



WORKPLACE VIOLENCE IN THE HEALTHCARE SECTOR

A REVIEW OF THE LITERATURE

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Background: Healthcare workers are most at risk and most vulnerable to workplace violence (WPV) when compared to other professions. Despite high rates of exposure to violence, it is highly underreported.

Aim: To identify the prevalence rate of WPV and the existing demographic relationship to WPV in the healthcare sector. To check for risk factors and health implications of this type of WPV on victims. Also, this research work intends to highlight the proposed strategies and interventions that can be used to mitigate against this type of WPV.

Methods: To achieve this aim, a literature review methodology was employed. The Malmö university library and google scholar search engines were utilized with several inclusion criteria to arrive at a total of 24 articles for this review.

Results: Prevalence rate for WPV is high with the prevalence for non-physical violence being higher than physical violence. Age and years of experience showed a significant relationship with being a victim of WPV while gender did not provide a conclusive result. There were few cases of physical injuries but a high percentage of victims of nonphysical violence suffered from psychological trauma such as fear, depression, post-traumatic stress disorder - PTSD, and anxiety. Prevention strategies and interventions have been recommended by victims and researchers of WPV.

Conclusion: WPV is an existing phenomenon with adverse effects which reduce the quality of lives and services of workers. There is need for effective preventive methods to reduce WPV such as the implementation of zero-tolerance policy to WPV, the presence of police officers in at-risk health care facilities and involvement of victims in the development of prevention strategies.

Keywords: healthcare sector, prevalence, victim, violence, workplace violence (WPV)

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Mosunmola Adedokun

TABLE OF CONTENT

1. INTRODUCTION	5
2. AIM	7
3. METHODOLOGY	7
3.1. Study Quality	8
3.2. Study Characteristics	9
3.3. Study Limitations	9
3.4. Ethical considerations	10
4. RESULTS	10
4.1 Prevalence	10
4.2 Demographics of WPV.....	11
4.3 Risk factors for WPV and Health Impact	12
4.4 Prevention strategies & Interventions	14
5. DISCUSSION	15
5.1 Limitations	17
5.2 Future work	18
6. CONCLUSION AND RECOMMENDATION.....	18
7. REFERENCES	20
8. APPENDIX	24
8.1 Appendix 1: Flowchart of the selected literature for review	24
8.2 Appendix 2: Overview of Studies Included in Literature Review	25
8.3 Appendix 3: Overview of research questions answered by the reviewed literature.....	28

1. Introduction

According to International Labour Organisation (2005), violence in the healthcare sector constitutes approximately 25% of all violence at work. Workplace violence (WPV) and victimization is a phenomenon that has been studied by many (Brophy, Keith, & Hurley, 2018; Chen et al., 2018; Hahn et al., 2010; Phillips, 2016; Pinar et al., 2017; Wiskow, 2003) and it seems like there is no end in sight probably until a noticeable reduction in the violent acts occurs. The American Nursing Association (2019) defines workplace violence as “Any act or threat of physical violence, harassment, intimidation or other threatening, disruptive behaviour from patients, patient's family members, external individuals, and hospital personnel. It includes physical, sexual, and psychological assaults”. Wiskow (2003) categorised violence as either physical or psychological – “Physical violence includes assault, murder, attack, abusive behaviour while psychological violence includes threats, verbal attacks, bullying, non-verbal abuse such as stalking and intimidation”. The author further described the three types of workplace violence and their aggressors: (1) The one who has no legitimate relationship to the workplace (2) A recipient of the service provided by the workplace (3) An employment related involvement in the workplace setting. Research has shown that majority of the WPV in the healthcare sector are perpetrated by the second category i.e. recipients/patients/clients or family members of the service provided by the healthcare facilities (Chen et al., 2018; Cheung & Yip, 2017; Dehghan-Chaloshtari & Ghodousi, 2020; Hahn, et al., 2010; Sharipova, Borg, & Hogh, 2008).

For the purpose of this review the term ‘healthcare workers’ refers to employees in the healthcare sector such as nurses, physicians, volunteers, care providers whose jobs require them to have direct contact with patients or clients in the hospitals or care facilities.

According to Phillips (2016), “Healthcare workplace violence is an underreported, ubiquitous, and persistent problem that has been tolerated and largely ignored” (p1161). Although this statement is relatively true because WPV in healthcare is underreported (Cheung & Yip, 2017), but it has not been ignored. The interest in the healthcare sector has increased significantly with several studies from different parts of the world focusing on WPV in the healthcare sector. There has been a lot of studies on the violence and victimization employees encounter in the workplace by different professionals and in different countries. Psychologist, sociologist and organisational behaviourist have all studied the phenomenon of workplace violence, but there has been limited work on the psycho-social injuries caused by the violence and victimization experience at work (Schindeler, 2014).

Healthcare workers are most at risk and most vulnerable when compared to other professions (Hahn, et al., 2010, Simha F. Landau & Bendalak, 2008). The World Health Organisation (WHO) states that 8% – 38% of healthcare workers experience some form of physical violence at some point in their careers, identifying nurses, paramedics and staff directly involved in patient care and emergency room as the healthcare workers with the highest risk (Brophy et al., 2018; Mayhew & Chappell, 2003; WHO, n.d.), while some studies rank nurses

as the second most at risk group (Pinar et al., 2017). Majority of healthcare workers have experienced a form of violence at one point - 29% in Sweden, 25% in USA and 44.7 in Turkey (ANA, 2019; Arnetz, Arnetz, & Pett, 1996; Pinar et al., 2017). Although the female gender dominates the healthcare sector (Brophy et al., 2018), previous studies have showed no significant gender difference in the frequency of physical and nonphysical WPV towards healthcare workers. (Estrada, Nilsson, Jerre, & Wikman, 2010; Lan, Lei, & Jinghe, 2018). This finding also correlates with the study on other occupational WPV by (Lanthier, Bielecky, & Smith, 2018) that found that men and women have the same risk for experiencing physical assault in the workplace but that women are at a higher risk for sexual assault than men. This research work aims to confirm this finding or provide more knowledge on the gender impacts the risk of experiencing WPV in the healthcare profession.

Despite the high rates of exposure to violence in the healthcare sector, it is highly underreported (ANA, 2019; Henson, 2010, Sharipova, Borg, & Hogh, 2008) and the reason for this can vary. It could be due to injury severity, toleration of low level violence, internal violence, departmental or jurisdiction rules and influences on individual -such as having concern for the perpetrator because they are patients with dementia or mental health issues (Mayhew & Chappell, 2003; Brophy et al., 2018). It can also be due to lack of detailed information on the procedure for handling violent incidents (Dehghan-Chaloshtari & Ghodousi, 2020; Mayhew & Chappell, 2003). According to Maran, Varetto, Zedda, & Magnavita, (2018) some volunteers in the healthcare sector fear that reporting a violent episode may be seen as an evidence of negligence. Unfortunately, not reporting violent acts can be perceived by the perpetrators that violence has no consequence, therefore leading to an increase. This is supported by the work of Brophy et al., (2018) on WPV where the authors compared underreporting of violence to the *broken window* principle, where a lack of interest for visible signs of low-level crime in an environment leads to a conducive environment for high-level crime. Their research included the use of group interviews to retrieve data from 54 healthcare workers on WPV.

Workplace violence and victimization is costly, and its impact is widely spread. Victims suffer from physical effects of violence such as physical injury or disability and also suffer from non-physical consequences such as sleeping difficulties, poor job performance, declining morale, chronic pain, nightmares, anxiety, depression and post-traumatic stress disorder. (Stokowski, 2010). The impact is indirectly experienced by the victims' family, co-workers, patients and employers. The ripple effect of victimization is obvious as it goes beyond the victim, it affects the society. WPV and victimization leads to reduced productivity, increased employee turnover, absenteeism, counselling costs, decreased staff morale, and reduced quality of life. All of these mentioned above are time and cost consuming (Daigle, 2012). The overall rate of cost ranged from \$961 to \$4,973/100 FTE¹s across hospitals on a study conducted in the United States with 798 worker-to-worker and patient-to-worker violent reported events (Essenmacher, et al., 2013).

As mentioned earlier, other fields have paid attention to this growing phenomenon, but criminologists have provided sparse research on workplace violence and victimization (Henson, 2010). As criminologists, our job entails

¹FTE- Full Time Equivalent

understanding why crime happens, where crime happens, the perpetrators, victims, trends, demographics and then use this information to provide remedies or interventions that will be useful to the criminal justice system, policy makers, and the society at large. In this study, existing work on workplace violence in the health sector will be reviewed and analysed with the aim to provide answers to the research questions.

2. Aim

There is an increased volume of research that have been conducted on the above topic and some of the findings and results will be discussed herein. This thesis is a literature review which aims to report, analyse and provide a detailed summary on some of the existent literature on workplace violence and victimization among healthcare workers. It aims to add to the body of criminology by discussing the prevalence of WPV towards healthcare workers, to check if a significant relationship exists between demographics such as age, gender, years of experience and the risk of experiencing WPV. Also, this research work intends to highlight the proposed strategies and interventions that can be used to mitigate against this type of WPV.

Specifically, this thesis work aims to provide answers to these research questions:

1. How prevalent is WPV experienced by healthcare workers?
2. Does age, gender, and years of experience have a significant impact on the being victim of WPV?
3. Are there specific risk factors that trigger violence in the healthcare sector and how does WPV affect the health of victims?
4. What strategies & interventions have been described to influence the prevalence of WPV?

3. Methodology

This thesis was conducted by performing a literature review on workplace violence and victimization in the healthcare sector. This method was selected because it is the most appropriate method to answer the research questions. According to (Snyder, 2019), literature reviews are used when the aim of the research is to provide an overview of a certain issue, to discuss a particular matter or to evaluate the state of knowledge on a topic.

An electronic search was conducted on the Malmo university's library database and google scholar. Multiple search terms were used to ensure and capture as many studies as possible. The search terms included one or more of the following terms: "workplace violence in healthcare", "workplace victimization in healthcare", "workplace violence AND nurses". The third search term was

included because nurses are the largest healthcare professionals (Rosseter, 2019) and it is important that they are captured in this research along with other healthcare professionals.

The different searches produced a total of 4679 articles. There is a lot of information available on the internet, but the challenge is sifting through and separating quality from quantity (Majid, 2018). The selection process involved the use of an inclusion criteria. The inclusion criteria includes articles that are; peer reviewed, published in English, focused on Workplace violence in the healthcare sector, focused on the violence against the employees and not the organisation or employers and articles that were published between 1st of January, 2000 and 20th January, 2020. The next step was the removal of exact duplicates and further screening of the search results to check for relevance. This was done by reading of titles and abstract of the articles. For example, the title and abstract of (Brophy, Keith, & Hurley, 2018) meets the above criteria and it was selected for the study. Also, articles that used literature review as their methodology were excluded because of the use of secondary data. An example is the research article by Mothibi, Rankoana, & Nel, (2015) which met the inclusion criteria but made use of secondary data and literature review as its methodology, so it was removed. Also, articles whose full text could not be accessed were removed from the study because accessibility to the abstract alone will not suffice for this research. Finally, four articles were found through reviewing the reference list and bibliographies of selected articles. A detailed flow chat of this selection process can be found in Appendix 1.

This search process produced a total of 24 articles which are included for this literature review. For easy replication of this study, these articles can be found in six (6) databases, namely, Social science citation index, Science Citation index, SwePub, Scopus, Journals@OVID, and Medline PubMed. A brief description of the selected articles and the database where they can be found is included in the Appendix 2.

A major advantage of this methodology is the ability to review and gather collective information on the topic. It provides access to broad range of studies such as research conducted through different scientific methods, different geographical regions and different areas within the healthcare sector. A few of the studies selected for this review include national surveys for the country, while some focused on a few hospitals or specific departments within the hospitals.

3.1 Study Quality

The studies selected encompass different areas within the healthcare sector, such as different types of hospitals, different departments within the hospitals, long term cares and volunteers. A major strength of some of the articles to be reviewed includes the following: A large sample size (100-15,970 participants for quantitative studies and 20 – 56 participants for qualitative studies), the use of a standardized questionnaire titled “The Joint Programme on Workplace Violence in the Health Sector of the International Labour Office, the International Council of Nurses, the World Health Organization, and the Public Services International (ILO/ICN/WHO/PSI Joint Programme)”, and a good response rate from the participants. The response rate in each of the selected literature was considered. The response rate ranged from 62%-96.1%, with an exception to two studies with

5.3 % (850 participants) and 10.9% (3465 participants) that were included because of their significant impact to this thesis work. The selected literature was chosen from several fields of study such as nursing, medicine and caring sciences.

3.2 *Study Characteristics*

Several study designs were used in the selected literature. The studies were either quantitative or qualitative and they included one of the following research designs; case studies, comparative analysis, correlational analysis, descriptive analysis, content analysis, collaborative study, and cross-sectional designs. Majority of the quantitative studies were conducted with the use of the “Workplace Violence in The Health Sector Country Case Studies Research Instruments, 2003” by the ILO, ICN, WHO and PSI. Other studies used the “Survey of Violence Experienced by Staff - German version (SOVES-G)”, the “Perception of Aggression Scale (POAS-S)”, the “Violent Incident Form [VIF]”, and other unnamed structured questionnaires developed themselves or by other authors. For the qualitative studies conducted, data collection methods include the use of interviews, focus groups and written narratives.

The studies to be reviewed were carried out in various countries; three studies each from United States of America, Sweden and China, two studies from Canada, one study each from the following Iran, Saudi Arabia, Taiwan, Australia, Egypt, Turkey, Ghana, Denmark, South Korea, Pakistan, Italy, Hong Kong and Switzerland. The studies include discussions on major topics addressing the aim of this thesis paper such as prevalence, consequences, perpetrators, high-risk factors, strategies and interventions on WPV in the healthcare sector.

3.3 *Study Limitations*

The articles to be reviewed in this thesis had a few limitations. The most common limitation was the recall bias. The articles with recall bias as a limitation had participants who were required to recall incidents within the last 12 months. Recall bias occurs when participants intentionally or unintentionally omit details of previous experiences accurately. This is supported by Spencer, Brassey, & Mahtani, (2017) who said “the accuracy and volume of memories may be influenced by subsequent events and experiences”. It is common for self-reported data. However, the use of a 12- month self-assessment time frame allows for international comparison (Hahn, et al., 2010).

Most of the qualitative studies to be reviewed had the limitation of a small sample size. The use of a small sample size could affect the reliability of a study and sometimes leads to results been affected by other factors such as cultural or religious beliefs.

The final limitation from the studies include obtaining data from a particular setting such as the geographical location of the healthcare facility – rural or urban, the type of facility – general or private hospital or long-term care centre, and specific department within the hospital. This limitation can lead to overestimation or underestimation of the results.

Despite the limitations, the results from these studies were informative, revealing and useful.

3.4 Ethical considerations

It is important to make certain appropriate ethics when conducting a research, especially when it involves persons. Anonymity, voluntary participation, informed consent, right to withdrawal and communication on use of the research are important and should be communicated adequately to the research participants. This study involves the work lives of healthcare workers, hence the importance of appropriate ethics. For this study, no ethical approval was sought from the Malmö university Ethics council because this study is a literature review and makes use of secondary data/existing research. But instead credit is given to the authors of the existing research by adequate referencing of their works.

4. Results

4.1 Prevalence

The first research question of this study is to identify the prevalence rate of WPV experienced by healthcare workers. Twenty (20) of the reviewed literature addressed prevalence rate in workplace violence against healthcare workers. The prevalence for non-physical violence was higher than physical violence in most studies (Abou-ElWafa et al., 2015; Chen et al., 2018; Dehghan-Chaloshtari & Ghodousi, 2020; El-Gilany, El-Wehady, & Amr, 2010; Gacki-Smith, Juarez, Boyett, Homeyer, Robinson, MacLean, 2009; Maran et al., 2018; Mayhew & Chappell, 2003; Pinar et al., 2017; Gerberich et al., 2004). This is similar to findings from results conducted in the in the 1990s to early 2000s (Piquero, Piquero, Craig, & Clipper, 2013) and is still valid between 2000 and 2020. Non-physical violence was mostly a risk factor for physical (Dehghan-Chaloshtari & Ghodousi, 2020). The prevalence of violent acts is not limited to certain areas or professions within the healthcare sector, it cuts across nurses, physicians, volunteers, and long-term care workers. In most cases, more than half of the study participants have experienced non-physical violence.

In a 12 month survey period, the prevalence rate for WPV in the reviewed studies are 95.5% (Choi & Lee, 2017), 81.5% (Chen, Ku, Yang), 78.4% (Hahn et al., 2010), 68.6% (Li et al., 2017), 65.8% (Shi et al., 2017), 53% experienced *physical violence* (Boafo & Hancock, 2017), 44.7% (Pinar et al., 2017), 44.6% (Cheung & Yip, 2017), 31% (Lundström et al., 2005), 27.7% (El-Gilany et al., 2010), about 25% in elder care (Sharipova et al., 2008), 16.5% (Zafar et al., 2013)². The research on emergency nurses show that emergency and non-emergency nurses experience physical violence 62% and 48% respectively in the 12-month survey period. (Abou-ElWafa et al., 2015). In 2004, Gerberich et al.'s 476 nurses reported 711 physical assault events while 400 participants in Mayhew &

² These figures are percentages from different sample sizes and should be interpreted as such

Chappell's study in 2003 reported 585 violent events. Josefsson et al. (2007) findings indicated that 50% of participants have experienced indirect threat of violent acts and 40% have experienced violent acts. The statistics above show mainly the prevalence rate for any type of WPV experienced by the participants, an exception to this is if the type of WPV is specified.

When comparing the violence experienced in the entire career of nurses, the past 12 months, and the past week in Hahn et al. (2010), the results of 291 nurses show that 95% of nurses have experienced a form of violence in the career, 78.4% in the last 12 months and 14.0% in the past week.

According to the results of the reviewed literature, about 1.7% to 57% of the study participants have experienced physical violence, while about 49%-100% have experienced non-physical violence or abuse during their career. The study with the highest percentage of physical violence gave no explanation to why the acts of physical violence was very high but instead compared it to other studies which also provided high levels of physical violence (Dehghan-Chaloshtari & Ghodousi, 2020).

4.2 Demographics of WPV

This study aims to discover if there is a significant relationship between demographics and being a victim of WPV. Chen et al., (2012) and Mayhew & Chappell, (2003) indicated that that there was no correlation between age, gender, work experience, marital status, hierarchy and workplace violence. Hahn et al. (2010) agrees with the above but their results found a correlation between WPV and work experience in the health sector. Lundström et al. (2005) studies on caregivers found weak relations between the age and education of caregivers and their exposure to violence. Zafar et al., (2013) results show that male physicians were more likely to experience abuse than female physicians. But the authors found correlations between age, years of experience and the reporting of WPV but not with gender. The prevalence of experiencing and reporting WPV differs amongst healthcare workers. These findings stand out when compared to most of the reviewed literature.

Choi & Lee, (2017); Dehghan-Chaloshtari & Ghodousi, (2020); El-Gilany et al. (2010); Lundström et al. (2005); Pinar et al., (2017) results showed that employees with less than 5 years' work experience are at higher risk for WPV while Li et al. (2017) result showed employees with 10-20 years' work experience at a higher risk to experience violence. The authors attributed the reason to probably being that it is because they treat critically ill children and are tasked with responsibilities with significant medical risk. An error will most likely lead to violent acts from the parents. Zafar et al. (2013) and Hahn et al. (2010) highlighted that experienced nurses are more likely to report WPV than less experienced nurses. Cheung & Yip (2017) noted that male nurses reported WPV than their female counterparts. In Shi et al. (2017), the type of hospital has a correlation with years of experience. Nurses in county hospitals with 5 – 10 years' experience were a highest risk while in tertiary hospitals, nurses with 11-20 years' experience were at highest risk.

Chen et al. (2018); Dehghan-Chaloshtari & Ghodousi (2020); Pinar et al. (2017) show that females are more likely to experience WPV, while Cheung & Yip (2017); Gerberich et al., (2004); Li, et al., (2017); Zafar et al. (2013) findings

revealed that males are more likely to experience WPV. But a few studies found no significant gender differences or patterns to the recipients of WPV (El-Gilany et al., 2010; Mayhew & Chappell, 2003)

When it comes to vulnerable age group, the articles grouped the ages in different ranges and highlighted different age group has been at higher risk for WPV. Dehghan-Chaloshtari & Ghodousi (2020); Abou-ElWafa, et al. (2015); Pinar et al. (2017); Boafu & Hancock (2017); Gerberich et al., (2004); Chen et al., (2018); Lundström et al., (2005); Shi et al., (2017); Cheung & Yip (2017) grouped the following as age groups at risk for WPV are “30-39”, “younger nurses”, “less than 29”, “21-30”, “younger age”, “26-35”, “19-24”, “30 or younger”, “21 – 34” respectively. From all of these, it is clear that the above studies agree that younger nurses are at risk for WPV. Although an exception was found in the results of Chen et al. (2018) and Lundström et al., (2005), whose participants aged “36–45” and “60 years and older” experienced more physical violence when compared to younger nurses.

Employees on daytime shift showed higher exposure to violence than those working the night shift (Lundström et al., 2005)

4.3 Risk factors for WPV and Health Impact

Organizations, industries or sectors have their different peculiarities and thus all have certain risk factors that trigger violence within their workplace. The healthcare sector is exposed to both healthy and unhealthy people with different ailments and actions that increase the chance of violent acts to occur. These risk factors are like triggers that sometimes prompt the action to occur. The same form of violent behaviours should not be expected from people with different risk factors (Mayhew & Chappell, 2003). Further research needs to be done to understand the complex variations in the patterns of violence by the perpetrator characteristics. The different risk factors for WPV in the reviewed studies will be grouped according to the results of Brophy et al. (2018). The risk factors will be grouped into three (3) groups, *Clinical risk factors*, *environmental risk factors* and *organisational risk factors*.

The *clinical risk factors* include the presence of patients with cognitive impairment-dementia, psychiatry diagnosis, learning impairment, history of violence and patients or visitors under the influence of alcohol (Brophy et al., 2018; Hahn et al., 2010; Hylén et al., 2019; Josefsson et al., 2007; Mayhew & Chappell, 2003; Wolf et al. 2014). These are the results from Hahn et al. (2010) of the violent incidents reported in the past 12 months: “Dementia (34.6%, n = 45), drug or alcohol abuse (21.0%, n = 48), delirium (12.7%, n = 29), psychiatric illness (7.9%, n = 18) and pain (5.7%, n = 13)” (p. 3540). Dementia has been known to cause aggressive behaviour hence, the reason for high exposure to violence when tending to patients with the disease (Sharipova et al., 2008).

The *environmental risk factors* include the physical surroundings of the workplace. The presence of physical security, good alarm systems, good building layout are all important elements within the facility. The absence of these often leads to a higher risk for violence to occur. Chen et al (2018) attributed the reduction of WPV in the paediatric department of a teaching hospital to the having trusted and respected staff and improved tightened security. The (International Labour Organization (ILO) et al., 2005) cited (Health & Safety

Organiser, UNISON, February 2003) saying the United Kingdom have or are introducing police stations within the hospitals. The study by Mayhew & Chappell (2003) mentioned an intervention called the Crime Prevention Through Environmental Design (CPTED), where “the focus of attention is the design of buildings, doors and windows, the immediate surroundings, the placement of fittings, and the type of furniture selected” (p.10). The idea is to make violence more difficult to perpetrate. Initially, this intervention may be expensive to execute but may be cheaper in the long term and it provides a good prevention strategy.

A common *organisational risk factors* amongst the reviewed studies is the long waiting time. Brophy et al. 2018; Hahn et al. 2010; Maran et al., 2018; Mayhew & Chappell, 2003; Wolf et al. 2014). The participants claim that patients get aggravated and are triggered after waiting for a long time to see a physician and this aggravation is mostly taken out on the nurse. This leads to the next risk factor which is understaffing (Brophy et al. 2019, Cheung & Yip, 2017, Hahn et al. 2010). There seems to be a high case of understaffing in the healthcare sector especially for professionals with direct contact with patients. Understaffing inevitably leads to long waiting hours. The less staff available to attend to patients, the longer they are kept waiting. Employees at a long-term care facility in Ontario complained of the numerous tasks to be performed for each patient within a short time frame. Brophy et al. (2019) cited the Ontario Long Term Care Association saying, “One-to-one attention and care that comes from having more staff can alleviate some of the triggers that influence aggressive behaviors”.

Health impact

Violence has several negative outcomes to our health irrespective of the location and severity of the violence. Victims of non-physical WPV recorded several cases of fear, depression, post-traumatic stress disorder -PTSD, and anxiety (Brophy et al., 2019; Gerberich et al., 2004; Maran et al., 2018; Li et al., 2017; Sharipova et al., 2008; Wolf et al., 2014; Zafar et al., 2013). The prevalence of non-physical violence has been seen to be highest level of violence experienced in the workplace. Despite the zero request for sick leave amongst the 37% who were exposed to violence in Lundström et al., (2005) the caregivers were sick emotionally as they reported feelings of powerlessness, insufficiency, anger, shame and guilt.

In a study by Brophy et al. (2019) and Josefsson et al. (2007), participants experienced fear of crime from witnessing a crime or being exposed to one and Bofo & Hancock’s (2017) participants say they stay super alert on the job because of the fear of being victimized. Some claimed the impact of WPV on their health was severe (Cheung & Yip, 2017).

In Josefsson et al (2007) study on registered nurses who worked in municipal care of older people (Dementia care and general elder care), it was reported that 18% of the exposed staff in dementia care and 9% in general elder care were required to visit a healthcare centre as a consequence of violence experienced.

Wolf et al. (2014) conducted a study using a qualitative descriptive exploratory design. Forty-six (46) participants gave narratives about their experience with WPV. Below are a few narratives from the victims of physical violence:

“I missed a week of work due to my injuries. —Participant P”

“I ended up tearing cartilage in my left knee, ended up having surgery. I work with chronic pain and will need a knee replacement. —Participant J”

“I . . . after many trigger point injections for pain control had to quit my job as a Field Nurse since I now had decreased strength in my right arm and leg due to injuries suffered during this attack. I ended up with torn muscles from my right scapula and separation to my sacroiliac joint. To this day I have discomfort in my shoulder and especially my hip.—Participant D”

Other implications of WPV against health workers include damaged and destroyed eyeglasses, jewellery and clothing (Hahn et al., 2010).

4.4 Prevention strategies & Interventions

After conducting a research on a delicate issue such as WPV that affects the quality of life of people, it is not uncommon for researchers to proffer possible solutions, or strategies and interventions to reduce the occurrence of WPV. To answer the final research question for this study, prevention strategies & interventions proffered in the reviewed studies shall be elaborated below and then an explanation on how they have influenced the prevalence of WPV will be discussed in the discussion section.

Twenty (20) of the twenty-four (24) studies reviewed recommended useful strategies directed at policy makers within and outside the healthcare system. Some of these strategies were proffered either by the participants through the different data collection methods used in the studies or by the researchers.

A major issue in WPV experienced by healthcare workers is the high level of under reporting. Majority of these workers complained about the unclear reporting procedures within their different organisations. Boafo & Hancock, (2017), Choi & Lee, (2017) and Dehghan-Chaloshtari & Ghodousi, (2020), suggested a clear and concise reporting procedure available to all members of staff. This will ensure all forms of violence are reported and adequate actions can be taken to tackle the issue. This will also help to provide complete data on WPV and ensure appropriate intervention strategies are deployed.

Counselling was an important and common recommendation from the authors of the study. One in every two healthcare worker seems to have been a victim of WPV. Verbal and psychological violence is the largest form of violence experience by healthcare workers. Although there are no physical injuries, victims suffer from several mental health challenges that have been mentioned above and they should be given priority for psychological counselling. (Brophy et al., 2019; Chen et al., 2018; El-Gilany et al., 2010; Maran et al., 2018; Zafar et al. 2013) confirmed the importance of counselling to victims such as overcoming the feelings of isolation, removal of guilt, trauma and fear of returning to work.

Training was also a common intervention suggested by the participants (Abou-ElWafa et al., 2015; Boafo & Hancock, 2017; Brophy et al. 2019; Josefsson et al., 2007; Hylén et al., 2019; Shi et al., 2017; Wolf et al., 2014). Many of the participants claimed to have no training whatsoever on how to handle violent situations when they occur. This was recommended in two (2) parts. Firstly, training to equip the staff on how recognise high-risk patients and situations (Wolf et al., 2014) and secondly, training to equip managers and supervisors on the appropriate levels of sensitivity to address these issues when the subordinates

experience violent acts (Brophy et al., 2019). Maran et al. (2018) findings show that the “prevention of violent behaviour is a fundamental element in the training of both staff and volunteers and should be an integral”. Volunteers and participants from Long term care also emphasised the need to be trained on how to identify and handle violent acts. Hahn et al. (2010) found a positive correlation between the nurses’ experience with WPV and the necessity for a training course in aggression management. Appropriate training of management to employ compassion and sensitivity to support victims was also mentioned (Brophy et al., 2019).

The work environment was referred to as a high-risk setting. Participants suggested having a good security in their workplace environment. This involves the use of security personnel (Abou-El Wafa et al., 2015; Brophy et al., 2019; El-Gilany et al., 2010; Wolf et al., 2014), functioning security equipment such as an duress alarm (Brophy et al., 2018; Hylén et al., 2019; Maran et al., 2018; Mayhew & Chappell, 2003), security controls (Boafo & Hancock, 2017; Zafar et al., 2013). This serves as a form of comfort to employees and allows for them to carry out their job more effectively. Pinar et al. (2017) cited ‘Calnan, Kelloway & Dupre 2012’ on how tight security measures were not welcome in healthcare settings (p.2346). There needs to be an acceptable medium where patients and workers can both be comfortable to ensure the care provided is not compromised

Other suggestions include creating a culture of respect through relevant strategies (Gerberich et al., 2004), a comprehensive prevention programme (Pinar et al., 2017), zero tolerance to bullying and violence (Brophy et al., 2019; Chen et al., 2018; Mayhew & Chappell, 2003; Wolf et al., 2014) and discovery of the aetiology of violence and vulnerability associated with victimization (Lundström et al. 2005).

5. Discussion

Each of the reviewed literature provided answers to one or more of the research questions in this study (See appendix 3 for the overview of research questions answered by the reviewed literature). The findings from the review of selected literature further supports other research literature that addresses the high rate of prevalence and the adverse health impacts of WPV on healthcare workers. It also supports the risk factors as addressed in other literatures and unifies the different recommendations to reduce WPV.

Four research questions were established at the beginning of this research work and they have been answered in the results section. Here, the results will be discussed.

Firstly, the results show that WPV is highly prevalent and experienced by healthcare workers. This further supports previous literature on the high prevalent rate of WPV in the healthcare sector. Research shows that at some point in the career of healthcare workers, they have been exposed to a form of WPV (Lawoko, Soares, & Nolan, 2004). The results showed nonphysical violence as the most

prevalent form of WPV. Violence is wrong and no form of violence should be viewed as a norm. Prevalence of WPV has several negative impacts such as the quitting of qualified healthcare workers and high employee turnover (Gerberich et al., 2004). This causes a ripple effect that affects the employer, the government and the people. The cost of recruitment increases for employers, reduction of qualified healthcare workers in the hospitals which in turn leads to long waiting time and aggravation of patients and visitors.

Secondly, this research sought to know if certain demographics such as age and gender has an effect on being a victim of WPV. The findings indicated that age, gender, and years of experience have an impact on being a victim. Although, there were a few contrary results, the majority of the studies showed employees with less than 5 years' work experience, employees with an average age of 29 years old are likely to experience WPV. As regards gender, some studies found no significant gender differences as a risk for WPV while some found men and others found women to be more at risk. Since women comprise about 75% of the workforce in the healthcare sector in many countries, especially in the nursing, midwifery and care providing roles (World Health Organisation, 2008), WPV against female healthcare workers can be considered part of the continuum of violence against women (Brophy et al., 2018)

Irrespective of the severity of the injuries caused by WPV, it is unhealthy for anyone to be victimised and be exposed to violence frequently. This research showed that physical violence occurred in few cases which sometimes led to injuries. According to the findings, the most prevalent type of violence which is nonphysical violence often have several psychological effects on the health of the victims such as PTSD, anxiety, fear, feelings of powerlessness, insufficiency, anger, shame and guilt. These continuously reduces the quality of life of the employees and the quality of service they provide to their patients. The psychological effects can also be experienced from witnessing a violent act inflicted on other colleagues (Brophy et al., 2019; Josefsson et al., 2007). The risk factors identified have helped to put a spotlight on the areas of focus. The environmental and organisational risk factors can be managed with proper policies, whereas a lack of these policies leads to an adverse effect on the healthcare facilities /organisations. Employers spend more money or lose money in some cases when there is a high turnover of employees, sick or absent days caused by violence. All these often lead to poor quality patient service delivery.

The final research question sought to know the strategies and interventions that have been described to influence the prevalence of WPV. As seen in the results sections, majority of the researchers and some participants proffered solution to the reduction of WPV in the healthcare sector. The reviewed studies were retrospective in nature and mostly focused on experiencing WPV in the last 12 months, it was difficult to measure how the proffered solutions have influenced WPV using these studies. However, a study by Deans (2004) which utilized a one-day training on how to handle aggression in the Emergency departments showed results of increased confidence in handling WPV and also increased feeling of support from other colleagues and management. Provision of appropriate training was proffered by some of the participants in the reviewed literature and the result from the research from Deans (2004) clearly shows the impact a one-day training can have on nurses. Also, a comparative study was conducted by Pawlin (2008) whose results show that the creation of a WPV recording tool which describes the incident, characteristics and outcome produced

eleven times increase in the reporting of WPV. The provision of a clear WPV reporting tool/process/procedure is essential to the reduction of WPV in the healthcare sector.

It was also discovered that employees contribute to the normalization of WPV and also enable its continuity (Schindeler, 2014). This normalization of WPV is revealed in the results from the low reporting rate of WPV. As mentioned in the introduction, WPV in the healthcare sector is highly underreported. The findings from this work revealed that underreporting is often caused by fear of retaliation, minor or absence of injuries, complex or absence of reporting procedures, empathy for perpetrators, lack of support from supervisors, and concern that the assaults are viewed as an act of negligence (Cheung & Yip, 2017; Gacki-Smith, et al., 2009). Organisations need to ensure the policy documents are developed with the appropriate sanctions and support. They also need to actively drive the awareness of these policy documents by constantly communicating employees' rights, reporting procedures and available support system.

In criminology, it has been noticed that most criminal events occur as some form of repetition (Farrell, 2010). The repeat victimization theory and hotspot policing have been used to focus on the improvement of crime prevention practices. Although, they are mainly used to explain recurrent crimes relating to theft of personal items, burglary, and the geographical area where they occur. In the context of WPV, it may be difficult to use the repeat victimization and hotspots to describe or reduce the occurrence of a crime because the perpetrators are not criminals, they are mostly patients suffering from a mental disability or family of loved ones who are reacting out of love. But instead the repeat victimization and hot spot policing can be used to study WPV and develop prevention strategies to reduce the frequency and make the healthcare facilities a healthy work environment for its employees. There is a level of similarities in the experience of WPV in different countries as the reviewed literature were from different countries. This explains that this phenomenon is not specific to a particular region or country. Future studies should consider studying the similarities and differences between the prevalence of WPV in different countries.

5.1 *Limitations*

For the findings of this study to be adequately interpreted in the right context, it is important to recognise the limitations. This thesis came across some limitations such as: (1) the literature review's reliance on previous research by other researchers and the possibility of a selection bias by the researcher. To reduce this bias, this thesis adhered strictly to the inclusion criteria mentioned in the methodology. (2) the availability of access to the previous research was also a limitation, as the full text of some of the articles to be selected were not available. Unfortunately, these studies could not be included as access to the abstract only was not good enough. (3) some of the reviewed literature were funded and this sometimes leads to flawed or skewed results. Despite the limitations of this study, the results answered the research questions and provide a good international overview of WPV in the healthcare sector.

5.2 Future Work

According to (Snyder, 2019), literature reviews can be used to identify gaps in research and thus shed light on areas for future research. Most of the reviewed literature were cross sectional and retrospective in nature. Despite the numerous advantages of this research method, there are also a few disadvantages such as the inability to determine cause and effect, and the inability to analyse behaviour over a period of time. There has been limited work on the study of WPV participants in the healthcare sector over a period of time. For future research, it will be interesting and value adding to the field of criminology to conduct a longitudinal study on the antecedents and patterns of WPV in the healthcare sector. This will help provide variable pattern and study on the development or regression of WPV over a period of time. This future research suggestion is also in line with authors Choi & Lee (2017) and Sharipova et al., (2008). The study of trends will help to develop more effective intervention programmes (Josefsson et al., 2007). El-Gilany et al. (2010) recommended for future research a study of the perpetrators of the acts.

Also interesting to study will be the prevalence of horizontal WPV (i.e. WPV perpetrated by colleagues). Research on the prevalence, correlation between gender, age, experience, and racial background will be important to help to address this form of WPV.

If this research work was to be conducted again in the future within the allocated time frame, the inclusion criteria should include a shorter time frame for the years the literatures were published to produce a lesser amount of literatures from the search. The use of other research methods such as a cross sectional method to answer these research question would have been possible but time consuming and expensive because of the aim to study the effects in more than one country.

6. Conclusion and Recommendation

This study was able to show that WPV in the healthcare sector is highly prevalent. It further reveals that nonphysical violence occurs more frequently than physical violence. Also, majority of the reviewed studies showed health workers with less than 5 years' work experience and those with an average age of 29 are likely to experience WPV. The victims of WPV mostly suffer from psychological injuries rather than physical injuries – this correlates with nonphysical violence being more prevalent than physical violence. The use of prevention strategies and interventions to reduce the occurrence of WPV should be the focus of policy makers as they have been proven to have an impact on the prevalence of WPV.

WPV remains a significant concern in the healthcare sector. The hospital and care facilities are expected to be a safe place but unfortunately, they are not to care providers. Majority of the perpetrators are patients, family -or friends of patients (Cheung & Yip, 2017; Hahn, et al., 2010; Sharipova, Borg, & Hogh, 2008), which makes it more sensitive to manage. Felson (2011) describes the success of criminology as a field when “it focuses on crime, not criminals...it

does best building on tangible features of crime...studying crime within a larger set of human needs and tendencies". The best way to address this existing phenomenon will be to focus on the violence being committed and develop effective preventive measures to reduce the violent acts.

"Healthcare policy and legal enforcement thus have a significant deterrent effect on WPV" (Cheung & Yip, 2017, p.8). Prevention strategy such as the zero-tolerance approach to patients' and visitors' violence in hospital settings adopted in England and Australia can be adopted in other countries. This strategy has been proven to reduced WPV in healthcare facilities where it has been used compared to facilities where it has not been used (Cheung & Yip, 2017). Secondly, the presence of police officers at high risk settings such as the emergency departments should be encouraged. This is currently used in some hospitals in the United Kingdom (n.d., 2010). Lastly, victims of WPV should be involved in the developmental process of prevention strategies. Because they have a better insight into the problem, they have experienced it and they will provide valuable contributions to the development of prevention strategies.

7. References

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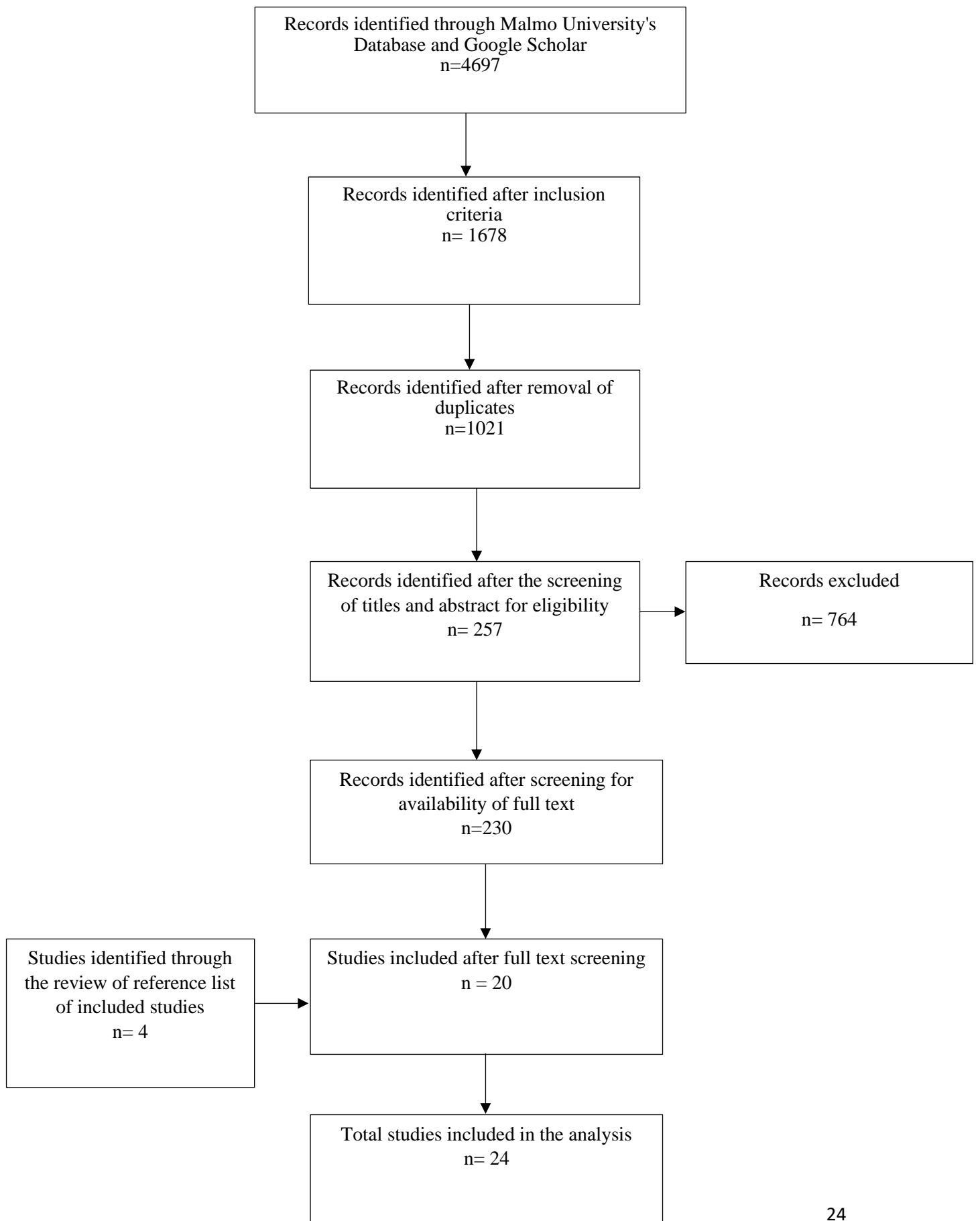
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8. APPENDIX

8.1 Appendix 1. Flowchart of selected literature for review



8.2 Appendix 2. Overview of Studies Included in Literature Review

Author & Year	Country	Sample Size	Design	Response rate	Instrument ³	Database
(Dehghan-Chaloshtari & Ghodousi, 2020)	Iran	100 nurses	Quantitative	n/a	ILO/ICN/WHO/PSI 2003	Social Sciences Citation Index
(Lundström, Saveman, Eisemann, & Åström, 2005)	Sweden	149 care givers	Quantitative	81%	Semi-structured questionnaire	Journals@OVID
(Brophy, Keith, & Hurley, 2018)	Canada	54 healthcare workers	Qualitative	n/a	Semi-structured interviews	Scopus
(Maran, Varetto, Zedda, & Magnavita, 2018)	Italy	108 hospital staff and 96 volunteers	Quantitative	n/a	Violent Incident Form [VIF], Beck Depression inventory [BDI] and State-Trait Anxiety Inventory [STAI Y]	Social Sciences Citation Index
(Mayhew & Chappell, 2003)	Australia	400 health workers	Qualitative & Quantitative	n/a	General Health Questionnaire (GHQ-12), semi structured interviews	Scopus
(Abou-ElWafa, El-Gilany, Abd-El-Raouf, Abd-Elmouty, & El-Sayed, 2015)	Egypt	275 nurses	Quantitative	96.1%	ILO/ICN/WHO/PSI 2003	Social Sciences Citation Index

³ The survey instrument for most qualitative studies is the researcher who gathers the information through interviews or other means.

(Pinar, et al., 2017)	Turkey	12944 healthcare staff	Quantitative	89.6%	ILO/ICN/WHO/PSI 2003	Scopus
(Li, et al., 2017)	China	1932 medical staff	Quantitative	86.8%	ILO/ICN/WHO/PSI 2003	Scopus
(El-Gilany, El-Wehady, & Amr, 2010)	Saudi Arabia	1091 primary healthcare staff	Quantitative	96.1%	ILO/ICN/WHO/PSI 2003	Scopus
(Chen, Ku, & Yang, 2012)	Taiwan	791 nurses	Quantitative	89.9%	ILO/ICN/WHO/PSI 2003	Medline PubMed
(Gacki-Smith, et al., 2009)	USA	3465 nurses	Quantitative	10.9%	Questionnaire developed by the Emergency Nurses Association	Science Citation Index
(Wolf, Delao, & Perhats, 2014)	USA	46 nurses	Qualitative	n/a	Written narratives	Journals@OVID
(Zafar, et al., 2013)	Pakistan	266 physicians and nurses	Quantitative	86%	ILO/ICN/WHO/PSI 2003	Scopus
(Brophy, Keith, & Hurley, 2019)	Canada	56 Long term care staff	Qualitative	n/a	Semi structured interviews	Medline PubMed
(Josefsson, Sonde, & Wahlin, 2007)	Sweden	213 nurses	Quantitative	62%	Structured questionnaire	SwePub
(Sharipova, Borg, & Hogh, 2008)	Denmark	8134	Quantitative	78%	Structured questionnaire	Scopus
(Boafo & Hancock, 2017)	Ghana	592 nurses	Quantitative	67%	ILO/ICN/WHO/PSI 2003	Social Sciences Citation Index

(Chen, et al., 2018)	China	1831 nurses	Quantitative	92.3%	Structured questionnaire	Scopus
(Gerberich, et al., 2004)	USA	4918 nurses	Quantitative	78%	Structured questionnaire	Medline PubMed
(Hylén, Engström, Engström, VPelto-Piri, & Anderzen-Carlsson, 2019)	Sweden	17 nurses	Qualitative	n/a	Focus group interviews	Science Citation Index
(Choi & Lee, 2017)	South Korea	358 nurses	Quantitative	n/a	Structured questionnaire	Science Citation Index
(Hahn, et al., 2010)	Switzerland	291 nurses	Quantitative	71%	SOVES German version (SOVES-G), The POAS-S	Science Citation Index
(Shi, et al., 2017)	China	15970	Quantitative	74.7%	Structured questionnaire developed based on SOVES-G-R, Chinese version of the Workplace Violence Scale and ILO/ICN/WHO/PSI 2003	Science Citation Index
(Cheung & Yip, 2017)	Hong Kong	850	Quantitative	5.3%	ILO/ICN/WHO/PSI 2003, Depression anxiety stress scale 21 (DASS-21)	Science Citation Index

n/a – not available

8.3 Appendix 3. Overview of research questions answered by the Reviewed literature

Author & Year	RQ1	RQ 2	RQ 3	RQ 4
(Dehghan-Chaloshtari & Ghodousi, 2020)	•	•		•
(Lundström, Saveman, Eisemann, & Åström, 2005)	•	•		•
(Brophy, Keith, & Hurley, 2018)			•	•
(Maran, Varetto, Zedda, & Magnavita, 2018)	•		•	•
(Mayhew & Chappell, 2003)	•	•	•	•
(Abou-ElWafa, El-Gilany, Abd-El-Raouf, Abd-Elmouty, & El-Sayed, 2015)	•	•		•
(Pinar, et al., 2017)	•	•		•
(Li, et al., 2017)	•	•	•	
(El-Gilany, El-Wehady, & Amr, 2010)	•	•		•
(Chen, Ku, & Yang, 2012)	•	•		
(Gacki-Smith, et al., 2009)	•			
(Wolf, Delao, & Perhats, 2014)			•	•
(Zafar, et al., 2013)	•	•	•	•
(Brophy , Keith, & Hurley, 2019)			•	•
(Josefsson, Sonde, & Wahlin, 2007)	•		•	•
(Sharipova, Borg, & Hogh, 2008)	•		•	•
(Boafo & Hancock, 2017)	•	•	•	•
(Chen, et al., 2018)	•	•	•	•
(Gerberich, et al., 2004)	•	•	•	•
(Hylén, Engström, Engström, VPelto-Piri, & Anderzen-Carlsson, 2019)			•	•
(Choi & Lee, 2017)	•	•		•
(Hahn, et al., 2010)	•	•	•	•
(Shi, et al., 2017)	•	•		•
(Cheung & Yip, 2017)	•	•	•	