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# Systematic review of sexual violence against health care workers by patients and relatives

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#### **ADMINISTRATIVE INFORMATION**

Support - Self Funded.

Review Stage at time of this submission - Piloting of the study selection process.

Conflicts of interest - None declared.

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**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 July 2023 and was last updated on 22 July 2023.

#### INTRODUCTION

eview question / Objective Sexual assault is a global concern that impacts healthcare workers worldwide. Healthcare workers, including nurses, doctors, and support staff, play a crucial role in providing medical care, aid, and comfort to patients (Joseph & Joseph, 2016). However, the vulnerability within the patientprovider relationship can be exploited, resulting in instances of sexual violence (Notaro et al., 2019). Importantly, these acts of violence extend beyond patients to include incidents involving relatives or caregivers accompanying patients. While the focus has predominantly been on victims in the general population, it is crucial to acknowledge that healthcare workers themselves are at risk of experiencing sexual assault from patients or their relatives (Abo Ali et al., 2015; Kahsay et al., 2020). Distressingly, healthcare professionals frequently encounter violence, highlighting a significant issue within the healthcare system (Mento et al., 2020). Various studies have shed light on the alarming

prevalence of violence targeting nurses and physicians by patients and visitors (Liu et al., 2019; Demirci & Uğurluoğlu, 2020). The high prevalence of sexual violence emphasized the urgent need for immediate action to address this issue and implement measures to safeguard and support healthcare workers in their workplace. Recognizing sexual violence against healthcare personnel is a global emergency with a profound impact on health systems as emphasized by the World Medical Association in 2020. The primary objective of this systematic review is to report on the literature around sexual violence against healthcare workers by patients or their relatives. The review aim to:

- a. Identify the prevalence of sexual violence in healthcare settings.
- b. Determine the types of sexual violence experienced by healthcare workers.
- c. Explore the risk factors associated with sexual violence against healthcare workers.
- d. To explore the physical, psychological, and professional consequences experienced by

healthcare workers who have been sexually assaulted.

**Rationale** This systematic review holds crucial significance for multiple stakeholders:

The study aims to shed light on the challenges faced by healthcare workers and the prevalence of sexual violence within their workplace. By recognizing their vulnerabilities and experiences, the review seeks to advocate for the development of supportive measures to ensure their safety and well-being.

Findings from this review will enable healthcare institutions to implement targeted policies and protocols that can safeguard their staff against sexual violence. By fostering a secure working environment, institutions can promote the overall quality of care and retain a satisfied workforce.

The findings will provide evidence to inform policymakers and advocacy groups about the urgent need for addressing sexual violence against healthcare workers. This information can drive legislative changes, allocate resources, and strengthen advocacy efforts.

Through this comprehensive systematic review, we aim to contribute to a better understanding of sexual violence against healthcare workers. By highlighting the prevalence, risk factors, consequences, and management strategies, we aspire to guide the development of effective interventions and support mechanisms, ultimately fostering a safer, more supportive, and satisfying work environment for healthcare professionals worldwide.

Condition being studied The vulnerability within the patient-provider relationship can lead to instances of sexual violence targeting healthcare workers. This systematic review aims to comprehensively investigate sexual violence against healthcare workers by patients or their relatives. The review will explore the various types of sexual violence encountered by healthcare workers. Understanding the different forms of assault will provide valuable insights into the nature and severity of the problem. Additionally, the review aims to examine the physical, psychological, and professional consequences faced by healthcare workers who have been victims of sexual assault. By reporting on the literature and findings, this review aims to contribute to a better understanding of the issue and inform the development of effective interventions and support mechanisms to ensure the safety, well-being, and professional satisfaction of healthcare workers.

#### **METHODS**

Search strategy Comprehensive search across electronic databases (e.g Pubmed, MEDLINE, Science direct, Web of science, Scopus, CINAHL) search strategy which consists of the combination of keywords related to "Sexual violence" OR "sexual harassment" OR "sexual assault" OR "rape" AND "health personnel" OR "health care worker" OR "health worker" OR "Health Care Provider" OR "Health care Provider" OR "Health Care Professionals" AND "Patient" OR "clients" AND "caregivers" OR "relatives" OR "family" OR "family member" AND "globally" from 2010 to 2023 and other MeSH terms

- Additional sources will be explored manual search of relevant journals, reference lists, and grey literature sources
- Keywords: sexual assault, sexual violence, rape, healthcare workers, nurses, doctors, healthcare providers, patients, relatives.

**Participant or population** Healthcare workers, healthcare providers, patients, relatives.

**Intervention** No intervention.

Comparator No comparator.

**Study designs to be included** The systematic review will follow the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines ( Moher et al., 2015) to ensure a comprehensive and transparent approach.

Eligibility criteria i. Inclusion criteria: Studies reporting on incidents of sexual violence against healthcare workers published in peer -reviewed journals from [2010 to 2023], published in English language - Studies reporting incidents of workplace sexual violence against healthcare workers by patients or relatives - Quantitative, and mixed-methods studies.

Information sources Comprehensive search across electronic databases (e.g Pubmed, MEDLINE, Science direct, Web of science, Scopus, CINAHL) Organizational Websites: relevant international and national organizations, such as the World Health Organization (WHO), World Medical Association (WMA), International Council of Nurses (ICN), and medical or nursing associations, for policy documents, guidelines, and reports related to workplace violence and sexual assault against healthcare workers.

References of Included Studies: reference lists of relevant articles and systematic reviews identified during the search to find additional sources that may have been missed during the initial database search. Literature Reviews and Systematic Reviews: published systematic reviews and meta-analyses on related topics to identify additional sources and to ensure comprehensive coverage of the available literature.

Main outcome(s) The main outcomes of this proposed systematic review on sexual violence against healthcare workers by patients and relatives would include the following patient-relevant outcomes:

- a. Prevalence of Sexual Violence: The review aims to determine the prevalence of sexual violence in healthcare settings perpetrated by patients or their relatives against healthcare workers. This outcome will provide an understanding of the scope and magnitude of the issue.
- b. Types of Sexual Violence Experienced: By examining the literature, the review seeks to identify and categorize the different types of sexual violence experienced by healthcare workers. This may include verbal harassment, unwanted touching, sexual assault, or other forms of inappropriate behavior.
- c. Risk Factors Associated with Sexual Violence: The review will explore the factors that contribute to the occurrence of sexual violence against healthcare workers. Understanding these risk factors will help in developing preventive measures and targeted interventions.

Additional outcome(s) Consequences Experienced by Healthcare Workers: The review aims to investigate the physical, psychological, and professional consequences experienced by healthcare workers who have been victims of sexual assault. This outcome will shed light on the impact of sexual violence on the well-being and job satisfaction of healthcare professionals.

Data management Articles that meet search criteria will be imported from Endnote to Rayyan software. Two independent reviewers will extract data using a predetermined data extraction form, including study characteristics, participants, incidence/prevalence rates, types of assault, risk factors, and intervention details. Firstly, titles and abstracts will be screened by both reviewers independently. When decisions cannot be made from the title and abstract alone, the full paper will be retrieved. The full text of the articles that meet initial screening criteria will be read to ascertain their eligibility for inclusion in the systematic review by each reviewer independently .Data extraction will include study characteristics, participant demographics, prevalence rates, risk factors, consequences, and management strategies. Disagreements will be solved by a third reviewer or

by consensus. In order to improve the quality of this process, a third author will review the included studies and the classification of the main information in accordance with the encoding records. The selected and excluded studies will be reported after the review by the third author. Tables and figures will be created to show the included studies and outcomes.

Quality assessment / Risk of bias analysis The Joanna Briggs Institute's (JBI) critical appraisal checklist for studies reporting prevalence data will be used to assess the quality of the studies included in the review (Munn, Moola, Lisy, Riitano, & Tufanaru, 2015). Risk of bias assessments at the study level will be completed independently by two members of the authorship team and compared, with discrepancies discussed to reach consensus.

**Strategy of data synthesis** Findings will be synthesized narratively or, if appropriate, through meta-analysis.

- Quantitative studies will undergo meta-analysis if deemed appropriate; otherwise, a narrative synthesis will be conducted
- Qualitative studies will be subjected to thematic analysis to identify common themes and patterns. Data will be arrayed in table format, stored in MS Excel, and summarized using descriptive statistics across all studies. Using all studies meeting inclusion, we will calculate pooled prevalence and 95% confidence interval (95% CI) for each country using random effects meta-analysis models (Stijnen, Hamza, & Ozdemir, 2010). Forest plots will be generated to show study-specific and pooled prevalence estimates and 95%CIs.

**Subgroup analysis** Subgroup analyses and sensitivity analyses will be conducted as needed.

Sensitivity analysis Not applicable.

**Language restriction** Only published studies in English language will be considered for inclusion.

Country(ies) involved Nigeria.

**Keywords** sexual assault; sexual violence; rape; healthcare workers; healthcare providers; patients; relatives.

**Dissemination plans** 1. Academic Journals: We will prepare manuscripts for submission to reputable academic journals global health, and related disciplines. By publishing our findings, we can reach a broad academic audience and contribute to the existing literature.

- 2. Conferences and Workshops: We will submit abstracts and proposals to present our findings at relevant national and international conferences, symposiums, and workshops. This will allow us to engage with researchers, practitioners, and policymakers, fostering discussions and knowledge exchange.
- 3. Policy Briefs: We will develop concise policy briefs summarizing the key findings and recommendations of the systematic review. These briefs will be tailored to policymakers and government agencies, emphasizing the implications for sexual violence policy.
- 4. Collaboration with Stakeholders: We will actively collaborate with key stakeholders, including NGOs, professional associations, and advocacy groups.

#### Contributions of each author

Author 1 - Adeyinka, G. Ishola - Author 1 drafted the manuscript.

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