

VIOLENCE ON HEALTH WORKERS AT THE WORKPLACE AND ITS MANAGEMENT STRATEGY: A SYSTEMATIC REVIEW

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ABSTRACT

Background: Healthcare workers at workplace frequently face with patients becoming violent because of undesired events such as a long wait. Globally, workplace violence is a major challenge to safety for health workers, involving significant consequences to the victims, patients, and healthcare organizations. This study aimed to systematically review violence on health workers at the workplace and its management strategy.

Subjects and Method: A systematic review was conducted by searching published articles from 2015 to 2019 including ProQuest, Springer Link, and Scopus. The keyword for this review was "prevalence" AND "risk factor" AND "workplace violence" AND "hospital". The inclusion criteria were English, open access, health worker, and cross-sectional. After review process, 14 articles were included in this study.

Results: Violence was affected by age of the victim, lack of courage to report incidents of violence, work experience, direct interaction with patients, feeling of worry / anxiety, shift system, and night work. Two articles stated lack of courage to report incidents of violence as a predictor. Three articles stated reporting as a futile act as a cause of under reporting. An article stated that the institution had taken necessary steps and provided encouragement to report act of violence, as well as had chosen strategies to prevent violence, including security measure, protocol, and training related to violence in the workplace.

Conclusion: Violence is often found in health workers in the workplace. Violence was affected by age of the victim, lack of courage to report incidents of violence, work experience, direct interaction with patients, feeling of worry/anxiety, shift system, and night work. Improving management in health care facilities is needed to prevent and deal with workplace violence.

Keywords: violence, workplace, health workers.

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BACKGROUND

Profession who has a high risk of experiencing violence is health personnels from patients and visitors. Based on The National Crime Victimization Survey, health personnels have a 20% higher risk of experiencing workplace violence than other workers (The Joint Commission, 2018).

Workplace violence can be experienced by health personnels in all health care centers (Kocabiyik et al., 2015).

The notion of workplace violence put forward by The National CDC Institute for Safety and Health (NIOSH) is an act of

violence (including physical violence and threats of violence) to someone at work or while on duty (The Joint Commission, 2018).

According to the World Health Organization (WHO), workplace violence is an incident where staff are harassed, threatened, and attacked in circumstances related to their work, travel to and from work, which involve explicit and implicit challenges and to security, welfare, and health. Workplace violence can affect quality of health services (Cheung and Yip, 2017).

Workplace violence experienced by health personnels is a problem faced in va-

rious countries around the world. From an international study, it was found that the incidence of workplace violence in nurses in the Hospital environment has a prevalence of 10% -50%, up to 87% (Cheung and Yip, 2017).

In a study conducted in several countries, it was found that the profession that has a high risk compared to other professions, both from the health sector or other sectors, which are vulnerable to violence is nurses. In Turkey, workplace violence is not just physical and psychological violence, but also to the murder of health personnels (Aksakal et al, 2015).

Reporting of acts of violence is often not done by health personnels. Several things caused the lack of reporting related to reporting procedures. Even though they have reporting procedures, not all health personnels know how to utilize those (Peng Li et al., 2018).

To find out the prevention of violence in the right workplace, it is first necessary to know about various risk factors that cause violence. In addition, it is necessary to know the efforts or strategies that have been implemented by health service providers to become a reference for other health service providers.

SUBJECTS AND METHOD

This systematic review was conducted by using PRISMA. Authors searched for articles through an online database, namely ProQuest, Springer Link, and Scopus with keywords "prevalence" AND "risk factor" AND "workplace violence" AND "hospital".

The inclusion criteria for this systematic review were articles published from 2015-2019, English, open access, health per-

sonnels, and cross-sectional design. The exclusion criteria used were study on health students, such as koas or nursing students and topics other than workplace violence.

Articles found after entering keywords were 874 articles. The next step was to filter out the articles that would be used by making arrangements for the past five years, the field of public health, and open access. The final step taken was screening of titles and abstracts according to inclusion criteria and relevance to the study objectives. The number of articles that were reviewed was 14 articles. The steps in the search for articles to the discovery of articles to be explored are explained in Figure 1.

RESULTS

From an article search on three databases with predetermined keywords, 874 articles were found with 14 relevant articles. The study sites are Macau, Serbia, Hong Kong, Taiwan, China, Saudi Arabia, Egypt, Palestine, and India. All articles used in this systematic review use a cross-sectional design by distributing questionnaires to health personnels, both medical and/or non-medical personnel.

In fourteen articles reviewed, it was known that health personnels have experienced violence at work. Workplace violence in the form of physical or non-physical violence committed by the patient or a patient's relative.

Factors that have a significant influence on most articles were the health profession/clinician (Articles no. 2, 3, 5, 7, 8, 10, 11, and 13), age (Articles no. 5, 7, 9, 10, 11, 13, 14), shift work systems (Articles no. 1, 2, 3, 4, 6, 10, 12), and work experience (Articles no. 1, 4, 8, 9, 11, 12, 13).

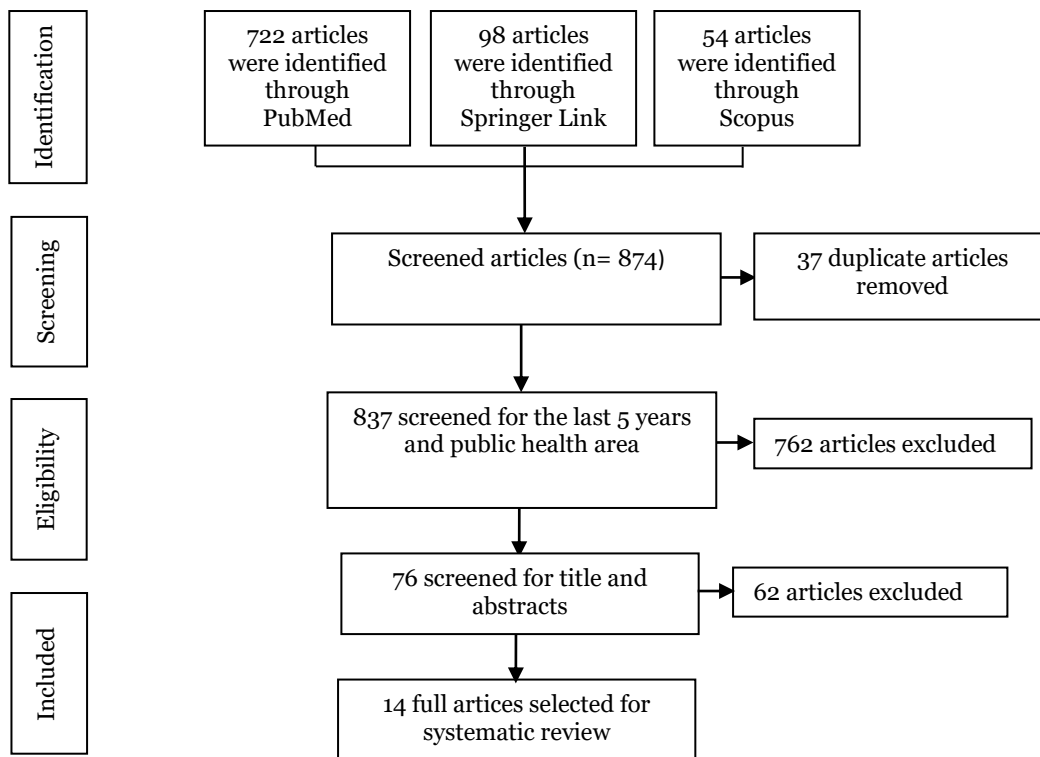


Figure 1. PRISMA Flow Diagram

Five of the fourteen articles mention factors that influence workplace violence were interactions with patients. Four of the fourteen articles mention factors that influence violence in the workplace were worry about violence. Three of the fourteen articles mentioned factors that influence workplace violence were the department or work environment of health personnels and/or professional titles.

Two of the fourteen articles mentioned factors that influence workplace violence were lack of support to report acts of violence, education level, and/or gender. Factors

on the number of employees in a work environment, job satisfaction, problems with colleagues, self-harm, treatment time, income, and/ or marital status are found in one of fourteen articles.

In three articles, it was mentioned that reporting violence was a useless action. In one article, it was mentioned that health service institutions had implemented strategies to overcome violence in the workplace. The strategy was the existence of a security system in health care institutions, preparation of patient protocols, and implementation of training for health personnels.

Table 1. Article Search Results

No	Author (Year)	Title	Place	Design	Results	Conclusions
1	Cheung et al. (2017)	Workplace Violence toward Physicians and Nurses: Prevalence and Correlates in Macau	Macau	Cut Latitude	Out 720 health personnels, 57.2% have experienced workplace violence. Some factors that have a significant influence were work experience, direct service to patients, shift work systems, and anxiety over acts of violence. Not all nurses reported acts of violence they experienced.	Workplace violence is an occupational hazzard in Macau for general practitioners and nurses. Therefore, training needs to be carried out related to de-escalation skills in dealing with violence. Coping strategies need to be possessed by doctors and nurses as health workers who have high interactions with patients to reduce psychological impacts.
2	Marina et al. (2017)	Encouraging employees to report verbal violence in primary health care in Serbia: A cross-sectional study	Belgrade, Serbia	Potong Lintang	From a total of 1,526 participants, 47.8% had experienced verbal abuse at work. The most common perpetrators of violence are patients. Factors that have contributed to verbal abuse are the profession of nurses, night watch, interactions with patients, number of employees, and lack of support to report acts of violence. The lack of reporting among others was caused by the assumption that reporting was a futile act, reporting was not an important thing, and it was not known which reporting was aimed at.	The high prevalence of verbal violence can have a negative impact. To reduce the prevalence can be done by improving procedures in the organization and increasing the urge to report the occurrence of verbal violence.
3	Cheung and Yip (2017)	Workplace Violence towards Nurses in Hongkong: prevalence and correlates	Hongkong	Cut Latitude	Of a total sample of 850 nurses, 44.6% had experienced violence at work. Violence was most often done by patients. Factors that significantly influenced were the clinician, shift work, job satisfaction, and problems with colleagues, tendency to self-harm, and anxiety. Not all nurses who experience acts of violence report to their superiors.	Workplace violence is an occupational hazard for nurses in Hong Kong. Health service providers and health personnels need to form a strategy to prevent incidents of violence in the health service environment. Health authorities need to develop reporting systems that are easy to understand and implement a zero tolerance policy to prevent incidents of violence in the workplace.
4	Niu et al. (2019)	Prevalence of workplace violent episodes experienced by nurses in acute	Northern Taiwan	Cut Latitude	Of the total sample of 429 nurses, 88.3% had experienced violence. The factor that contributes to physical and psychological violence was the shift work system while nurses who have 5-10 work experience on	Psychiatric nurses have experienced physical and psychological abuse in the past 12 months. Institutions need to do multilevel actions to create a comfortable environment and can reduce the incidence of violence in

		psychiatric settings			psychological violence. Lack of reporting of incidents of violence due to the presumption of vain and not important actions. Most respondents said that there had been steps to report incidents of violence and the incentive to report incidents of violence. The strategy of the institution to prevent workplace violence was to have a security system, protocol development, and training.	the workplace.
5	Li et al. (2018)	Physical violence against general practitioners and nurses in Chinese township hospitals: incidence and implications	Provinsi Heilongjiang, China	Cut Latitude	The total sample was 840 people. Even though most stated that they had procedures, but not all of them understood how to report them. Only a small number of participants said that they had received training to deal with acts of aggression from perpetrators of violence. Some factors that have a significant influence were age, general nurses, and higher professional degrees.	Physical violence in Chinese Township Hospitals is an occupational hazard. A strategy for formulating policies, procedures and interventions needs to be made to deal with incidents of violence in the workplace.
6	Al-Turki et al. (2016)	Violence against health workers in Family Medicine Centers	Riyadh, Saudi Arabia	Cut Latitude	Of the total 270 participants, 45.6% had experienced violence at work. More violence was done by patients. Factors that have an influence were afternoon or night duty, shift work, and lack of support to report violence. Most victims did not report acts of violence because they believe that reporting was not an efficient action.	Workplace violence is still a problem in primary health care. With the implementation of programs and training for health personnels, an efficient reporting system (policies and procedures), and the implementation of a zero tolerance policy is expected to reduce violence among health personnels.
7	Xing et al. (2015)	Physical Violence against General Practitioner s and Nurses in Chinese Township Hospitals: A Cross-Sectional Survey	Provinsi Heilongjiang, China	Cut Latitude	From a total of 840 respondents, 12.6% had experienced physical violence. The most physical acts of violence were the relatives of patients. Only a few reported incidents of violence because reporting actions were deemed useless. Although there were reporting procedures, not all health personnels understand the procedures. Factors that have a significant influence were general nurses, age <35 years old, a higher professional degree, and direct interaction with patients.	Physical violence is an occupational hazard that is a public health problem in Chinese Township Hospitals. Strategic policies, procedures and interventions are needed to deal with the case.

8	Li et al. (2017)	Workplace violence against medical staff of Chinese children's hospitals: A cross-sectional study	China	Cut Latitude	Of 1,932 participants, 68.6% had experienced violence at work. Violence was mostly done by patients' families. Factors that have a significant influence were the level of education, profession, department, work experience, time of care, direct service to patients, gender, and income.	Medical staff have a high risk of experiencing violence at the Children's Hospital in China. Preparation of preventative measures are needed, such as drafting regulations, developing policies and strategies to prevent violence in hospitals, and hospital managers need to provide psychological support for victims.
9	Shi et al. (2017)	A cross-sectional study on the prevalence and associated risk factors for workplace violence against Chinese nurses	China	Cut Latitude	From a total of 15,970 participants, the prevalence of violence in the workplace was 65.8%. The most common type of violence was verbal violence. Violence was most often done by patients' relatives. Some factors that have a significant influence were age, department, work experience, and direct interaction with patients.	Workplace violence is often found in Tertiary and Country Hospitals in China. It is necessary to develop effective control strategies at the individual, hospital and national levels.
10	Sun et al. (2017)	Workplace violence against health care workers in north chinese hospitals: A cross-sectional survey	Northastern China	Cut Latitude	Of the total sample of 1,899 people, 83.3% had experienced violence at work. Some factors that have a significant influence on workplace violence were gender, education, age, occupation, anxiety, professional titles, and shift work systems.	The healthcare profession in hospitals is a profession that is vulnerable to experience violence at work in China. This problem cannot be underestimated. The issue of discussing strategies to prevent and intervene in acts of violence needs to be studied and implemented.
11	Abdella and Salama (2017)	Prevalence and risk factors of workplace violence against health care workers in emergency department in Ismailia, Egypt	Ismailia, Mesir	Cut Latitude	From a total of 134 participants, 58.2% had experienced violence. Most participants did not report to the hospital authority. Some factors that have a significant influence were work, age, work experience, and marital status.	Workplace violence is a problem experienced by health workers in the emergency department. Protocol development to report, recognize, handle, and develop strategies in dealing with violence in the workplace are required.
12	Liu et al. (2015)	Extent, Nature, and Risk Factors of Workplace Violence in Public Teritary Hospitals in China:	Provinsi Heilongjiang, China	Cut Latitude	From the total of 1,129 participants, 35.4% experienced physical violence at Specialist Hospitals and 76% experienced non-physical violence at General Hospitals. Some factors that have a significant influence were lack of	Preventive action is not only on departments in hospitals that have a high risk. Hospital management should provide an education program for those with high risk and follow up to provide support to employees and

13	Hamdan and Hamra (2015)	A Cross-Sectional Survey Workplace violence towards worklers in the emergency departments of Palestinian hospitals: a cross-sectional study	Palestina	Cut Latitude	experience, medical units, surgical units, anxiety, and rotating shift work systems. From the total of 444 participants, 76.1% had experienced workplace violence in 12 months. More violence was done by the family and relatives of patients. Some factors that have a significant influence were age, profession, and lack of experience. Lack of preventive and management measures was evident from the lack of security systems, policies and procedures, and training. Only a small proportion of victims of violence report incidents of violence experienced, mostly because of the actions taken were not enough and were afraid of the consequences.	prevent the recurrence of violence. Violence is experienced by many health personnels in the Emergency Department in Palestine. Policies need to be strengthened to prevent violence and improve reporting systems. All stakeholders, such as governments, policy makers, health service providers, and professional associations need to collaborate to develop national policies and violence prevention programs to eradicate violence from its roots.
14	Kumar et al. (2016)	A Study of Workplace Violence Experienced by Doctors and Associated Risk Factors in a Tertiary Care Hospital of South Delhi, India	South Delhi, India	Cut Latitude	From the total of sample of 151 people, 47.02% had experience violence at work. Most acts of violence were committed by patients and their relatives. There was a high risk for doctors who have a young age with little experience. Not all participants know the policies in the workplace and not all the participants got the training to understand and prevent violence.	Most doctors have experienced workplace violence in the last 12 months at a tertiary hospital in South Delhi, India. Health personnels need to be protected from the risk of violence for their own health and can provide good quality services to patients.

DISCUSSIONS

From the articles found, it was known that the factors that have a significant influence on workplace violence in most articles are profession, age, shift work system, and work experience. Based on The Joint Commission (2018), professional factors in the health sector are one of the causes of violence.

Based on studies from the American Nurse Association, it is known that over a period of three years, there were 25% of nurses and nursing students experiencing physical violence by patients or relatives of patients. General practitioners who work in the Emergency Department also have the risk of experiencing violence. Health personnels who have a younger age also have a higher risk due to lower education levels. In addition, younger age was also associated with a lack of experience, so the ability to deal with violent incidents becomes weaker (Zainal et al., 2018). Health personnels who work in shifts have a higher risk of experiencing violence due to lower job control, lack of fairness at work, and insecurity at work (Niu et al., 2019).

Most of health personnels who experienced violent incidents did not report violence. Some causes of reporting were not carried out due to the assumption that reporting actions were an inefficient action (Al Turki et al., 2016), unimportant, and afraid of consequences (Xing et al., 2015). Some of these reasons were causes of violence seen from the side of the victim. The cause of the lack of reporting actions from the Hospital side was due to lack of understanding of the procedure (Xing et al., 2017; Kremic et al., 2017).

Reporting incidents of violence can be a protective factor in health workers experiencing psychological violence (Xing et al, 2015). One way that can be done to resolve the problem of violence in the workplace is to increase encouragement and increase awareness to report incidents of violence experien-

ced. Delays in reporting verbal abuse events can lead to physical violence.

Health service institutions need to develop policies, procedures, and intervention strategies adopted by health service institutions (Xing et al., 2015). Steps that can be taken was to conduct training related to violence and psychological endurance from health service institutions to health personnels as a form of mitigating negative impacts. Interventions that aim to reduce workplace violence need to be adjusted to the type of violence, the profession of health personnels, or other factors because violence experienced by health personnels was not always caused by the same reason (Sun et al., 2017). National policies need to be prepared by the Government, policy makers, and service providers in overcoming problems of violence in the workplace (Hamdan and Hamra, 2015).

Workplace violence was often experienced by health personnels. Factors that have a major influence on incidents of violence were health professions, age, shift systems, and work experience. Knowing the factors that have a significant influence can be a reference to make improvements to management such as the formulation of strategies to develop policies in preparing procedures that facilitate the reporting of violent incidents, and formulating an effective intervention to deal with violence in the workplace.

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