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**Workplace violence against nurses working in
emergency departments in Saudi Arabia: a
cross-sectional study**

Fuaad Ali Alshehri

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Faculty of Health Science

School of Nursing

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the name of Allah, the Most Gracious, the Most Merciful

Declaration

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Abstract

Aim: the aim of this study was to assess the prevalence, types and contributing factors of violence against nurses in emergency departments.

Background: Violence against health care workers, especially nurses is a significant concern for healthcare internationally. Emergency departments are considered high-risk areas in hospitals. Violence against nurses in EDs is a serious issue that cannot be ignored.

Method: A cross-sectional study design was conducted from June to August 2016 using convenience sample of emergency nurses in four major hospitals in Riyadh City in Saudi Arabia. The questionnaire was adapted from Kitaneh and Hamdan (2012). Chi-Square test was used to analyse the data.

Results: Four hundred and thirty-six emergency nurses responded to the questionnaire (a response rate of 71.2 %). The results showed 41.7% of respondents were exposed to both physical and non-physical violence in the workplace during the previous 12 months. The results showed that 44.7% of respondents were exposed to physical assault, 29.5% of respondents were exposed to threat, 88.1% of respondents were exposed to verbal abuse and 4.4% of respondents were exposed to sexual harassment in the last 12 months. Patients (67.7%) were identified as the most common perpetrators of physical violence, and visitors and patients' relatives (67.1%) were identified as the most common perpetrators of non-physical violence. The treatment room was the most common place where the physical and non-physical violence happened. The most common factors contributing to physical violence were mental health or psychiatric patient (38.5%) while waiting to receive service (58.9 %) contributed most to non-physical violence.

Conclusion: Understanding workplace violence is the first phase to develop or improve appropriate strategies to handle this problem. Establishing and enacting suitable laws could enhance workplace safety violence for nurses. Further research on the topic is needed.

Table of Contents

Chapter 1: Introduction	1
Introduction.....	1
1.1 Background	1
1.2 Context of the study	2
1.2.1 Healthcare services in Saudi Arabia	2
1.2.2 Emergency Departments in Saudi Arabia	3
1.2.3 Nursing in Saudi Arabia.....	3
1.2.4 Nursing workforce in Saudi Arabia	4
1.3 Statement of the problem.....	4
1.4 Research questions	5
1.5 Aim and objectives of the study	5
1.6 Significance of the study	5
1.7 Thesis structure.....	5
Chapter 2: Literature review	8
Introduction.....	8
2.1 Search strategy.....	8
2.2 Definition.....	8
2.2.1 Workplace violence.....	9
2.2.2 Physical violence.....	9
2.2.3 Verbal abuse.....	9
2.2.4 Threatening behaviour	10
2.2.5 Sexual harassment.....	10
2.3 Prevalence of violence.....	10
2.3.1 International healthcare field and EDs.....	11
2.3.2 Saudi healthcare field and EDs	12
2.4 Types of violence	13
2.5 Risk factors for violence.....	15
2.5.1 Patients and their families related violence.....	15
2.5.2 Healthcare professionals related violence.....	16
2.5.3 Environment related violence	17
2.6 Gap in the literature	18
Summary	18

Chapter 3: Methods20

Introduction.....20

3.1 Research paradigm 20

3.1.1 Quantitative research..... 20

3.1.2 Research design..... 21

3.1.3 Study design (Cross-sectional study)..... 21

3.1.4 Strengths and weaknesses of cross-sectional studies 21

3.1.5 Survey 22

3.1.6 Development of the questionnaire 22

3.1.7 Translation 23

3.1.8 Population 24

3.1.9 Sample and sampling 25

3.1.10 Recruitment strategies..... 25

3.1.11 Setting 26

3.1.12 Pilot 27

3.2 Data collection..... 28

3.3 Issues of validity and reliability 28

3.4 Data analysis..... 28

3.5 Ethical considerations..... 29

Summary30

Chapter 4: Results.....33

Introduction.....33

4.1 Response rate..... 33

4.2 Participants' demographic information 34

4.3 Physical and non-physical violence..... 35

4.4 Means of protection and the procedures for reporting violence..... 38

4.5 Inferential test..... 41

4.5.1 Predictors of physical violence 41

4.5.2 Predictors of non-physical violence 41

4.5.3 Types of physical violence..... 42

4.5.4 Types of non-physical violence 44

Chapter 5: Discussion48

Introduction.....48

5.1 Workplace violence 48

5.2	Physical workplace violence	49
5.2.1	Prevalence of physical violence	49
5.2.2	Predictors of physical violence	50
5.2.3	Types of physical violence.....	51
5.2.4	Risk factors relating to physical violence	51
5.3	Non-physical workplace violence	53
5.3.1	Prevalence of non-physical violence.....	53
5.3.2	Predictors of non-physical violence	53
5.3.3	Types of non-physical violence	54
5.3.4	Risk factors for non-physical violence.....	55
5.4	Limitations of the study.....	57
5.5	Implications and recommendations of the study	57
5.5.1	Implications for further research.....	57
5.5.2	Implications for practice	58
5.5.3	Implications for nursing	58
	Conclusion	58
	Reference list	61
	Appendices.....	77
	Appendix 1: Author permission	77
	Appendix 2: Questionnaire.....	78
	Appendix 3: Information sheet.....	88
	Appendix 4: Ethics	90

List of Tables

Table 2.1: Morrison's hierarchy of aggressive and violent behaviours	10
Table 2.2: Prevalence of violence against nurses across different countries.....	11
Table 3.1: Overview of participating hospitals.....	26
Table 4.1: Response rate by hospital	33
Table 4.2: Summary of key demographic information of the emergency nurse respondents ..	35
Table 4.3: Summary of key physical and non-physical violence from the respondents.....	37
Table 4.4: Summary of key types of physical violence in the workplace	38
Table 4.5: Summary of key types of non-physical violence in the workplace	38
Table 4.6: Summary of key means of prevention and procedures for reporting violence.....	40
Table 4.7: Relationship between independent variables and frequency of physical violence.	41
Table 4.8: Relationship between independent variables and frequency of non-physical violence	42
Table 4.9: Variable result for hospitals and types of physical violence	43
Table 4.10: Variable result for gender and types of physical violence.....	44
Table 4.11: Variable results for hospitals and types of non-physical violence	45
Table 4.12: Variable result for nationality and types of non-physical violence	46
Table 5.1: Comparison of prevalence of violence in EDs across different countries.....	48
Table 5.2: Comparison of prevalence of physical violence in ED across different countries.	50
Table 5.3: Comparison of prevalence of non-physical violence in EDs across different countries.....	53

Chapter 1: Introduction

Introduction

Violence is a common issue across the world, especially in the healthcare sector (O'Brien-Pallas et al. 2009). Violence in the healthcare setting, in the course of service provision, can be termed workplace violence (Ahmad et al. 2015). Healthcare professionals are often at a high risk of being victims of workplace violence. This violence poses a major challenge to healthcare personnel and it negatively affects the provision of healthcare services. Workplace violence is defined by the World Health Organization as occasions when staff are exposed to assault, threats or abuse in work-related circumstances that predispose them, or result in, challenges to their wellbeing, health and safety (Richards 2003). Workplace violence has existed for a long time; however, the documentation or recording of such incidents has not been done well in the past. Nevertheless, recent studies have reported the increasing prevalence of workplace violence in the United States, Western Europe, Australia, and Middle Eastern countries (Ahmad et al. 2015; Crilly, Chaboyer & Creedy 2004; Spector, Zhou & Che 2014; Zampieron et al. 2010).

Violence in the workplace can occur in any setting, within any profession, but there are certain professions, such as the healthcare professions, that are more affected by it (Ahmad et al. 2015). Healthcare professionals in emergency departments (EDs) have been reported to experience incidents of workplace violence more often than other healthcare professionals (Gacki-Smith et al. 2009). Furthermore, Wei et al. (2016) state that nurses, when compared to other healthcare personnel, are at higher risk of experiencing violence. For these reasons, this research study will investigate violence against ED nurses. In this chapter, this study's background, context, problem statement, research questions, purpose, objectives and significance will be discussed. An explanation of the structure of this thesis is also included.

1.1 Background

Nursing staff working in EDs are at high risk for violence in the workplace. This is because nurses encounter and interact with patients while providing healthcare more than most other healthcare professions (Wei et al. 2015). In Australia, 36.0% of nurses have been reported

to experience workplace violence, 49.9% in Italy, 50.0% in China, and 80.4% of nurses in Palestine (Farrell, Shafiei & Chan 2014; Kitaneh & Hamdan 2012; Wu et al. 2012; Zampieron et al. 2010). The prevalence of workplace violence requires an understanding of the risk factors associated with workplace violence to inform the development and implementation of solutions.

The risk factors for workplace violence include long waiting times, psychiatric conditions, and having no means to prevent workplace violence (Tang et al. 2007; Pich et al. 2011; Spector, Zhou & Che 2014). Long waiting times increase the anxiety of patients and those who accompany them, making them impatient and increasing the likelihood that they will perpetrate violence (Pich et al. 2011; Hamdan & Hamra 2015). Psychiatric patients, by virtue of their psychiatric illnesses, are more likely to be perpetrators of violence (Spector, Zhou & Che 2014). This is linked to some mental health conditions that diminish self-control and increase the predisposition to violence (Anderson & West 2011). The lack of structures to prevent violence in the workplace creates an environment where potential perpetrators are more likely to commit violence (Pich et al. 2011).

1.2 Context of the study

The ED is an area that forms the first contact point for patients presenting with conditions that require urgent medical and nursing care (Alyaemni & Alhudaithi 2016; Beebe & Funk 2001). In most hospitals, it is open around the clock, every day of the week. Most of the patients presenting to the ED are accompanied by their friends or relatives, who may be anxious about the patient's condition. Interestingly, patients' friends or relatives are sometimes perpetrators of workplace violence against nurses (Ahmad et al. 2015).

1.2.1 Healthcare services in Saudi Arabia

The clear majority of healthcare services in Saudi Arabia are provided by the Saudi Ministry of Health (MOH), although the private sector contributes 21.2% to the provision of these services (Almalki, FitzGerald & Clark 2011a). The total number of hospitals under the MOH is 244, plus primary healthcare centres numbering 2037 (Almalki, FitzGerald & Clark 2011a). The hospitals and healthcare centres account for 60.0% of Saudi Arabia's total health services (Almalki, FitzGerald & Clark 2011a). Other governmental bodies involved in the provision of these services include army and security forces medical services, referral hospitals,

teaching hospitals under the Higher Education Ministry, the Red Crescent Society and the National Guard Health Affairs (Almalki, FitzGerald & Clark 2011a). Most of these other agencies, except for teaching and referral hospitals, and the Red Crescent Society, offer healthcare services to specific populations, commonly their employees, but in cases of crises and emergencies, all residents can be offered services.

1.2.2 Emergency Departments in Saudi Arabia

The emergency department is the area in a hospital is reserved for providing timely, acute care to patients not having prior appointments, who present by themselves, or who may be brought in via emergency medical or ambulance services (Beebe & Funk 2001). The EDs in Saudi Arabian hospitals are equipped to handle common and complicated medical conditions. A substantial number of the presentations in the ED are cases of road traffic accidents (Ministry of Health 2013). Among the services and procedures provided in the ED are triaging, defibrillation, intubation, medicine administration, skin traction application, cast application and removal, blood extraction and transfusion, electrocardiograms, oxygen therapy and services such as admission and discharge, and code blue services (Ministry of Health 2013). The department is usually headed by a qualified physician, and a physician with at least 2 years' experience should be available during shifts. Nurses working in the ED must be qualified in basic cardiac life support and it is preferred that they be also qualified in advanced cardiac life support, neonate resuscitation program and paediatric assessment life support (Ministry of Health 2013). Nursing staffing in the ED is usually based on patient acuity and the number of patients.

1.2.3 Nursing in Saudi Arabia

Nursing in Saudi Arabia has had a slow growth with the first nursing schools offering nursing education to men only, in 1958 (Almalki, FitzGerald & Clark 2011b). Three years later, the first women's nursing schools were established in Jeddah and Riyadh. The number of institutions offering nursing courses has been increasing, and reached 46 in 2010 (Almalki, FitzGerald & Clark 2011b). Nurses are classified depending on their level of education, with diploma holders from health institutes being called technical nurses, senior technical nurses are diploma holders from junior colleges, specialist nurses are those holding a Bachelor of Nursing degree, and senior specialist nurses for those with a Master of Nursing qualification. Consultant nurses must hold a PhD and have at least three years' experience.

1.2.4 Nursing workforce in Saudi Arabia

Nursing staff comprise approximately half of the total health workforce in Saudi Arabia, and even more than this in the MOH. In Saudi Arabia, there has been a shortage of nursing staff because there are insufficient Saudi-born qualified nurses and they have a high level of turnover (Almalki, FitzGerald & Clark 2011b). More than half the nurses are non-Saudis, with most non-Saudi nurses having diploma level qualifications (Almalki, FitzGerald & Clark 2011b).

In the MOH, which is the main provider of health care in Saudi Arabia, there were 172,483 nurses, and 38.3% of them were Saudi (Ministry of Health 2015). In the MOH, approximately three-quarters of the total nursing workforce (74.3%) is female, and this proportion is higher in Riyadh City hospitals (77.7%) (Ministry of Health 2015). Surprisingly, Saudi male nurses make up more than half the nursing workforce in Saudi Arabia (51.5%). However, many Saudi male nurses are working in Ministry of Health Headquarters, Regional Health Directorates and Primary Health Care Centres (Ministry of Health 2015).

1.3 Statement of the problem

Workplace violence is known to affect the working environment of staff, including nurses, in their provision of services. There are risks of physical, mental and emotional harm associated with workplace violence. In Saudi Arabia, some studies on workplace violence targeting healthcare workers, including nurses in general hospital settings, have been done. Therefore, it is important to conduct a deeper investigation of the issues relating to ED workplace violence against nurses in Saudi Arabia. This study will provide more reliable information on the actual occurrence of violence against these ED nurses. In addition, by exploring more issues relating to workplace violence, the findings from such an exploration will be important in strengthening the existing evidence about workplace violence. Furthermore, this study examines the availability of procedures for reporting workplace violence and whether these procedures have been utilised optimally, an element that has not been examined through other studies. The relationship between hospital types of workplace violence is also examined in this study, since it has not been examined before.

1.4 Research questions

This study seeks to answer the following three questions:

Question 1: What is the prevalence of violence against nurses working in EDs in Saudi Arabia?

Question 2: What are the types of violence against nurses working in EDs in Saudi Arabia?

Question 3: What are the contributing factors for workplace violence against nurses working in EDs in Saudi Arabia?

1.5 Aim and objectives of the study

The aim of this study is to provide evidence-based information that will further reveal the issue of workplace violence through investigating the magnitude of violence towards nurses in EDs in Saudi Arabia. The specific objectives of this study are:

Objective 1: To assess the prevalence of violence against nurses working in Saudi Arabian EDs.

Objective 2: To identify the types of violence against nurses working in Saudi Arabian EDs.

Objective 3: To identify the contributing factors related to violence against nurses in Saudi Arabian EDs.

1.6 Significance of the study

Workplace violence is a major health concern, and is starting to receive international attention (Johnson 2009; Kling et al. 2009). Both direct and indirect exposure to physical and non-physical violence might cause negative consequences in the future for nurses. If nurses experience any kind of violence in EDs, the consequences could include a negative effect on the quality of the healthcare provided to patients, a decrease in the productivity of nurses, negative impacts on nurses physically or psychologically, or even the potential for nurses to leave their jobs.

1.7 Thesis structure

This thesis is composed of five chapters. Chapter 1, Introduction, includes an introduction to the study, background of the health system, emergency department, and nursing workforce in Saudi Arabia, and the context of the study. It also provides a statement of the

research problem (rationale), research questions, the purpose and objectives, significance of the study, definition of terms, and the structure of the thesis. Chapter 2, Literature review, presents a review of the literature on violence, including definitions, prevalence, types, risk factors, and the gaps in the literature. Chapter 3, Methods, describes the research paradigm, including the study design, population, sample and sampling, recruitment strategies, setting, development of the questionnaire, translation, and the pilot study. It also addresses the data collection methods, issues of validity and reliability, data analysis, and finally the ethical implications of the study. Chapter 4, Survey results, presents the results of the survey. Chapter 5, Discussion, presents a discussion of the study results.

Chapter 2: Literature review

Introduction

The following chapter discusses the prevalence and types of, and risk factors for, workplace violence. The chapter explains violence and workplace violence as defined by international organisations. Workplace violence is described as encompassing a broad range of acts carried out by any person and affecting staff, a definition that includes physical violence, threats, sexual abuse and harassment (Alkorashy & Al Moalad 2016; New South Wales Health 2015; Pai & Lee 2011). The chapter then discusses the international context, and then focus moves to the Saudi Arabian context for prevalence, types and risk factors for workplace violence in the healthcare sector and ED. The chapter notes that underreporting appears to be a universal issue that underpins the poor resolution of workplace violence. Workplace violence risk factors include age, gender, patient psychiatric or mental issues, alcohol and drug intoxication, and pain. Other risk factors independent of the patient include long waiting times, inexperienced staff, over-crowding, staff shortages and inability to obtain the required service. After discussing the international literature, the chapter concludes by discussing the remaining gaps in the literature that will be examined by the current research project.

2.1 Search strategy

An extensive search was conducted to collate the literature relevant to the research topic. This search used combinations of the following keywords: nurse, emergency nurse, violence, assault, aggression, abuse, harassment, emergency department, emergency service, accident and emergency, triage and trauma centre. The search was conducted using the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Scopus, PubMed, ProQuest, Science Direct, and Web of Science. The research was limited to English and Arabic languages, and was conducted throughout the study from early 2016 until the end of 2016.

2.2 Definition

Violence is defined as any incident in which a healthcare worker is threatened, abused or assaulted (Ng et al. 2009). Violence is often narrowly defined as “the use of physical force to harm someone” (Zhulavska & Piantkovska 2016). Violence, in such a sense, usually includes

behaviours such as “physical harassment, sexual abuse, aggression, mobbing and bullying” (Alkorashy & Al Moalad 2016). However, violence has different forms, and it is important to recognise the distinctions. The most blatant form of violence is physical violence, and includes actions such as punching, kicking or hitting (Zhulavska & Piantkovska 2016). Violence also includes aggressive behaviour such as spitting or kicking. Moreover, verbally violent behaviour does not involve any physical contact and includes name-calling and communicating with obscenities (Crilly, Chaboyer & Creedy 2004). Lastly, threatening behaviour, with an intention to harm, and sexual harassment are also forms of violence. This paper specifically defines the most important forms of violence that occurred in the ED (verbal, physical, threats, and sexual abuse) as follows:

2.2.1 Workplace violence

According to the International Labour Office, the International Council of Nurses, the World Health Organization, and Public Services International, workplace violence is defined as “incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being or health” (2002, p.3). It has been further categorised into three types of violence, where the aggressor has no employment relationship, where the aggressor is a recipient of services provided, or the aggressor is a fellow staff member, such as an employee, supervisor or manager.

2.2.2 Physical violence

It includes physical assaults, which involve contact that may or may not cause harm (Abbas & Selim 2011). It is defined as “the use of physical force against an individual involving physical contact, such as beating, kicking, slapping, stabbing, shooting, pushing, biting, pinching and sexual assault, regardless of whether or not an injury was sustained” by Abbas and Selim (2011, p. 1050). Therefore, such violence is contingent upon a physical action regardless of whether an injury was sustained or not.

2.2.3 Verbal abuse

It is defined as “the use of words which are personally insulting, such as generally abusive spoken obscenities and foul language, or indicating a lack of respect for the dignity and worth of an individual” by Abbas and Selim (2011, p. 1050).

2.2.4 Threatening behaviour

Abbas and Selim (2011, p. 1050) define threatening behaviour as “any action that involves signs of violence indicating intention to harm, such as the intention to throw a chair, cause a fight or to verbally threaten an individual.” Threatening behaviour can be threats of physical violence or verbal violence.

2.2.5 Sexual harassment

Abbas and Selim (2011, p. 1050) define sexual harassment as “any unwanted behaviour of a sexual nature, including verbal or physical, which is offensive to an individual or for the perpetrator’s own sexual gratification.”

2.3 Prevalence of violence

The prevalence of violence against nurses is a significant international problem (Luck, Jackson & Usher 2008; Wyatt, Anderson-Drevs & Van Male 2016). In fact, violence against nurses is common across cultures (Lau, Magarey & Wiechula 2012a). According to Opie et al. (2010) the most common forms of violence were verbal abuse (80.0%), followed by physical violence (28.6%), and sexual harassment or abuse (22.5%). Morrison's hierarchy of aggressive and violent behaviours is an 8-level taxonomy for incidents. Higher scores suggest more minor events whereas a score of 1 indicates serious harm (Morrison 1994). The taxonomy is outlined in the following table.

Table 2.1: Morrison’s hierarchy of aggressive and violent behaviours

Level	Definition	Physical or non-physical
1	Inflicted serious harm requiring medical care	Physical
2	Inflicted low-grade harm requiring no medical care	Physical
3	Made a verbal threat with a plan to inflict harm	Non-physical
4	Touched another in a threatening way	Physical
5	Made a verbal threat without a plan to inflict harm	Non-physical
6	Approached another person in a threatening way	Non-physical
7	Was loud and demanding	Non-physical
8	Exhibited low-grade hostility	Non-physical

Ilkiw-Lavalle and Grenyer (2003) conducted a study on patient (n=29) and staff (n=29) perceptions of violent incidents in mental health units in Illawarra, Australia, using Morrison’s

hierarchy of aggressive and violent behaviours, and found that levels 2, 3, and 7 were the most often indicated. In order to examine the prevalence of violence, studies have reviewed reports of violent experiences, and have also administered surveys to healthcare workers. The limitations of such studies include the possibility of incomplete recollections of scenarios or incomplete reporting (Erickson & Williams-Evans 2000). However, such studies do report the prevalence of workplace violence.

2.3.1 International healthcare field and EDs

Rates of violent events might differ across international reports. The prevalence of violent incidents against nurses in different settings was reported as between 27% and 82%, as demonstrated in Table 2.2 below. As a result, the violence against nurses indicates that violence is a significant problem facing nurses globally (Gates, Ross & McQueen 2005). The prevalence of violence against nursing staff was high.

Table 2.2: Prevalence of violence against nurses across different countries

Author (Year)	Country	Methods	Rate of violence	Number of Participants
Chen, Ku and Yang (2013)	Taiwan	Descriptive study	81.5%	791 nurses
Spector, Zhou and Che (2014)	USA	Survey research	76.0%	762 nurses
Crilly, Chaboyer and Creedy (2004)	Australia	Descriptive study	70.0%	108 nurses
Teymourzadeh et al. (2014)	Iran	Cross-sectional study	69.0%	413 nurses
Zampieron et al. (2010)	Italy	Cross-sectional study	49.0%	700 nurses
Abbas and Selim (2011)	Egypt	Cross-sectional study	27.7%	269 nurses

The incidence of violence is greater in the ED than in other areas of healthcare provision (Speroni et al. 2014). The incidence of physical and verbal violence among nurses working in EDs has been reported to be on the increase (Gerberich et al. 2004; Pinar & Ucmak 2011). The prevalence of violence against nurses working in psychiatric departments and EDs ranged from 60% to 90% (Lau, Magarey & McCutcheon 2004). People working in the ED will typically experience between one and ten incidents of violence per 12-month period in the US (May & Grubbs 2002). May and Grubbs (2002) investigated the prevalence of ED physical violence in

Florida by interviewing 86 nurses. Seventy-one of the participants (82.1%) reported that they had suffered physical violence at least once in the past 12 months (May & Grubbs 2002). Lyneham (2000) stated that nursing staff working in EDs are exposed to some form of violence weekly in Australia. Similarly, Gacki-Smith et al. (2009) conducted survey research with 3465 registered nurses who had worked in US EDs using a 69-item questionnaire. It was found that almost 25% of the sample reported that they had experienced physical violence more than 20 times in the past 3 years.

Healthcare workers in EDs are more likely to suffer incidents of violence compared to workers in non- EDs (Kowalenko et al. 2013). Approximately, one in five persons working in EDs worldwide will experience physical violence (International Labour Office, the International Council of Nurses, the World Health Organization, and Public Services International 2002). Esmailpour, Salsali and Ahmadi (2011) investigated incidents of workplace violence amongst 196 registered nurses in EDs in Iran, and found that 92% of the sample reported experiencing verbal abuse during the previous 12 months. The team also found that 19.7% reported suffering physical violence in the past year. Albashtawy (2013) investigated the incidence of workplace violence against 227 ED nurses in Jordan, and found that 75.8% of the sample had experienced at least one type of violence. The rates were lower than that reported by Esmailpour, Salsali and Ahmadi (2011) in Iran, with 63.9% reporting an incident of verbal violence in the past 12 months, and 11.9% physical violence.

2.3.2 Saudi healthcare field and EDs

The prevalence of workplace violence in the health sector ranges widely between 7% and 91.6% in Arab settings (Alkorashy & Al Moalad 2016), with variations most likely explained by differences in operational definitions of violence, formal processes, organisational culture, and situational factors. Mohamed (2002) investigated work-related assault on randomly selected nurses from five different hospitals in Riyadh. In total, 235 nurses from 434 indicated that they had been victims of violence in the previous 12 months (Mohamed 2002). In Saudi Arabia, in particular in Riyadh, 83.9% and 46.9% of nurses were exposed to verbal abuse and physical attack, respectively, during the previous year (Alkorashy & Al Moalad 2016). El-Gilany, El-Wehady and Amr (2010) investigated experiences of violence across a wide range of healthcare professions, including physicians, nurses and midwives, health inspectors, pharmacists, technicians, administrators, drivers, and other workers in

primary healthcare centres in the Al-Hassa. From a total study population of 1228, 302 (27.7%) of the 1091 respondents indicated that they had personally experienced at least one violent incident in the past 12 months (El-Gilany, El-Wehady & Amr 2010).

The prevalence of violent incidents in EDs in Saudi Arabia is at least three times as high as in other wards (Alzahrani et al. 2016). Alzahrani et al. (2016) investigated violence and aggression aimed at nurses and other health professionals in three public hospital EDs of Tabuk City, in north western Saudi Arabia. Of the 129 participants, 117 (90.7%) indicated that they had experienced violence or aggression in the past 12 months (Alzahrani et al. 2016).

Violence is a “reality”, as nurses would be exposed to incidents of violence in their workplace, with varied types of violence (Anderson 2002, p. 351). The magnitude of violence of all types in workplaces is extremely high in the experience of nurses (Edward et al. 2014; Lanza, Zeiss & Rierdan 2006a). This shows a need to consider action towards aggressors.

2.4 Types of violence

After reviewing the incidence of violence, it is necessary to identify its types to gain a better understanding of this issue. Workplace violence can be physical or non-physical (Talas, Kocaöz & Akgüç 2011). Physical forms of violence include pushing, kicking and slapping; however, non-physical forms of violence, such as verbal abuse, were reported as the most common forms of aggression in EDs. This is more prevalent than physical violence, threats, sexual harassment, abuse, or bullying (Farrell, Bobrowski & Bobrowski 2006; Hesketh et al. 2003; Lin & Liu 2005; Opie et al. 2010).

Nurses may perceive ED violence differently from that of violence in areas of health care that are non-emergency or urgent. Forms of violence occur in EDs across all cultures (Lau, Magarey & Wiechula 2012a). There are various ways to categorise the types of violence in the workplace. Usually, the types of violence are categorised as being defined by various behaviours, or categorised by aggressor characteristics. Violence could be verbal, physical, or psychological, or include sexual abuse, harassment, bullying, threatening behaviour, or aggression that might happen intentionally or unintentionally (Farrell, Bobrowski & Bobrowski 2006; Hesketh et al. 2003; Lin & Liu 2005; Opie et al. 2010; Pai & Lee 2011). The types of workplace violence in the healthcare field in Saudi Arabia appear to be consistent with

those of other settings across the world. Mohamed (2002) identified verbal abuse, threatening behaviour, attempts at physical harm, sexual harassment, and physical assault. By definition, workplace violence can be carried out by any person.

Verbal violence is the most common type of violence against healthcare workers, particularly in the ED (Cashmore et al. 2012; Crilly, Chaboyer & Creedy 2004). Verbal abuse typically refers to the use of words that are, or are intended to be, personally insulting. Verbal abuse includes abusive spoken obscenities and language of a foul nature. Verbal abuse also commonly includes words being used that indicate a clear lack of respect for an individual's worth and dignity (Abbas & Selim 2011).

Physical violence is a part of workplace violence. The use of physical force against an individual, involving physical contact without that individual's consent, regardless of whether an injury occurred, is considered to be physical violence (Abbas & Selim 2011). Physical violence includes "hitting with body parts, slapping, kicking, punching, pinching, scratching, biting, pulling hair, hitting with an object, throwing an object, spitting, beating, shooting, stabbing, squeezing, and twisting" (Kowalenko et al. 2013, p.199). Alkorashy and Al Moalad (2016, p.1) indicated that types of violence can include behaviours such as "physical harassment, sexual abuse, aggression, mobbing and bullying". Differences exist from culture to culture; however, it has been noted, for example, that for some cultures violence in the ED is more likely to involve weapons (Lau, Magarey & Wiechula 2012a). Interestingly, there were some incidents involving violent attacks with weapons or instruments, in north western Saudi Arabia (Alzahrani et al. 2016).

Sexual harassment is a type of workplace violence. Sexual harassment can include verbal or physical acts. In the healthcare context, perpetrators of violence are most typically the patients; however, patient's family members, their friends, management, and fellow staff members can also be perpetrators (Palácios et al. 2003). Workplace violence encompasses a broad range of acts carried out by any person and affecting staff. Sexual violence can have significant psychological consequences where a wrong doer violates, assaults or makes sexually explicit comments towards a patient or staff member in a hospital setting (Palácios et al. 2003).

Threatening behaviour is also recognised as workplace violence. Threatening behaviour is a type of violence similar to common law assault in that it can occur without actual physical contact. It includes menacing or threatening gestures, staring with an intention to harm, and behaviour that suggests further harm, which is contrary to the safety of a person as defined. Kowalenko et al. (2013) found that nurses were more likely to be physically threatened than other healthcare professionals in the ED.

2.5 Risk factors for violence

After reviewing several studies to identify risk factors associated with violence towards nurses, it was found that the risk factors for violence in Saudi Arabia are like those in other countries. The risk factors can be categorised as characteristic of patients and their families related to violence, healthcare professionals related to violence, or environmental factors related to violence (Hahn et al. 2013).

2.5.1 Patients and their families related violence

The most common types of violence come from patients, and patients' relatives (Hegney et al. 2006). Risk factors for the patient include age, gender, having mental health issues or being a psychiatric patient, alcohol and drug abuse, and the impact of pain from disease (Abualrub & Al Khawaldeh 2014; O'Connell et al. 2000; Taylor & Rew 2011).

Gender and age of the perpetrator have been identified as major risk factors for violence (Angland, Dowling & Casey 2014; Monahan et al. 2001; Stuart 2003). Males are more likely to be aggressive than females, and most perpetrators are younger than 30 (Chou, Lu & Mao 2002; Daffern, Mayer & Martin 2006). Furthermore, the majority of assailants were males, and almost all offenders in Saudi Arabia were between their mid-twenties and mid-thirties (Alzahrani et al. 2016). Those with mental health problems and psychiatric patients also have other risk factors for violence. Hahn et al. (2008) indicate that the increasing number of patients being diagnosed with dementia and Alzheimer's disease among the general population and among hospital patients is a major risk factor for nurses and other healthcare professionals. In fact, those with a psychiatric condition can pose additional risk, as they may experience frustration sooner than others, or may have trouble expressing themselves or understanding healthcare workers (Lau, Magarey & Wiechula 2012a). May and Grubbs (2002) found that of

71 nurses who reported being victims of physical violence, 79.1% of the incidents were perpetrated by patients with cognitive dysfunction. In Saudi Arabia, patients with mental health or psychiatric issues and presenting to EDs were found particularly likely to be aggressive (Mohamed 2002).

Furthermore, alcohol and drug abuse also contribute to the risk factors for violence (Gilchrist, Jones & Barrie 2011; Whittington & Winstanley 2008). If the patient is intoxicated, this poses a further risk of behaviour that leads to aggressive behaviours (Luck, Jackson & Usher 2008). In Western countries, such as Australia, the UK, and Ireland, alcohol and substance abuse is reported to be “strongly related to abusive and violent behaviours in emergency departments” (Angland, Dowling & Casey 2014; Ferns, Cork & Rew 2005; Gilchrist, Jones & Barrie 2011). In the study by Abbas and Selim (2011) on violence in Egyptian government hospitals, “alcohol drinking and addiction” was found to be eighth out of 14 possible risk factors. The impact of pain from disease is another risk factor that might aggravate a potentially violent situation. If a patient is experiencing a high level of pain, and has not been given any medication to reduce the pain, this may lead to outbursts of violence in order to attract attention to him or herself (Abbas & Selim 2011; Lau, Magarey & Wiechula 2012b).

2.5.2 Healthcare professionals related violence

Less experienced nurses working in the ED are at greater risk of exposure to violence. Nurses working in the ED are often new to the profession. Esmaeilpour, Salsali and Ahmadi (2011) found that more than 63.2% of their randomly selected sample of emergency nurses were within their first four years of practice. Kowalenko et al. (2013) found that nurses with two years’ training were more likely to be physically threatened than those with four years’ training. Nurses with less experience may be more vulnerable to workplace violence as they may lack knowledge for detecting indicators of violent situations. Albashtawy (2013) found that 74% of his sample who had been exposed to incidents had less than four years of experience. In addition, newer nurses may be more likely to accommodate or become desensitised to abusive behaviours (Henry et al. 2011). El-Gilany, El-Wehady and Amr (2010) found that there was a higher risk of violence where nurses have been working in healthcare

settings less than five years in Saudi Arabia. Furthermore, females are more likely to be victims of workplace violence in healthcare settings (Pompeii et al. 2013).

2.5.3 Environment related violence

Environmental factors include long waiting times, shortage of nursing staff, and lack of security guards. These contributing factors to violence in EDs can operate to increase the risk of violent outbursts.

Long waiting times have been identified as a major risk factor for emergency department violence (Abbas & Selim 2011; Pich et al. 2010; Taylor & Rew 2011). Further, Lau, Magarey and Wiechula (2012b) found long waiting times had a significant association with violent incidents in EDs. Waiting time refers to the length of time between the arrival of a patient and his or her family members or friends in the ED, and the time that the patient first presents to a physician. When patients are in pain or distress, long waiting times cause anger, frustration and agitation, which can cause such people to threaten, verbally abuse or assault nurses (Taylor & Rew 2011). Dissatisfaction with waiting times is recognised as “a crucial trigger” of emergency department violence. Alzahrani et al. (2016) found that long waiting times for the patient contributed to aggravating violence in EDs in Saudi Arabia.

A shortage of nursing personnel has been found to contribute to workplace violence in healthcare settings. Abbas and Selim (2011) found that insufficient nursing staff was the third most important factor contributing to violence, and in the study by Mohamed (2002), roughly two in three participants (63%) felt shortage in personnel was relevant. Another risk factor is insufficient security measures and a shortage of guards. Lack of security staff was found to be one of the contributing factors for violence (Abbas & Selim 2011). Moreover, insufficient security staff, lack of panic alarms, means and action of surveillance devices, which assist staff in notifying security of potential threats, have been observed as risk factors (Abbas & Selim 2011; Wyatt, Anderson-Dreves & Van Male 2016). In the study by Mohamed (2002), nurses tended to perceive a “shortage in security personnel”, with more than four in every five (82%) of the participants indicating this. Other risk factors for violence in EDs in Saudi Arabia include the lack of security measures, shortage of guards, and lack of clear guidelines for punishment for people who instigate violence (Alzahrani et al. 2016).

2.6 Gap in the literature

This review has highlighted a gap in the literature. Relatively few studies, both internationally and in Saudi Arabia, have focused on violence against nurses in EDs. Most studies have focused on violence against healthcare professionals in the health sector. Furthermore, the lack of such comprehensiveness makes it difficult for employees and decision-makers in Saudi Arabia to acknowledge and respond to negative behaviours, such as workplace violence. Therefore, more research and investigation are required to focus on workplace violence against nurses working in EDs.

Summary

This chapter reviews the previous studies regarding the prevalence, types and risk factors of violence in the healthcare industry as a whole, as well as the healthcare system of Saudi Arabia. It commences its discussions by setting out definitions of the different kinds of violence, and thereafter discusses the prevalence of violence in healthcare and ED settings. A discussion of the statistics of the prevalence of violence highlights the need to assess the risk factors of violence. Therefore, intrinsic and extrinsic risk factors are discussed. Problems such as overcrowding, long delays, and communication lacking empathy are risk factors discussed. The next chapter will outline the research design used for this study.

Chapter 3: Methods

Introduction

This chapter presents the research design and methods used in this study to achieve the previously stated aim and objectives of uncovering violence against nurses in emergency departments in Saudi Arabia. It addresses key issues, including research paradigm, quantitative research, research design, study design, the study population, the study sample and sampling, recruitment strategies, study setting, development and translation of the questionnaire, pilot study, data collection, reliability and validity, and data analysis. Finally, the ethical considerations of the study are discussed and conclusions drawn.

3.1 Research paradigm

Nursing research is mostly conducted within two distinct paradigms, which are quantitative and qualitative (Polit & Beck 2014). In reference to these paradigms, Ellis (2013) suggests these paradigms provide a way in which one might look at natural phenomena whilst allowing incorporation of a set of philosophical assumptions to guide and influence the study's scientific approach.

3.1.1 Quantitative research

Quantitative research, a conventional scientific approach, is based on a framework and underlying philosophical principles of human inquiry (Begley 2008; Creswell 2014; Polit & Beck 2004). These corresponding underpinnings are commonly referred to as positivism. Quantitative research involves the collection of data that focuses on enumeration with statistical analysis reporting rather than subjective meaning reporting (Creswell 2014; Polit & Beck 2014). This positivist approach to research holds the belief that whatever is observed by the human senses can be measured objectively.

In quantitative research, research methods inclusive of experiments and surveys are utilized to collect data and information (Mulhall 2003). Walker (2005) states that quantitative research designs aim to advance the acquisition and gathering of knowledge while enhancing the provision of questions for future research studies.

3.1.2 Research design

A research design is characterised as a plan that by which researchers seek to attain data needed to answer the study's research questions (Polit & Beck 2006). The present study sought to examine the occurrence of violence inherent within EDs, which is representative of descriptive studies. Polit and Beck (2006) suggest the study's research design should incorporate the utilization of a cross-sectional descriptive survey. In accordance to cross-sectional research designs, descriptive promotes data collection commonly used to identify prevalence (Hallberg 2008). Therefore, the use of a descriptive approach within the present study enables researchers to collect data without manipulating the study's variables or altering the environment.

3.1.3 Study design (Cross-sectional study)

A cross-sectional design incorporates data collection from groups that experience either the same condition or phenomenon of interest at a particular point in time (Bowling 2005a; Polit & Beck 2004; Walker 2005). Hence, a cross-sectional design provides a 'snapshot' of data or information from one point in time by measuring quantities or investigating ways in which (how and why) things transpire. Since a cross-sectional design with a descriptive nature is part of a larger positivist paradigm, the purpose of the present study's survey is to explore the prevalence of nursing staff violence in EDs (Hallberg 2008; Walker 2005).

The researcher explored other similar studies that used a cross-sectional approach to ensure that the chosen approach was correct and appropriate. For example, both Darawad et al. (2015) and Gacki-Smith et al. (2009) chose a cross-sectional approach to assess the prevalence and associated factors regarding violence against nurses in the emergency department.

3.1.4 Strengths and weaknesses of cross-sectional studies

Cross sectional studies are typically inexpensive. Data is collected once. The implication is that it is less onerous than collecting data at two or more intervals as required in longitudinal studies. Cross sectional studies are useful as a rapid means for identifying areas where further research may be required (Bonita, Beaglehole & Kjellström 2006). Cross sectional studies typically offer a limited indication of the development of an issue. A one-off data collection tends to mean that data focuses on a limited period such as 12 months. It is

impossible to compare trends over time, such as a number of years or decades, in the same way that a longitudinal study can achieve.

The implication of bias is inaccuracy. There are a number of sources of bias and error in cross sectional studies. Reporting bias, also known as recall bias, response bias, and responder bias is a central issue with cross sectional studies. The researcher asks respondents their experiences and perceptions with almost no opportunity for the researcher to verify claims (Bonita, Beaglehole & Kjellström 2006). Selection bias is also often present in cross sectional studies. Selection bias refers to any event or happening that means that the sample surveyed is inconsistent with complete randomisation (Cortes et al. 2008; Bonita, Beaglehole & Kjellström 2006; Sanderson, Tatt & Higgins 2007; Shields & Watson 2013).

3.1.5 Survey

Surveys are used to collect descriptive data in the form of questionnaires (Babbie 2016; MacKenna, Hasson & Keeney 2013). The survey instrument used in this research is a quantitative closed-ended questionnaire. The advantages of quantitative surveys are that they are able to rapidly capture *prima facie* relevant data. Typically, they can be completed quickly at the convenience of the respondents and generally do not pose emotional risks on participants (MacKenna, Hasson & Keeney 2013). In contrast, the disadvantage of quantitative surveys is that there is limited opportunity for the researcher to verify the veracity of responses apart from comparing a participant's responses with his or her responses to other items, or by comparing such responses with the responses of other participants (Babbie 2016; MacKenna, Hasson & Keeney 2013; Shields & Watson 2013).

3.1.6 Development of the questionnaire

The questionnaire was adapted from Kitaneh and Hamdan (2012), and was used with permission (Appendix 1). The original instrument was designed to assess violence against physicians and nurses in 11 hospitals across the Palestinian Ministry of Health (MOH). This instrument was settled on because it was conducted in an Arabic country, it has been developed and used widely, has been revised and validated over the years, and it was reviewed by experts in the field to check the validity (Gerberich et al. 2004; Kitaneh & Hamdan 2012). The instrument (Appendix 2) contains 34 self-administered, closed-ended items and did not contain any open-ended questions. The questionnaire was modified to fit the study's objectives and the

Saudi hospital context and culture. The modifications were only in the demographic information section. The final version of the questionnaire used in this research consisted of four sections:

- **Section one:** consisted of eight items designed to collect demographic information on the sample, including gender, age, nationality, occupation, highest qualification, years of experience in the job, and years of experience working in emergency departments in Saudi Arabia. The demographic data was used to describe the population and allow comparisons to be drawn.
- **Section two:** entitled “physical violence”, sought to uncover nurses’ experiences of physical violence and contained eight items (multiple choice) questions.
- **Section three:** entitled “non-physical violence” sought to uncover nurses’ experiences of non-physical violence and contained eight items (multiple choice) questions.
- **Section four:** entitled “systems as well as means of protection available and procedures for reporting violence” sought to identify systems and means of protection available and procedures for reporting physical and non-physical violence in the emergency department in the selected hospitals. This section contained ten items.

3.1.7 Translation

The official language of Saudi Arabia is Arabic. However, the official language in Saudi Arabian health organisations is English, which is the most commonly spoken language (Walston, Al-Omar & Al-Mutari 2010). Consequently, language barriers were identified as a problem for the expatriate nurses in Saudi Arabia (Al-Khathami et al. 2010; Brady & Arabi 2005). The original questionnaire (in Arabic) was translated into English. Translation of the Arabic version of the questionnaire content into English was necessary to allow non-Saudi nurses to comprehend the survey and accommodate the majority of the study population. The research supervisors were consulted at every step of the validation, and their comments were incorporated into the final version.

The process of translation followed the method of two-way translation advocated in order to ensure the content of the translated questionnaire was accurate (Brislin 1970). Firstly, the questionnaire was translated from Arabic into English by the researcher. The researcher’s mother tongue is Arabic, he speaks English fluently, and has obtained an undergraduate nursing degree in Australia. The Arabic and English version, which was translated by the researcher,

was checked by an expert in linguistics. The first linguist was consulted: he is a Saudi lecturer at Taibah University in Saudi Arabia and finished his Master degree in Australia, where English is spoken, and was doing his PhD in Australia at the time of translation. Secondly, the final English version of the questionnaire was then back-translated into Arabic by two independent experts in the health field and one expert in linguistics. The two experts have worked in the health field for more than 10 years. Their native language is Arabic, and they speak English fluently. They also received their Bachelor, Master and PhD degrees in Australia. At the time of translation, they were working in Hail University as lecturers. Lastly, the original Arabic and back-translated Arabic versions were compared by another expert in linguistics, a lecturer at a King Abdul-Aziz University in Saudi Arabia with more than 13 years' experience in English-Arabic translations. He earned his Master and PhD degrees from an Australian university. They were sufficiently similar which indicated an accurate translation into English.

3.1.8 Population

A research population is defined as a set of persons (subjects) or units with specific common characteristics that meet the inclusion criteria and from whom information may be gathered (Burns & Grove 2005; Polit & Beck 2014; Rebar & Macnee 2011; Schneider & Fisher 2013). In this study, the target population was all nurses working in EDs at Ministry of Health (MOH) general hospitals and medical city in Riyadh City. The total population in these hospitals is 612 emergency nurses. The researcher was aiming to recruit 350 nurses to provide a representative sample and allow appropriately powered statistical analysis.

Inclusion criteria

In this study, a protocol was drawn up that outlined the inclusion and exclusion criteria. This was deemed necessary in order that the target population was clearly defined (Burns & Grove 2005). From this it was possible to carefully select those that met the inclusion criteria.

The following outlines the inclusion criteria:

- I. All nurses who worked at emergency departments of the nominated organisations (1, 2, 3 and 4).
- II. Nurses will be Saudi and non-Saudi nationals.
- III. Nurses will be both female and male.

- IV. Nurses should have a minimum of one year of work experience in emergency departments in Saudi Arabia.
- V. Nurses should be able to speak and write English or Arabic.
- VI. Nurses are either enrolled or registered nurses.

The following outline the exclusion criteria:

- I. Nurses who participate in pilot study.
- II. Assist nurse and Nursing students are excluded.

3.1.9 Sample and sampling

There are two classifications of sampling designs: non-probability and probability (De Vaus 2014). When using non-probability sampling, the researcher selects the participants based on which persons are most suitable and more representative of the population of interest. Conversely, those who opt to use a probability sample select participants from a population using randomisation procedures.

In this study, convenience sampling was used, which is one type of non-probability sampling strategy, and is also used in both quantitative and qualitative approaches (Haber 2014; Rebar & Macnee 2011; Schneider & Fisher 2013). The rationale for the choice of this type of sampling within the study was its easy access to participants; however, the disadvantage of this sampling is that it limits the ability to generalise (Haber 2014; Rebar & Macnee 2011; Schneider & Fisher 2013). Using this approach, the researcher selects the required sample, having regard for the requirement to involve certain criteria and elements within the study. Thus, it was important to collect data from those affected by the problem. Therefore, for the purpose of this study, all eligible nurses were invited to participate.

3.1.10 Recruitment strategies

The recruitment process began in June 2016, and continued until August 2016. The participants of this study were recruited through each emergency department. Face-to-face meetings took place with directors of nursing and heads of emergency departments in the four selected hospitals to gain their support in facilitating data collection. The aim of these introductory meetings was to describe the purpose and aims of the study, the data collection process, and to ask them to help in recruiting the target participants. Authorisation was given

to access the departments and approach participants, allowing the researcher to introduce the study at the end of the weekly staff meetings for 10 minutes. After finishing the presentation, nurses who wanted to participate in the study were provided with a survey package that contained an information sheet, a questionnaire, and an envelope. The information sheet explained details of the study, listed contact details for the researcher, and outlined the measures for ensuring the confidentiality of participant responses (see Appendix 3). The questionnaire was provided in both languages English and Arabic (appendix 2). An invitation letter was posted on the nursing staff board in each hospital after the meeting, providing relevant information about the study for employees who missed the meeting in order to encourage them to participate.

To increase the response rate (Parahoo 2008), a reminder (in both Arabic and English) was posted on the board in the nursing staff room in each hospital two weeks after the first distribution of the questionnaires. Two weeks after the first reminder, a second reminder (a colourful poster in both Arabic and English) was displayed on the staff notice board of each department in each hospital. The researcher asked for permission from heads of emergency departments in each hospital to make another presentation at the end of the weekly staff meeting in the fifth week, and then two weeks after the second presentation, the researcher collected the questionnaires and removed the posters.

3.1.11 Setting

The three hospitals and one medical city included are in the capital city of Riyadh, the central region of the Kingdom of Saudi Arabia. These hospitals and medical city were selected using purposive sampling as they are within the remit of the Ministry of Health’s research ethics committee, where ethical permission to conduct the study was sought. The MOH managed and operated these organisations at the time of this study, and details about the size and type of hospital, and the services included are outlined below (Table 3.1):

Table 3.1: Overview of participating hospitals

Hospital	Year established	Bed capacity in organisation	Bed capacity in ED	Total number of ED staff nurses
Hospital (1)	1987	800	80	98
Hospital (2)	1985	500	55	78
Hospital (3)	1985	750	65	79
Medical City (4)	1956	1800	285	357

Note: Information gathered from various sources (Ministry of Health, 2015; High Commission for the Development of Arriyadh, 2016; King Saud Medical City, 2011; Mufti, 2000).

- **Hospital 1** is a public healthcare specialist centre. It accepts referrals from all other hospitals across the country, including those in rural areas.
- **Hospital 2** is located in a highly populated central city. The hospital accepts referrals from other hospitals and offers specialised orthopaedic services.
- **Hospital 3** accepts clients including by referral from regional hospitals.
- **Hospital 4** is a medical city, which includes different specialised hospitals. It is a major public referral centre in the country, offering highly specialised tertiary healthcare services.

For privacy reasons, the healthcare organisations where the data gathering took place are not mentioned. Each hospital was given a code for easy identification in the current study.

3.1.12 Pilot

A pilot study is defined as a “mini” version of the proposed research, which tests the feasibility of the main study (Cooper and Schindler 2008; Haber 2014). The main purpose for undertaking a pilot study was to test the feasibility of the updated survey and ensure the study design was suitable (Haber 2014). Although the chosen questionnaire had been previously tested, it demanded re-examining as it was being utilised on a different population and on people from different cultures. Cooper and Schindler (2008) state that the common range of the sampling of a pilot study in a quantitative study is 25–100 participants. After translating, the final questionnaire was tested in a hospital in Riyadh City three weeks before distribution of the questionnaire. A total of 26 emergency nurses, made up of five each Saudi males and females, and eight each non-Saudi males and females, were asked to complete the questionnaire. This was to ensure at least two members of each group answered in Arabic and English, that they met the inclusion criteria, and were independent of the main study. The participants involved in the pilot study were excluded from the main study. Each respondent was asked to comment on readability, layout and intelligibility of the questionnaire, and to comment on any questions that might be unclear (Hallberg 2008). There were no comments regarding difficulty with terminology and wording, clarity of the questions or structure of the items reported by the participants. The tool appeared to be valid and reliable and most suitable to collect the data for this study. This procedure was to ensure that there was no misunderstanding by participants of diverse nationalities or genders.

3.2 Data collection

After obtaining ethics approval from the Ministry of Health and each selected hospital (Appendix 4), the data collection process was conducted as follows. A formal letter was received from the Directors of the selected organisations to support and facilitate the researcher collecting the data; copies of ethical approvals, the questionnaire, information sheet, and a summary of the study were also attached to the request. The recruitment strategy was implemented by the researcher to collect the data as described in 3.1.7. Open boxes that contained the survey package were placed in the nursing staff rooms and at the signing in/out area (time clock) in each hospital to be easy for participants to access. The completed survey boxes, secured, sealed and with a small slot, were placed next the open boxes and under the invitation letter. The boxes for completed surveys were emptied weekly. Data was stored in a locked cabinet and only the writer had access to this raw data.

3.3 Issues of validity and reliability

Attaining accuracy in research is important. If a study is deemed not to be precise and accurate, this reflects on the findings and thus is a determination of the overall validity and reliability of the study (Creswell 2014). Reliability is a measure of the consistency of an instrument (Burns & Grove 2005). The validity of any study relates to how well the study measures what it set out to measure (Polgar & Thomas 2013). Content validity, also referred to as face validity, defines how effective the instrument is in providing a true representation of the subject being assessed. An expert panel was asked to validate the content of the questionnaire. The panel provided a rating of the relevance and clarity of each item. Members of the panel were two senior emergency nurses and two academic nurses, all of whom were independent of the current study. These members were chosen for their academic knowledge and professional work experience in Saudi Arabian emergency departments (Fain 2013). The panel encouraged the use of the questionnaires, and did not provide any notes and comments.

3.4 Data analysis

In this study, statistical analysis of the collected data was conducted using the Statistical Package for the Social Sciences (SPSS) version 23. SPSS is a software package used for conducting statistical analysis, manipulating data and generating tables and graphs to summarise data (Greasley 2007). Before analysis began, a database in the SPSS program was

created by the researcher and each individual survey was coded and numbered, each questionnaire result was entered directly into the database and then data cleaning was conducted. The data were also checked carefully for missing values. Another technique used was randomly selecting a number of questionnaires (10%) and checking them carefully to detect incorrectly entered data; therefore, the data were double-checked and re-entered if necessary.

Descriptive statistics are used to summarise and describe the basic features of the data and display them in an understandable way (De Vaus 2014; Pallant 2007). Descriptive statistics used in this study included frequency to analyse the categorical data. Demographic data was analysed through using descriptive statistics; whereas, the multiple-choice questions and Likert scale results were subjected to inferential testing. This enabled the identification of the existence of potentially statistically significant correlations between the relevant variables (Bowling 2005b; Polgar & Thomas 2013). In this study, the independent variables were demographic information that include hospital, gender, and nationality. The dependent variables were physical and non-physical violence, systems and means of protection, and the procedures for reporting in their organisations. Therefore, there might be significant relationships between demographic variables of hospital, gender, nationality and the prevalence of physical and non-physical violence.

3.5 Ethical considerations

Polit and Beck (2014) outlined a major premise of any research activity being that ethical principles and considerations are identified, observed and adhered to throughout the entire research process. As such, ethical considerations permeate all aspects of the study through to its communication, dissemination, and publishing. To ensure that this study met with these principles, ethical approval of the study was obtained from the University of Adelaide Human Research Ethics Committee and the Ministry of Health Department of Medical Research in the Kingdom of Saudi Arabia (Appendix 4). Furthermore, ethical permission was also obtained from each hospital involved in the study.

The principles of autonomy and respect are the cornerstones from which all ethical considerations involving individual participation within research may be built (Creswell 2014; Haigh 2008). The researcher was obliged to respect the rights, values and wishes of the

participants. The participants were given verbal and written information about the study, what was required from them, and explanations relating to the research as written in the information sheet that accompanied each questionnaire. Participants were informed about their rights, including that participation was voluntary and that they could withdraw from the study at any time without prejudice or penalty, data would only be used for the purpose of the study, and the anonymity of the participants would be maintained.

The study did not require any personal information from participants, and blank envelopes were provided to help maintain anonymity. Participants were informed that return of the completed questionnaire implied formal consent to participate in the study. Also, there were no direct benefits to participating in the study. The researcher's contact details were included in case participants needed to discuss any issue concerning the questionnaire, or ask questions about the study. Ethical challenges that might arise during the study were anticipated, and a contingency plan prepared (De Vaus 2014; Polit & Beck 2014). There were no physical or mental risks associated with study participation; however, possible associated risks were anticipated. For example, if participants felt emotional distress or harm about an incident, they would be asked to stop filling in the questionnaire and to talk to the social worker in the hospital.

The data generated (hard copies and electronic copies) from the project were kept secure and stored confidentially in a locked cabinet and on a password-protected computer at the University of Adelaide. Access was limited to the researcher and the supervisors to maintain the privacy of the participants. The data will be destroyed after five years pursuant to the guidelines provided in the Australian Code for the Responsible Conduct of Research (National Health and Medical Research Council and the Australian Research Council 2007).

Summary

In this chapter, the methods used in the study have been described and discussed. A descriptive design of cross-sectional survey was used to study violence against nurses in emergency departments. A questionnaire was used to collect data from respondents. It consisted of four sections: demographic information, physical violence, non-physical violence, systems and means of protection available, and the procedures for reporting violence. The data

collection took place between June and August 2016. The data were analysed using SPSS version 23. Inferential tests used in the analysis process include the independent sample the Chi square test. The results of this study are presented in Chapter 4.

Chapter 4: Results

Introduction

This chapter presents the current study's findings from the survey. This study assesses the incidence and factors contributing to workplace violence against nurses in EDs, and investigates the support received by nurses who are victims of workplace violence. The research questions for this study were stated in 1.4 (p. 11). In order to answer the research questions, the researcher conducted a quantitative descriptive survey. The questionnaire, which had 34 questions, was adapted from Kitaneh and Hamdan (2012). This chapter outlines: demographic information of the participants', the incidence and predictors of physical and non-physical violence, means of protection, and the procedures for reporting physical and non-physical violence.

4.1 Response rate

The questionnaire was distributed to all emergency nurses across four different hospital emergency departments in Riyadh City. Returned surveys were checked for eligibility for analysis. This check resulted in the exclusion of 23 of the 459 questionnaires returned because they did not meet the inclusion criteria ($n = 8$) or were incomplete ($n = 15$). Ultimately, 436 of the responses were valid. Therefore, the effective response rate was 71.2% ($n = 436$) for questionnaires completed and returned by the end of the data collection period. The response rate for the three smaller hospitals (where less than 100 forms were distributed) was quite high (88.5% to 96.2%). However, for the larger hospital, where 357 forms were distributed, the response rate was significantly lower, 56.9%, because of the limited time for obtaining responses since there was a public holiday, and the research was approved by the hospital's ethics committee after distributing the questionnaire in the other hospitals (Table 4.1).

Table 4.1: Response rate by hospital

Hospital	Distributed	Returned & Eligible	Percent
1	98	88	89.8
2	78	69	88.5
3	79	76	96.2
4	357	203	56.9
Total	612	436	71.2

As suggested by Babbie (2016), the response bias will be minimal because of the high response rate.

4.2 Participants' demographic information

As reported in Table 4.2, the following demographic results were obtained from the respondents through the survey: gender, age nationality, occupation, qualification, experience (years) working as a nurse and experience (years) working in EDs. Almost three-quarters of respondents were female ($n = 320, 73.4\%$), and more than quarter were male ($n = 116, 26.6\%$). The following age groups were represented: 18–30 ($n = 255, 58.5\%$), 31–40 ($n = 135, 31.0\%$), 41–50 ($n = 40, 9.2\%$), 51 and over ($n = 6, 1.4\%$). More than three-quarters ($n = 390, 89.5\%$) of the total sample of emergency nurses were aged less than 40 years. Over three-quarters of the respondents were from non-Saudi nurses ($n = 333, 76.4\%$) with the rest being Saudis ($n = 103, 23.6\%$).

The majority of the respondents were nursing staff ($n = 418, 95.9\%$), very few were head nurses ($n = 13, 3.0\%$) and only five (1.1%) of the respondents were nurse managers. Nurses' educational attainments were mainly divided between diploma certificate level and bachelor degree level in nursing ($n = 181, 41.5\%$ and $n = 251, 57.6\%$ respectively). Only a few nurses held a post-graduate qualification in nursing ($n = 4, 0.9\%$).

Level of experience working in Saudi Arabia ranged from 1 year to over 31 years. More than one third of respondents ($n = 167, 38.3\%$) had 6–10 years' experience working as nurses in Saudi Arabia, approximately one third ($n = 149, 34.2\%$) had 1–5 years' experience, 15.1% ($n = 66$) had 11–15 years, 7.6% ($n = 33$) had 16–20 years, 2.5% ($n = 11$) had 21–25 years, 1.4% ($n = 6$) had 26–30 years, and 0.9% ($n = 4$) had 31 years. Most respondents had 1–5 years' experience in emergency departments in Saudi Arabia ($n = 265, 60.8\%$), less than one third of participants ($n = 127, 29.1\%$) had 6–10 years' experience, 8.7% ($n = 38$) had 11–15 years, 0.5% ($n = 2$) had 16–20 years, 0.7% ($n = 3$) had 21–25 years, and 0.2% ($n = 1$) had over 26 years (Table 4.2).

Table 4.2: Summary of key demographic information of the emergency nurse respondents

Variable	Category	N	%
Gender	Male	116	26.6
	Female	320	73.4
Age	18–30	255	58.5
	31–40	135	31.0
	41–50	40	9.2
	51 +	6	1.4
Nationality	Saudi	103	23.6
	Non-Saudi	333	76.4
Occupation	Nursing Staff	418	95.9
	Head Nurse	13	3.0
	Nursing Manager	5	1.1
Qualification	Diploma	181	41.5
	Bachelor	251	57.6
	Post-graduate	4	0.9
Experience working in Saudi Arabia	1–5 yrs	149	34.2
	6–10 yrs	167	38.3
	11–15 yrs	66	15.1
	16–20 yrs	33	7.6
	21–25 yrs	11	2.5
	26–30 yrs	6	1.4
	31 + yrs	4	0.9
Experience working in ED	1–5 yrs	265	60.8
	6–10 yrs	127	29.1
	11–15 yrs	38	8.7
	16–20 yrs	2	0.5
	21–25 yrs	3	0.7
	26+ yrs	1	0.2

4.3 Physical and non-physical violence

In the survey, this question allowed multiple answers, so in some cases a nurse could have been attacked by a patient, and/or a visitor or patient’s relative, and/or a co-worker, so the total percentage of the responses may exceed 100%.

In the 12 months prior to the survey, 44.7% of the respondents reported that they were exposed to physical violence in the workplace, and 73.2% of respondents reported non-physical violence at work (Table 4.3). In the same period, 55.3% of the respondents reported that they were not exposed to physical violence in the workplace, and 26.8% of respondents reported that they were not exposed to non-physical violence at work. In the 12 months prior to the survey, 41.7% of respondents were exposed to both physical and non-physical violence in the workplace. For physical violence, the assailant was more frequently a patient (67.7%), but visitors and patients' relatives also featured (44.6%), as did co-workers (3.1%) and others (1.0%). For non-physical violence, the most common assailants were visitors and patients' relatives (67.1%), closely followed by patients (63.6%) and co-workers (10.0%). More physically violent attacks occurred during the afternoon shift than during the other shifts (35.9%), and non-physical violence happened more often during the night shift (37.9%), closely followed by afternoon shift (35.7%).

Violent attacks happened most often during patient treatment, as presented in Table 4.3. Physical attacks happened most frequently in the treatment room (38.5%), and in triage (30.8%). Similarly, non-physical violence mainly occurred in the treatment room (36.8%) and in triage (35.4%). Mostly, treatment was not required for either physical (63.6%), or non-physical violence (67.1%). Only 10.7% of physically violent attacks required treatment, 9.2% by a doctor, and 1.5% by a nurse. In 21.5% of the physically violent attacks, and 25.1% of the non-physically violent attacks, the nurse self-treated.

The most common factors contributing to physical violence were "mental health or psychiatric patient" (38.5%), "waiting to receive service" (36.4%), and "influence of alcohol/drugs" (27.7%). When respondents were asked to indicate which factors contributed to the most recent incident of non-physical violence, the main reasons given were "waiting to receive service" (58.9%), "mental health or psychiatric patient" (27.6%), and "fear and/or stress" (25.4%).

Table 4.3: Summary of key physical and non-physical violence from the respondents

Variable	Category	N	%	N	%
Number of times of being exposed to		Physical		Non-physical	
	Never	241	55.3	117	26.8
	Once	80	18.4	71	16.3
	2–3 times	64	14.7	115	26.4
	4–5 times	28	6.4	48	11.0
	6 times	23	5.3	85	19.5
Who assaulted *					
	Patient	132	67.7	203	63.6
	Visitor or patient's relative	87	44.6	214	67.1
	Co-worker	6	3.1	32	10.0
	Other	2	1.0	0	0
When the incident happened					
	Morning	48	24.6	42	13.2
	Afternoon	70	35.9	114	35.7
	Night	52	26.7	121	37.9
	Unsure	24	12.3	42	13.2
Where the incident happened *					
	Resuscitation	33	16.9	57	17.9
	Waiting room	33	16.9	98	30.7
	Triage	60	30.8	113	35.4
	Treatment	75	38.5	117	36.8
	Hallway	35	17.9	73	22.9
	Other	10	5.1	6	1.9
Receiving treatment after the incident					
	Yes, I received treatment	21	10.8	7	2.2
	There was no need for treatment	124	63.6	214	67.1
	I needed treatment but did not receive	7	3.6	17	5.3
	Self-treatment	42	21.5	80	25.1
Who treated					
	Doctor	18	9.2	5	1.6
	Psychiatrist	0	0	1	0.3
	Nurse	3	1.5	2	0.6
	Other	0	0	3	0.9
The cause of the most recent incident *					
	Waiting to receive service	71	36.4	188	58.9
	Failure to meet the desire of the patient or his/her companions	33	16.9	66	20.7
	Mental health/psychiatric patient	75	38.5	88	27.6
	Way of dealing with the patient by the staff	10	5.1	22	6.9
	Unavailability of medications or needed service for patient	26	13.3	40	12.5
	Fear and/or stress	32	16.4	81	25.4
	Lack of tools to prevent the attack on workers	34	17.4	80	25.1
	Impact of disease/pain	39	20.0	74	23.2
	Influence of alcohol/drugs	54	27.7	73	22.9
	Do not know the reason	28	14.4	40	12.5
	Another reason	3	1.5	1	0.3

* Multi-selected items, therefore, sum of percentages may exceed 100%.

In the 12 months prior to the survey, of the 44.7% of respondents exposed to physical violence, the most common form of attack was pushing. This type of aggression occurred in 65.6% of all violent attacks. Other more severe types of attacks included beating (23.6%), kicking (17.4%), slapping and pinching (both 13.3%), biting (8.7%) and other types e.g. “through tools” (3.6%). Surprisingly, attacks involving weapons (shooting) accounted for 4.1% of all cases of physical violence (Table 4.4).

Table 4.4: Summary of key types of physical violence in the workplace

Variable	Category	N	%
Types of physical violence *			
	Beating	46	23.6
	Pushing	128	65.6
	Slapping	26	13.3
	Kicking	34	17.4
	Biting	17	8.7
	Pinching	26	13.3
	Shooting	8	4.1
	Stabbing	0	0
	Other	7	3.6

* Multi-select items, therefore, sum of percentages may exceed 100%.

In the 12 months prior to the survey, 73.2% of the respondents were exposed to non-physical violence in the workplace, which included threats (29.5%), verbal abuse/harassment (88.1%), and sexual abuse/harassment (4.4%) (Table 4.5).

Table 4.5: Summary of key types of non-physical violence in the workplace

Variable	Category	N	%
Types of non-physical assault *			
	Threat	94	29.5
	Verbal abuse/harassment	281	88.1
	Sexual abuse/harassment	14	4.4

* Multi-selected items, therefore, sum of percentages may exceed 100%.

4.4 Means of protection and the procedures for reporting violence

Only one third (33.0%) of all respondents indicated that their hospital had methods for preventing violence. A similar percentage (36.7%) indicated that their hospital had policies, systems and instructions to prevent violence against staff members. Further, 31.4% of the

respondents claimed that they received training or educational programs on dealing with violence in the workplace.

The majority of respondents (70.6%) mentioned that their hospital had procedures for reporting violence against staff. However, only 47.1% of the nurses had reported physical violence to the administrator and only 28.7% had done so for non-physical violence. The main reason stated for not reporting the incident was “no benefit in writing” (63.1%,) followed by “incident was not important” (18.1%). Of concern were the claims that the incident was not reported due to “fear of consequences for me or my work” (7.4%). Other reasons for non-reporting included “don’t know whom I should report it to” (7.8%), and “feeling ashamed” (3.2%). Of the respondents, 57.8% reported that there was no action taken against the attacker.

In relation to the impact that physical and non-physical violence has on nurses, this study looked at the impact that violence had on personal feelings, patient care, and any plans to stop working in the ED. When asked about the impact of the attacks on emergency nurses, 48.2% of the respondents mentioned the attacks made them feel “fear and anxiety”, 10.3% a “desire for revenge”, and 5.1% “feelings of guilt”. Nearly one third (29.8%) indicated that the attacks had “no impact” on them. When asked about the impact of the attacks on patient care, 16.5% mentioned that they refused to work with the patient, 12.2% indicated that they minimised their response to the patient’s needs, and a further 15.1% mentioned that they minimised their time spent on patient care. The remaining 49.5% stated that the attacks had no impact on patient care.

Finally, when asked about planning to stop working in the emergency department after the attacks, 38.0% indicated that they are likely or very likely to stop working in the ED, while 39.2% had not yet made a decision. The balance of 22.8% answered that despite the attack(s) they were unlikely or very unlikely to stop working in the ED.

Table 4.6: Summary of key means of prevention and procedures for reporting violence

Variable	Category	N	%
Methods used to prevent violence			
	Yes	144	33.0
	No	273	62.6
	Do not know	19	4.4
Policies, systems, instructions preventing violence			
	Yes	160	36.7
	No	245	56.2
	Do not know	31	7.1
Received training, educational programs			
	Yes	137	31.4
	No	288	66.1
	Do not know	11	2.5
Procedures for reporting violence			
	Yes	308	70.6
	No	84	19.3
	Do not know	44	10.1
Written report to administrator *			
	Physical - yes	115	47.1
	Physical - no	129	52.9
	Non-physical - yes	95	28.7
	Non-physical - no	236	71.3
Why the incident was not reported *			
	Incident was not important	56	18.1
	Fear of consequences for me or my work	23	7.4
	Feeling ashamed of the incident	10	3.2
	Do not know whom I should write to	24	7.8
	No benefit	195	63.1
	Other	1	0.3
Taking action against the attacker? (Missing n = 81, 18.6%)			
	Yes	46	10.6
	No	252	57.8
	Do not know	57	13.1
The impact of violence on nurses? (Missing n = 29, 6.7%)			
	Fear and anxiety	210	48.2
	Feeling guilty	22	5.1
	Feeling a desire for revenge	45	10.3
	No impact	130	29.8
The impact of violence on patient care? (Missing n = 29, 6.7%)			
	Refusing to work with patient	72	16.5
	Minimising my response to patient's needs	53	12.2
	Minimising the time spend on patient care	66	15.1
	No impact	216	49.5
Stopping working in ED			
	Very likely	73	16.7
	Likely	93	21.3
	Not decided yet	171	39.2
	Unlikely	51	11.7
	Very unlikely	48	11.1

* Multi-selected items, therefore, sum of percentages may exceed 100%.

4.5 Inferential test

The researcher has further analysed with a “Chi-square test” between independent variables “hospital, gender, and nationality” and dependent variables “frequencies of physical and non-physical violence”.

4.5.1 Predictors of physical violence

A Chi-square test was conducted to explore the relationship between independent variables “hospital, gender, and nationality” and frequency of physical violence as shown (Table 4.7). The Chi-square test ($\chi^2 = 52.464$; $p = 0.000$) indicated that there is a statistically significant relationship between hospitals and physical violence. More frequent physical violence was experienced in Hospital 3 than in the other three hospitals. A statistically significant relationship was found between gender and physical violence ($\chi^2 = 22.540$; $p = 0.000$). Males experience more frequent physical violence than females. Finally, there was no statistically significant relationship between nationality and physical violence ($\chi^2 = 0.02$; $p = 0.89$).

Table 4.7: Relationship between independent variables and frequency of physical violence

Variable	Never N (%)	Once N (%)	2–3 Times N (%)	4–5 Times N (%)	6+ Times N (%)	Total N (%)	χ^2	P. value
1	48 (54.6)	20 (22.7)	12 (13.6)	4 (4.55)	4 (4.55)	88 (100)		
2	49 (71.0)	8 (11.6)	11 (15.9)	1 (1.5)	0 (0.0)	69 (100)		
3	22 (29.0)	13 (17.1)	18 (23.7)	13 (17.1)	10 (13.2)	76 (100)		
4	122 (60.1)	39 (18.2)	23 (11.3)	10 (4.9)	9 (4.4)	203 (100)		
Total	241 (55.3)	80 (18.4)	64 (14.7)	28 (6.4)	23 (5.3)	436 (100)	52.464	0.000
Male	48 (41.4)	21 (18.1)	23 (19.8)	16 (13.8)	8 (6.9)	116 (100)		
Female	193 (60.3)	59 (18.4)	41 (12.8)	12 (3.8)	15 (4.7)	320 (100)		
Total	241 (55.3)	80 (18.4)	64 (14.7)	28 (6.4)	23 (5.3)	436 (100)	22.540	0.000
Saudi	58 (56.3)	19 (18.5)	16 (15.5)	6 (5.8)	4 (3.9)	103 (100)		
Non-Saudi	183 (55.0)	61 (18.3)	48 (14.4)	22 (6.6)	19 (5.7)	333 (100)		
Total	241 (55.3)	80 (18.4)	64 (14.7)	28 (6.4)	23 (5.3)	436 (100)	0.664	0.956

4.5.2 Predictors of non-physical violence

A Chi-square test was performed to examine the relationship between “hospital, gender, and nationality” and frequency of non-physical violence. A Chi-square test ($\chi^2 = 39.123$; $p = 0.000$) indicated that there is a statistically significant relationship between hospitals and non-physical violence. Hospital 3 and 4 experienced more frequent non-physical violence than

hospital 1 and 2. There was no statistically significant relationship between gender and non-physical violence ($\chi^2 = 1.296$; $p = 0.862$). Finally, a Chi-square test ($\chi^2 = 12.415$; $p = 0.015$) indicated a statistically significant relationship between nationality and non-physical violence. Non-Saudi nurses experience more frequent non-physical violence than Saudis (Table 4.8).

Table 4.8: Relationship between independent variables and frequency of non-physical violence

Variable	Never N (%)	Once N (%)	2–3 Times N (%)	4–5 Times N (%)	6+ Times N (%)	Total N (%)	χ^2	P value
1	28 (31.8)	15 (17.1)	19 (21.6)	10 (11.4)	16 (18.2)	88 (100)		
2	32 (46.4)	14 (20.3)	7 (10.1)	4 (5.8)	12 (17.4)	69 (100)		
3	20 (26.3)	10 (13.2)	16 (21.1)	14 (18.4)	16 (21.1)	76 (100)		
4	37(18.2)	32 (15.8)	73 (36.0)	20 (9.9)	41 (20.2)	203 (100)		
Total	117 (26.8)	71 (16.3)	115 (26.4)	48 (11.0)	85 (19.5)	436 (100)	39.123	0.000
Male	28 (24.1)	18 (15.5)	33 (28.5)	15 (13.0)	22 (19.0)	116 (100)		
Female	89 (27.8)	53 (16.6)	82 (25.6)	33 (10.3)	63 (19.7)	320 (100)		
Total	117 (26.8)	71 (16.3)	115 (26.4)	48 (11.0)	85 (19.5)	436 (100)	1.284	0.862
Saudi	40 (38.8)	19 (18.5)	20 (19.4)	9 (8.7)	15 (14.6)	103 (100)		
Non-Saudi	77 (23.1)	52 (15.6)	95 (28.5)	39 (11.7)	70 (21.0)	333 (100)		
Total	117 (26.8)	71 (16.3)	115 (26.4)	48 (11.0)	85 (19.5)	436 (100)	12.415	0.015

4.5.3 Types of physical violence

Further analysis was conducted using “Chi-square” and “Fisher’s exact” tests on the relationship between independent variables ‘hospital’ and ‘gender’ and the ‘types of physical violence’ because there are significant associations between hospitals and gender and frequency of physical violence.

The results for relationships between Hospitals and different types of physical violence are shown in Table 4.9. The following statistically significant differences were found: Hospital 3 were more frequent than other 3 hospitals to be attacked by “beating” ($\chi^2 = 81.825$, $p = 0.000$), “slapping” ($\chi^2 = 10.207$, $p = 0.017$), “kicking” ($\chi^2 = 32.950$, $p = 0.000$) and “biting” ($\chi^2 = 15.617$, $p = 0.001$). Finally, no statistically significant relationship was found between hospitals and shooting and other types of physical violence.

Table 4.9: Variable result for hospitals and types of physical violence

Outcome	Variable Hospital	Present N (%)	Absent N (%)	Total N (%)	χ^2	P value
Beating	1	3 (3.4)	85 (96.6)	88 (100)		
	2	4 (5.6)	65 (94.2)	69 (100)		
	3	30 (39.5)	46 (60.5)	76 (100)		
	4	9 (4.4)	194 (95.6)	203 (100)		
	Total	46 (10.6)	390 (89.4)	436 (100)	81.825	0.000
Pushing	1	29 (33.0)	59 (67.1)	88 (100)		
	2	15 (21.7)	54 (78.3)	69 (100)		
	3	30 (39.5)	46 (60.5)	76 (100)		
	4	54 (26.6)	149 (73.4)	203 (100)		
	Total	128 (29.4)	308 (70.6)	436 (100)	6.974	0.073
Slapping	1	8 (9.1)	80 (90.9)	88 (100)		
	2	1 (1.5)	68 (98.6)	69 (100)		
	3	9 (11.8)	67 (88.2)	76 (100)		
	4	8 (3.9)	195 (96.1)	203 (100)		
	Total	26 (6.0)	410 (94.0)	436 (100)	10.207	0.017
Kicking	1	5 (5.7)	83 (94.3)	88 (100)		
	2	4 (5.8)	65 (94.2)	69 (100)		
	3	18 (23.7)	58 (76.3)	76 (100)		
	4	7 (3.5)	196 (96.6)	203 (100)		
	Total	34 (7.8)	402 (92.2)	436 (100)	32.950	0.000
Biting	1	2 (2.3)	86 (93.2)	88 (100)		
	2	2 (2.9)	67 (97.1)	69 (100)		
	3	9 (11.8)	67 (88.2)	76 (100)		
	4	4 (2.0)	199 (98.0)	203 (100)		
	Total	17 (3.9)	419 (96.1)	436 (100)	15.617	0.001*
Pinching	1	6 (6.8)	82 (93.2)	88 (100)		
	2	3 (4.3)	66 (95.7)	69 (100)		
	3	6 (7.9)	70 (92.1)	76 (100)		
	4	11 (5.4)	192 (94.6)	203 (100)		
	Total	26 (6.0)	410 (94.0)	436 (100)	1.049	0.789
Shooting	1	3 (3.4)	85 (96.6)	88 (100)		
	2	0 (0.0)	69 (100.0)	69 (100)		
	3	0 (0.0)	76 (100.0)	76 (100)		
	4	5 (2.5)	198 (97.5)	203 (100)		
	Total	8 (1.8)	428 (98.2)	436 (100)	4.366	0.225*
Stabbing	1	0 (0.0)	88 (100)	88 (100)		
	2	0 (0.0)	69 (100)	69 (100)		
	3	0 (0.0)	76 (100.0)	76 (100)		
	4	0 (0.0)	203 (100.0)	203 (100)		
	Total	0 (0.0)	436 (100)	436 (100)	00	--
Other	1	3 (3.4)	85 (96.6)	88 (100)		
	2	0 (0.0)	69 (100.0)	69 (100)		
	3	0 (0.0)	76 (100.0)	76 (100)		
	4	4 (0.9)	199 (99.1)	203 (100)		
	Total	7 (1.6)	429 (98.4)	436 (100)	4.366	0.225*

* Note: Fisher's exact test.

As shown in Table 4.10, males were more likely than females to be attacked by number of different types of physical violence “beating” (χ^2 test value was 43.809, $p = 0.000$) and “kicking” (χ^2 test value was 13.098, $p = 0.000$). There was a borderline difference in “biting” (χ^2 test value was 3.790, $p = 0.052$), and again males were more likely to be subjected to it.

Table 4.10: Variable result for gender and types of physical violence

Outcome	Variable Gender	Present N (%)	Absent N (%)	Total N (%)	χ^2	P value
Beating	Male	31 (26.7)	85 (73.3)	116 (100)	43.809	0.000
	Female	15 (4.7)	305 (95.3)	320 (100)		
	Total	46 (10.6)	390 (89.5)	436 (100)		
Pushing	Male	37 (31.9)	79 (68.1)	116 (100)	.491	0.483
	Female	91 (28.4)	229 (71.6)	320 (100)		
	Total	128 (29.4)	308 (70.6)	436 (100)		
Slapping	Male	9 (7.8)	107 (92.2)	116 (100)	.908	0.341
	Female	17 (5.3)	303 (94.7)	320 (100)		
	Total	26 (6.0)	410 (94.0)	436 (100)		
Kicking	Male	18 (15.5)	98 (84.5)	116 (100)	13.098	0.000
	Female	16 (5.0)	304 (95.0)	320 (100)		
	Total	34 (7.8)	402 (92.2)	436 (100)		
Biting	Male	8 (6.9)	108 (93.1)	116 (100)	3.790	0.052*
	Female	9 (2.8)	311 (97.2)	320 (100)		
	Total	17 (3.9)	419 (96.1)	436 (100)		
Pinching	Male	9 (7.8)	107 (92.2)	116 (100)	1.990	0.158
	Female	17 (5.3)	303 (94.7)	320 (100)		
	Total	26 (6.0)	410 (94.0)	436 (100)		
Shooting	Male	3 (2.6)	113 (97.4)	116 (100)	.728	0.482*
	Female	5 (1.6)	315 (98.4)	320 (100)		
	Total	8 (1.8)	428 (98.2)	436 (100)		
Stabbing	Male	0 (0.0)	116 (100)	116 (100)	00	--
	Female	0 (0.0)	315 (100)	320 (100)		
	Total	0 (0.0)	436 (100)	436 (100)		
Other	Male	1 (0.9)	115 (99.1)	116 (100)	.830	0.362*
	Female	6 (1.9)	314 (98.1)	320 (100)		
	Total	7 (1.6)	429 (98.4)	436 (100)		

* Note: Fisher’s exact test.

4.5.4 Types of non-physical violence

Further analysis was done using “Chi-square” and “Fisher’s exact” tests on the relationship between independent variable “hospital”, and “nationality” and the “types of non-

physical violence” because there is a significant association between hospital and nationality and frequency of non-physical violence.

As shown in Table 4.11, Hospital 3 were a higher level than other three hospitals in the form of threat ($\chi^2 = 44.650$, $p = 0.000$). Hospitals 1 and 4 were more frequent than the other two hospitals to be exposed to verbal abuse/harassment ($\chi^2 = 27.951$, $p = 0.000$). Finally, a Fisher’s exact test was conducted to assess the relationship between hospitals and sexual abuse/harassment. No statistically significant relationship was found between sexual abuse/harassment and hospital.

Table 4.11: Variable results for hospitals and types of non-physical violence

Outcome	Variable Hospital	Present N (%)	Absent N (%)	Total N (%)	χ^2	P value
Threat	1	16 (18.2)	72 (81.8)	88 (100)		
	2	9 (13.0)	60 (87.0)	69 (100)		
	3	38 (50.0)	38 (50.0)	76 (100)		
	4	31 (15.3)	172 (84.7)	203 (100)		
	Total	94 (21.6)	342 (78.4)	436 (100)	44.650	0.000
Verbal abuse/harassment	1	55 (62.5)	33 (37.5)	88 (100)		
	2	33 (47.8)	36 (52.2)	69 (100)		
	3	38 (50.0)	38 (50.0)	76 (100)		
	4	155 (76.4)	48 (23.7)	203 (100)		
	Total	281 (64.5)	155 (35.6)	436 (100)	27.951	0.000
Sexual abuse/harassment	1	4 (4.6)	84 (95.5)	88 (100)		
	2	0 (00.0)	69 (100.0)	69 (100)		
	3	4 (5.3)	72 (94.7)	76 (100)		
	4	6 (3.0)	197 (97.0)	203 (100)		
	Total	14 (3.2)	422 (96.8)	436 (100)	3.866	0.276*

* Note: Fisher’s exact test.

The results for relationships between nationality and different types of non-physical violence are displayed in Table 4.12. Saudis are significantly more likely to be subjected to threats ($\chi^2 = 7.210$, $p = 0.007$) and non-Saudi nurses are significantly more likely to be subjected to verbal abuse/harassment ($\chi^2 = 27.796$, $p = 0.000$). A Fisher’s exact test was used to explore the relationship between nationality and sexual abuse/harassment, revealing that there is no significant relationship between the two groups. Saudi nurses experience more frequent non-physical violence in terms of “threats and verbal abuse/harassment” than non-Saudis.

Table 4.12: Variable result for nationality and types of non-physical violence

Outcome	Variable Nationality	Threat N (%)	No threat N (%)	Total N (%)	χ^2	P value
Threat	Saudi	32 (31.1)	71 (68.9)	103 (100)	7.210	0.007
	Non-Saudi	62 (18.6)	271 (81.4)	333 (100)		
	Total	94 (21.6)	342 (78.4)	436 (100)		
Verbal abuse/ harassment	Saudi	44 (42.7)	59 (57.3)	103 (100)	27.796	0.000
	Non-Saudi	237 (71.2)	96 (28.8)	333 (100)		
	Total	281 (64.5)	155 (35.6)	436 (100)		
Sexual abuse/ harassment	Saudi	3 (2.9)	100 (97.1)	103 (100)	0.039	0.844*
	Non-Saudi	11 (3.3)	322 (96.7)	333 (100)		
	Total	14 (3.2)	422 (96.8)	436 (100)		

* Note: Fisher's exact test.

Summary

This chapter presented the results of this study on violence against nurses working in ED in SA. The study questions sought to investigate the prevalence and types of violence against nurses and its contributing factors. Independent variables used for the analyses were gender, nationality, hospitals. Males faced a higher prevalence of physical violence than female ($\chi^2 = 22.540$; $p = 0.000$). Hospital 3 had a higher prevalence of physical violence than other hospitals ($\chi^2 = 52.464$; $p = 0.000$). Hospital 3, 4 had a higher prevalence of non-physical violence than other hospitals ($\chi^2 = 39.123$; $p = 0.000$) while non Saudis had a higher prevalence of non-physical violence than Saudis ($\chi^2 = 12.415$; $p = 0.015$). The discussion and implications and conclusion of this study are presented in Chapter 5.

Chapter 5: Discussion

Introduction

The important findings of the study are critiqued in this chapter. Critical results related to physical and non-physical violence in Saudi Arabia's EDs are discussed with regard to the research questions, and compared and contrasted with Saudi Arabian, regional and international literature. In the final section of this chapter, the limitations of the study and implications for nursing research and practice will be addressed, followed by a summary of the chapter.

5.1 Workplace violence

Violence, either physical or non-physical, was reported by 383 of 436 nurses (88%), with nurses experiencing at least one episode of violence during the previous 12-month period. From studies done in other countries, such as in Iran, Australia, Canada and Jordan, the prevalence of workplace violence against EDs in Saudi Arabia is high, and comparable to that obtained in this study. Table 5.1 below demonstrates the findings.

Table 5.1: Comparison of prevalence of violence in EDs across different countries

Author (Year)	Country	Prevalence %	Number of participants
Esmaeilpour, Salsali and Ahmadi (2011)	Iran	91.6	178 emergency nurses
The present study	Saudi Arabia	88.0	436 emergency nurses
Lemelin, Bonin and Duquette (2009)	Canada	86.5	300 emergency nurses
Albashtawy (2013)	Jordan	75.8	227 emergency nurses
Crilly, Chaboyer and Creedy (2004)	Australia	70.0	70 emergency nurses

Comparing the findings of the present study with other Saudi Arabian studies demonstrates a rise in the reported cases of violence against nurses in the ED. In 2002, 54.3% of nurses reported exposure to workplace violence, and then in 2011, 67.4% of healthcare personnel reported having been exposed to violence (Algwaiz & Alghanim 2012; Mohamed 2002).

In the findings from this study, the incidence of exposure to non-physical violence (verbal abuse) is higher than exposure to physical violence, and the ratio of physical to non-physical violence in EDs in Saudi Arabia was 1:1.7. The findings of this study concur with findings from other studies that found that verbal abuse is more common than physical violence (Adib et al. 2002; Albashtawy 2013; Crilly, Chaboyer & Creedy 2004; Esmailpour, Salsali & Ahmadi 2011; Gacki-Smith et al. 2009; May & Grubbs 2002; Ergün & Karadakovan 2005; Tang et al. 2007). Most violent events happened during the afternoon and night shifts. Similar study findings occurred in several developed and developing countries, where there were more violent incidents during the afternoon and night shifts (Crilly, Chaboyer & Creedy 2004; Esmailpour, Salsali & Ahmadi 2011; Gacki-Smith et al. 2009; Kitaneh & Hamdan 2012; Ergün & Karadakovan 2005; Tang et al. 2007). This might be because there was a shortage of nursing staff, a lower presence of hospital administration, a lack of security personnel, and the fact that most patients and their relatives visit the ED in the evening after the Primary Health Care Centres close, and they have no choice other than the ED (Albashtawy 2013; Mayer, Smith & King 1999). Comparing this study's results with other studies is difficult because of differences in the definitions of violence, the variations in settings, different populations, durations of the studies, and in the methodologies used. Furthermore, the findings might differ from sector to sector or country to country, according to differences in the working system and environment.

5.2 Physical workplace violence

5.2.1 Prevalence of physical violence

Approximately 45% of emergency nurses were exposed to some form of physical violence during their work at least once over the last year. Findings from studies done in other countries show a lower prevalence of physical violence than in Saudi Arabia. This includes studies done in countries such as Turkey, Iran, Taiwan and Jordan, as demonstrated in Table 5.2 (Albashtawy 2013; Esmailpour, Salsali & Ahmadi 2011; Ergün & Karadakovan 2005; Tang et al. 2007). The prevalence of physical violence in these countries, including the findings from this study, was lower than findings from a study done in the US (May & Grubbs 2002). The findings of the current study also reveal more extreme physical violence events against emergency nurses with firearms accounting for 4.1% of acts of physical violence. In another Saudi Arabian study, there were 14 incidents in which emergency healthcare workers were attacked with weapons and instruments (Alzahrani et al. 2016). These results are consistent

with findings from Iraq (Abualrub, Khalifa & Habbib 2007). In contrast, studies conducted in other countries reported that no weapons were used against nurses and other healthcare workers (Adib et al. 2002; Crilly, Chaboyer & Creedy 2004; Esmailpour, Salsali & Ahmadi 2011). The prevalence of physical violence in Saudi Arabia was higher than in most of these other countries. This might be because admissions in public hospitals are less organised, there are no protective tools and there is a lack of security personnel (Abbas & Selim 2011; Alzahrani et al. 2016; El-Gilany, El-Wehady & Amr 2010; Farrell, Bobrowski & Bobrowski 2006). This rate of physical violence against nurses is a worrying finding.

Table 5.2: Comparison of prevalence of physical violence in ED across different countries

Author (Year)	Country	Prevalence %	Number of participants
Ergün and Karadakovan (2005)	Turkey	19.7	66 emergency nurses
Esmailpour, Salsali and Ahmadi (2011)	Iran	19.7	186 emergency nurses
Tang et al. (2007)	Taiwan	30.0	236 emergency nurses
The present study	Saudi Arabia	45	436 emergency nurses
Albashtawy (2013)	Jordan	63.9	313 emergency nurses
May and Grubbs (2002)	USA	82.1	86 emergency nurses

5.2.2 Predictors of physical violence

There was a significant relationship between particular hospitals and physical violence, shown by Hospital 3 having a higher prevalence of beating, slapping, kicking, and biting. The findings of this study and the study by Abbas and Selim (2011) indicate that government hospitals with easy public access and prone to over-crowding were more likely to experience violence. In addition, there was a significant difference between the genders of the nurses in the prevalence of beating, kicking, and biting. From the findings of the parent study, male nurses were more likely to be victims of physical violence than female nurses. In other Saudi Arabian studies, male nurses were also more exposed to physical violence than female nurses (Algwaiz & Alghanim 2012; El-Gilany, El-Wehady & Amr 2010; Mohamed 2002). Therefore, the findings of this study were congruent with research findings from other Middle Eastern countries (Abbas & Selim 2011; Adib et al. 2002; Esmailpour, Salsali & Ahmadi 2011; Gacki-Smith et al. 2009). This might be because physical violence towards male nurses is a reflection of the influence of Saudi culture (Albashtawy 2013; Alkorashy & Al Moalad 2016; Farrell, Bobrowski & Bobrowski 2006).

This can be attributed to the Saudi and Arabic culture where physical acts of violence against females are considered shameful, especially if perpetrated by males (Albashtawy 2013; El-Gilany, El-Wehady & Amr 2010; Mohamed 2002; Spector, Zhou & Che 2014). In addition, the Saudi culture limits physical contact between males and females in public places (Aldossary, While & Barriball 2008; Esmailpour, Salsali & Ahmadi 2011). Furthermore, male nurses in Saudi Arabia dislike receiving orders from other non-professional individuals, and do not react well to criticism of their work (Albashtawy 2013; Aldossary, While & Barriball 2008; El-Gilany, El-Wehady & Amr 2010; Esmailpour, Salsali & Ahmadi 2011; Mohamed 2002; Spector, Zhou & Che 2014). For these reasons, male nurses were more commonly subjected to physical violence than female nurses.

5.2.3 Types of physical violence

The most frequent types of physical abuse reported by nursing staff were pushing, beating, pinching, slapping, biting and kicking. Pushing was the predominant form of physical violence experienced by the nurses. These findings are similar to those reported by Talas, Kocaöz and Akgüç (2011), which were from a study done in Turkey that showed that the predominant forms of physical violence were kicking, pushing, and slapping, accounting for over 70% of physical violence incidents. Similar findings on physical abuse are also reported by Pich et al. (2011) in their Australian study. However, findings in this study with regard to the predominant forms of physical abuse are different compared to other places like Taiwan, where most forms of physical abuse perpetrated against nurses did not involve any physical contact (55.7%) (Tang et al. 2007). In contrast, this study reports physical contact as predominant. This variation might be attributed to the differences in the perpetrators of physical abuse. This could be attributed to the collectivist cultural values associated with natives of the Middle East (Spector, Zhou & Che 2014).

5.2.4 Risk factors relating to physical violence

It is evident from the findings of the study that there are several risk factors that predispose perpetrators to physical violence, such as mental issues, being psychiatric patients, long waiting times, the influence of alcohol and drug intoxication, and the impact of disease and pain.

The increasing number of patients diagnosed with cognitive and psychiatric disorders could be a major risk factor for the nurses and other healthcare professionals in EDs. Accordingly, the finding of this study 38.5% of perpetrators of physical violence had a mental illness. In other reports, it is claimed that patients with mental health disease and emotional disorders were the most common categories of people who were likely to cause violence (Ferns 2005; Hahn et al. 2008, Lanza, Zeiss & Rierdan 2006b; Lee, Pai & Yen 2010; Morphet et al. 2014; Nolan et al. 2001; O'Connell, B. 2000). This is because patients with mental illnesses can worsen and cause violent episodes in hospitals, and as Pich et al. (2011) note, most healthcare practitioners are not adequately prepared or trained to handle such patients who are deteriorating. In addition, mentally ill patients are more prone to physically abuse staff than patients presenting with other illnesses (Anderson & West 2011). However, Tang et al. (2007) do not report mental illness as a predominant precipitant of physical abuse against staff in the ED.

In this study, a long waiting time was listed as the second most important risk factor for physical violence, with 36.4% of the physical abuse incidents being precipitated by a long waiting time. Other studies suggest that a long waiting time is the predominant cause of physical violence in the ED in other parts of the world, such as Australia and Taiwan, unlike in this study where it was second (Hamdan & Hamra 2015; Pich et al. 2011; Tang et al. 2007). However, the difference between a long waiting time and cognitive impairment as precipitants of violence against staff was minimal in the study done in in Taiwan (Tang et al. 2007).

Alcohol and drug intoxication ranked third among the risk factors that were attributed by respondents as contributing to physical violence in this study. This was associated with 27.7% of incidents of physical abuse reported. The findings of this study concur with Mohamed (2002), who found that alcohol and drug intoxication was the third most common risk factor for physical violence. Such findings are also supported by Pich et al. (2011), who demonstrated that alcohol intoxication increased the likelihood of physical violence. Alcohol intoxication results in cognitive inhibition among individuals, predisposing them to aggressive acts such as physical violence (Bartholow et al. 2003). However, substance abuse may only precipitate violence to a lesser degree when compared to alcohol intoxication due to the lower prevalence of substance abuse compared to alcohol abuse (Pich et al. 2011).

Although the impact of disease accounted for about 20% of the cases of physical violence reported, it is not a common risk factor precipitating physical violence, similar to what has been reported in other studies. Hamdan and Hamra (2015) reported that disease as a risk factor only accounts for about 7.6% of the cases physical violence, ranking it as the eighth most common cause of physical violence in the ED in a Palestinian hospital. Most other studies did not acknowledge any influence of disease or patient pain as a risk factor for physical violence.

5.3 Non-physical workplace violence

5.3.1 Prevalence of non-physical violence

Almost three-quarters of emergency nurses have been exposed to some form of non-physical violence at least once over the last year. A comparison of the prevalence of non-physical violence with other countries is shown in Table 5.3. The prevalence of non-physical violence (verbal abuse) in most of these countries was higher than in Saudi Arabia, but not in Jordan. This might be because physical violence towards women is not acceptable behaviour in the social and cultural norms of Saudi Arabia; therefore, female nurses are considered easy targets for verbal violence (Adib et al. 2002; Talas, Kocaöz & Akgüç 2011).

Table 5.3: Comparison of prevalence of non-physical violence in EDs across different countries

Author and year	Country	Prevalence %	Number of participants
May and Grubbs (2002)	USA	100.0	125 emergency nurses
Şenuzun Ergün and Karadakovan (2005)	Turkey	98.5	92 emergency nurses
Esmailpour, Salsali and Ahmadi (2011)	Iran	91.6	196 emergency nurses
Tang et al. (2007)	Taiwan	92.0	263 emergency nurses
The present study	Saudi Arabia	73.2	436 emergency nurses
Albashtawy (2013)	Jordan	11.9	417 emergency nurses

5.3.2 Predictors of non-physical violence

In this study, a higher proportion of females reported experiencing most forms of non-physical violence. This could be attributed to Saudi culture, which prohibits physical contact between genders, and therefore physical violence towards females. Consequently, females are more likely to be victims of non-physical than physical violence (Alkorashy & AlMoalad 2016; Mohamed 2002). In addition, it might also be because physical violence against females is under-reported in Saudi Arabia (Alyaemni & Alhudaithi 2016). Findings from this study also revealed a significant difference between the type of hospital and reported

incidences of certain forms of non-physical violence, such as threats. Respondents from Hospital 3 reported higher incidences of threats than the other three hospitals. Similarly, respondents from Hospitals 1 and 4 reported more incidences of verbal violence than the other two hospitals. Similar significant association was noted between the nationality of the victims and the types of non-physical violence. Moreover, the findings from this study also reveal a significant difference between the nationality of victims who reported incidences of certain forms of non-physical violence, such as threats, verbal abuse or harassment. Saudi nurses in this study are more likely to be victims of threats, non-Saudi nurses are significantly more likely to receive verbal abuse or harassment. If threats are considered more severe than verbal abuse, then this study indicated that Saudi nurses are more commonly exposed to more severe forms of non-physical violence. Nurses' skills and experience play an important role in violence prevention; therefore, nurses who are less professional, less experienced, or younger do not have sufficient knowledge to manage the assailant or to meet the needs of the patients, which leads to violence (Esmailpour, Salsali & Ahmadi 2011; Hahn et al. 2013; Kowalenko et al. 2013; Talas, Kocaöz & Akgüç 2011).

There are similarities between the findings of this study and other such studies done by El-Gilany, El-Wehady and Amr (2010), where it was found that "non-Saudi" healthcare workers were more likely to be victims of violence. This is also supported by studies such as Adib et al. (2002), where it was reported that nurses who are not from Kuwait, or have less experience in Kuwait, were more likely to be victims of non-physical violence. In this study, most patients and their relatives did not speak English and most non-Saudi nurses did not speak Arabic, which could create miscommunication leading to verbal abuse (Aldossary, While & Barriball 2008; Almutairi & McCarthy 2012; Almutairi, McCarthy & Gardner 2015). Non-Saudi nurses belonged to a variety of nationalities and cultural backgrounds (Almutairi & McCarthy 2012; Tumulty 2001). This diversity of culture might increase the potential for interpersonal conflict, which could lead to violence (Almutairi & McCarthy 2012; Almutairi, McCarthy & Gardner 2015; Leininger & McFarland 2006).

5.3.3 Types of non-physical violence

Almost three-quarters of the respondents reported that they were exposed to non-physical violence in the workplace. This study asked respondents to report on three forms of

non-physical violence. Respondents reported that 29.5% of them had been threatened, 88.1% were victims of verbal abuse or harassment, and sexual abuse or harassment was experienced by 4.4%. These findings concur with findings from Taiwan, where verbal abuse was also the main form of non-physical abuse (Pai & Lee 2011). In Taiwan, verbal abuse was reported among 51.6% of the respondents, 29.8% reported being bullied or mobbed, and 12.9% reported sexual harassment (Pai & Lee 2011). Crilly, Chaboyer and Creedy (2004) also reported verbal abuse in the form of swearing and yelling as the predominant forms of non-physical violence in Queensland, consistent with the findings of this study. Such findings are also supported by Talas, Kocaöz and Akgüç (2011); Tang et al. (2007) in Turkey and Taiwan.

5.3.4 Risk factors for non-physical violence

In this study, there are several risk factors that relate to non-physical violence, such as a long waiting time, mental illness, fear, stress, and a lack of tools to prevent attacks on healthcare workers.

The long waiting time before receiving services was reported by the respondents to be the dominant risk factor for non-physical violence, at 58.9%. This is similar to the findings of Hamdan and Hamra (2015); Pich et al. (2011); Tang et al. (2007), which also demonstrated a long waiting time as a major precipitator of violence against ED staff. Tang et al. (2007) reported that a long waiting time influenced about 89% of abuse perpetrated against ED staff. Pich et al. (2011) suggested that a waiting time of 2 to 3 hours is considered a long time for the patient to wait. Long waiting times are due to insufficient staff with high numbers of patients requiring care (Mohamed 2002). In addition, other studies mention that long waiting times are worsened by an improper staff arrangement in the department, resulting in patient congestion (Tang et al. 2007). Furthermore, waiting time is lengthened by an insufficient number of hospital beds, or a lack of emergency department beds (Pich et al. 2011).

The risk factor in this study that contributed to 27.6% of non-physical violence was the presence of psychiatric problems in patients. These findings are supported by other studies in European and US settings, which also suggest that mentally ill or psychiatric patients exhibit a tendency to both physical and non-physical violence towards staff (Hamdan & Hamra 2015; Spector, Zhou & Che 2014). This may be due to the behavioural and cognitive changes associated with psychiatric and mental health conditions that render the affected patients unable

to appropriately control their actions (Anderson & West 2011). However, mentally ill patients are less likely to precipitate non-physical abuse than physical violence (Spector, Zhou & Che 2014). Furthermore, Hall et al. (2015) stated that individuals with emotional dysregulation are often prone to physical and verbal violence. The unpredictability of patient outcomes, as well as the unplanned nature of their ailments, cause both the patients and their family members overwhelming frustration and stress. The effect of this is that they are more likely to vent their frustration on the people around them, who are usually the nurses (Kowalenko et al. 2013). This is supported by the findings that indicated that at least 25.3% of the non-physical violence cases were because of fear and stress.

The lack of tools necessary to prevent the abuse or violence towards healthcare workers was another risk factor mentioned by 25.1% of the respondents as important in precipitating violence against them. This is supported by Pich et al. (2011), who found that a lack of strategies and tools for prevention of violence is a risk factor for abuse cases. Pich et al. (2011) demonstrated the need for installation and enactment of preventative measures more than reactive measures. Possible preventative measures may include training on aggression minimisation, such as through use of de-escalation techniques (Pich et al. 2011; Talas, Kocaöz & Akgüç 2011). In addition, workplace design could be improved to minimise close contact between patients and relatives of patients waiting to be treated, and the staff supposed to treat them (Pich et al. 2011; Talas, Kocaöz & Akgüç 2011).

It is therefore apparent that the prevalence of workplace violence in the EDs of Saudi Arabian hospitals is high, and is comparable to other countries. The prevalence of physical violence in Saudi Arabian EDs is generally higher than in most other countries, but lower than the prevalence of non-physical violence. However, most other countries have their nurses experiencing higher incidences of non-physical violence than revealed by this study. The common types of physical violence are pushing, beating, kicking and slapping, while the type of non-physical violence that was reported to affect more nurses was verbal violence. Risk factors for physical and non-physical violence are comparable for both forms of violence, which are perpetrated by psychiatric patients and as a consequence of long waiting times.

5.4 Limitations of the study

This study has several limitations. Firstly, the questionnaire used in the study was administered in four hospitals operated by the MOH in Riyadh City, which limited the exploration of the magnitude of violent acts. Therefore, it needs to be used more widely in other MOH and non-MOH hospitals (governmental and private) across Saudi Arabia, or extended to nurses in different EDs to obtain a more accurate description of workplace violence. Secondly, since a questionnaire was used for gathering data, there were no other methods available to confirm respondents' answers. The survey also depended on the memory and recall capacity of nursing professionals over the last 12 months, which is a long period and is likely to introduce bias into their responses. Furthermore, the use of convenience sampling is another limitation for this study because there may be a selection bias for emergency nurses who have been exposed to violence.

5.5 Implications and recommendations of the study

5.5.1 Implications for further research

Workplace violence in the ED continues to occur, but through research, policies and legislation, training and education measures can be introduced to minimise or prevent future incidents of violence. Policies and legislation regarding the handling of workplace violence should be optimised in their implementation. Incidents of workplace violence should be reported to higher authorities, including the judicial service, and culpable perpetrators be able to face punitive measures. In addition, existing policies should be re-evaluated with the intention of improving the management and prevention of workplace violence. Furthermore, the introduction of “zero-tolerance” policies towards workplace violence is recommended. There is a need to identify the best practice for preventing and mitigating violence in the ED. Other studies of workplace violence against other professions in Saudi EDs are also required to compare and ascertain whether nurses are the main victims of violence and the reasons for this. In addition, more studies are required on the prevention of workplace violence to inform the application of effective preventative and management measures in Saudi Arabian hospitals. It is paramount that future research should focus on practices and measures to prevent workplace violence. This may include identification of evidence-informed measures on handling workplace violence and effective ways of implementing these measures. For instance,

zero-tolerance policies on workplace violence may be implemented in pilot hospitals, and their effectiveness in curbing workplace violence should be assessed.

5.5.2 Implications for practice

A training program should be implemented to manage violence in the workplace specifically targeting staff who are more likely to be at risk of violence. Nurses and other healthcare professionals in EDs should learn how to recognise violent situations, how to de-escalate them, to alert managers about safety concerns, and to report violent incidents. Recommendations also include an education program, not only for emergency nurses, but also for the other healthcare professions in the ED. This education program may include instructor led programs offered in hospital settings or be delivered through continuous professional development. These programs should be established to improve staff communication skills and cultural awareness. A language program should be established for foreign nurses who do not speak Arabic.

5.5.3 Implications for nursing

The ultimate benefit of this study in nursing is the need to improve the safety of nurses in the ED and understand how to avoid violent incidents. Providing patients, visitors, nurses, and other healthcare workers with a safe working environment will assist in minimising the concern for workplace violence within the healthcare environment.

Conclusion

The purpose of the study was to investigate the prevalence and types of physical and non-physical violence in Saudi Arabian EDs, and the risk factors. The emergency nurses in the study indicated that violence was a common occurrence. Significant relationships were found among the demographics of hospitals, gender and nationality for both physical and non-physical violence. A significant association between male gender and physical violence was also revealed by this research. Hospitals and nationality were also significantly associated with non-physical violence.

This study addressed several areas requiring further research. There is a shortage of violence research among emergency nurses in SA. Further research is needed to develop

strategies for preventing violence against emergency nurses, which would need to consider the local culture and the findings of this study. Further in-depth research is needed to assess the impact of violence on the perception of emergency nurses. A comparative study between hospitals (public and private) and primary healthcare centres in terms of violence against nurses is required. It would also be useful to compare the perception of nurses and other health professionals in EDs in terms of violence.

Finally, the implication for future research includes the need to investigate measures that can be effective in limiting workplace violence, including the assessment of effectiveness of such measures in Saudi Arabian hospital settings. In addition, instructor-directed education programs targeting nurses should be provided to educate them on how to identify and prevent common, avoidable incidences of violence. These initiatives will be essential for lowering the incidences of workplaces violence experienced by ED in nurses in Saudi Arabia.

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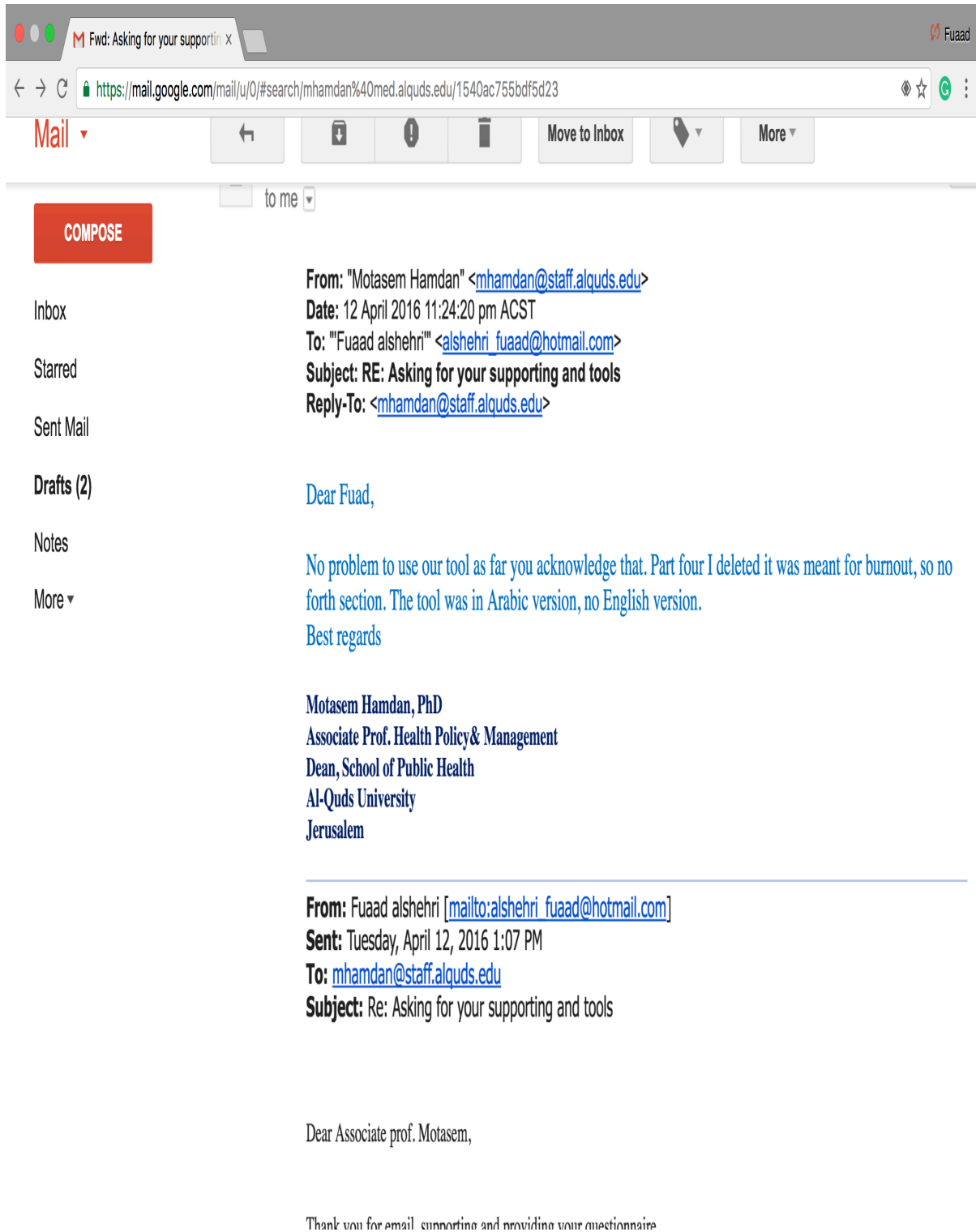
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Appendices

Appendix 1: Author permission



The screenshot shows a Gmail interface with the following details:

- Browser Tab:** Fwd: Asking for your supportin x
- Address Bar:** <https://mail.google.com/mail/u/0/#search/mhamdan%40med.alquds.edu/1540ac755bdf5d23>
- Mail Header:** Mail, Move to Inbox, More
- Compose Button:** COMPOSE
- Left Sidebar:** Inbox, Starred, Sent Mail, Drafts (2), Notes, More
- From:** "Motasem Hamdan" <mhamdan@staff.alquds.edu>
- Date:** 12 April 2016 11:24:20 pm ACST
- To:** "Fuaad alshehri" <alshehri_fuaad@hotmail.com>
- Subject:** RE: Asking for your supporting and tools
- Reply-To:** <mhamdan@staff.alquds.edu>
- Body:**

Dear Fuad,

No problem to use our tool as far you acknowledge that. Part four I deleted it was meant for burnout, so no forth section. The tool was in Arabic version, no English version.

Best regards

Motasem Hamdan, PhD
Associate Prof. Health Policy & Management
Dean, School of Public Health
Al-Quds University
Jerusalem

From: Fuaad alshehri [mailto:alshehri_fuaad@hotmail.com]
Sent: Tuesday, April 12, 2016 1:07 PM
To: mhamdan@staff.alquds.edu
Subject: Re: Asking for your supporting and tools

Dear Associate prof. Motasem,

Thank you for email supporting and providing your questionnaire

Appendix 2: Questionnaire

Appendix 2



Assessing violence against nurses in emergency departments in Saudi Arabian Hospitals

Dear Colleagues,

This study aims to assess the reality of violence against nurses in emergency departments in Saudi Arabian hospitals in order to support making decisions and formulating necessary policies and procedures to limit violence and protect staff. Participation in this study is voluntary and anonymous- your name will not record. We assure you that the information provided by the participants will be kept confidential and will be used only for the purpose of the study.

If you decide to participate, you are free to withdraw at any time. Filling the survey takes about 10-20 minutes, and completion of the questionnaire will be deemed to demonstrate your consent to participate in the research.

Thank you very much for your cooperation and appreciation

Please read the following instructions first:

This questionnaire is presented in four parts: The first is demographic information, the second part addresses the physical violence, the third part addresses non-physical violence, such as threats, verbal abuse, and sexual abuse. The fourth part includes means of protection, systems and policies available about the violence against workers in the hospitals. Please read the definition of each type of violence at the beginning of each related part; and then only answer the relevant questions if you have been exposed to that type of violence during your work in the emergency department in the last 12 months.

Section one: Demographic information

Please answer the following questions by referring (✓) in the right place/ box:

Have you been employed in emergency department one year and more?

- Yes (Please continue with the questionnaire)
- No (Please don't continue with the questionnaire- thank you for your time)

1. Hospital name			
2. Gender	Male <input type="checkbox"/>	Female <input type="checkbox"/>	
3. Your age	25 or under <input type="checkbox"/>	26-30 <input type="checkbox"/>	31- 35 <input type="checkbox"/>
	36-40 <input type="checkbox"/>	41- 45 <input type="checkbox"/>	46-50 <input type="checkbox"/>
	51-55 <input type="checkbox"/>	56- 60 <input type="checkbox"/>	61 or more <input type="checkbox"/>
4. Your nationality	Saudi <input type="checkbox"/>	Non-Saudi <input type="checkbox"/>	
5. Your occupation	Nursing staff <input type="checkbox"/>	Head Nurse <input type="checkbox"/>	Nurse manager <input type="checkbox"/>
6. Your highest qualification	Diploma <input type="checkbox"/>	Bachelor <input type="checkbox"/>	Postgraduate <input type="checkbox"/>
7. How many years of experience do you have as a nurse?			
8. How many years have you been working in Saudi Arabian the emergency departments?			

1

Section Two: Physical violence

Physical Violence: occurs when an employee is exposed to the to the deliberate use of force such as beating, pushing, slapping, kicking, biting, pinching, stabbing, shooting by the patient and/or their families/companions, a colleague or any other people. Physical violence leads or may lead to physical harm or emotional or sexual harm to the abused the employee.

Please answer the following questions by ticking (✓) to the best response in relation to physical violence during the last twelve months. **If you were not exposed to physical violence please moved to the second section.**

9. How many times have you been exposed to physical violence during the last 12 months? If your answer is never, please proceed to section three (tick one only)	Never <input type="checkbox"/>	Once <input type="checkbox"/>	
	2-3 Times <input type="checkbox"/>	4-5 Times <input type="checkbox"/>	
	6 times and more <input type="checkbox"/>		
10. What types of physical assault were you exposed to during the most recent incident? Tick as many as are relevant?	Beating <input type="checkbox"/>	Pushing <input type="checkbox"/>	Slapping <input type="checkbox"/>
	Kicking <input type="checkbox"/>	Biting <input type="checkbox"/>	Pinching <input type="checkbox"/>
	Shooting <input type="checkbox"/>	Stabbing <input type="checkbox"/>	Other, please specify <input type="checkbox"/>
11. In the most recent physical incident, who assaulted you? Tick as many as are relevant	Patient <input type="checkbox"/>	Visitor/Patient's relative <input type="checkbox"/>	
	Co-worker <input type="checkbox"/>	Other, please specify <input type="checkbox"/>	
12. In the most recent incident, when did the incident happen?	Morning <input type="checkbox"/>	Afternoon <input type="checkbox"/>	
	Night <input type="checkbox"/>	Unsure <input type="checkbox"/>	
13. In the most recent incident, where did the incident happen?	Resuscitation <input type="checkbox"/>	Waiting room <input type="checkbox"/>	
	Triage <input type="checkbox"/>	Treatment room <input type="checkbox"/>	
	Hallway <input type="checkbox"/>	Other, please specify <input type="checkbox"/>	
14. Did you receive treatment after the most recent incident?	1. Yes I received treatment <input type="checkbox"/> 2. There was no need for treatment <input type="checkbox"/> 3. I needed treatment but did not receive it <input type="checkbox"/> 4. Self-treatment <input type="checkbox"/>		
15. If yes, who treated you?	Doctor <input type="checkbox"/>	Psychiatric <input type="checkbox"/>	
	Nurse <input type="checkbox"/>	Other, please specify <input type="checkbox"/>	
16. What do you think was the cause of the most recent incident? Tick as many as are relevant?	1. Waiting for receiving service <input type="checkbox"/> 2. Failure to meet the desires of the patient or his companions <input type="checkbox"/> 3. Mental health/Psychiatric patient <input type="checkbox"/> 4. Way of dealing with the patient by the staff <input type="checkbox"/> 5. Unavailability of medications or needed service for patient <input type="checkbox"/> 6. Fear/ Stress <input type="checkbox"/> 7. Lack of tools to prevent the attack on workers <input type="checkbox"/> 8. Impact of disease/pain <input type="checkbox"/> 9. Influence of alcohol/drugs <input type="checkbox"/> 10. Do not know the reason <input type="checkbox"/> 11. Another reason; please specify <input type="checkbox"/>		

Section Three: Non-physical violence

Threat: happens when someone (patient, relatives, visitors, co-workers) uses words, gestures, behaviours to intimidate or threaten harm (physically or other) to an employee.

Verbal abuse/harassment: This happens when someone such as (patient, patient's relatives, visitors or co-workers) shouts, curses, make innuendo, or other words to verbally insult an employee without an intention to bodily harm, verbally insult an employee. For instance, someone yells at you. This includes any behaviour towards an employee based on age, disability, gender, race, colour, language, religion, political beliefs, national or social origin, belonging to a minority, poverty, richness, place of birth or any other unwanted status which negatively influences dignity of the employee.

Sexual abuse/harassment: any unwanted, unwelcomed and non-reciprocal sexual attention. It may include sexist remarks, behaviour or sexual advances which result in a tense and unproductive environment. These forms of harassments/ abuses threaten the employee and cause him/her to feel humiliated.

Please answer the following questions by referring (✓) to the best suitable to answer only if it had threat, verbal abused or sexual harassment during the last twelve months. **If you were not exposed to these types of violence please moved to the fourth section.**

17. How many times have you been exposed to non-physical violence during the last 12 months? If your answer is never, please proceed to section three, Tick one only	Never <input type="checkbox"/>	Once <input type="checkbox"/>
	2-3 Times <input type="checkbox"/>	4-5 Times <input type="checkbox"/>
	6 times and more <input type="checkbox"/>	
18. What types of non-physical assault were you exposed to during the most recent incident? Tick as many as are relevant	Threat <input type="checkbox"/>	
	Verbal abused/harassment <input type="checkbox"/>	
	Sexual abused/harassment <input type="checkbox"/>	
19. In the most recent non-physical incident, who assaulted you? Tick as many as are relevant	Patient <input type="checkbox"/>	Visitor/Patient's relative <input type="checkbox"/>
	Co-worker <input type="checkbox"/>	Other, please specify <input type="checkbox"/>
20. In the most recent incident, when did the incident happen?	Morning <input type="checkbox"/>	Afternoon <input type="checkbox"/>
	Night <input type="checkbox"/>	Unsure <input type="checkbox"/>
21. In the most recent incident, where did the incident happen?	Resuscitation <input type="checkbox"/>	Waiting room <input type="checkbox"/>
	Triage <input type="checkbox"/>	Treatment room <input type="checkbox"/>
	Hallway <input type="checkbox"/>	Other, please specify <input type="checkbox"/>
22. Did you receive treatment after the most recent incident?	1. Yes I received treatment <input type="checkbox"/> 2. There was no need for treatment <input type="checkbox"/> 3. I needed treatment but did not receive it <input type="checkbox"/> 4. Self-treatment <input type="checkbox"/>	
23. If yes, who treated you?	Doctor <input type="checkbox"/>	Psychiatric <input type="checkbox"/>
	Nurse <input type="checkbox"/>	Other, please specify <input type="checkbox"/>

<p>24. What do you think was the cause of the most recent incident? Tick as many as are relevant</p>	<ol style="list-style-type: none"> 1. Waiting for receiving service <input type="checkbox"/> 2. Failure to meet the desires of the patient or his companions <input type="checkbox"/> 3. Mental health/Psychiatric patient <input type="checkbox"/> 4. Way of dealing with the patient by the staff <input type="checkbox"/> 5. Unavailability of medications or needed service for patient <input type="checkbox"/> 6. Fear/ Stress <input type="checkbox"/> 7. Lack of tools to prevent the attack on workers <input type="checkbox"/> 8. Impact of disease/pain <input type="checkbox"/> 9. Influence of alcohol/drugs <input type="checkbox"/> 10. Do not know the reason <input type="checkbox"/> 11. Another reason; please specify <input type="checkbox"/>
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Section Four: Systems and means of protection available and the procedures for reporting physical and non-physical violence.

Please answer about available systems, means and procedures for reporting of assaults against workers in the hospital:

1. Are there enough methods to prevent violence on staff (such as guards, security, camera, warning devices, contact) in the department?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Do not know <input type="checkbox"/>		
2. Are there enough policies, systems and instructions to prevent violence on workers in the hospital?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Do not know <input type="checkbox"/>		
3. Are there reporting procedures for the reporting violence in the hospital?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Do not know <input type="checkbox"/>		
4. Did you receive training or educational programs by the hospital to prevent and deal with violence?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Do not know <input type="checkbox"/>		
5. In the most recent incident, did you write a report to your administrator or to any third party administrator for the violence against you? Tick as many as are relevant	Physical violence	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
	Non-physical violence	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
6. If the answer is no, why was the incident not reported? Tick as many as are relevant	1. The incident was not important <input type="checkbox"/> 2. Fear of consequences on me and my work <input type="checkbox"/> 3. Feeling ashamed of the incident <input type="checkbox"/> 4. I do not know whom I should write to <input type="checkbox"/> 5. No benefit in writing, from my experience there will be no follow up or action against the assaulter <input type="checkbox"/> 6. Other, please specify <input type="checkbox"/>				
7. Has any action been taken against the assaulter?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Do not know <input type="checkbox"/>		
8. What is the impact of violence on you? Tick one only	1. I have fear and anxiety <input type="checkbox"/> 2. I feel guilty <input type="checkbox"/> 3. I feel a desire for revenge <input type="checkbox"/> 4. There is no impact <input type="checkbox"/>				
9. What is the impact of violence on your provision of patient care? Tick one only	1. I refuse to work with the patient <input type="checkbox"/> 2. I minimise my response to the patient's needs <input type="checkbox"/> 3. I minimise the time spent on patient care <input type="checkbox"/> 4. There is no impact <input type="checkbox"/>				
10. In the next 1-3 years, do you think you will stop working in the emergency department (ED) because of exposure to violence?	Very likely <input type="checkbox"/>	Likely <input type="checkbox"/>	Not decided yet <input type="checkbox"/>	Unlikely <input type="checkbox"/>	Very Unlikely <input type="checkbox"/>

Thank you for participating in this study and for your time. You can place it either in the secured/sealed boxes that have been placed in the nursing staff room or in the signing in/out area (time clocks).

تقييم العنف ضد العاملين بالتمريض في أقسام الطوارئ في المستشفيات السعودية
الزملاء الأعزاء،

وتهدف هذه الدراسة إلى تقييم واقع العنف ضد العاملين بالتمريض في أقسام الطوارئ في المستشفيات في المملكة العربية السعودية من أجل دعم اتخاذ القرارات وصياغة السياسات والإجراءات اللازمة للحد من العنف وحماية الموظفين. المشاركة في هذه الدراسة هو طوعي ومجهول البيانات- لن تسجل اسمك. ونحن نؤكد لكم أن المعلومات المقدمة من قبل المشاركين ستبقى سرية ولن تستخدم إلا لغرض الدراسة.

إذا قررت المشاركة، أنت حر في الانسحاب في أي وقت. بملء الاستبيان يستغرق حوالي ١٠ - ٢٠ دقيقة، وسيعتبر ملء الاستبيان لإظهار موافقتك على المشاركة في البحث.

شكرا جزيلًا للتعاون والتقدير

يرجى قراءة التعليمات التالية أولاً:

ويرد هذا الاستبيان في أربعة أجزاء: الأول هو المعلومات الديموغرافية، والجزء الثاني يتناول العنف الجسدي، يتناول الجزء الثالث العنف غير المادية، مثل التهديدات والشتائم، والاعتداء الجنسي. ويتضمن الجزء الرابع وسائل الحماية والنظم والسياسات المتاحة عن العنف ضد العاملين في المستشفيات. يرجى قراءة تعريف كل نوع من أنواع العنف في بداية كل جزء ذات صلة؛ ومن ثم الإجابة فقط على الأسئلة ذات الصلة إذا كنت قد تعرضت لهذا النوع من العنف خلال عملك في قسم الطوارئ في ال 12 شهرا الماضية.

المقطع الاول: المعلومات الديموغرافية

الرجاء الإجابة على الأسئلة التالية في اشارة (√) في المكان المناسب / مربع:

هل عملت في قسم الطوارئ مدة سنة واحدة وأكثر؟

• نعم (يرجى الاستمرار في الاستبيان)

• لا (يرجى عدم الاستمرار في الاستبيان- شكرا لك)

١ - أسم المستشفى		
٢ - الجنس		<input type="checkbox"/> ذكر <input type="checkbox"/> أنثى
٣ - العمر		
<input type="checkbox"/> ٢٥ أو أقل	<input type="checkbox"/> ٢٦ - ٣٠	<input type="checkbox"/> ٣١ - ٣٥
<input type="checkbox"/> ٣٦ - ٤٠	<input type="checkbox"/> ٤١ - ٤٥	<input type="checkbox"/> ٤٦ - ٥٠
<input type="checkbox"/> ٥١ - ٥٥	<input type="checkbox"/> ٥٦ - ٦٠	<input type="checkbox"/> ٦١ فأكثر
٤ - الجنسية		
<input type="checkbox"/> سعودي		<input type="checkbox"/> غير سعودي
٥ - الوظيفة		
<input type="checkbox"/> ممرض	<input type="checkbox"/> رئيس التمريض	<input type="checkbox"/> مدير التمريض
٦ - المؤهلات		
<input type="checkbox"/> دبلوم	<input type="checkbox"/> بكالوريوس	<input type="checkbox"/> دراسات عليا
٧ - سنوات الخبرة في التمريض؟		
٨ - عدد سنوات الخبرة في قسم الطوارئ بالمملكة؟		

القسم الثاني: العنف الجسدي

العنف الجسدي: يحدث عندما يتعرض الموظف إلى أن الاستخدام المتعمد للقوة مثل الضرب والدفع والصفع والركل والعض، القرص، والطنع، وإطلاق النار من قبل المريض و / أو أسرهم / الصحابة، زميل أو أي دولة أخرى الناس. العنف الجسدي يؤدي أو قد يؤدي إلى ضرر جسدي أو الضرر النفسي أو الجنسي إلى إيذاء الموظف.

الرجاء الإجابة على الأسئلة التالية بوضع علامة (√) لأفضل استجابة فيما يتعلق بالعنف البدني خلال الاثني عشر شهرا الماضية. إذا لم تكن تتعرض للعنف الجسدي من فضلك انتقل إلى القسم الثاني.

<input type="checkbox"/> مرة واحدة <input type="checkbox"/> ٢-٣ مرات <input type="checkbox"/> ٤-٥ مرات	<input type="checkbox"/> أبدا <input type="checkbox"/> ٢-٣ مرات <input type="checkbox"/> ٦ مرات فأكثر	٩ - كم عدد المرات التي تعرضت فيها للاعتداء الجسدي خلال ١٢ شهر الماضية؟ إذا كانت اجابتك ابدا(لا)، فضلا انتقل الى الجزء الثالث؛ ارجو اختيار اجابه واحدة
<input type="checkbox"/> صفع <input type="checkbox"/> مسعر <input type="checkbox"/> أخرى، تحدد:	<input type="checkbox"/> دفع <input type="checkbox"/> عض <input type="checkbox"/> طعن	<input type="checkbox"/> ضرب <input type="checkbox"/> ركل <input type="checkbox"/> إطلاق نار
<input type="checkbox"/> زائر/ مرافق للمريض <input type="checkbox"/> أخرى، تحدد:	<input type="checkbox"/> المريض <input type="checkbox"/> زميل بالعمل	١٠ - ما هو نوع الاعتداء الجسدي الذي تعرضت له خلال الاعتداء الأخير؟ يمكن اختيار أكثر من خيار إذا حدث؟
<input type="checkbox"/> المساء <input type="checkbox"/> غير متأكد	<input type="checkbox"/> الصباح <input type="checkbox"/> الليل	١١ - خلال الاعتداء الجسدي الأخير، من كان الشخص المعتدي؟ يمكن اختيار أكثر من خيار إذا حدث؟
<input type="checkbox"/> غرفة الانتظار <input type="checkbox"/> غرفة العلاج <input type="checkbox"/> أخرى، تحدد:	<input type="checkbox"/> الإنعاش <input type="checkbox"/> الفرز <input type="checkbox"/> المدخل	١٢ - خلال الاعتداء الأخير؟ متى كان توقيت الاعتداء؟
<input type="checkbox"/> نعم تلقيت العلاج. <input type="checkbox"/> لم يكن هنالك حاجة للتدخل العلاجي. <input type="checkbox"/> كنت احتاج للعلاج ولاكن لم احصل عليه. <input type="checkbox"/> قمت بمعالجة نفسي.		١٣ - خلال الاعتداء الأخير، في أي مكان حصل الاعتداء؟
<input type="checkbox"/> معالج نفسي <input type="checkbox"/> أخرى، تحدد:	<input type="checkbox"/> طبيب <input type="checkbox"/> ممرض	١٤ - هل تلقيت العلاج بعد الاعتداء الأخير؟
<input type="checkbox"/> الانتظار للحصول على الخدمة. <input type="checkbox"/> الفشل في تلبية احتياجات المريض أو مرافقة. <input type="checkbox"/> الحالة الصحية العقلية/ النفسية للمريض. <input type="checkbox"/> طريقة التعامل مع المريض من قبل الفريق الطبي. <input type="checkbox"/> عدم وجود الدواء أو الخدمة العلاجية المطلوبة للمريض. <input type="checkbox"/> الخوف / القلق. <input type="checkbox"/> ضعف الأدوات المتوفرة التي تمنع الاعتداء على العاملين. <input type="checkbox"/> تأثير المرض / الألم. <input type="checkbox"/> تأثير الكحول/ المخدرات. <input type="checkbox"/> لا أعرف السبب. <input type="checkbox"/> سبب آخر: تحدد:		١٥ - إذا كان الجواب بنعم، من قام بمعالجتك؟
<input type="checkbox"/> الانتظار للحصول على الخدمة. <input type="checkbox"/> الفشل في تلبية احتياجات المريض أو مرافقة. <input type="checkbox"/> الحالة الصحية العقلية/ النفسية للمريض. <input type="checkbox"/> طريقة التعامل مع المريض من قبل الفريق الطبي. <input type="checkbox"/> عدم وجود الدواء أو الخدمة العلاجية المطلوبة للمريض. <input type="checkbox"/> الخوف / القلق. <input type="checkbox"/> ضعف الأدوات المتوفرة التي تمنع الاعتداء على العاملين. <input type="checkbox"/> تأثير المرض / الألم. <input type="checkbox"/> تأثير الكحول/ المخدرات. <input type="checkbox"/> لا أعرف السبب. <input type="checkbox"/> سبب آخر: تحدد:		١٦ - ما هو اعتقادك السبب في الحادثة الأخيرة؟ يمكن اختيار أكثر من خيار إذا حدث؟

القسم الثالث: العنف غير جسدي

التهديد: يحدث عندما يقوم شخص ما (المريض، أقارب المريض، الزوار، زملاء العمل) يستخدم الكلمات والإيماءات، والسلوكيات لتخويف أو التهديد بضرر (جسدياً أو غيرها) للموظف.

اللفظي الاعتداء / التحرش: وهذا يحدث عندما يقوم شخص ما مثل (المريض، أقارب المريض، الزوار، زملاء العمل) بالصراخ، الشتم، الغمز، أو بعبارة أخرى الإهانة اللفظية للموظف دون وجود نية لأذى بدني، لفظياً إهانة موظف. على سبيل المثال، يصرخ شخص ما لك. وهذا يشمل أي سلوك تجاه موظف على أساس السن أو الإعاقة أو الجنس أو العرق أو اللون أو اللغة أو الدين أو المعتقدات السياسية، أو الأصل القومي أو الاجتماعي أو الانتماء إلى أقلية أو الفقر أو الغنى، ومكان الميلاد أو أي وضع غير مرغوب فيه يؤثر الآخر سلباً على كرامة الموظف.

الجنسي الاعتداء / التحرش: أي اهتمام جنسي غير المرغوب فيه، بانتقادات وغير متبادل. ويمكن أن تتضمن الملاحظات المتحيزة ضد المرأة، والسلوك أو التحرشات الجنسية التي تؤدي في بيئة متوترة وغير منتجة. هذه الأشكال من المضايقات / انتهاكات تهدد الموظف وتسبب له / لها إلى الشعور بالهانة.

الرجاء الإجابة على الأسئلة التالية في إشارة (√) لأفضل مناسبة للإجابة إلا إذا كان التهديد والاعتداء اللفظي أو التحرش الجنسي خلال الاثني عشر شهراً الماضية. إذا كنت لم يتعرضوا لهذه الأنواع من العنف يرجى الانتقال إلى القسم الرابع.

١٧ - كم عدد المرات التي تعرضت فيها للاعتداء الجسدي خلال ١٢ شهر الماضية؟ إذا كانت اجابتك ابدأ(لا) ،فضلاً انتقل الى الجزء الرابع؛ ارجو اختيار اجابه واحدة	<input type="checkbox"/> ابدأ (لا)	<input type="checkbox"/> مرة واحدة
	<input type="checkbox"/> ٢ - ٣ مرات	<input type="checkbox"/> ٤ - ٥ مرات
	<input type="checkbox"/> ٦ مرات فأكثر	
١٨ - ما هو نوع الاعتداء الغير جسدي الذي تعرضت له خلال المرة الأخيرة؟ يمكن اختيار أكثر من خيار إذا حدث؟	<input type="checkbox"/> تهديد <input type="checkbox"/> لفظي اعتداء / تحرش <input type="checkbox"/> جنسي اعتداء / تحرش	
١٩ - خلال الاعتداء الجسدي الأخير، من كان الشخص؟ يمكن اختيار أكثر من خيار إذا حدث؟	<input type="checkbox"/> المريض <input type="checkbox"/> زميل بالعمل	<input type="checkbox"/> زائر/ مرافق للمريض <input type="checkbox"/> أخرى، تحدد:
٢٠ - خلال الاعتداء الأخير؟ متى كان توقيت الاعتداء؟	<input type="checkbox"/> الصباح <input type="checkbox"/> الليل	<input type="checkbox"/> المساء <input type="checkbox"/> غير متأكد
٢١ - خلال الاعتداء الأخير، في أي مكان حصل الاعتداء؟	<input type="checkbox"/> الإنعاش <input type="checkbox"/> الفرز <input type="checkbox"/> المدخل	<input type="checkbox"/> غرفة الانتظار <input type="checkbox"/> غرفة العلاج <input type="checkbox"/> أخرى، تحدد:
٢٢ - هل تلقيت العلاج بعد الاعتداء الاخير	١- نعم تلقيت العلاج. <input type="checkbox"/> ٢- لم يكن هنالك حاجة للتدخل العلاجي. <input type="checkbox"/> ٣- كنت احتاج للعلاج ولاكن لم احصل عليه. <input type="checkbox"/> ٤- قمت بمعالجة نفسي. <input type="checkbox"/>	
٢٣ - إذا كان الجواب بنعم. من قام بمعالجتك؟	<input type="checkbox"/> طبيب <input type="checkbox"/> ممرض	<input type="checkbox"/> معالج نفسي <input type="checkbox"/> أخرى، تحدد:
٢٤ - ما هو اعتقادك المسبب في الحادثة الأخيرة؟ يمكن اختيار أكثر من خيار إذا حدث؟	١- الانتظار للحصول على الخدمة. <input type="checkbox"/> ٢- الفشل في تلبية احتياجات المريض أو مرافقة. <input type="checkbox"/>	

<p>٣- الحالة الصحية العقلية/ النفسية للمريض. <input type="checkbox"/></p> <p>٤- طريقة التعامل مع المريض من قبل الفريق الطبي. <input type="checkbox"/></p> <p>٥- عدم وجود الدواء أو الخدمة العلاجية المطلوبة للمريض. <input type="checkbox"/></p> <p>٦- الخوف / القلق. <input type="checkbox"/></p> <p>٧- ضعف الأدوات المتوفرة التي تمنع الاعتداء على العاملين. <input type="checkbox"/></p> <p>٨- تأثير المرض / الألم. <input type="checkbox"/></p> <p>٩- تأثير الكحول/ المخدرات. <input type="checkbox"/></p> <p>١٠- لا أعرف السبب. <input type="checkbox"/></p> <p>١١- سبب آخر : حدد..... <input type="checkbox"/></p>	
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القسم الرابع: نظم ووسائل الحماية المتاحة وإجراءات الإبلاغ عن العنف الجسدي وغير الجسدي.

الرجاء الإجابة عن النظم المتاحة ووسائل وإجراءات للإبلاغ عن الاعتداء على العاملين في المستشفى:

25- هل هناك طرق كافية لمنع العنف على الموظفين (مثل الحرس والأمن، وكاميرا، وأجهزة إنذار، الاتصال) في قسم؟	<input type="checkbox"/> نعم	<input type="checkbox"/> لا	<input type="checkbox"/> لا اعرف		
26- هل هناك سياسات كافية وأنظمة وتعليمات لمنع العنف على العاملين في المستشفى؟	<input type="checkbox"/> نعم	<input type="checkbox"/> لا	<input type="checkbox"/> لا اعرف		
27- هل هناك إجراءات للعنف التقارير في المستشفى التقارير؟	<input type="checkbox"/> نعم	<input type="checkbox"/> لا	<input type="checkbox"/> لا اعرف		
28- هل تلقيت التدريب أو البرامج التعليمية التي يقدمها المستشفى لمنع والتعامل مع العنف؟	<input type="checkbox"/> نعم	<input type="checkbox"/> لا	<input type="checkbox"/> لا اعرف		
29- في معظم الحوادث الأخيرة، هل كتبت تقرير إلى المشرف أو المسؤول إلى أي طرف ثالث عن العنف ضدك؟ يمكن اختيار أكثر من خيار إذا حدث؟	اعتداء جسدي	<input type="checkbox"/> نعم	<input type="checkbox"/> لا		
	اعتداء غير جسدي	<input type="checkbox"/> نعم	<input type="checkbox"/> لا		
30- إذا كان الجواب لا، لماذا كان الحادث لم يبلغ؟ يمكن اختيار أكثر من خيار إذا حدث؟	1- الحادثة لم تكن مهمة. 2- الخوف من نتائج السليبيه علي وعلى عملي. 3- اشعر بالخجل من الحادثة. 4- لم اعرف الى من اكتب التقرير. 5- لا يوجد فائدة من الكتابة، من واقع خبرتي لن يتم المتابعة أولن يتم اتخاذ إجراء ضد المعتدي. 6- أخرى، تحدد:				
31- هل تم اتخاذ أي إجراء ضد الطرف المعتدي؟	<input type="checkbox"/> نعم	<input type="checkbox"/> لا	<input type="checkbox"/> لا اعرف		
32- ما هو تأثير العنف على لك؟ الرجاء اختيار فقرة واحدة فقط؟	1- شعور بالخوف / القلق. <input type="checkbox"/> 2- شعور بالذنب. <input type="checkbox"/> 3- شعور برغبة بالانتقام. <input type="checkbox"/> 4- لا يوجد تأثير. <input type="checkbox"/>				
33- ما هو تأثير العنف على توفير الخاصة بك لرعاية المرضى؟ الرجاء اختيار فقرة واحدة فقط؟	1- أرفض التعامل مع المريض. <input type="checkbox"/> 2- التقليل من الاستجابة لاحتياجات المريض. <input type="checkbox"/> 3- التقليل من الوقت المخصص للمريض. <input type="checkbox"/> 4- لا يوجد تأثير. <input type="checkbox"/>				
34- في السنوات 1-3 القادمة، هل تعتقد أنك سوف تتوقف عن العمل في قسم الطوارئ (ED) بسبب التعرض للعنف؟	محتمل جدا	محتمل	لم اقرر	غير محتمل	غير محتمل جدا

شكرا لكم على المشاركة بهذه الدراسة. الرجاء وضع الاستبيان في الصندوق المغلق التي توجد في غرفة التمريض أو في منطقة التوقيع الدخول/ الخروج.

Appendix 3: Information sheet

PARTICIPANT INFORMATION STATEMENT



<p>Workplace violence against nurses in emergency departments (EDs): A study of Ministry of Health (MOH) in Riyadh City, Saudi Arabia.</p>	<p>العنف في مكان العمل ضد الممرضين بقسام الطوارئ: دراسة في وزارة الصحة بمدينة الرياض بالمملكة العربية السعودية.</p>
<p>Dear Participant, You are invited to participate in the research project described below.</p>	<p>عزيزي المشارك/ة، انت مدعو للمشاركة في هذه المشروع البحثي الموضح أدناه.</p>
<p>Aim: The study is designed to assessing the incidence and contribute factors to workplace violence against nursing staff in this department. It is also to investigate the support received by nurses who are victims of workplace violence.</p>	<p>الهدف: هذه الدراسة صممة لتقييم الاصابات والعوامل التي تساهم في العنف في مكان العمل ضد الممرضين في قسم الطوارئ. أيضا استكشاف الدعم الذي يتلقاه الممرضين الذي يتعرض للعنف في مكان العمل.</p>
<p>The research team: This study is being conducted by Fuaad Alshehri as part of the requirements for the Master of Nursing Science degree at the University of Adelaide under the supervision of Dr. Tim Schultz and Dr. David Foley.</p>	<p>فريق العمل: يقوم فواد الشهري بعمل هذه الدراسة كأحد المتطلبات لحصول على درجة الماجستير من جامعة ادليد بأستراليا ويشرف عليه كلا من الدكتور (تيم شالتز) والدكتور (ديفيد فولي).</p>
<p>Who is involved? The target population is emergency nurses who have worked at least one year in one of four in Saudi Arabian Emergency Departments. Participants may be: Saudi or non Saudi, male or female, Arabic or English speakers, enrolled or registered nurses.</p>	<p>المشاركين المطلوبين؟ الفئة المستهدفة هم الممرضين بقسم الطوارئ الذين عملوا على الأقل سنة واحده بقسم الطوارئ بالسعودية، يكون الممرضين السعوديين وغير سعوديين، كلنا من الممرضين الذكور والإناث مدعويين، يجب ان يجيد اللغة العربية او الانجليزية تحدثاً وكتابه وان يكون فني او اخصائي تمريض و ان يعمل بهذا المستشفى.</p>
<p>Questionnaire: The study uses a questionnaire to collect data to investigate workplace violence against nursing staff in this department. This questionnaire contains four sections (34 questions). The first section is demographic information, the second section addresses physical violence, the third section addresses non-physical violence and the fourth section includes means of protection, systems and policies available about the violence in the hospital. Please fill out the questionnaire included, put in the envelop provided and return it to the collection box at nursing room. The questionnaire will take 10-15 minutes to complete. The return of the completed questionnaire is considered as informed consent to participate in this study.</p>	<p>معلومات الاستبيان: هذه الدراسة تستخدم الاستبيان لجمع معلومات البحث لتحقيق في العنف ضد طاقم التمريض العاملين بقسم الطوارئ. هذا الاستبيان يحتوي على أربع أجزاء (٣٢ سؤال). الجزء الاول معلومات ديموغرافك، الجزء الثاني يتناول العنف الجسدي، الجزء الثالث يتناول العنف الغير جسدي والجزء الرابع يتضمن الوسائل الحماية والانظمة والسياسات المتاحة عن العنف بالمستشفى. الرجاء تعبئة الاستبيان المرفق وإعادته للصندوق المعد لهذه الدراسة والموجود في غرفة الممرضين في قسم الطوارئ. تعبئة الاستبيان المرفق سوف تستغرق ما بين العشر الي الخمس عشرة دقيقة. إعادة الاستبيان كاملاً يعتبر موافقه عن علمك وقرارك على المشاركة بهذه الدراسة.</p>
<p>Risks: Participation in this study should involve no physical or mental discomfort. If, however, you should find any question to be offensive or cause emotional distress or harm, you have the right to leave the question. Participant who emotionally upset about the incident during filling the questionnaire, please contact the social-worker counsellor in the hospital.</p>	<p>المخاطر: المشاركة في هذا البحث لا يترتب عليها أي مخاطر جسدية أو عقلية. ولكن وإذا واجدة بان الاسئلة لا تتناسب معك او تسبب اضطراب نفسي او ضرر، فلك الحق والحريه المطلقة في ترك السؤال وعدم الإجابة عليه. المشارك الذي شعر بالضيق العاطفي بسبب الحادثه خلال تعبئة الاستبيان، رجاء التواصل مع اخصائي الخدمة الاجتماعية بالمستشفى.</p>

PARTICIPANT INFORMATION STATEMENT



<p>Counsellor details: office: (+966) 11XXXXXX phone: (+966) 11XXXXXX</p>	<p>معلومات الاخصائي: المكتب: (+٩٦٦) ١١ XXXXXXX الجوال: (+٩٦٦) ٥ XXXXXXX</p>
<p>Expected benefits: There are no direct benefits to you for participating in this study. No incentives are offered. However, the result will have scientific interest that may eventually have benefits for the Saudi Arabian hospitals and nurses, in particular emergency nurses.</p>	<p>الفوائد المتوقعة: لا يوجد هناك فوائد مباشرة للمشاركين بهذه الدراسة. أيضاً لا يتم تقديم حوافز. لكن النتيجة سوف يكون لها اهمية علمية التي ربما يكون لها فوائد للمستشفيات والكادر التمريضي وخاصة ممرضي او ممرضات الطوارئ في المملكة العربية السعودية.</p>
<p>Participation and withdrawal: Participation in this study is voluntary and you are free to withdraw form this study at any time without prejudice or penalty. If you wish to withdraw, do not complete the questionnaire.</p>	<p>المشاركة والانسحاب: المشاركة في هذه هي تطوعية ولك كامل الاحقية في الانسحاب متى شئت ولن يترتب على عدم مشاركتك أي أعباء مادية أو وظيفة. إذا أردت الانسحاب، فقط لا تقم بإعادة الاستبيان فإن إعادة تعتبر موافقة ضمنية على المشاركة في البحث.</p>
<p>Confidentiality and security of data: All questionnaires, comments and responses are anonymous, will be treated confidentially and will be stored confidentially. The names and personal information of participants are not required in any of the responses. The research team will only have access to the data. The information you provide will be used only for the purposes of this study.</p>	<p>سرية وسلامة المعلومات: جميع الاستبيانات، التعليقات والردود سوف يتعامل معها بسرية. هذا البحث لا يهدف إلى معرفة المشاركين وكل المعلومات التي تيم جمعها سوف يتم تخزينها بشكل سري بحيث لا يمكن أن يطلع عليها إلا أفراد فريق البحث. بالإضافة إلى ذلك، كل المعلومات التي سوف تدخل في برنامج التحليل الإحصائي بترميز مشفر لن تشمل على أسماء أشخاص أو مكان عمل. والنتائج التي سوف تنشر لن تشمل على أسماء أشخاص أو منشآت وكل المعلومات التي يتم جمعها سوف تستخدم لغرض المذكور أعلاه.</p>
<p>Ethics Clearance and Contacts: This study complies with the ethical conduct of research in both Saudi Arabia and Australia. It has been approved by the HREC at the University of Adelaide (approval number H-2016-119) and the Directorate of Research and Studies Ethics at the MOH. You are free to discuss your participation with the researcher. For complaints that are not answered by the researcher you can contact the study's principal supervisor, Dr. Tim Schultz on phone (+61) 8 8313 6270 or on E-mail : tim.schultz@adelaide.edu.au For concerns or complaints about the conduct of a research study can contact the Human Research Ethics Committee's Secretariat at the University of Adelaide on Phone (+61) 8 8313 6028 or by E-mail to hrec@adelaide.edu.au Thank you for your participation in this study. Fuaad Alshehri- Master Student Phone: (+966) 5555 92987 Email: fuaad.alshehri@student.adelaide.edu.au</p>	<p>أخلاقيات البحث العلمي وأرقام التواصل: هذه الدراسة متوافقة مع اخلاقيات البحث في كل من المملكة العربية السعودية واستراليا وتمت الموافقة عليها من قبل إدارة للبحوث والدراسات بوزارة الصحة ولجنة أخلاقيات البحث العلمي بجامعة ادليد (رقم الموافقة H-2016-119). وكذلك تمت الموافقة عليها من قبل وزارة الصحة (رقم الموافقة: IRB00010471) يمكنك بالتاكيد مناقشة مشركتك مع الباحث الرئيسي. لشكاوى التي لم يستطع الباحث الرئيسي الإجابة عنها، يمكنك التواصل مع المشرف على البحث الدكتور (تيم شالتز) على الرقم والبريد الإلكتروني التاليه: تلفون: (+٦١) ٨ ٨٣١٣٦٢٧٠ إيميل: tim.schultz@adelaide.edu.au للاستفسار والشكاوى حول أجرى الدراسة يمكن الاتصال بأمانة البحوث لجنة الاخلاقيات الانسانية في جامعة ادليد على الرقم والبريد الإلكتروني التاليه: تلفون: (+٦١) ٨ ٨٣١٣٦٠٢٨ إيميل: hrec@adelaide.edu.au نشكر لك مشاركتك في هذا البحث باحث درجة ماجستير تلفون: (+٩٦٦) ٥٥٥٥٩٢٩٨٧ إيميل: fuaad.alshehri@student.adelaide.edu.au</p>

Appendix 4: Ethics



RESEARCH BRANCH
OFFICE OF RESEARCH ETHICS, COMPLIANCE
AND INTEGRITY
THE UNIVERSITY OF ADELAIDE

LEVEL 4, RUNDLE MALL PLAZA
50 RUNDLE MALL
ADELAIDE SA 5000 AUSTRALIA

TELEPHONE +61 8 8313 5137
FACSIMILE +61 8 8313 3700
EMAIL hrec@adelaide.edu.au

CRICOS Provider Number 00123M

8 June 2016

Dr T Schultz
School: School of Nursing

Dear Dr Schultz

ETHICS APPROVAL No: H-2016-119

PROJECT TITLE: Workplace violence against nurses in emergency departments
in Kingdom of Saudi Arabia

The ethics application for the above project has been reviewed by the Low Risk Human Research Ethics Review Group (Faculty of Health Sciences) and is deemed to meet the requirements of the *National Statement on Ethical Conduct in Human Research (2007)* involving no more than low risk for research participants. You are authorised to commence your research on **08 Jun 2016**.

Ethics approval is granted for three years and is subject to satisfactory annual reporting. The form titled *Annual Report on Project Status* is to be used when reporting annual progress and project completion and can be downloaded at <http://www.adelaide.edu.au/ethics/human/guidelines/reporting>. Prior to expiry, ethics approval may be extended for a further period.

Participants in the study are to be given a copy of the Information Sheet and the signed Consent Form to retain. It is also a condition of approval that you **immediately report** anything which might warrant review of ethical approval including:

- serious or unexpected adverse effects on participants,
- previously unforeseen events which might affect continued ethical acceptability of the project,
- proposed changes to the protocol; and
- the project is discontinued before the expected date of completion.

Please refer to the following ethics approval document for any additional conditions that may apply to this project.

Yours sincerely,

Sabine Schreiber
Secretary, Human Research Ethics Committee
Office of Research Ethics, Compliance and Integrity



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ADELAIDE SA 5000 AUSTRALIA

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EMAIL hrec@adelaide.edu.au

CRICOS Provider Number 00123M

Applicant: Dr T Schultz

School: School of Nursing

Project Title: Workplace violence against nurses in emergency departments in Kingdom of Saudi Arabia

The University of Adelaide Human Research Ethics Committee
Low Risk Human Research Ethics Review Group (Faculty of Health Sciences)

ETHICS APPROVAL No: H-2016-119 **App. No.:** 0000021707

APPROVED for the period: 08 Jun 2016 to 30 Jun 2019

Thank you for the detailed response dated 7.6.16 to the matters raised. It is noted that this study will be conducted by Fuaad Alshehri, Masters student.

Sabine Schreiber
Secretary, Human Research Ethics Committee
Office of Research Ethics, Compliance and Integrity

IRB Registration Number with KACST, KSA: H-01-R-012
IRB Registration Number with OHRP/NIH, USA: IRB00010471
Approval Number Federal Wide Assurance NIH, USA: FWA00018774

May 23, 2016
IRB Log Number: 16-201E
Department: External
Category of Approval: EXEMPT

Dear Fuaad Ali Alshehri,

I am pleased to inform you that your submission dated May 17, 2016 for the study titled '**Workplace violence against nurses in emergency departments in Kingdom of Saudi Arabia**' was reviewed and was approved. Please note that this approval is from the research ethics perspective only. You will still need to get permission from the head of department or unit in KFMC or an external institution to commence data collection.

We wish you well as you proceed with the study and request you to keep the IRB informed of the progress on a regular basis, using the IRB log number shown above.

Please be advised that regulations require that you submit a progress report on your research every 6 months. You are also required to submit any manuscript resulting from this research for approval by IRB before submission to journals for publication.

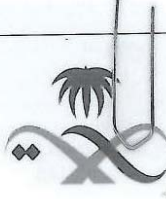
As a researcher you are required to have current and valid certification on protection human research subjects that can be obtained by taking a short online course at the US NIH site or the Saudi NCBE site followed by a multiple choice test. Please submit your current and valid certificate for our records. Failure to submit this certificate shall a reason for suspension of your research project.

If you have any further questions feel free to contact me.

Sincerely yours,

Prof. Omar H. Kasule
Chairman Institutional Review Board--IRB.
King Fahad Medical City, Riyadh, KSA.
Tel: + 966 1 288 9999 Ext. 26913
E-mail: okasule@kfmc.med.sa





الموضوع: بحث الطالب/ فؤاد الشهري.

المحترم
المحترم
المحترم

سعادة/ مدير عام الشؤون الصحية بمنطقة الرياض
ص. لسعادة/ مدير مستشفى الملك سلمان بالرياض
ص. لسعادة/ مدير مستشفى الإيمان بالرياض

السلام عليكم ورحمة الله وبركاته، ، ، ،

إشارة إلى البحث المقدم من الطالب/ فؤاد علي الشهري، المبتعث من وزارة التعليم لدراسة درجة الماجستير في تخصص "التمريض" بكلية التمريض جامعة أدليد بأستراليا، رقم السجل المدني (١٠٨٣١٩٢١٥١) والرقم الأكاديمي (١٦٨٣٧٠٢) وعنوان الرسالة:
" العنف ضد المرضى العاملين بقسم الطوارئ بمستشفيات المملكة العربية السعودية"

نحيطكم علماً بأن الطالب قد إستوفى كافة المستندات المطلوبة وتمت مراجعتها من اللجان المعنية بالإدارة العامة للبحوث والدراسات بوزارة الصحة ولجنة الأخلاقيات بمدينة الملك فهد الطبية (مرفق صورة)، وتمت الموافقة على تسهيل مهمة إجراء هذا البحث، وحيث أن الطالب سينفذ جزء من دراسته في مستشفى الملك سلمان ومستشفى الإيمان بمنطقة الرياض.

وعليه، نأمل من سعادتكم التفضل بالإطلاع والإيعاز لمن يلزم بتسهيل مهمته لجمع البيانات اللازمة بما يضمن أن لا يكون هناك أي تأثير على خدمة المراجعين، مع العلم بأن وزارة الصحة تضمن حقوقها في نتائج هذا البحث من خلال إتفاقية المشاركة في البيانات والتي تم توقيعها بين الباحث والإدارة العامة للبحوث والدراسات.

وتفضلوا بقبول خالص تحياتي ، ، ،

مرفق مستندات وملخص المقترح البحثي، ، ، ، ،



الموضوع: بحث الطالب/ فؤاد الشهري.

سعادة/ المدير التنفيذي لمجمع الأمل للصحة النفسية بالرياض المحترم

السلام عليكم ورحمة الله وبركاته، ، ، ،

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وتفضلوا بقبول خالص تحياتي، ، ، ،

مرفق مستندات وملخص المقترح البحثي، ، ، ، ،



الموضوع: بحث الطالب/ فؤاد الشهري.

سعادة/ مدير مركز الأبحاث بمدينة الملك سعود الطبية بالرياض المحترم
ص. لسعادة/ رئيس لجنة الأخلاقيات بمدينة الملك سعود الطبية
المحترم
السلام عليكم ورحمة الله وبركاته، ، ، ،

إشارة إلى البحث المقدم من الطالب/ فؤاد علي الشهري، المبتعث من وزارة التعليم لدراسة درجة الماجستير في تخصص "التمريض" بكلية التمريض جامعة أدليد بأستراليا، رقم السجل المدني (١٠٨٣١٩٢١٥١) والرقم الأكاديمي (١٦٨٣٧٠٢) وعنوان الرسالة: " العنف ضد المرضى العاملين بقسم الطوارئ بمستشفيات المملكة العربية السعودية "

نحيطكم علماً بأن الطالب قد إستوفى كافة المستندات المطلوبة وتمت مراجعتها من اللجان المعنية بالإدارة العامة للبحوث والدراسات بوزارة الصحة ولجنة الأخلاقيات بمدينة الملك فهد الطبية (مرفق صورة)، وتمت الموافقة على تسهيل مهمة إجراء هذا البحث، وحيث أن الطالب سينفذ جزء من دراسته في مستشفى الملك سلمان ومستشفى الإيمان بمنطقة الرياض.

وعليه، نأمل من سعادتكم التفضل بالإطلاع والإيعاز لمن يلزم بتسهيل مهمته لجمع البيانات اللازمة بما يضمن أن لا يكون هناك أي تأثير على خدمة المراجعين، مع العلم بأن وزارة الصحة تضمن حقوقها في نتائج هذا البحث من خلال إتفاقية المشاركة في البيانات والتي تم توقيعها بين الباحث والإدارة العامة للبحوث والدراسات.

وتفضلوا بقبول خالص تحياتي ، ، ،

مرفق مستندات وملخص المقترح البحثي، ، ، ،

From: Institutional Review Board
Sent: Thursday, June 30, 2016 2:55 PM
To: 'fuaad.alshehri@student.adelaide.com.au' <fuaad.alshehri@student.adelaide.com.au>
Subject: HORE-22-Jun16-01: IRB Approval Notification (without grant request)

Ref. No. : HORE-22-Jun16-01
Title : "Workplace Violence Against Nursing Staff in Emergency Department in the Kingdom of Saudi
PI : Mr. Fuaad Alshehri

Dear Mr. Fuaad Alshehri,

It is our pleasure to inform you that the above-referenced proposal has been approved by the King Saud Medical Institutional Review Board via an expedited review decision; and we would like to take this opportunity to congratulate you on behalf of the Institutional Review Board Committee.

Please note that you are obligated to ***send a progress report to the IRB committee every 6 months*** and require to submit a ***Final Report within a year from the date of this memo (or earlier in the case the study has completed)***

approval of the conduct of this proposal will be automatically suspended after 12 months, in the case the Progress Final Report, if relevant) is pending acceptance. You also need to notify the Research Centre as soon as possible

1. any amendments to the proposal;
2. termination of the study;
3. any serious or unexpected adverse events;
4. any event or new information that may affect the benefit/risk ratio of the proposal;
5. any manuscript resulting from this research for approval by IRB before submission to journals for publication.

Please visit the Research Centre before the initiation of the research to secure:

- Original IRB Approval Memorandum
- "Letter of Endorsement" signed by the Director of Research Centre

Feel free to contact the Research Centre/Project Manager for any assistance at rc@ksmc.med.sa, telephone number 5555 Ext. 2345

We wish you every success in your research endeavors.
Advance Happy Holiday!!!

Best regards,
Nerissa Marcelino, RN, MAN
IRB-Coordinator
Shelanne Ammad, RN
Administrative Staff

Institutional Review Board (IRB)
King Saud Medical City
Riyadh, Kingdom of Saudi Arabia
Tel. No.: 4355555 Ext 2345
Email: irb@ksmc.med.sa