


BMJ Open Physical and psychological consequences on nurses affected by workplace violence: a scoping review protocol

Domenico Cannizzaro , Ilaria Saguatti, Dalia Caleffi, Sergio Rovesti, Paola Ferri

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Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia Faculty of Medicine and Surgery, Modena, Emilia-Romagna, Italy

Correspondence to

Dr Domenico Cannizzaro;
domenico.cannizzaro@unimore.it

ABSTRACT

Introduction Healthcare settings are experiencing profound changes that make them increasingly complex and demanding environments, particularly for nurses. Against this backdrop are the numerous phenomena of violence in healthcare settings, which are a worrying reflection of the growing problem of aggression in society. Institutions maintain a constant focus on the phenomenon while trying to counter it; however, workplace aggression is still on the rise.

Workplace violence (WPV) potentially leads to lower quality of care and increased costs; it also exposes nurses to burnout, turnover and intention to leave the profession. The purpose of this scoping review is to explore the physical and psychological consequences on nurses who are victims of WPV and to identify possible correlations with burnout, turnover and intention to leave the workforce.

Methods and analysis This scoping review will follow the methodology proposed by Arksey and O'Malley, also incorporating recommendations from the Joanna Briggs Institute Handbook for Scoping Review. A literature search will be conducted in PubMed, CINAHL, PsycInfo, Web of Science and Scopus. Grey literature sources including Google Scholar and ProQuest Dissertations & Theses will also be consulted. Data will be summarised in descriptive form and categorised according to the identified outcome variables, following an inductive approach. The results will be presented following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews guidelines. The review will include studies published from January 2020 to March 2025.

Ethics and dissemination This scoping review represents the preliminary phase of a larger project aimed at developing support strategies for nurses who are victims of violence. This scoping review protocol has been registered in the Open Science Framework (https://osf.io/785qd/?view_only=21952c15efd14b34a9931f07121bf935). No ethical opinion is required, as the review does not involve direct involvement of human subjects.

The findings will be disseminated through peer-reviewed publications and presentations at national and international conferences and workshops dedicated to workplace safety and nursing. In addition, the results will be shared with healthcare managers and stakeholders to inform context-specific strategies and support interventions within care settings.

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STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The search strategy will be designed with professional librarians to ensure a thorough and inclusive approach to published research and grey literature sources.
- ⇒ The study will employ the systematic methods outlined by Arksey and O'Malley, complemented by the recommendations from the Joanna Briggs Institute Handbook for conducting scoping reviews.
- ⇒ The study will adhere to the guidelines of the Preferred Reporting Items for Systematic Review and Meta-Analysis extension for Scoping Reviews.
- ⇒ Stakeholders and health promotion practitioners will be consulted throughout the study.
- ⇒ A formal assessment of the quality of the included studies will not be conducted, which is a common limitation in scoping reviews and may impact on the reliability of the data collected.

INTRODUCTION

The numerous and increasing rates of violence in the healthcare sector observed in recent years are a disturbing reflection of the growing problem of aggression in society.¹ The Occupational Safety and Health Administration defines workplace violence (WPV) as acts or threats of violence and other disruptive behaviour that occur in the workplace.² The prevalence of WPV against nurses is significant and steadily increasing in the healthcare setting.^{3–5} The phenomenon is a growing concern, contributing to increased stress, burnout and higher staff turnover.^{6–8} Nurses play a central role within healthcare teams, especially those who work on the frontlines, often find themselves interacting with all kinds of patients.⁹ They also constitute one of the professional groups which are the most vulnerable to acts of violence.¹⁰ Patient verbal and physical attacks have significant staff consequences, including decreased work productivity, increased burnout, job dissatisfaction, absenteeism, turnover and intentions to leave.^{7–11}



According to the study by Chipps and colleagues, 74% of frontline nurses reported that they had experienced frequent physical attacks or frequent incidents of verbal aggression, which had a significant impact on their mental health, engagement at work, stress levels and intention to leave the profession.¹¹ In a more recent scoping review of Italian surveys, the 12-month prevalence of WPV ranged between 11.9% and 93.3% and between 27.5% and 50.3% for verbal and physical violence, respectively.¹²

In Italy, as in many European countries, there have been numerous incidents of WPV, especially post-pandemic,¹³ so much so that urgent measures to counter the phenomenon of violence against health professionals were necessary. Legislative Decree No. 137 of 2024 (DL 137/2024 - Norms for Countering Violence against Health Personnel) was introduced, which contains urgent measures aimed at countering the phenomena of violence against health workers, nurses, nursing assistants, auxiliary and care and treatment professionals in the performance of their activities.¹⁴ Also, thanks in part to Law Number 113 of August 14, 2020, through the Decree of January 27, 2022 of the same law, the National Day of Education and Prevention against Violence is held on 12 March of each year (Decree January 27, 2022 Announcement of the 'National Day of Education and Prevention against Violence against Health and Social Workers').¹⁵ Nevertheless, despite the intent by institutions to turn the spotlight on the phenomenon and raise awareness, workplace aggressions are still on the rise. The study by Hadavi and colleagues showed that the prevalence of WPV against employees was relatively high during the COVID-19 pandemic; however, it was lower than that in the era before the pandemic.¹⁶ Compared with other healthcare professionals, nurses are victimised at a higher rate due to the extent of their interactions with different groups of people (patients, families, caregivers, peers, supervisors, other health professionals).¹⁰⁻¹⁷ These events produce significant effects on the job productivity of nurses and can impact their personal lives.¹⁸

WPV creates constant fears in the mind of the nurses. WPV not only affects healthcare workers like nurses and doctors but also organisation like hospitals or mental health institutions.⁷ WPV is directly related to decreasing job satisfaction, burnout, humiliation, guilt, emotional stress, intention to quit a job and increased staff turnover.⁷

A cross-sectional study conducted among a group of 192 nurses at one public hospital in Myanmar investigated the existence of WPV in the past 12 months. Specifically, the reported rate of physical violence was 1.6%, and the reported rates of non-physical violence were verbal abuse (27.1%) and bullying/mobbing (7.8%).¹⁹ Regarding verbal aggression, according to some nurses working in specific settings such as the psychiatric setting, this phenomenon is considered an unavoidable risk and a component of work activity. However, this view is not protective of nurses' dignity.²⁰ The results of the study by Yadanar and colleagues showed a significant volume of WPVs among nurses. However, this volume was not

adequately matched in reporting; in fact, the incident reporting rate was found to be underestimated, as most respondents believed that reporting was not important enough to proceed with formal reporting.¹⁹ A scoping review of the literature, conducted by Pagnucci and colleagues in 2022, highlighted the need to further investigate WPV, in order to undertake specific corrective management and prevention actions.²¹

There are not sufficient pieces of consistent literature on WPV towards nurses. Although the prevalence and determinants of WPV have been documented, limited evidence exists on the physical and psychological outcomes reported by nurses following such events. Moreover, no comprehensive synthesis of existing research has mapped the associations between WPV, burnout and nurses' intention to leave. This scoping review aims to address these gaps.⁷

This scoping review therefore aims to fill these gaps by exploring the consequences described by nurses who are victims of WPV, identifying their characteristics, outcomes and current research gaps.

METHODS AND ANALYSIS

Design

This scoping review will apply Arksey and O'Malley's framework,²² consisting of six steps: (1) identifying the research questions; (2) identifying relevant studies; (3) selecting studies; (4) charting the data; (5) collating, summarising and reporting results; and (6) consultation with stakeholders. The above approach was chosen because it is able to accurately outline the current scientific evidence, as well as the knowledge gaps, present in the literature. Furthermore, in order to improve the rigour of the research, elements adopted from the Joanna Briggs Institute (JBI) Handbook for Scoping Reviews will also be incorporated, particularly in the methodological approach to study selection, data extraction and stakeholder engagement.²³

The research protocol was developed according to the standards of the guidelines Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) Protocols.²⁴

Step 1: identifying the research questions

The main research question, guiding this scoping review, is "What literature is currently available that examines the physical and psychological effects and consequences on nurses who have been victims of workplace violence?". Subsequent subquestions may facilitate the exploration of this area, based on the guidelines established on the Population Concept Context framework²⁵ (refer to online supplemental table 1):

1. What is known about the physical and psychological consequences of violence experienced by nurses in the workplace?
2. What are the described and lived attitudes and experiences of nurses following violence experienced in the workplace?

3. How is the violence experienced by nurses in the workplace likely to contribute to their choice to leave the profession?
4. What gaps currently exist in the literature and what areas require further investigation and research?

Step 2: identifying relevant studies

Literature searches will be conducted using the electronic databases PubMed, CINAHL, PsycINFO, Web of Science and Scopus. In addition, queries will also be conducted by consulting the grey literature databases Google Scholar and ProQuest Dissertations & Theses, and we will contact relevant stakeholders for additional grey literature where applicable. The decision to query multiple databases, including those containing grey literature, is due to the need to ensure complete coverage of the topic, applying JBI guidelines.²³

The first exploratory search was conducted on PubMed in order to census all terms and synonyms that are normally used in the literature, on the research topic; thanks to this first exploratory search, it was possible to develop a draft search string.

The draft search strategy was then implemented and improved, with the support of professional librarians. The final goal is to develop a search strategy that is as effective as possible, including all terms and synonyms, as well as any semantic variations; to accompany the search strategy, Boolean operators and even truncations of some words were also included, so that as much literature as possible could be included.

Therefore, the final search strategy will be developed with the support of professional librarians, subjecting the latter also to review by health professionals, who possess expertise in WPV. Finally, SR-Accelerator software (<https://sr-accelerator.com/#/polyglot>) capable of adapting the search strategy to each database will be used; specifically, it will be employed to adapt the search strategy to the databases identified for this scoping review (refer to online supplemental table 2). The use of such software will prove to be a particularly suitable choice, as it will allow specific search strategies to be devised, including all the words used, without the risk of modifications or distorting the previously devised search strategy.

A combination of controlled vocabularies and keywords was used in the search strategy. A full search strategy with filters and limits for each database can be seen in the online supplemental files.

Step 3: selecting studies

The querying of PubMed, CINAHL, PsycINFO, Web of Science, Scopus and the grey literature databases Google Scholar and ProQuest Dissertations & Theses took place in March 2025 and will be rerun in April 2025. This will result in a comprehensive exploration of the existing literature examining the physical and psychological effects and consequences experienced and described by nurses who are victims of violence in the work setting. The reference list and forward citations of eligible articles will be

searched to locate any additional material not discoverable in the initial search. Articles, included among eligible articles, should analyse the psychological and physical consequences and effects experienced and described by nurses who are victims of violence in the workplace setting. Specifically, the included studies should address aspects related to burnout, stressors, anxiety, distress and frustration; studies investigating turnover and intention to leave, related to incidents of WPV, will also be included.

This scoping review may include numerous study designs, including quantitative, qualitative and mixed methods studies. On the other hand, articles without original data, posters, abstracts, dissertations, non-scientific studies and reports, and systematic reviews will be excluded. In addition, the review will include studies published within the last 5 years (1 January 2020 to 28 March 2025). This time frame was chosen to ensure a harmonious balance of recent and relevant literature acquisition and reflects a methodological intention to gather the most recent and relevant evidence, with particular focus on the post-COVID-19 period. This choice allows for the inclusion of studies that account for significant organisational, regulatory and technological changes that have shaped the manifestation and management of WPV in healthcare settings.

Once the search strategies have been launched in PubMed, CINAHL, PsycINFO, Web of Science, Scopus and the grey literature databases Google Scholar and ProQuest Dissertations & Theses, the time filters will be set, including studies published from 1 January 2020 to 28 March 2025 (date of article extraction). Once the final number of articles has been obtained, they will be transported to the Rayyan Qatar Computer Research Institute software for the literature screening phase (<https://help.rayyan.ai/hc/en-us/articles/4406419348369-What-is-the-version-of-Rayyan>); this is a software usable for free on the web, designed specifically for reviews in general and for systematic reviews; the software is preferably designed for team use.²⁶

The article screening process will be structured according to the following steps:

1. First review of articles flagged by the software as ‘duplicates’ because they are in multiple databases.
2. Review of the title and abstract of all results.
3. Full-text review of selected eligible articles, applying JBI guidelines.²³

Phase 1, that is, manual elimination of all duplicate articles, will be performed by a single reviewer, while subsequent phases, by multiple reviewers. In total, three reviewers will independently check all titles and abstracts within the Rayyan software, adopting the platform’s blind screening function; the blind function will be adopted with the aim of reducing bias or influences among reviewers, thus ensuring consistency of study selection. This process will be structured in two stages:

1. Initial screening of articles identified in the main search.
2. Additional screening of the identified articles through reference lists and forward citations.



All reviewers will consistently and systematically apply the predefined inclusion and exclusion criteria. In fact, thanks to the blinded article scrutiny process on the Rayyan software, reviewers will be able to make independent decisions, unaffected by any external influences. However, to ensure the reproducibility of the study and reduce possible errors, reviewers will test the process by independently examining a random sample of the articles, present on the Rayyan software, equal to 10% of the total literature. Once the testing phase is concluded, the reviewers will compare their results to ensure the correct applicability of the inclusion criteria and the exclusion criteria adopted in a consistent manner. Once the blind screening phase is concluded, the reviewers will be able to discuss discrepancies, if any, between the article selections. The same validation process will also be applied on the selected articles, for full-text review.

Any conflicts, which may arise among the reviewers, as a result of discrepancies on the selected articles, will be addressed with a constructive and collaborative approach, aimed at reaching consensus and an agreed and shared selection of articles for inclusion in the scoping review. For each conflicting data point, the methodological quality of the originating study will be assessed using validated checklists (JBI Critical Appraisal Tools), in order to support a critical interpretation of the observed differences. The research team, upon completion of even this last phase, will be able to collectively agree on the final list of studies to be included.

Considering that the objective of a scoping review is to explore and accurately investigate the breadth as well as the state of the art offered by the currently consulted literature, no critical appraisal will be conducted; furthermore, risk of bias assessment will not be performed. The final results of this research will be reported within a PRISMA flowchart and will include all relevant literature identified.^{27 28} The current study adheres to the PRISMA method. It is a standard guideline for conducting a systematic literature review and has been used in various fields of research.²⁸

Step 4: charting the data

The data will be extracted by adopting an extraction matrix that will be developed specifically for this scoping review. The development of the extraction matrix is guided by the research questions and examples of similar scoping reviews in the field. The tool will first be used on a subset of studies to ensure relevance and usability and then applied to all studies.²³ The research team will be able to make modifications, aimed at refining the tool with the research questions. An imperative aspect will be that the sections and data elements remain complete and relevant to the study.

Step 5: collating, summarising and reporting the outcomes

The data will be analysed and summarised according to a descriptive method, also indicating the characteristics of the studies, in tabular and graphical form, through an

extraction chart,²² while, as for the results, they will be classified as related to collaborative patterns.²³ Once suitable papers are selected, the research team will initiate an inductive method analysis, also focusing on the main objectives described and reported on each paper.

Any discrepancies will be resolved collaboratively through group comparisons and discussions. The final results will be represented in accordance with the PRISMA extension for Scoping Review guidelines to ensure transparency and methodological rigour in the research.²⁷

Step 6: consultation with stakeholders

The consultation phase sees the involvement of stakeholders to improve the relevance and applicability of the scoping review. Stakeholders such as health professionals, health leaders and industry experts will be actively involved to provide insights, point to additional sources and share findings. This phase will ensure that the scoping review can be as close to reality as possible and address real-world needs in a practical way, as recommended by the JBI guidelines.²³

Protocol registration

This protocol has been registered on the Open Science Framework (OSF) to ensure transparency and reproducibility of the research process (OSF registration doi https://osf.io/785qd/?view_only=21952c15efd14b34a9931f07121bf935). The protocol was registered on 19 April 2025.

Implications

This scoping review is expected to be the first in the field capable of exploring the physical and psychological consequences described by nurses and victims of WPV, as well as investigating the possible correlation with burnout, turnover and intention to leave, in nurses who are victims of WPV.

Analysing the described factors could help healthcare leaders and institutions make targeted decisions and plan specific interventions on organisation and work plans, as well as implement and develop new protocols, with a particular focus on the significant reduction of WPV phenomena, through the introduction of interventions adaptable to the specific settings (such as emergency departments, inpatient wards, mental health services, outpatient clinics, home care services, etc.). In addition, the possible relationship between the violence experienced and the dynamics related to burnout in nurses, turnover and intention to leave could encourage institutions to want to take targeted measures to contain these phenomena. Recognising and knowing how to manage such critical issues could lead to better collaboration between nurses and caregivers and establish more authentic relationships focused on respect and safe care for patients, thus improving continuity of care and laying the groundwork for valuable opportunities for skill development in nurses.

ETHICS AND DISSEMINATION

Ethical approval was not required for this scoping review, as it is based solely on analysis of previously published literature. However, great care will be taken to accurately represent the findings and interpretations of the original studies, respecting the integrity of the primary research. The review will be conducted in accordance with the ethical principles of research integrity, transparency and respect for original sources. This study represents the first phase of a larger study aimed at identifying strategies for improvement, as well as effective charge taking, towards nurses who are victims of aggression in work settings. Through taking charge, innovative solutions could be achieved, with respect to the side effects of WPV, such as burnout, turnover and intention to leave the nursing profession.

In view of the current scarcity of effective solutions, this systematic review will provide the basis for initiating larger studies on the effects of violence, the taking care of nurses who are victims of WPV, and the fallout in terms of patient care, and ultimately, also aspects related to work organisation.

The results will be disseminated through peer-reviewed publications, presentations at conferences dealing with the topic and sharing with top management of public and private healthcare companies.

The protocol for this scoping review has been registered on OSF (registration doi https://osf.io/785qd/?view_only=21952c15efd14b34a9931f07121bf935) to promote open science and improve the review process.

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Contributors DCan, PF and SR contributed to the conception, methodological development and design of the study. DCan, PF, IS and DCal will be involved in the acquisition and selection of the included studies. DCan, PF, SR, IS and DCal will contribute to data analysis and evidence curation. DCan and PF will coordinate and supervise the planning and validation of the research activities. DCan and PF were responsible for drafting the manuscript. DCan, PF, SR, IS and DCal participated in the critical revision and final editing of the manuscript. All authors have read and agreed to the published version of the manuscript. DCan is responsible for the overall content as the guarantor.

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ORCID iD

Domenico Cannizzaro <http://orcid.org/0009-0001-6675-2788>

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