Godfrey C, Rieger K, Salmond S, Apostolo J, Kirkpatrick P, Loveday H. Chapter 8: Mixed methods systematic reviews (2020). Aromataris E, Lockwood C, Porritt K, Pilla B, Jordan Z, editors. JBI Manual for Evidence Synthesis. JBI; 2024. Available from: https://synthesismanual.jbi.global. https://doi.org/10.46658/JBIMES-24-07.
23. Peters MDJ, Godfrey C, McInerney P, Khalil H, Larsen P, Marnie C, Pollock D, Tricco AC, Munn Z. Best practice guidance and reporting items for the development of scoping review protocols. JBI Evid Synth. 2022;20(4):953–68. https://doi.org/10.11124/JBIES-21-00242.
24. Arksey O'Malley L. Scoping studies: towards a methodological framework. Int J Soc Res Methodol. 2005;119–32. https://doi.org/10.1080/1364557032000119616.
25. Andrea C, Tricco E, Lillie W, Zarin, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. Ann Intern Med. 2018;169:467–73. https://doi.org/10.7326/M18-0850.
26. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, Shamseer L, Tetzlaff JM, Akl EA, Brennan SE, Chou R, Glanville J, Grimshaw JM, Hróbjartsson A, Lalu MM, Li T, Loder EW, Mayo-Wilson E, McDonald S, McGuinness LA, Stewart LA, Thomas J, Tricco AC, Welch VA, Whiting P, Moher D. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. 2021;372:n71. https://doi.org/10.1136/bmj.n71.

27. Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. Health Info Libr J. 2009;26(2):91–108. https://doi.org/10.1111/j.1471-1842.2009.00848.x.
28. Colquhoun HL, Levac D, O'Brien KK, Straus S, Tricco AC, Perrier L, Kastner M, Moher D. Scoping reviews: time for clarity in definition, methods, and reporting. J Clin Epidemiol. 2014;67(12):1291–4. https://doi.org/10.1016/j.jclinepi.2014.03.013.
29. Cannizzaro D, Saguatti I, Caleffi D, Rovesti S, Ferri P. Physical and psychological consequences on nurses affected by workplace violence: a scoping review protocol. BMJ Open. 2025;15(7):e105171. https://doi.org/10.1136/bmjopen-2025-105171.
30. Clark JM, Sanders S, Carter M, Honeyman D, Cleo G, Auld Y, Booth D, Condron P, Dalais C, Bateup S, Linthwaite B, May N, Munn J, Ramsay L, Rickett K, Rutter C, Smith A, Sondergeld P, Wallin M, Jones M, Beller E. Improving the translation of search strategies using the polyglot search translator: a randomized controlled trial. J Med Libr Assoc. 2020;108(2):195–207. https://doi.org/10.5195/jmla.2020.834.
31. Ouzzani M, Hammady H, Fedorowicz Z, et al. Rayyan—a web and mobile app for systematic reviews. Syst Rev. 2016;5:210. https://doi.org/10.1186/s13643-016-0384-4.
32. Johnson N, Phillips M. Rayyan for systematic reviews. J Electron Resour Librariansh. 2018;30(1):46–8. https://doi.org/10.1080/1941126X.2018.1444339.
33. Gillespie GL, Berry P. Qualitative analysis of workplace assault outcomes from the perspectives of emergency nurses. J Emerg Nurs. 2023;49(3):450–60. https://doi.org/10.1016/j.jen.2022.09.015.
34. Tsukamoto SAS, Galdino MJQ, Barreto MFC, Martins JT. Burnout syndrome and workplace violence among nursing staff: a cross-sectional study. Sao Paulo Med J. 2022;140(1):101–7. https://doi.org/10.1590/1516-3180.2021.0068.R1.31052021.
35. Fabri NV, Martins JT, Galdino MJQ, Ribeiro RP, Moreira AA O. Workplace violence and professional quality of life among primary care nurses. Acta Paul Enferm. 2022;35:eAPE0362345.
36. Ding C, Li L, Li G, Li X, Xie L, Duan Z. Impact of workplace violence against psychological health among nurse staff from Yunnan-Myanmar Chinese border region: propensity score matching analysis. BMC Nurs. 2023;22(1):242. https://doi.org/10.1186/s12912-023-01402-w.
37. Pien LC, Cheng Y, Lee FC, Cheng WJ. The effect of multiple types of workplace violence on burnout risk, sleep quality, and leaving intention among nurses. Ann Work Expo Health. 2024;68(7):678–87. https://doi.org/10.1093/annweh/wxae052.
38. Weltens I, van D, Domen MA, Patrick, Bak, Maarten. Exploring the consequences of aggressive experiences on psychiatric nurses: a real-time assessment study, perspectives in psychiatric care. 2024;1952005:10. https://doi.org/10.1155/2024/1952005.
39. Hong S, Nam S, Wong JYH, Kim H. Posttraumatic responses to workplace violence among nursing professionals: a collaborative and comparative study in South Korea and Hong Kong. BMC Nurs. 2023;22(1):354. https://doi.org/10.1186/s12912-023-01502-7.
40. Kobayashi Y, Oe M, Ishida T, Matsuoka M, Chiba H, Uchimura N. Workplace violence and its effects on burnout and secondary traumatic stress among mental healthcare nurses in Japan. Int J Environ Res Public Health. 2020;17(8):2747. https://doi.org/10.3390/ijerph17082747.
41. Kolutek R, Erkutlu H, Chafra J. Workplace violence and nurses' psychological well-being: the mediating role of burnout and the moderating role of psychological resilience. Arch Psychiatr Nurs. 2024;53:177–83. https://doi.org/10.1016/j.apnu.2024.10.015.
42. Yeh TF, Chang YC, Feng WH, Sclerosis M, Yang CC. Effect of workplace violence on turnover intention: the mediating roles of job Control, psychological Demands, and social support. Inquiry. 2020;57:46958020969313. https://doi.org/10.1177/0046958020969313.
43. Chipps E, Weaver SH, Wood T, Sinnott LT, McCarthy K. The impact of patient assaults and aggressive behaviors on nursing personnel's Stress, Well-being, and intention to leave Post-COVID-19 pandemic. J Nurs Adm. 2024;54(9):479–87. https://doi.org/10.1097/NNA.0000000000001464.
44. Ceballos JB, Frota OP, Nunes HFSS, Ávalos PL, Krügel CC, Ferreira Júnior MA, Teston EF. Physical violence and verbal abuse against nurses working with risk stratification: Characteristics, related factors, and consequences. Rev Bras Enferm. 2020;73(suppl 5):e20190882. English, Portuguese. https://doi.org/10.1590/0034-7167-2019-0882.
45. Luo Y, Zhang M, Yu S, Guan X, Zhong T, Wu Q, Li Y. The impact of psychological violence in the workplace on turnover intention of clinical nurses: the mediating role of job satisfaction. BMC Nurs. 2024;23(1):844. https://doi.org/10.1186/s12912-024-02477-9.
46. Park JE, Song MR. Effects of emergency nurses' experiences of Violence, Resilience, and nursing work environment on turnover intention: A Cross-Sectional survey. J Emerg Nurs. 2023;49(3):461–9. https://doi.org/10.1016/j.jen.2022.10.001.

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