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An Investigation into Violence against Nurses in the Southern Region of Malawi

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2nd November, 2011

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DECLARATION

I, Chimwemwe Chikoko, hereby declare that the work on which this dissertation is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university.

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2nd November, 2011

Date
List of abbreviations

ARV: Anti Retro-Viral
BLM: Banja La Mtsogolo
CHAM: Christian Health Association of Malawi
CI: Confidence Interval
CINAHL: Cumulative Index to Nursing and Allied Health Literature
DHO: District Health Office
HREC: Health Sciences Research Ethics Committee
ICN: International Council of Nurses
ICU: Intensive Care Unit
IES-R: Impact of Event Scale Revised
ILO: International Labour Organisation
MEDLINE: Medical Literature Analysis and Retrieval System Online
MoH: Ministry of Health
NMCM: Nurses and Midwives Council of Malawi
NONM: National Organisation of Nurses and Midwives in Malawi
NSO: National Statistics Office
OPD: Out Patients Department
PSI: Population Services International
PTSD: Post-Traumatic Stress Disorder
SRN: State Registered Nurse
STI: Sexually Transmitted Infections
UK: United Kingdom
USA: United States of America
WHO: World Health Organisation
WMA: World Medical Association
Definition of terms

Below are definitions of terms as used in this dissertation, which are adapted from the International Labour Organisation, International Council of Nurses, World Health Organisation and Public Services International (2002).

Assault/Attack: Intentional behaviour that harms another person physically, including sexual assault.

Abuse: Behaviour that humiliates, degrades or otherwise indicates a lack of respect for the dignity and worth of an individual.

Bullying/mobbing: Repeated and over time offensive behaviour through vindictive, cruel or malicious attempts to humiliate or undermine an individual or groups of employees.

Harassment: Any conduct based on age, disability, HIV status, domestic circumstances, sex, sexual orientation, gender reassignment, race, colour, language, religion, political, trade union or other opinion or belief, national or social origin, association with a minority, property, birth or other status that is unreciprocated or unwanted and which affects the dignity of men and women at work.

Sexual harassment: Any unwanted, unreciprocated and unwelcome behaviour of a sexual nature that is offensive to the person involved, and causes that person to feel threatened, humiliated or embarrassed.

Racial harassment: Any threatening conduct that is based on race, colour, language, national origin, religion, association with a minority, birth or other status that is unreciprocated or unwanted and which affects the dignity of women and men at work.

Threat: Promised use of physical force or power (i.e. psychological force) resulting in fear of physical, sexual, psychological harm or other negative consequences to the targeted individuals or groups.

Victim: Any person who is the object of act(s) of violence or violent behaviour(s) as described above.

Perpetrator: Any person who commits act(s) of violence or engages in violent behaviour(s) as described above.
Workplace: Health care facility, regardless of the size, location and the type of services provided, including major referral hospitals and health care centres.
Abstract

Introduction: Incidences of violence in nursing have been reported in local media in Malawi. Although violence in the health sector is not a new concept, it has become a global concern in the 21st century (Needham, Kingma, O’Brien-Pallas, McKenna, Tucker & Oud, 2008:6).

Study aim: The aim of the study was to investigate and describe the nature and extent of violence against nurses and the perceived effects thereof on nurses in selected health facilities in the southern region of Malawi.

Methodology: A descriptive, cross-sectional study was conducted for the purpose of describing what exists regarding workplace violence against nurses in Malawi.

Results: A total of 112 nurses from five facilities returned completed questionnaires representing a 59.57% response rate. The five facilities included two central hospitals, one psychiatric hospital and two health care centres located in the southern region of Malawi. A total of 86% of the respondents agreed that violence against nurses is a problem in Malawi. The overall prevalence of violence for the preceding 12 months was 70.54% (Confidence interval 61.1%-78.8%). The prevalence of violence was highest at the psychiatric hospital with 100% of the nurses having experienced violence in the preceding 12 months. The types of violence experienced include verbal abuse, threatening behaviours, physical assaults and sexual harassments. Seventy one percent (71%) of the violent incidents were perpetrated by patients, 47% by patients’ relatives and 43% by work colleagues. Nurses reacted to incidents of violence by reporting to managers, telling their friends, crying or, retaliating. A smaller percentage (4%) preferred to ignore the situation. Most (67%) violent incidents occurred during the day. The majority (87.5%) of the nurses perceived that violence has psychological effects on them, which consequently affects their work performance and make them lose interest in the nursing profession.

Conclusion: Violence against nurses is a problem in Malawi and it has the potential to compromise patient care. As such, it is necessary that measures are taken to minimise workplace violence against nurses and to create a safe working environment for them. Topics on violence against nurses should be included in nursing education programmes and provided during in-service training for qualified nurses to promote their assertiveness and to raise awareness on the existence of violence against them.
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Chapter One

Introduction

1.1 Workplace violence in the health sector

Although violence in the health sector is not a new issue, it has become a global concern in the 21st century (Needham, Kingma, O’Brien-Pallas, McKenna, Tucker & Oud, 2008:6). Violence at work is becoming an alarming phenomenon worldwide (Kingma, 2001:129). It entails “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” (World Health Organisation [WHO], 2010: 1). Workplace violence includes both physical and psychological violence. It is expressed in physical assaults, verbal abuse, bullying/mobbing, sexual/racial harassment and making threats (WHO, 2010). The problem of workplace violence is understood and managed differently according to variations in regions, nations and cultures of people (Needham et al., 2008:7).

Workplace violence has the consequence of bringing intolerance between the victims and the perpetrators (International Labour Organisation [ILO], International Council of Nurses [ICN], WHO & Public Services International [PSI], 2002). Other forms of violence such as sexual harassment can lead to stigmatisation of the victims (ILO et al., 2002). Workplace violence is also a source of arguments in the workplace and it is a human rights issue (ILO et al., 2002). People working in the health sector are more at risk of workplace violence than those working in other sectors (WHO, 2010). For instance, health care workers are 16 times more at risk of workplace violence than other service workers such as prison officers, transport workers and bank staff (Kingma, 2001:129).

On average, nurses are three times more at risk than other occupational groups to experience violence in the workplace (WHO, 2010). Violence in nursing occurs at three levels, namely violence towards nurses, violence amongst nurses and to a lesser extent violence by nurses towards others (Khalil & Karani, 2005:4). Much of the literature pertaining to workplace violence which affects nurses is based on studies done in Western countries and in South Africa. A recent study in Cape Town reported that violence of different types is prevalent in the health care setting (Khalil, 2009:37). Although there have been newspaper reports on violence in Malawi (the researcher’s home country) no published literature was found. This study focuses on violence against nurses in the southern region of Malawi.
1.2 Background and Rationale for the Study

1.2.1 Description of Malawi and its Health Indicators

Malawi (see appendix A) is a land locked country in Southeast Africa (National Statistical Office [NSO] & ORC Macro, 2005:1). It is densely populated with an estimated population of over 13 900 000 most of whom live in the rural areas (NSO, 2008:2). There are over eleven ethnic groupings in the country. More than 80% of the population are Christians, 13% are Moslems and less than 1% either belongs to other religious groupings or do not belong to any (NSO, 2008:13). Malawi is among the world’s least developed countries and the economy is heavily based on agriculture. It is divided into three regions (south, central and north) and 28 administrative districts (NSO, 2008:8).

Public health indicators in Malawi are far from satisfactory, and there is a profound human resource crisis in the health care sector (Mtonya, Mwapasa & Kadzamira, 2005:3). The hierarchy of health infrastructure consists of dispensaries and clinics on the lowest level, health centres on the next level, followed by community and district hospitals and finally on the highest level are central hospitals (Mtonya et al., 2005:4). The government through the Ministry of Health (MoH) operates about 70% of the health facilities in the country. Other services are provided by Christian Health Association of Malawi (CHAM), Banja La Mtsogolo (BLM), and the private sector (Mtonya et al., 2005:4).

Health indicators in the country are amongst the poorest in Southern Africa with an infant mortality rate of 72 per 1000 live births; under five mortality rate of 122 per 1000 live births; and maternal mortality of 510 per 100000 live births (MoH, 2011:7). The shortage of health care workers is severe in the country with an estimated ratio of 6 nurses and midwives to 10 000 people (WHO, 2009:100). The World Health Organisation (2009:95) does not set a gold standard on the health care workers ration per population but estimates that globally there are 28 nurses per 10 000 people and the range from country to country is from 1 per 10 000 people to 195 per 10 000 people.

1.2.2 Rationale for the Study

International studies on workplace violence against health care workers show that nurses experience higher rates of violence than other occupational groups (Alexander & Fraser, 2004:377; Mullan & Badger, 2007:35). Alexander and Fraser (2004:377) established that the reported frequency of violence against health care workers in Australia was 68% for nurses compared to 48% in doctors and 47% in allied health professionals. In the United Kingdom, Mullan and Badger
(2007:35) found the frequency to be 65% for nurses compared to 42% for occupational therapists and 27% for physiotherapists. A study conducted in Kuwait with 5876 nurses found that 48% had experienced workplace violence in the preceding six months (Adib, Al-Shatti, Kamal, El-Gerges & Al-Raqem, 2002:469). The findings from these studies suggest that nurses may be more at risk of workplace violence compared to other healthcare workers.

There have been a number of anecdotal and newspaper reports of violence against nurses in Malawi occurring between the years 2006 to 2010 (Potani, 2010). These include: a report of an incident in Mangochi district where a nurse was beaten by guardians for allegedly being rude and neglecting a critically ill patient who later died. The nurse was suspended pending investigations into the matter (Nyasa Times, 2010). Commenting on the matter in an interview in AfricaNews, the executive director for the National Organisation of Nurses and Midwives in Malawi (NONM) admitted that their office receives conflicting reports about incidents between nurses and patients/patients’ relatives (Potani, 2010). An example of an incident which occurred in 2009 was given. In Mwanza district, a nurse who had allegedly intended to administer an injection with a large syringe to a sick child was beaten by the father of the child (Potani, 2010). Other reported incidents include: In Mzuzu a nurse was beaten by a parent of a patient whilst on duty in 2006 and the matter was reported to police (Potani, 2010). In another report, also in Mzuzu, a nurse was attacked by guardians of a patient because they felt she was playing tricks with them by delaying medical assistance, however, the nurse was waiting for a doctor whom she had called (Potani, 2010). These newspaper reports have not been substantiated by empirical research. It is against this background that the researcher investigated violence against nurses in Malawi.

1.3 Problem Statement

A systematic review of published articles provides evidence that violence against nurses exists in many countries (Taylor & Rew, 2010:1072). Workplace violence contributes to the deterioration of health care workers’ morale and impacts delivery of quality nursing care. Violence against nurses also negatively affects retention of qualified nurses (O’Brien-Pallas, Wang, Hayes & Laporte, 2008:35). The extent of violence against nurses and how it affects nurses in Malawi is not well-documented. This study therefore aimed to investigate the nature and extent of violence against nurses in one region of Malawi. It was informed by a study on violence against nurses in Cape Town that was conducted by Professor Doris Khalil of the University of Cape Town (Khalil, 2009:207).
1.4 Aim
The aim of the study was to investigate and describe the nature of and extent of violence against nurses and the perceived effects thereof on them in selected health facilities in the southern region of Malawi.

1.5 Specific Objectives
The specific objectives of the study were:

- To determine the extent of violence against nurses in five health facilities in the southern region of Malawi.
- To describe types of violence directed against nurses in each of the settings.
- To identify patterns of violence with respect to day/night and days of the week.
- To identify the perpetrators of workplace violence against nurses.
- To describe the perceived effects of violence on nurses’ professional and personal lives.

1.6 Outline of dissertation
This dissertation has five chapters. Chapter 1 provides the introductory information on workplace violence in the health sector, background information on health services in Malawi, reports of workplace violence against nurses in Malawi and the objectives of the study. Chapter 2 presents a review of related literature on workplace violence against nurses. It reviews the prevalence of violence against nurses; nature of violence that nurses experience; settings where violent acts against nurses occur; the risk factors associated with violence against nurses; nurses’ reaction to incidents of violence; and the effects of violence against nurses. Chapter 3 describes the methodology of this research in detail. The research findings are presented in chapter 4. Chapter 5 includes a discussion of the results, recommendations and conclusion.
Chapter Two

Literature Review

2.1 Introduction

A literature review was conducted to establish what is already known regarding violence against nurses worldwide. The literature search was conducted using electronic databases for peer reviewed research articles published between 2000 and 2011. The databases used were Academic Search Premier, CINAHL, MEDLINE and Psycho INFO via Ebscohost and Pubmed. The search terms used were workplace violence/aggression, workplace bullying/mobbing, Malawi and nursing. Where necessary, relevant studies cited in the articles obtained were also searched electronically. Articles that were included in the literature review are those that discussed violence against nurses in the workplace; and articles that discussed violence against health care workers including nurses. Articles that were excluded are those that discussed violence against health care workers in general (without specifying violence against nurses); articles discussing nursing management of clients who experienced domestic violence; or those discussing gender based violence in general terms. The literature indicated that there is violence against nurses and there is also violence amongst nurses. This review highlights the main issues in respect of the nature and extent of violence against nurses, the forms of violence experienced by nurses, the settings and times when violence against nurses occurs, the nurses’ lived experiences of being victims of violence at work places and the effects of such violence against nurses.

2.2 Prevalence of workplace violence

The prevalence of violence against nurses varies from country to country (Taylor & Rew, 2010:1074). Reported prevalence of workplace violence against nurses range from 17% in Slovakia (Estryn-Behar, Heijden, Fry, Nezet, Conway & Hesselhorn, 2008:109) to almost 100% in Turkey (Senuzun Ergun & Karadakovan, 2005:156). The prevalence of violence against nurses does not follow an obvious pattern that would make it easy to predict which countries are likely to have high rates of violence against nurses. It is suggested that such differences could be due to many factors among which are: setting; work load; working style; and attitudes to reporting the event by the victims (Kamchuchat, Chongsuvivatwong, Oncheunjit, Yip & Sangthong, 2008:205).

A possible reason why the prevalence of workplace violence against nurses varies from study to study is that surveys use different time frames in reporting (Taylor & Rew, 2010:1079). Some studies
report the prevalence of violence against nurses in the preceding week (Roche, Diers, Duffield, & Catling-Paull, 2009:13), some in the preceding three months (Hegney, Eley, Plank, Buikstra & Parker, 2006:223), some in the preceding six months (Shiao, Tseng, Hau, Cheng & Guo, 2010:823) whilst others in the preceding twelve months (Abbas, Fiala, Abdel Rhaman & Fahim, 2010:29). Although there is a general consensus that workplace violence against nurses exists in different countries, the inconsistencies in timeframes used significantly affects the reported prevalence of workplace violence (Taylor & Rew, 2010:1081). This makes it difficult to understand the problem or compare the findings from study to study.

Whilst the issue of workplace violence has become a global concern, it seems violence against nurses is on the increase. Hegney et al. (2006:227) reported that there was an increase in workplace violence towards nurses in Australia. In their research, they compared results of two similar studies conducted in 2001 and 2004. In the 2001 study, about 45% of the nurse participants working in public hospitals reported to have experienced workplace violence in the preceding three months compared to 57% in 2004 (Hegney et al., 2006:223). In Iran, AbuAlRub, Khalifa and Habbib (2007:284) highlighted that over 50% of the 116 respondents felt violence had increased 2 to 4 times in the previous 12 months.

The reason for such an increase in workplace violence against nurses is not well explained. There are differing opinions amongst researchers as to whether violence against nurses is increasing or decreasing. Ferns (2006:41) suggested that there is indeed an increase in violence against nurses which however remains undetermined due to underreporting of such incidents. Hutchinson, Vickers, Jackson and Wilkes (2006) have argued that the high prevalence rates of violence against nurses exist because nurses passively tolerate or ignore witnessed workplace violence, normalising the behaviours as an acceptable part of their work experience. However, Hegney et al. (2006:227) counter argue that the observed increase may not necessarily be due to an increase in the levels of violence but rather due to the fact that nurses have become more assertive; nurses therefore recognise when they have been abused making them more likely to report having been victims of workplace violence.

It is also difficult to measure the actual prevalence of workplace violence for any particular period because most nurses who have been victims of workplace violence experience more than one incident of the violence within a period. A study in Hong Kong discovered that on average, nurses who had been victims of workplace violence experienced more than ten instances of different types
of workplace violence in a year (Kwok, Law, Li, Ng, Cheung, Fung, Kwok, Tong & Yen, 2006:8). Bullying amongst nurses also occurs repeatedly and the offenders and victims are continuously the same (Hutchinson et al., 2006). It is possible that the percentage of nurses who report to have experienced workplace violence under-represents the actual frequency that violent incidents against nurses occur. In Thailand, it was established that 38.9% of nurses who reported to have experienced an incident of workplace violence in the previous year had experienced more than one incident (Kamchuchat et al., 2008:203). Another reason why it is difficult to measure the actual prevalence of workplace violence is that data is collected by interviews or questionnaires which are likely to bring recall bias.

Apart from experiencing workplace violence personally, nurses also witness incidents of violence against their colleagues (AbuAlRub et al., 2007:286; Opie, Lenthall, Dollard, Wakeman, MacLeod, Knight, Dunn & Richard, 2010:20). An Australian study on nurses working in remote areas found that close to 90% of the 349 participants had witnessed their colleagues experience workplace violence (Opie et al., 2010:21). AbuAlRub et al. (2007:286) reported that 53.4% of the respondents indicated that they had witnessed incidents of violence against other nurses in the previous twelve months. Witnessing of a violent incident is not an indicator of the prevalence of violence because it is possible that more than one nurse might have witnessed the same violent incident. It is however important to explore how witnessing such incidents affects the nurses.

2.3 Types of workplace violence
Nurses experience various forms of violence at their workplace; categorised broadly into physical violence or psychological violence (Celik, Celik, Agirbas & Ugurluoglu, 2007:359; Kwok et al., 2006:8). Other terms used to describe workplace violence include “... physical assault, abuse, verbal abuse, harassment, kicking, punching, spitting, pulling hair, biting, stalking, sexual harassment, sexual assault, and acts of aggression or intimidation” (Taylor & Rew, 2010: 1079). The use of varying terminologies from study to study to describe workplace violence makes it hard to compare the findings or generalise findings from one study to a different setting.

2.3.1 Physical Violence
The occurrence of physical violence at the workplace has been categorised into two areas: violence with a weapon or violence without a weapon (Kansagra, Rao, Sullivan, Gordon, Magid, Kaushal, Camargo & Blumenthal, 2008:1270). McKinnon and Cross (2008:13) reported that the occurrence of physical violence with a weapon against nurses in Australia was 14.3%. In Iran AbuAlRub et al. (2007:284) also found that 14.3% of the respondents reported having experienced physical violence
in which a weapon was used. The weapons that were used against nurses in these studies were not identified. A study conducted in the United States of America reported that guns or knives were brought into Emergency departments daily by patients and/or their visitors (Kansagra et al., 2008:1270); however, there was no mention whether these weapons were used against nurses. Physical violence without a weapon has been reported to occur in the form of restraining (25.5%) and punching (15.9%). Other reported forms of physical violence without a weapon were wrestling with a patient, being stalked and held hostage and being bitten by patient’s dog (McKinnon & Cross, 2008:13). In other instances, physical violence against nurses has occurred in the form of property damage (McKenna, Poole, Smith, Coverdale & Gale, 2003:59; Opie et al., 2010:20). This property could belong to the hospital (McKenna et al., 2003:13) or the individual nurse (Opie et al., 2010:20).

2.3.2 Psychological Violence

There is a consensus in findings from studies that psychological violence occurs more often than physical violence. Senuzun Ergun and Karadakovan (2005:154) reported that over 98% (n = 66) of nurses who participated in a study in Turkey had experienced psychological violence compared to 19% who experienced physical violence. Celik et al. (2007:359) established that 91% (n = 622) of the respondents had been victims of psychological violence before. They also found that of the 33% who reported to have experienced physical violence, all of them had also been victims of psychological violence. A study in Kuwait reported that 48% (n = 5876) of the participating nurses had experienced psychological violence in the previous six months prior to the study, compared to 7% who experienced physical violence (Adib et al., 2002: 469). Psychological violence occurs in many forms such as verbal aggression, bullying and sexual harassment (Senuzun Ergun & Karadakovan, 2005:156; Kwok et al., 2006:8).

Another form of psychological violence which has not been reported much is economic violence. A study in Sweden found that of those who had experienced violence, 0.5% was economic violence (Astrom, Bucht, Eisemann, Norberg & Saveman, 2002:70). This was experienced by 1 person out of the 201 nurses who reported to had experienced some form of violence. This was a case where the nurse was falsely accused of stealing money (Astrom et al., 2002:67). Economic violence in nursing is an issue which needs further investigation and a clearer description of what it entails.

Verbal aggression has been reported in a number of studies as the most common form of psychological violence against nurses (Abe & Henley, 2007; Celik et al., 2007:359; Khalil, 2009:211; Rowe & Sherlock, 2005:245; Shields & Wilkins, 2009:11). A study conducted in Philadelphia, USA
found that over 96% of the 307 nurses who participated reported to have experienced verbal aggression at work (Rowe & Sherlock, 2005:245). In this study, the verbal aggression was reported to have been expressed as anger, judging, criticising, or condescension.

Khalil (2009:208) identified six types of workplace violence amongst nurses described as psychological, vertical, covert, horizontal, overt and physical. The study also found that covert violence mostly occurred in the form of gossiping. Horizontal violence (also referred to as lateral violence) relates to behaviours among individuals who consider themselves peers with equal power but overall without power within the system (Stanely, Martin, Michael, Welton & Nemeth, 2007:1259). Horizontal violence occurred mostly in the form of bullying (Khalil, 2009:212). A study in Turkey found that the most common form of bullying that reported by nurses was being spoken to in a belittling manner (Yildirim & Yildirim, 2007:1447). Other reported forms of bullying were being blamed for things that one was not responsible for and being controlled when working. Overt violence mostly occurred in the form of shouting in public (Khalil, 2009:213). Although there was a distinction made for the types of violence amongst nurses, covert, overt, vertical and horizontal violence all seem to fall under psychological violence.

Incidents of sexual harassment against nurses have been reported. Sexual harassment can be in the form of physical or psychological violence (Nielsen, Bjorkelo, Notelaers & Einarsen, 2010:261; McKenna et al., 2003:60). Sexual harassment is reported by male and female nurses. The overall reported prevalence of sexual harassment is low; 30% in McKenna et al. (2003:69), 12% in Kwok et al. (2006:8), 0.7% in Kamchuchat et al. (2008:203) and 1.5% in Astrom et al. (2002:70). Other studies do not mention the occurrence of sexual harassment against nurses. Sexual harassment, however, is a traumatising experience for the victims. Kamchuchat et al. (2008:206) suggested that the reason why sexual harassment is underreported could be because of fear of stigmatisation and the psychological effect of the event. It is therefore important to recognise that the prevalence of sexual harassment against nurses could be higher than it has been reported in studies.

2.4 Perpetrators of workplace violence

2.4.1 Patient Related Violence

Violence against nurses in the workplace originates from various sources. Mullan and Badger (2007:37) found that 98% of violent acts experienced by nurses in aged care were perpetrated by patients. Similar findings where patients were the frequent perpetrators of violence have been reported by Senuzun Ergun and Karadakovan (2005:156) and Hegney et al. (2006:228). Although
more incidents of violence are reported to have been perpetrated by patients, most of those incidents are by a few patients (Weizzmann-Henelious & Osuutala, 2000:270). A study in a Finnish forensic psychiatric hospital found that 778 (80.2%) of reported violent incidents had been perpetrated by five patients only (Weizzmann-Henelious & Osuutala, 2000:270). There are differing reports about whether male or female patients are more likely to demonstrate violence against nurses. Mullan and Badger (2007:37) established that male patients are the ones who are mostly violent against nurses whereas Weizzmann-Henelious and Osuutala (2000:271) reported that female patients were most likely to be violent. Kwok et al. (2006:8) in Hong Kong compared the prevalence of violence against nurses working in male wards and nurses working in female wards and found that it was 91% and 82% respectively. With such variations in findings, it remains inconclusive if the patients’ sex is a determinant for being a risk for violence against nurses.

2.4.2 Patients’ relatives/Visitor related violence
Patients’ visitors/relatives are another common source of violence against nurses (Campbell, Messing, Kub, Agnew, Fitzgerald, Fowler, Sheridan, Lindauer, Deaton & Bolyard, 2011:84). A study in Iran found that 84% of violence incidents were perpetrated by patients’ relatives (Esmaeilpour, Salsali & Ahmadi, 2011:133). The study also revealed that most incidents of violence occurred during visiting hours in the hospitals, a time when the patients’ relatives and visitors were around. Kamchuchat et al. (2008:204) found that 51.9% of reported incidents of violence against nurses were perpetrated by patients’ visitors or relatives.

2.4.3 Colleague/Nurse related violence
Other reported perpetrators of workplace violence against nurses are fellow nurses, nursing management, other managers, doctors, and allied health professionals (Hegney et al., 2006:224). Campbell et al. (2011:84) found that 7.6% of physical violence was instigated by co-workers, 1.5% by physicians and 1.7% by supervisors. They also established that 35.5% of psychological violence was instigated by co-workers, 22.8% by physicians, and 11.3% by supervisors. In Turkey, Yildirim and Yildirim (2007:1449) revealed that workplace bullying was perpetrated by administrators (75.8%), co-workers (17.1%) physicians (4.1%) and subordinates (3%). Co-workers were reported to be the most common source of sexual harassment against nurses compared to patients and patients’ relatives (Kamchuchat et al., 2008:204). Doctors were reported to be most common source of violence in operating rooms than elsewhere (Celik et al., 2007:364). Although it has been established that workplace violence against nurses is perpetrated by various sources, there is no mention of the sex of these perpetrators except for the case with patients.
As aforementioned, nurses are sometimes perpetrators of violent incidents against fellow nurses (Abe & Henly, 2010; Johnson & Rea, 2009; Khalil, 2009:207). This applies to nurses of all cadres and positions. Violence amongst nurses mostly occurs in the form of bullying (Abe & Henly, 2010; Johnson & Rea, 2009). Johnson and Rea (2009) in a USA study reported that 27.3% of the 249 nurses who responded in the survey had experienced workplace bullying in the three months prior to the study. Most were bullied by their seniors whilst a few were bullied by subordinates (Johnson & Rea, 2009).

Abe and Henly (2010) in Japan found that nurses, who had been victims of workplace violence from fellow nurses, also experienced other negative acts at work such as someone withholding information, being humiliated, and being shouted at. Khalil (2009:213) reported that professional nurses were identified as the main perpetrators of violence against fellow nurses. Woelfel and McCaffrey (2007:130) condemned the occurrence of violence amongst nurses and argued that although there are explanations why violence occurs among nurses, it cannot justify the violence among people in a profession built on caring.

2.5 Causes of workplace violence

Violence against nurses occurs due to various reasons. Patients most likely to be violent are those with severe symptoms of their disease, or those who abused drugs and alcohol (Kamchuchat et al., 2008:206). May and Grubbs (2002:14) found that most (79.1%) of the violent incidents against nurses by patients were attributed to cognitive dysfunction caused by head injury; dementia and developmental delay. Substance abuse contributed to 60% of the incidents; 55.8% were due to anger related to long waiting times and anger towards nurses related to enforcement of hospital policies such visiting hours or number of visitors per room (May & Grubbs, 2002:14). Reported reasons why patients’ visitors have been violent against nurses include: anger towards staff members related to patients’ situations (58.1%); anger related to long waiting times (47.7%); anger related to the health care system (46.5%); substance abuse (22.1%) and cognitive dysfunction (3.5%) (May & Grubbs, 2002:14).

The origins of workplace violence amongst co-workers are believed to have been preceded by longstanding power struggle (Strandmark & Hellberg, 2007:332). Conflict in professional values between nurses and other health care professionals is a major source of workplace violence (Standmark & Hallberg, 2007:336). Differences in approach to patients such as the biomechanical view by other health care professionals and psychosocial view by nurses are an example of such
professional values which can result in violence. Some doctors have been violent towards nurses for refusing to carry out orders which the nurses found to be in conflict with their professional values (Kamchuchat et al., 2008:204).

Hutchinson et al. (2006) explained bullying amongst nurses from a qualitative study they conducted in Australia. Bullying amongst nurses was found to be a result of an informal power hierarchy which existed at the workplace. In this hierarchy, the bullies were at the top and the bullied were at the bottom (Hutchinson et al., 2006). The existence of bullying was denied by management and it became part of the work environment. The bullies made the bullied seem and feel incompetent by ignoring their efforts at work, criticising them, and sidelining them in activities at work (Hutchinson et al., 2006). The bullies controlled nursing roles and tasks, and started to gain favour and support from the management. This enabled the bullies to use emotional abuse and psychological violence against their colleagues. Hutchinson et al. (2006) concluded that the understanding of workplace bullying is important in the management of bullying at an institution. Although the findings of Hutchinson et al. (2006) cannot be generalised to other settings, they provide a framework for the understanding of workplace bullying.

2.6 Settings and times of workplace violence

There are significant differences in levels of workplace violence against nurses in various fields of nursing (Hegney et al., 2006:223). Violence against nurses has been reported in a number of areas including correctional services (Farrel et al., 2006:783), emergency departments (Taylor & Rew, 2010:1079), aged care hospitals (Hegney et al., 2006:223), psychiatric units, private hospitals, community services, orthopaedics (Kwok et al., 2006:8) and maternity units (Khalil, 2009:37). Basically, there is some level of violence against nurses at any setting where nurses work. In most cases, the incidents of violence against nurses happen when they are on duty; however, there have been reports where nurses have been attacked away from work whilst off duty (Opie et al., 2010:21). The nature and extent of the violence is generally influenced by the nature of patients, availability of resources and interpersonal relations amongst co-workers (Bilgin, 2009:258).

2.6.1 Violence against nurses in Psychiatric facilities

Nurses working in psychiatric hospitals are considered to be more at risk of violence than other categories of nurses (Bilgin, 2009: 256; Hegney et al., 2006:227). Reported prevalence of workplace violence against nurses in psychiatric facilities is as high as 100% (Bilgin, 2009:255). Maguire and Ryan (2007:123) found that violent incidents against nurses in the psychiatric facilities was higher in traditional hospital settings compared to acute in-patient units, the community residential facilities,
day hospitals, or any other types of units for psychiatric care. A different finding was reported by McKinnon and Cross (2008:13) who revealed that nurses working in in-patient psychiatric units had the same frequency of experiencing violence as those working in community psychiatric services.

2.6.2 Violence against nurses in Emergency Departments

Another setting in which high levels of violence against nurses occur is in emergency departments (Taylor & Rew, 2010:1079). Kwok et al. (2006:8) established that 100% of the nurses working in the emergency department reported to have been victims of workplace violence in the preceding twelve months. High prevalence rates of violence against nurses working in the emergency departments have also been reported by Senzun Ergun and Karadakov (2005:154) in a Turkish city hospital. The incidence of verbal violence against nurses was found to be 98.5%. Working in the emergency department is said to increase the risk of violence by 80% (Kamchuchat et al., 2008:201). In a survey on workplace violence across 65 USA emergency departments, there were over 3461 reported attacks on staff by patients and visitors in a period of five years (Kansagra et al., 2008:1270). There was a high prevalence of workplace violence in emergency departments that provided adult only services compared to those that treated adults and children (Kansagra et al., 2008:1271).

There are several factors that contribute to the high risk of workplace violence in emergency departments. Some of these factors are patient related, for instance, patients who come to the emergency departments have access to weapons and psychoactive substances which make them potentially violent (Emergency Nurses Association, 2008:49). Some factors are staff related because the emergency departments are mostly under staffed, the risk of violence increases due to delay of services (Emergency Nurses Association, 2008:49). Others factors are environment related, since the emergency departments have poor control of people’s movements and persons who are prone to violence have relatively easy access (Emergency Nurses Association, 2008:49).

2.6.3 Violence against nurses in relation to time

The occurrence of workplace violence against nurses is also determined by the place (for instance bedside) within the unit and time of day. Esmaeilpour et al. (2011:133) found that for nurses working in emergency departments in Iran, most physical violence incidents (48.5%) occurred near the patients’ beds while verbal abuse (49.1%) mostly occurred in nursing stations. This study also discovered that 40% of the physical violence incidents occurred on Saturdays, Mondays and Wednesdays during the afternoon shift (Esmaeilpour et al., 2011:133). 42.9% of the verbal abuse occurred during the morning shifts also on Saturdays, Mondays and Wednesdays because these are
visiting days at the hospitals (Esmaeilpour et al., 2011:133). AbuAlRub et al. (2007:287) also found that violence against nurses mostly occurred during visiting hours. The relationship between workplace violence and time on duty is not clear due to conflicting findings. In an Egyptian study, working the night shift was said to have higher chance for being assaulted than working in the morning shift (Abbas et al., 2010:29). Estryn-Behar et al. (2008:111) also found that those working night shifts were 2.17 times more likely to be attacked than those who did not work night shifts. In Sweden, Lundstrom, Saveman, Eisemann and Astron (2007:86) noted that violence against nurses occurred mostly during the day time. Kamchuchat et al. (2008:203) found no association between violence and time, but reported that the shift between 8am and 4pm had the highest frequency (35%) of violent incidents.

2.6.4 Violence against nurses in aged care facilities

Nurses working in the aged care facilities are another group exposed to high levels of workplace violence (Hegney et al., 2006:226). It is reported that these nurses experience higher levels of workplace violence compared to those working in public hospitals and private hospitals (Hegney et al., 2006:226). A Canadian national survey found that the percentage of nurses reporting to have experienced physical violence by patients was higher amongst nurses working in a geriatrics setting than other settings in the country (Shields & Wilkins, 2009:12). Fifty percent of nurses working in the geriatrics setting experienced workplace violence as compared to: 47% in palliative care; 44% in psychiatric hospital; 44% in critical care; 42% in emergency room; 32% in medical/surgical units; 35% in several clinical areas; 29% in rehabilitation; 23% in paediatrics; 17% in oncology; 16% in operating rooms and recovery rooms; and 6% in newborn care. Higher levels of violence by geriatric patients have been attributed to confusion, dementia and Alzheimer’s disease (Campbell et al., 2011:88).

2.6.5 Violence against nurses in private hospitals

Workplace violence against nurses working in private hospitals is also high. Kwok et al. (2006:8) established that the prevalence of workplace violence against nurses in private hospitals was 85% seconded by 84% in psychiatric hospitals. Yildirim and Yildirim (2007:1449) found that workplace bullying against nurses was statistically significantly higher in private hospitals than in public hospitals. These studies however did not mention the type of patients who were in private hospitals or the speciality of these hospitals therefore it is difficult to conclude whether private hospitals really have higher prevalence rates of violence than public hospitals. As discussed earlier, some specialities have a high prevalence rate of reported workplace violence due to the nature of the conditions of patients they treat.
2.7 Associated risk factors for workplace violence

2.7.1 Gender
A number of factors have been identified as risks for being a victim of workplace violence for nurses. One of the risk factors is being male (Esmaeilpour et al., 2011:136). McKinnon and Cross (2008:12) found that 100% (n = 20) of the male respondents had been victims of workplace violence compared to 83.7% of the female respondents. In Egypt, Abbas et al. (2010:29) found that 35.3% of the male nurses who participated in their study had experienced workplace violence compared to 24.2% of the female nurses. Hegney et al. (2006:228) also found that in Australian public hospitals, the proportion of male nurses reporting to have experienced workplace violence was significantly higher (p = <0.01). A national survey in Canada found that 46.2% of the female nurses who responded, reported that they had experienced workplace violence as compared to 54.6% of male nurses (Shields & Wilkins, 2009:11). Campbell et al. (2011:87) found that male nurses were twice as likely to have experienced workplace violence compared to female nurses.

High prevalence rates of workplace violence against male nurses by patients has been attributed to the fact that male nurses tend to be protective of their female counterparts and often are in the forefront when restraining aggressive patients (Shields & Wilkins, 2009:14). Kamchuchat et al. (2008:206) have argued that sex is not a significant determinant to the risk of workplace violence due to the predominance of females in the nursing profession. Johnson and Rea (2009) found no relationship between workplace violence and sex of the nurse. The relationship between gender of the nurse and being a victim of workplace violence is unclear and needs further research.

2.7.2 Work Experience
There are different findings from studies regarding the relationship between workplace violence and work experience and/or age of the victim. A study by Shields and Wilkins (2009:14) noted that nurses with less work experience reported higher frequencies of experiencing workplace violence compared to those with greater work experience. Forty eight percent (48%) of nurses who had worked for less than five years reported to have experienced different forms of workplace violence compared to 39.1% of those who had worked for more than 30 years. Being a victim of workplace violence for less experienced nurses has been attributed to their lack of skills to predict or manage violent situations (Shields & Wilkins, 2009:14).

In contrast to the above findings, McKinnon and Cross (2008:13) found a statistically significantly high prevalence of workplace violence amongst nurses with 11 or more years of work experience.
than those with less than 11 years’ experience (p<0.000). This corresponds with findings of Ghasemi, Rezaee, Jafari, Ashtiani, Izadi and Ranjbar (2009:45) who found an association between exposure to workplace violence and being older than 35 years and work experience of more than 10 years. Johnson and Rea (2009) also did not find an association between workplace violence and age or work experience. With such conflicting findings, the relationship between work experience or age and being victim of workplace violence remains unclear. A probable reason why it is difficult to compare work experience and risk of violence from study to study is the use of different cut off points for years of experience. As noted above, some studies used ten years (Ghasemi et al., 2009:45), others eleven years (McKinnon & Cross, 2008:13) and yet others used five years (Shields & Wilkins, 2009:14). It therefore remains inconclusive whether more or less work experience is a risk factor for experiencing violence at work.

### 2.7.3 Race and ethnicity

Race and ethnicity are said to create tension in the work place and contribute towards workplace violence against nurses (Campbell et al., 2011:88). In the USA, Campbell et al. (2011:87) found that nurses from other races (African American, Asian, and Pacific) were less likely to experience workplace violence than those of the white race. A reason for this found could be that the majority of the participants (61%) in the sample were white, while other races were under-represented. In the UK, immigrant nurses have been found to be prone to workplace violence (Alexis, Vydelingum & Robbins, 2007:2225). Black and minority ethnic nurses in the UK reported that white UK nurses were sometimes abusive towards the foreign born nurses (Alexis et al., 2007:2225). This is in contrast to the Johnson and Rea (2009) study which found no association between workplace violence against nurses and being an immigrant nurse or of a different race in the USA. The issue of race or ethnicity and violence is setting specific because of the variations of racial and ethnic groups in different countries. This can be better examined by conducting research in the specific population where one wants to identify the relationship.

### 2.7.4 Cadre of nursing

The relationship between the cadre of nursing and the risk of violence is difficult to ascertain because of the different categories, qualifications and number of nurses for each category in different countries. The general picture is that nurses belonging to a lower level cadre are more at risk of violent attacks as compared to nurses in a higher level cadre. Hegney et al. (2006:228) found that assistant nurses and enrolled nurses reported more violence than registered nurses. Similar findings were reported by Estryn-Behar et al. (2008:111) who found that nursing aids/assistants were more at risk of violence experience than registered nurses. Increased level of education for the
2.7.5 Work load
Abbas et al. (2010:29) found that working in a place crowded with colleagues increased the odds of being exposed to a violent incident compared to working with low numbers of colleagues. In contrast, working in isolation has also been found to increase the risk of workplace violence for nurses (Shields & Wilkins, 2009:12). There is no trade-off point given as the appropriate ratio of nurse to patient to decrease workplace violence. Shields and Wilkins (2009:12) also found that nurses who perceived that staffing levels were inadequate were more likely to be victims of workplace violence. It is difficult to verify the association between the number of nurses working and violence because the nurses-patient ratio of the facilities where the studies were conducted are not given.

Nurses perceive that violence is associated with increased workload; lack of understanding by patients’ relatives on hospital guidelines; and managements’ tolerance of violent acts from other staff (Hegney et al., 2006:230). Roche et al. (2009:18) found that most nurses perceived that violence against nurses increased when there were few registered nurses; increased workload; poor relationships with doctors; unexpected changes in patient needs; poor leadership and when there were more patients. A study in Iran found that nurses perceived that workplace violence was on the increase in the country because of the unstable political environment and war (AbuAlRub et al., 2007:286). These perceptions are likely to differ from setting to setting and it is therefore important to research the context specific perceptions for nurses. Identifying these perceived reasons of increased workplace violence is one step towards the eradication of workplace violence.

2.7.6 Nurses’ interpersonal style
Nurses’ interpersonal style is alleged to contribute to experience of aggressive behaviours from patients and patients’ relatives (Bilgin, 2009:258). Nurses who were less sociable and less tolerant were more exposed to physical assault than those who were more sociable. Related to this are findings by Shields and Wilkins (2009:12) where nurses low co-worker support, low supervisor support and poor physician relationship increased the risk of experiencing physical and emotional assault. The relevance of interpersonal style may be difficult to apply in settings with severe shortage of nurses like Malawi, where some of the nurses work on their own.
2.7.7 Training related to workplace violence

Training nurses on workplace violence has been found to reduce the incidence of verbal abuse by 40% (Kamchuchat et al., 2008:206). The training course on workplace violence covers different areas including: communication skills; understanding patients’ needs; how to respond appropriately to patients’ needs; improving of nurses’ personalities; managing aggression; and how to defuse hostile situations (Kamchuchat et al., 2008:202). Although training nurses on management of workplace violence does not minimise their exposure to violent incidents, it has been found to reduce the incidence of violence by up to 50% (Deans, 2004:17).

2.8 Reactions of nurses to workplace violence

2.8.1 Judgment of the violent incident

Nurses’ reactions to incidents of violence differ widely. In a study involving nurses working in Emergency departments by Luck, Jackson and Usher (2008:1074) in Australia, it was established that nurses made judgments about specific episodes of violence at work. The judgments informed their verbal and behavioural reactions to the violence; their decision to report; emotional effects; and how they chose to deal with event (Luck et al., 2008:1074). To make a decision, the nurses considered why they had been a target for the violence; the degree to which the violence perpetrator could be held accountable for the violence episode; and the reason why the violence perpetrator presented him/herself to the emergency department (Luck et al., 2008:1074). Some incidents though violent in nature, are not classified as violence by the nurses. In situations where nurses felt that the perpetrator lacked intent, as in the case of mentally ill patients, the incident is sometimes disregarded, and no action is taken (Senuzun Ergun & Karadakovan, 2005:159). These findings by Luck et al. (2008:1074) and Senuzun Ergun and Karadakovan (2005:159) provide important insights into what influences nurses’ reactions when they fall victim to workplace violence.

2.8.2 Reporting the violent incident

Most incidents of workplace violence against nurses go unreported (Esmaeilpour et al., 2011:134; Farrel et al., 2006:785; Kwok et al., 2006:8; Senuzun Ergun & Karadakovan, 2005:159). Senuzun Ergun and Karadakovan (2005:159) found that most nurses (83.5%) who had been victims of workplace violence did not report the incidents because they felt that no legal action will be taken. There are several reasons why nurses do not report incidents of violence. Adib et al. (2002:473) found that nurses did not report incident of violence for the following reasons: “the incident
remained under control; there was no harm meant or done; the victim did not believe reporting is useful; the perpetrator apologized; the perpetrator was confused; the victim feared for her professional record”.

It has been suggested that another reason why incidents remain unreported is that nurses do not know the reporting procedures of incidents of violence (Hegney et al., 2006:229). Even in institutions where there are policies and guidelines on reporting and handling of violent incidents against nurses, only as little as 18% of nurses reported to be aware of the existence of such policies (Hegney et al., 2006:229). There is a need to investigate if the presence of such policies and guidelines, and nurses’ reported awareness of the guidelines helps to prevent or reduce workplace violence.

2.8.3 Seeking help from others
Nurses who have been victims of workplace violence do sometimes seek for help from other sources. Adib et al. (2002:473) found that of the respondents who indicated that they had experienced physical violence (n = 423), 66.7% asked for help, while for those who experienced verbal violence (n = 2813), 40.6% asked for help. The study in Hong Kong revealed that 82% of the nurses who had been victims of workplace violence confided in friends, family members or work colleagues (Kwok et al., 2006:8). Forty-two percent (42%) ignored the incident while about 3% sought help from a union (Kwok et al., 2006:9). A study conducted in Iran found that 14.3% of the nurses who experienced physical assaults and 7.4% of those who experienced verbal assaults pursued legal action (Esmaeilpour et al., 2011:134). In the same Esmaeilpour et al. (2011:134) study, another 11.4% investigated the cause of the physical violence and 25.8% examined the source of the verbal violence.

2.9 Effects of workplace violence

2.9.1 Physical effects
Violence against nurses has physical and psychological effects on the victims (Franz, Zeh, Schoblon, Kuhnert & Nienhouse, 2010:4). A study in Australia explored the severity of physical effects that nurses experience as a result of workplace violence ranged from mild injuries such as bruises to serious injuries such as fractures (McKinnon & Cross, 2008:13). Other types of minor injuries that nurses experienced reported in the same study were scratches, cuts, abrasions, sprains. Major injuries reported were muscle tears and fractures (McKinnon & Cross, 2008:13). Physical reactions such as feeling tired, having headache, alterations in appetite and having gastrointestinal problems
have also been reported in nurses who experience workplace bullying (Yildirim & Yildirim, 2007:1450). Nurses who have been victims of sexual abuse are also at a high risk of contracting sexually transmitted infections (STI) from the assailants (Allsworth, Anand, Redding & Peipert, 2009:532).

Franz et al. (2010:4) in Germany found that of the nurses who reported to have been victims of violence within the preceding year, 44.7% experienced physical impairment, 10.9% of whom had to receive medical treatment. Another study found that high levels of perceived distress in nurses following an assault from a patient are directly correlated to the perceived seriousness of the injury (Nhiwatiwa, 2003:565). Nurses who perceived that the experienced assault was serious were found to have high levels of distress when assessed using the Impact of Event Scale and the General Health Questionnaire (Nhiwatiwa, 2003:565).

2.9.2 Psychological effects
Being a victim of workplace violence has been found to make the nurses feel extremely bothered by the event and to experience repeated disturbing memories, thoughts and images of the attack (Esmaeilpour et al., 2011:135). Incidents of Post-traumatic stress disorder (PTSD) have also been reported in nurses who experienced violence at the workplace (Inoue, Tsukano, Muraoka, Kaneko & Okamura, 2006:33). Inoue et al. (2006:29) assessed the psychological impact of verbal abuse or violence by patients on nurses working in psychiatric departments in Japan using the Impact of Event Scale Revised (IES-R) to measure the psychological impact. This is a self rating scale for the measure of PTSD. 21% of the nurses who had been exposed to verbal abuse or violence had high scores, suggestive of PTSD (Inoue at al., 2006:31). Some nurses are reported to have attempted suicide or contemplated suicide as a result of being a victim to workplace violence (Kwok et al., 2006:9; Yildirim & Yildirim, 2007:1449). In Hong Kong, a nurse attempted suicide following verbal and physical abuse (Kwok et al., 2006:9) and in Turkey, 10% of nurses who reported to have experienced workplace bullying stated that they had contemplated suicide because of the bullying (Yildirim & Yildirim, 2007:1449).

2.9.3 Work related effects
Workplace violence influences the work of the nurses who have been victims (Celik et al., 2007:363; Franz et al., 2010:4). Violence against nurses compromises the quality of care that nurses provide to their patients. Roche et al. (2009:18) found that an increase in violence against nurses resulted in an increase in medication errors and patient falls. Mackinnon and Cross (2008:13) revealed that 96.6% of the respondents who had been victims of violence at workplace were afraid at work whilst 72.2%
felt that being a nurse compromised their safety. Other reported effects of being a victim of violence at work by nurses from another study are anxiety, tension and having less fun at work (Franz et al., 2010:4).

On the positive side, some nurses who had been victims of violence at their workplace became more careful when working so that they could not fall victim again (Franz et al., 2010:4). Yildirim and Yildirim (2007:1450) also found that nurses who had been victims of workplace bullying reported that they started working more carefully, harder and became more organised to avoid criticism. The finding that being a victim of workplace violence makes nurses more careful and prevents further victimisation is questionable because others have reported that most nurses who experience workplace violence are subjected to repeated incidents of violence of over ten times a year (Hutchinson et al., 2006; Kamchuchat et al., 2008:203; Kwok et al., 2006:8).

Nachreiner, Gerberrich, Ryan and McGovern (2007:672) conducted a nested case-control study in Minnesota, United States of America (USA) with nurses to identify rates of violence against nurses and their perceptions of the work environment. A total of 1475 nurses who had experienced workplace violence in the previous 12 months were the cases and some 1425 nurses who had not experienced any workplace violence within the same time frame were the controls (Nachreiner et al., 2007:673). The study revealed that those who had experienced violence were more likely than those who had not experienced violence to report higher levels of work stress. Those who experienced workplace violence also expressed that violence was an expected part of the job (Nachreiner et al., 2007:675). On the other hand, those who had not experienced violence were more likely to perceive higher levels of morale and had a positive attitude towards the work environment (Nachreiner et al., 2007:675).

Some nurses have expressed the desire to leave the nursing profession as a result of being a victim of violence (Farrel et al., 2006:782). Other nurses who have been victims of workplace violence seriously consider quitting their jobs or seeking alternative employment (Yildirim & Yildirim, 2007:1452). Yet other nurses, have actually resigned from their work due to the experience of workplace violence (King & McInerney, 2006:70). It is therefore suggestive that workplace violence has an effect on the retention of nurses in the health care workforce and this is an issue which needs further research.
2.10 Summary
Research done in America, Africa, Asia, Australia and Europe provides evidence that nurses are victims of workplace violence. The extent of violence differs from country to country. The nature of violence experienced is largely psychological and to a lesser extent physical. Violence affects nurses’ lives and performance at work. Nurses working in different units and different speciality areas within hospitals experience different levels of violence and are affected differently by the violence. All the above cited studies were conducted in institutions which have different staff levels, equipment and culture from a typical Malawian hospital. This makes it difficult to generalise the findings from those studies to a Malawian setting. Another reason why it is difficult to generalise these findings is the use of different terminologies to define violence. This study therefore aimed to investigate and describe the nature and extent of violence against nurses and the perceived effects thereof on them in five selected health facilities in the southern region of Malawi.
Chapter Three

Methodology

3.1 Introduction

This chapter describes in detail the methods that were employed to investigate the nature and extent of violence against nurses in the southern region of Malawi. A descriptive, cross-sectional study was considered appropriate for the purpose of describing what exists regarding workplace violence against nurses in Malawi and determining the frequency with which it occurs (Burns & Grove, 2005:232). Data was collected over a two month period in five selected health facility sites in the southern region of Malawi.

3.2 Setting of the study

Five government health facilities located in the southern region of Malawi were conveniently selected as the setting for data collection for this study. These facilities were selected because of their accessibility and proximity to the researcher. They are located in two cities of Zomba and Blantyre in the southern Region of Malawi. The facilities comprised two central hospitals, two health centres and one psychiatric hospital. Below is a description of these facilities.

3.2.1 Central hospital 1 (Facility 1)

This is a large tertiary government funded teaching hospital which provides all levels of health care. It is one of the four government-run central hospitals in the country with a bed capacity of 1500 and bed occupancy of over 100% at any given time (Kaufman, 2011). The hospital has an average of 95 000 admissions per year and attends to an average of 450 000 out patients annually (Mwafulirwa, 2010). The staff complement of nurses is about 250, with an estimated nurse to patient ratio of 1:150-200 (Mwafulirwa, 2011). On average, 100 nurses are on duty each day. It provides primary, secondary and tertiary health care. The departments include: outpatient department (OPD)/casualty; a medical department; surgical and orthopaedic department; a maternity unit; paediatric department; physiotherapy; dental and an ophthalmology department. The hospital also runs several other clinics which include the antenatal clinic; Antiretroviral (ARV) clinic; sexually transmitted infections (STI); diabetes, chest; psychiatry; and dermatology clinic.
3.2.2 Central hospital 2 (Facility 2)
This is another tertiary hospital located in Zomba city, in the southern region of Malawi providing primary, secondary and tertiary health care. Services offered include general adult outpatient services as well as specialised clinics (ARV clinic, STI clinic, family planning clinic, antenatal clinic, diabetic clinic, dental clinic, and dermatology clinic), medical department; surgical department; maternity unit; ophthalmology; and a paediatric department. The hospital attends to about 300 000 outpatients and admits over 200 000 patients annually (Masinga, 2011). It has an estimated capacity of over 500 beds and a bed occupancy rate of almost 100%. The facility has a staff complement of 130 nurses, about 70 nurses are on duty each day and the nurse to patient ratio averages 1:40 (Masinga, 2011).

3.2.3 Psychiatric hospital (Facility 3)
This is the only government psychiatric hospital in the country and it provides tertiary mental health services. The hospital is located in Zomba city in the southern region of Malawi and admits about 1500 to 2000 patients annually (Phiri: 2011). It has a bed capacity of 330 (Phiri, 2011). The facility has four units, namely acute wards; rehabilitation wards; children’s ward; and community services. It has a staff complement of 25 nurses, with an average of 12 nurses on duty during week days, giving a nurse to patient ratio of 1:25-30. There are 4 nurses on duty during weekends with a nurse to patient ratio of 1:60-80 and two nurses on duty for night shifts, with a nurse to patient ratio of 1:125 (Phiri, 2011).

3.2.4 Health centre 1 (Facility 4)
Health centre 1 is located in one of the townships in Blantyre city and it is run by the Blantyre District Health Office (DHO). The district has 10 health centres which serve as primary and secondary health care sites for surrounding communities (MoH: 2011). The facility has a dispensary, and provides primary maternity services (antenatal care and delivery), under five services, adult outpatient services and HIV services. It was purposively selected for this study because it is located in one of the most populous town ships in the city. The health centre has an annual outpatient attendance of over 70 000 clients, an average of 8 nurses are on duty each day. These nurses work in collaboration with 2 Medical Assistants (Chawirima, 2011).

3.2.5 Health centre 2 (Facility 5)
Health centre 2 is located in Zomba city also in the southern region of Malawi. It is one of the 13 health centres operated by Zomba DHO (MoH, 2011). The health centre was chosen because it is the only one located within the urban area of Zomba district and it was easily accessible. Like health
centre 1, this health centre also has a dispensary and provides primary maternity services, adult outpatient services, under-five services and HIV services (Zulu, 2011). Annual outpatient attendance is over 90000, and on average 8 nurses are on duty each day. The nurses work in collaboration with 3 medical assistants (Zulu, 2011).

### 3.3 Study population

An estimate of 9107 nurses and midwives are registered or enrolled with the Nurses and Midwives Council of Malawi (NMCM) (Chilomo, 2010). Less than half of these nurses and midwives are employed in public hospitals (WHO, 2008). The nurses are registered or enrolled in various categories with the NMCM which include: State Registered Nurse (SRN); State Registered Nurse Midwife; State Registered Midwife; State Registered Psychiatric Nurse; State Registered Paediatric Nurse; Enrolled Nurse; Enrolled Nurse Midwife; Enrolled Community Nurse (Midwife); Enrolled Psychiatric Nurse (Midwife); Nursing Midwifery Technicians; Nursing Technicians; and Psychiatric Nursing Technicians. Table 3.1 below is a description of the cadres of nurses in Malawi according to the NMCM (2009).
Table 3.1: Categories of nursing cadres in Malawi and their description (NMCM, 2009)

<table>
<thead>
<tr>
<th>Categories of Nursing in Malawi</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Registered Nurse</td>
<td>Holding a Bachelor of Science degree in nursing</td>
</tr>
<tr>
<td>State Registered Nurse Midwife</td>
<td>An SRN with a university certificate in midwifery or those who have gone through a two year diploma upgrading course in nursing and midwifery.</td>
</tr>
<tr>
<td>State registered midwife</td>
<td>Holding a post basic Bachelor of Science degree in midwifery or a university certificate in midwifery</td>
</tr>
<tr>
<td>State registered psychiatric nurse</td>
<td>Holding a post basic Bachelor of Science degree in mental health and psychiatric nursing</td>
</tr>
<tr>
<td>Enrolled nurse</td>
<td>Have a certificate in nursing</td>
</tr>
<tr>
<td>Enrolled nurse midwife</td>
<td>Have a certificate in nursing and a certificate in midwifery</td>
</tr>
<tr>
<td>Enrolled community nurse (midwife)</td>
<td>Enrolled nurse (midwife) with a post basic certificate in community nursing</td>
</tr>
<tr>
<td>Enrolled psychiatric nurse (midwife)</td>
<td>Enrolled nurse (midwife) with a post basic training in psychiatric nursing</td>
</tr>
<tr>
<td>*Nursing midwifery technicians</td>
<td>Those who have completed a three year integrated training program in both nursing and midwifery.</td>
</tr>
<tr>
<td>* Nursing technicians</td>
<td>Those who have completed two year training in nursing at technician level.</td>
</tr>
<tr>
<td>*Psychiatric nursing technicians</td>
<td>Those who have completed a one year post basic training in psychiatric nursing.</td>
</tr>
</tbody>
</table>

* Technicians in Malawi are nurses [formerly trained as enrolled nurses]

The target population for this study were nurses working in the five hospitals which were the site for this study. An estimated 430 nurses were working in these facilities at the time data was collected. Each of the five facilities had a varying mix of the categories in which the nurses are registered or enrolled.

3.3.1 Inclusion criteria

- All categories of nurses registered with the NMCM working in the five public hospitals and clinics.
- Nurses permanently employed at the study site at the time of data collection.
- Nurses employed by the government*.
- Both male and female nurses were included in the study.

* Within some government health facilities there are some nurses who are employed by non-governmental organizations to top up the staffing level or to do research work. Such nurses also help with provision of care to clients/patients in these facilities. These nurses were excluded because their employment contract is different from those nurses employed by government and usually have a better remuneration package. These nurses were excluded because they may have a different level of job satisfaction and/or morale compared to the nurses employed by government.
3.3.2 Exclusion criteria

- Student nurses
- Nurses on leave
- Nurse educators (registered nurses) who work or supervise students in the study sites will not participate in the study.

3.3.3 Recruitment strategy

At each facility, research assistants (see 3.6.3) approached potential respondents and sought their consent to participate. Those who accepted were given the questionnaire and asked to return it within three weeks by dropping the completed questionnaire in a designated box.

3.4 Sample

Five health facilities which were accessible to the researcher’s home town were conveniently selected. These facilities, while not representative, comprised a mixture of healthcare services (see 3.1). In these facilities the estimated number of nurses who are registered or enrolled is 430. This included those away on various purposes including annual leave, study leave, sick leave or attending workshops away from work. Using expected frequency rates of 55% and 95% confidence interval a sample of 120 was required. However, as the study sites had differing numbers of staff, the researcher aimed to ensure that all nurses in each of the small facilities were provided with a questionnaire. 50 nurses were targeted at Facility 1; 25 nurses at Facility 2; 20 nurses at Facility 3; 12 nurses at Facility 4; and 13 nurses at Facility 5. For the larger facilities, questionnaires were provided for the number of staff on duty during the three week collection period. This meant that some nurses were excluded due to being on leave or other absences. A non-probability sampling technique was used which meant that not everyone had an equal opportunity of being selected into the sample (Burns & Grove, 2005:40).

3.5 Ethical and Legal considerations

The research study complied with the World Medical Association’s (WMA) ethical principles on research involving human subjects as stipulated in the WMA Declaration of Helsinki (2008) and as required by the Constitution of the Republic of South Africa (1996) under the Bill of Rights (chapter II) and the Constitution of the Republic of Malawi (1999) Bill of Rights (chapter IV). The research proposal to conduct this study was submitted to the Faculty of Health Sciences Research Ethics committee and approval was granted (HREC REF 544/2010 – Appendix B). The proposal was also submitted to the National Health Sciences Research Committee at the Ministry of Health in Malawi.
and approval was granted as well (NHSRC 948 - Appendix C). This was in accordance with the principle of the WMA Declaration of Helsinki (2008:3) which states that “[t]he research protocol must be submitted for consideration, comment, guidance and approval to a research ethics committee before the study begins”.

In respecting the autonomy of the respondents, participation in the study was voluntary and all information obtained was anonymous and/or confidential (WMA Declaration of Helsinki, 2008: 3). An information sheet was attached to the questionnaire (see Appendix D), informing the respondents of their right to withdrawal from the study at any point. The information sheet was provided in English and Chichewa (the local language in Malawi). Returning of a completed questionnaire was deemed as consent to participate (Burns & Grove, 2005:196). The WMA Declaration of Helsinki (2008:3) stipulates that that “The potential subject must be informed of the right to refuse to participate in the study or to withdraw consent to participate at any time without reprisal”. Respondents who chose to withdraw or not to return questionnaires were not punished in any form. It was not anticipated that persons who consent to complete the questionnaire would be subjected to harm.

The names of respondents or health facilities where the participants were working were not used on the questionnaires. To ensure anonymity and confidentiality, only code numbers were used (Burns & Grove, 2005:188). Accessibility of collected data was restricted to the researcher and the five research assistants (one from data collection site) who assisted with data collection. After data collection, the completed questionnaires were kept in safe storage which only the researcher could access. In no way did or will the researcher disclose information in a manner traceable to any of the respondents. The WMA Declaration of Helsinki (2008:3) stipulates that “every precaution must be taken to protect the privacy of research subjects and the confidentiality of their personal information and to minimize the impact of the study on their physical, mental and social integrity”.

All respondents in the study were treated fairly and equally with no undue burdens subjected to them (Burns & Grove, 2005:189). To allow this, the respondents were given three weeks to complete the questionnaire in their own free time. The WMA Declaration of Helsinki (2008:3) states that “... research study involving human subjects must be preceded by careful assessment of predictable risks and burdens to the individuals and communities involved in the research in comparison with foreseeable benefits to them and to other individuals or communities affected by the condition under investigation”.
The risks to the respondents for this study did not outweigh benefits of the research to the participant or the nursing profession (Burns & Grove, 2005:191). The anticipated risk for the respondents was spending time to complete the questionnaire. The impact of this was minimised by allowing the nurses to do this in their own time, and consequently there was no compromise in the quality of care that was rendered to the patients. The respondents’ information sheet provided an estimate of the time required for completion of the questionnaire. While there was no direct benefit to participation in the study, the study results have produced information which may be utilised in policy and decision making to manage the issue of violence in nursing in the Malawi. The WMA Declaration of Helsinki (2008:3) stipulates that “Medical research involving human subjects may only be conducted if the importance of the objective outweighs the inherent risks and burdens to the research subjects”.

There were no harmful effects anticipated or reported by those who participated in this study. Provision was made should respondents have requested assistance or identified to be in need of assistance to be referred to Human Resource or staff health clinics (Appendix E) at their work place to maximize beneficence and to reduce harm (Burns & Grove, 2005:190). The WMA Declaration of Helsinki (2008:3) states that “every precaution must be taken . . . to minimize the impact of the study on [the respondents’] physical, mental and social integrity”.

3.6 Data collection

3.6.1 Development of the questionnaire

Data was collected using a structured questionnaire (see Appendix D). Items in the questionnaire were adapted from two instruments, one developed by Khalil (2009:37) and another by Kwok et al. (2006:7) for the assessment of violence against nurses. The questionnaire is a preferred method of data collection because it is an efficient and cost effective means of collecting data from a large number of respondents; can be anonymously completed; and respondents are able to express their views in their own words in response to the open ended questions without fear of recrimination (Burns & Grove, 2005:398). The questionnaire was provided in English only, as all nurses in Malawi are trained in English regardless of their home language and English is the medium of communication in the health system. The information letter was translated (Appendix D) and made available in Chichewa (the local language). The 21 item questionnaire comprised a mixture of closed
or structured questions, Likert scales, rank order questions and open ended questions. Section A of
the questionnaire elicited demographic information of the respondents and section B had questions
regarding violence against nurses.

3.6.2 Reliability and validity
Two lecturers at a college of nursing in Malawi were requested to review the questionnaire for
relevance and to comment on whether the questions addressed the aims and objectives of the
study. Adjustments to the questionnaire were made as suggested by the reviewers. Validity refers to
the degree to which an instrument is capable of giving the “truth”, while reliability refers to the
ability of the instrument to being consistent in giving results when applied (Burns & Grove,
2005:214). To further test the validity and reliability of the instrument, a pilot study was conducted.

3.6.2.1 Pilot study
The pilot study was conducted with a group of ten upgrading nursing students at one nursing college
in Blantyre, southern region of Malawi. These students were used because they were previously
enrolled nurses or nurse technicians and they therefore had experience working in one of the
identified facilities or a similar facility. The pilot respondents were asked to review the questionnaire
for clarity; to suggest any amendments where necessary; and to note the time it took to complete
the questionnaire. The suggested changes included clarifying instructions to questions; rearranging
possible answers for closed or structured questions; adding optional answers for closed or
structured questions; and rephrasing some questions. The feedback from the pilot study facilitated
the adapted questionnaire.

After incorporating the changes to the questionnaire, it was again tested on five nurses from Malawi
who are doing postgraduate studies at University of Cape Town. These were selected because of
their familiarity to the work environment in Malawi. There were no problems identified except for
one grammatical error with the Chichewa version information sheet. The error was corrected as
suggested. The average time for completing the questionnaire was reported to be 20 minutes and
the range was 10 minutes to 30 minutes.

3.6.3 Data collection process
Permission to collect data at the five identified health facilities was granted during the proposal
development phase as a requirement for the obtaining of ethical approval with National Health
Sciences Research Committee in Malawi. A copy of the proposal was sent to each of these facilities
and the head of each facility endorsed that the proposal had been reviewed and the researcher had
been given permission for data collection at the institutions (see Appendices F, G, H, I and J). Upon obtaining ethical approval from the Faculty of Health Sciences Research Ethics Committee and completing of the pilot study, the researcher contacted the nurse managers for the data collection sites to get access to the nurses. Permission to start data collection for Facility 2 (see 3.1.2) was delayed because the hospital director who had authorised for the facility to be included as a data collection site (see Appendix G) was reported to be out of office. The data for this facility was therefore collected a month after data collection for the other four facilities had finished. As such, the data collection period for this site was three weeks (in comparison to six weeks for the other four sites). This limited the number of returned questionnaires and also reduced the response rate for the facility and the whole study.

At each of the sites, one nurse supervisor was approached by the researcher and requested to be a research assistant who would help with the data collection process. These supervisors acted as research assistants for the study. They were individually informed of the aims of the study and the procedure for data collection. Copies of the questionnaire were sent to each of these sites through the data collection assistants. The data collection assistants approached eligible participants in person and distributed the questionnaires to them. The questionnaires were distributed to the nurses who were found on duty at the time of data collection. A total of 190 eligible respondents were invited to participate in the study. The distribution of questionnaires for each facility was as follows: 100 questionnaires at Facility 1; 45 questionnaires at Facility 2; 20 questionnaires at Facility 3; 12 questionnaires at facility 4; and 13 questionnaires at facility 5. The respondents were requested to return completed questionnaires by dropping them in a box that was put at a strategic place for each site. Each week, the researcher contacted the research assistants to remind the nurses to return the questionnaires in order to increase response rate. The data analysis process is described in the next section.

3.6.4 Data analysis process

The data analysis process was done in consultation with a statistician. Of the 190 questionnaires that were sent out, 155 were returned. Of these 155 returned questionnaires, 112 were completed and had usable data. Therefore, they were considered for analysis and gave an overall response rate of 60%. The response rate varied across individual facilities as follows: Facility 1 had 54 completed questionnaires out of 100 that were sent out giving a response rate of 54%; Facility 2 had 18 completed questionnaires out of 45 giving a response rate 40%; Facility 3 had 17 completed questionnaires out of 20 that were sent out giving a response rate 85%; Facility 4 had 11 completed
questionnaires out of 12 that were sent out giving a response rate of 92%; and facility 5 had 12 completed questionnaires out of 13 that were sent out giving a response rate 92%.

A spreadsheet to capture data was prepared using Epidata software. Raw data from each completed questionnaire were entered into the spread sheet. All closed or structured questions of the questionnaire were assigned numeric codes to allow for data entry into the spreadsheet. The numeric codes were entered in the spread sheet for data analysis. Open-ended questions that elicited string variables (word or sentence answers) were also entered in the spreadsheet and were analysed through content analysis and presented as frequencies and/or percentages.

There was one open-ended question that elicited a numeric answer therefore it was not coded and the answer was entered in the spreadsheet as it was. After data entry, the data were exported into Stata version 11 software for analysis. Descriptive and non-parametric statistics were used. For each variable, frequency and percentage was calculated. Where variables were suspected to relate, cross-tabulations were done and tests for significance of the relationship were applied. The analysed data are presented in frequency distribution tables, relative frequency distribution tables and as graphs in the next chapter (chapter 4).

3.7 Summary
A descriptive cross sectional study was found appropriate for this study. Five health facilities in the southern region of Malawi were the setting for the study. These comprised two central hospitals, one psychiatric hospital and two health centres. Ethical approval for the conduct of this study was obtained from the Faculty of Health Sciences Research Ethics Committee at the University of Cape Town and the National Health Sciences Research Committee in Malawi. The conduct of the study followed the ethical principles as stipulated by the WMA Declaration of Helsinki (2008). Data was collected using a structured self-administered questionnaire. The questionnaire was piloted to test its validity and reliability before data was collected. The collected data was entered in EpiData statistical package then transferred into Stata version 11 for analysis.
Chapter Four

Results

4.1 Introduction
This chapter presents the results of the study. The results are presented in tables and graphs. The sequence of the results is presented in the order of the objectives of the study. The first section of this chapter describes the demographic characteristics of the respondents. Descriptive statistics and multivariate analysis were done for all the variables measured by the questionnaire. A discussion of the results and recommendations are presented in Chapter five. A total of 190 questionnaires were sent out to persons who met the inclusion criteria in the five participating facilities. Of these questionnaires, 155 were returned and 43 of them were excluded for having inadequate data or being incomplete. A total of 112 completed questionnaires with usable data were analysed, giving a response rate of 60%.

4.2 Characteristics of study participants
The participating nurses were a mixture of Registered Nurses (37.5%), Enrolled Nurses (33.93%) and Nurse Technicians (28.57%) in various specialties within these cadres. The majority of the respondents (77%) were females and 23% were males. There was a statistically significant difference (p < 0.05) in the sex of the participants according to category of nursing. Most of the State Registered Nurses were female (57%) and 43% were male; 42% of the State Registered Nurse/Midwives were males while 58% were females; all the Registered Psychiatric Nurses, Registered Community Nurses, Enrolled Nurse/Midwives, Enrolled Community Nurses and Enrolled Psychiatric Nurse/Midwives were Females; 25% of the Enrolled Nurses were males and 75% were females; 30% of the Nurse/Midwife Technicians were males and 70% were females. There was an equal number of Nurse Technicians amongst males and females. The nurses had a varying range of work experience with 62.5% having practised as nurses for ten years or less, and 37.5% with a work experience of more than ten years. These nurses were drawn from different departments from each facility. The average duration of working in a department was 4.5 years, with a minimum duration of one year and a maximum duration of 25 years. Table 4.1 below provides the characteristics of the respondents.
Table 4.1: Demographic data of respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>n = 112</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Central Hospital 1)</td>
<td>54</td>
<td>48.21</td>
</tr>
<tr>
<td>2 (Central Hospital 2)</td>
<td>18</td>
<td>16.07</td>
</tr>
<tr>
<td>3 (Psychiatric Hospital)</td>
<td>17</td>
<td>15.18</td>
</tr>
<tr>
<td>4 (Health Care Centre 1)</td>
<td>11</td>
<td>9.82</td>
</tr>
<tr>
<td>5 (Health Care Centre 2)</td>
<td>12</td>
<td>10.17</td>
</tr>
<tr>
<td><strong>Category of nurse</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State registered nurse</td>
<td>23</td>
<td>20.54</td>
</tr>
<tr>
<td>State registered nurse midwife</td>
<td>12</td>
<td>10.71</td>
</tr>
<tr>
<td>State registered psychiatric nurse/midwife</td>
<td>3</td>
<td>2.68</td>
</tr>
<tr>
<td>State registered community nurse</td>
<td>4</td>
<td>3.57</td>
</tr>
<tr>
<td>Enrolled nurse</td>
<td>4</td>
<td>3.57</td>
</tr>
<tr>
<td>Enrolled nurse midwife</td>
<td>16</td>
<td>14.29</td>
</tr>
<tr>
<td>Enrolled community nurse/midwife</td>
<td>4</td>
<td>3.57</td>
</tr>
<tr>
<td>Enrolled psychiatric nurse/midwife</td>
<td>13</td>
<td>11.61</td>
</tr>
<tr>
<td>Nurse midwifery technician</td>
<td>30</td>
<td>26.79</td>
</tr>
<tr>
<td>Nurse technician</td>
<td>2</td>
<td>1.79</td>
</tr>
<tr>
<td>Enrolled community psychiatric nurse midwife</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>26</td>
<td>23.21</td>
</tr>
<tr>
<td>Female</td>
<td>86</td>
<td>76.79</td>
</tr>
<tr>
<td><strong>Work experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>14</td>
<td>12.50</td>
</tr>
<tr>
<td>1-2 years</td>
<td>20</td>
<td>17.86</td>
</tr>
<tr>
<td>3-4</td>
<td>14</td>
<td>12.50</td>
</tr>
<tr>
<td>5-6</td>
<td>10</td>
<td>8.93</td>
</tr>
<tr>
<td>7-8</td>
<td>6</td>
<td>5.36</td>
</tr>
<tr>
<td>9-10</td>
<td>6</td>
<td>5.36</td>
</tr>
<tr>
<td>11-12</td>
<td>2</td>
<td>1.79</td>
</tr>
<tr>
<td>13-14</td>
<td>2</td>
<td>1.79</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>38</td>
<td>33.93</td>
</tr>
<tr>
<td><strong>Current department</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical (including oncology)</td>
<td>15</td>
<td>13.39</td>
</tr>
<tr>
<td>Surgical (including orthopaedic)</td>
<td>15</td>
<td>13.39</td>
</tr>
<tr>
<td>Intensive Care Unit (ICU)</td>
<td>6</td>
<td>5.36</td>
</tr>
<tr>
<td>Community (primary level care)</td>
<td>21</td>
<td>18.75</td>
</tr>
<tr>
<td>Paediatric</td>
<td>18</td>
<td>16.07</td>
</tr>
<tr>
<td>Maternity</td>
<td>14</td>
<td>12.50</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>18</td>
<td>16.07</td>
</tr>
<tr>
<td>Emergency</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>3.57</td>
</tr>
</tbody>
</table>
4.3 The extent of violence against nurses in the five health facilities

The participants were asked to express their views on the statement “violence against nurses in the workplace is a problem” using a five-point Likert-scale. A total of 86% (n = 96) agreed to the statement; 4% (n = 4) disagreed; 7% (n = 8) were neutral; while 4% (n = 4) did not respond to the statement. There was no statistically significant difference in responses to the statement when adjusted for sex, category of nursing, work experience, and department where the respondent was working. There was however a statistically significant difference in response to the statement when adjusted for facility (p < 0.05). At Facility 1, 91% of the respondents agreed that violence in the workplace is a problem while the remaining 9% were neutral; at Facility 2, 72% of the respondents agreed to the statement, 17% disagreed and 11% were neutral. At Facility 3, 100% agreed to the statement; while at Facility 4, 87.5% agreed to the statement and 12.5% were neutral; at Facility 5, 91% agreed to the statement while 9% disagreed. Table 4.2 below summarizes these findings.

Table 4.2: Opinions about problem of violence in nursing

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sample (n = 112)</td>
<td>86%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Facility 1</td>
<td>91%</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td>Facility 2</td>
<td>72%</td>
<td>11%</td>
<td>17%</td>
</tr>
<tr>
<td>Facility 3</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Facility 4</td>
<td>88%</td>
<td>12.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Facility 5</td>
<td>91%</td>
<td>0%</td>
<td>9%</td>
</tr>
</tbody>
</table>

The prevalence of workplace violence against nurses was assessed by asking the nurses if they personally had experienced violence in the past twelve months. The overall prevalence was 70.54% (n = 112, confidence interval 61.1%-78.8%). This was then adjusted according to facility, sex, nursing category, work experience and department where the nurses worked. There was a statistically significant difference in the occurrence of workplace violence in each of the five facilities (p < 0.05). Workplace violence was particularly high at Facility 3 (psychiatric hospital) with 100% (n = 17, Confidence interval 80.4% – 100%) of the participants indicating that they had experienced some form of violence in the previous twelve months. The lowest prevalence was at Facility 1 (Central Hospital 1) with 59.3% (n = 54, confidence interval 45%-72%). There was also a statistically
significant difference in the occurrence of workplace violence according to the department where the nurses worked (p < 0.05).

There was no statistically significant difference in the occurrence of workplace violence according to sex, category of nursing and work experience. Male nurses however reported to have experienced more workplace violence than females. A larger proportion (76.92%) of the male participants (n = 26) reported to have experienced workplace violence compared to 68.6% of the female participants (n = 86). When adjusted for category of nursing, the lowest reported prevalence was with enrolled nurse/midwives (43.75%, n = 16). The highest prevalence of workplace violence was amongst state registered psychiatric nurses (n = 3); state registered community nurses (n = 4); enrolled community nurse/midwives (n = 4); and Enrolled community psychiatric nurse/midwife (n = 1). In all these categories of nurses there was a prevalence of 100% with respect to having experienced workplace violence in the previous twelve months. Sixty nine percent of the nurses who had work experience of less than 10 years (n = 70) reported to have experienced workplace violence compared to 73.81% of those who had a work experience of 10 or more years (n = 42). Table 4.3 below is a presentation of the results.
Table 4.3: Prevalence of workplace violence according to facility, sex, category of nursing, and years of work experience

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Frequency</th>
<th>%</th>
<th>95% (Confidence interval) ci</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>112</td>
<td>79</td>
<td>70.54</td>
<td>61.1-78.8</td>
</tr>
<tr>
<td><strong>Facility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Central Hospital 1)</td>
<td>54</td>
<td>32</td>
<td>59.3</td>
<td>45-72</td>
</tr>
<tr>
<td>2 (Central Hospital 2)</td>
<td>18</td>
<td>11</td>
<td>61.1</td>
<td>35.7-82.7</td>
</tr>
<tr>
<td>3 (Psychiatric Hospital)</td>
<td>17</td>
<td>17</td>
<td>100</td>
<td>80.4-100*</td>
</tr>
<tr>
<td>4 (Health Care Centre 1)</td>
<td>11</td>
<td>9</td>
<td>81.8</td>
<td>48.2-97.7</td>
</tr>
<tr>
<td>5 (Health Care Centre 2)</td>
<td>12</td>
<td>10</td>
<td>83.3</td>
<td>51.6-97.9</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>26</td>
<td>20</td>
<td>76.92</td>
<td>57.9 - 89</td>
</tr>
<tr>
<td>Female</td>
<td>86</td>
<td>59</td>
<td>68.60</td>
<td>58.2 - 77.4</td>
</tr>
<tr>
<td><strong>Nurse category</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State registered nurse</td>
<td>23</td>
<td>16</td>
<td>68.57</td>
<td>49.1 - 84.4</td>
</tr>
<tr>
<td>State registered nurse midwife</td>
<td>12</td>
<td>9</td>
<td>75</td>
<td>47.8 - 91.1</td>
</tr>
<tr>
<td>State registered psychiatric</td>
<td>3</td>
<td>3</td>
<td>100</td>
<td>46.8 – 100*</td>
</tr>
<tr>
<td>State registered community nurse</td>
<td>4</td>
<td>4</td>
<td>100</td>
<td>51 – 100*</td>
</tr>
<tr>
<td>Enrolled nurse</td>
<td>4</td>
<td>2</td>
<td>50</td>
<td>15.0 – 85.0</td>
</tr>
<tr>
<td>Enrolled nurse midwife</td>
<td>16</td>
<td>7</td>
<td>43.75</td>
<td>23.1 - 66.8</td>
</tr>
<tr>
<td>Enrolled community nurse/midwife</td>
<td>4</td>
<td>4</td>
<td>100</td>
<td>51 – 100*</td>
</tr>
<tr>
<td>Enrolled psychiatric nurse/midwife</td>
<td>13</td>
<td>11</td>
<td>100</td>
<td>57.8 – 95.7</td>
</tr>
<tr>
<td>Nurse midwifery technician</td>
<td>30</td>
<td>21</td>
<td>70</td>
<td>52.2 – 83.3</td>
</tr>
<tr>
<td>Nurse technician</td>
<td>2</td>
<td>1</td>
<td>50</td>
<td>9.5 – 90.5</td>
</tr>
<tr>
<td>Enrolled community psychiatric</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>20.7 – 100*</td>
</tr>
<tr>
<td><strong>Work experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;10 years</td>
<td>70</td>
<td>48</td>
<td>69</td>
<td>60.53 – 82.94</td>
</tr>
<tr>
<td>&gt;10 years</td>
<td>42</td>
<td>31</td>
<td>73.81</td>
<td>52.9 – 91.83</td>
</tr>
</tbody>
</table>

(*) one-sided, 97.5% confidence interval

The highest frequency of violent incidents was reported at the psychiatric department (16) followed by the maternity department (15) and the medical department (13). Some respondents experienced violence at more than one department in the preceding twelve months. Therefore, the frequency of violence according to setting is higher than the number of respondents who mentioned that they had experienced violence within the same period. Figure 4.1 below shows the frequency of reported incidents of violence per department.
The participating nurses were asked to indicate how many nurses had discussed their experiences of violent incidents with them. Most (88.38%) of the nurses had indicated that at least one nurse had shared an experience of workplace violence with them. A few (10.71%) indicated that no nurse had ever discussed experiencing violence to them. One person (0.89%) did not respond to this question. Figure 4.2 below illustrates these findings.
The nurses were asked if violence is directed against a specific category of nurses. Figure 4.3 below represents their responses.

**Figure 4.2: Number of nurses who shared their violent incidents with the respondents**

The nurses were asked if violence is directed against a specific category of nurses. Figure 4.3 below represents their responses.
Is violence directed towards a specific category of nurses?

![Pie chart showing responses to the question: Is violence directed towards a specific category of nurses?]

Yes
No
Not sure
No response

Figure 4.3: Opinions whether violence is directed towards a specific category of nurses

There was no statistically significant difference (p > 0.05) in the responses of the nurses based on their category of nursing. About 50% (n = 16) of those who said violence is directed towards a specific category of nurses were Nursing Midwifery Technicians. Those who responded “yes” to the question “is violence directed towards a specific category of nurses?” were asked to elaborate their answer in an open ended question. Most (60%, n = 16) of them said that violence is mostly directed at junior nurses (that is, enrolled nurses and nurse technicians). Some 13.34% believed that nurses working in psychiatric, maternity and paediatric settings are more prone to violence incidents. Another 13.34% respondents believed that only nurses who are in direct contact with patients experience acts of violence compared to those working in offices. Other opinions were that Registered nurses experience more incidents of violence because enrolled nurses and nurse technicians have negative attitudes towards the Registered nurses (6.67%). Another opinion expressed by 6.67% of respondents was that violence is directed towards nurses who are rude rather than towards a specific category of nurses.

The respondents were also asked to indicate on a five-point Likert scale the frequency of violence towards various categories of nurses basing on their opinion or experience. The frequency options were: often; sometimes; occasionally; never; or not sure. There was no statistically significant difference (p > 0.05) in the opinions of the nurses based on their category of nursing, as shown in table 4.4.
Table 4.4: Opinions about frequency of violence against specific categories of nurses

<table>
<thead>
<tr>
<th>Categories of nurses</th>
<th>Frequency of violence (n = 112)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>More often</td>
</tr>
<tr>
<td>Enrolled nurses</td>
<td>75%</td>
</tr>
<tr>
<td>Nurse technicians</td>
<td>75%</td>
</tr>
<tr>
<td>Registered nurses</td>
<td>46%</td>
</tr>
<tr>
<td>Student nurses</td>
<td>65%</td>
</tr>
<tr>
<td>Midwives</td>
<td>69%</td>
</tr>
<tr>
<td>Matrons</td>
<td>27%</td>
</tr>
<tr>
<td>In-charge nurses</td>
<td>44%</td>
</tr>
<tr>
<td>Psychiatric nurses</td>
<td>64%</td>
</tr>
<tr>
<td>Paediatric nurses</td>
<td>55%</td>
</tr>
</tbody>
</table>

There was no indication that violence against nurses is based on their cultural, ethnic or religious origin. Table 4.5 below illustrates the results. There was a statistically insignificant difference (p > 0.05) in the responses for those who experienced violence and those who did not experience violence.

Table 4.5: Opinions about violence based on cultural, ethnic and religious origin

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural</td>
<td>23%</td>
<td>41%</td>
<td>36%</td>
</tr>
<tr>
<td>Ethnic</td>
<td>16%</td>
<td>44%</td>
<td>39%</td>
</tr>
<tr>
<td>Religious</td>
<td>15%</td>
<td>49%</td>
<td>36%</td>
</tr>
</tbody>
</table>

About 66% (n = 112) of the respondents believed that violence against nurses is on the increase, 12% disagreed with this statement, and 22% were unsure. Most of those who had experienced violence, 77% (n = 79) believed that violence against nurses was on the increase compared to 39% (n = 33) of those who did not experience violence. There was a statistically insignificant difference (p > 0.05) in the views of nurses about the increase in violence based on whether they personally had experienced violence.

In an open ended question, the respondents who believed that violence was on the increase were asked to explain some of the contributing factors to the increase of violence against nurses. Multiple factors were noted in the responses; therefore the total for this table is more than 100%. Of those who felt that violence was on the increase, 25.78% (n = 74) said that they did not know why violence
against nurses was on the increase. Forty three percent believed that violence against nurses has increased due to poor quality health care services. A shortage of nurses and other health care workers has resulted in an increased work load and a high patient to nurse ratio, which in turn has lead to delayed services for patient and long queues at clinics which create conditions in which the risk of violence increases.

Eight percent of the respondents believed that the increase in violence against nurses was due to differences in religious and cultural values, whereas 5% were of the opinion that the causes of the increase in violence was that nurses are unmotivated due to poor working conditions such as low salaries, lack of incentives and not being appreciated. As a result, the nurses do not work efficiently which angers their clients and this in turn increases the risk of violence against the nurses. Other Four percent of respondents (4%) thought that issues which were seen to increase the risk of violence included that nurses are not appreciated in the health service, may be perceived to have low education and there is a societal negative attitude towards nurses. Other opinions about the perceived increase in violence against nurses were: there are no policies protecting nurses from workplace violence and no reporting procedures for incidents of workplace violence (4%); as nurses are the front liners in the health care system and assume a high level of responsibilities in the system, their risk of experiencing workplace violence increases (4%). Another 4% ascribed the poor communication between nurses and their clients or their colleagues as the cause of the increase in violence against the nurses.

Less widely held opinions expressed by respondents included: violence was on the increase due to alterations in mental state in psychiatric patients or relatives’ response to the unexpected death of their hospitalised relative (3%); the perceived difference in nursing cadres is a contributing factor (1.35%); and lack of support from senior staff (1.35%).

### 4.4 Types of violence experienced by nurses

Nurses were asked to indicate if they had observed incidents of threatening behaviours, physical assaults and verbal abuse being committed against other nurses in the workplace. Table 4.6 below summarises the findings.
Table 4.6: Types of violence observed by nurses

<table>
<thead>
<tr>
<th>Type of violence</th>
<th>Frequency (n = 112)</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threatening behaviours</td>
<td>75</td>
<td>67%</td>
</tr>
<tr>
<td>Physical assault</td>
<td>31</td>
<td>28%</td>
</tr>
<tr>
<td>Verbal abuse</td>
<td>99</td>
<td>88%</td>
</tr>
</tbody>
</table>

Other reported forms of violence that were observed were sexual harassment (3.57%) and oppression (0.89%). One respondent (0.89%) mentioned witchcraft; however, it is unclear how this was observed. There were no statistically significant differences (p > 0.05) in all the observed forms of violence based on facility, category of nursing, sex, work experience and department of work.

The forms of workplace violence which the 79 nurses had reported experiencing in the preceding twelve months were threatening behaviours, physical assaults, verbal abuse, use of an object, sexual harassment and acts of intimidation. Some respondents experienced more than one form of violence, and hence the total number of violent incidents does not equate to the number of respondents who reported to have personally experienced violence. Table 4.7 below illustrates the frequency of each type of violence, the percentage for the total number of respondents and the percentage for the number of nurses who reported to have experienced violence.

Table 4.7: Types of violence experienced by nurses

<table>
<thead>
<tr>
<th>Type of violence</th>
<th>frequency</th>
<th>% (n = 112)</th>
<th>% (n = 79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threatening behaviours</td>
<td>58</td>
<td>52</td>
<td>73</td>
</tr>
<tr>
<td>Physical assault</td>
<td>10</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Verbal abuse</td>
<td>74</td>
<td>66</td>
<td>95</td>
</tr>
<tr>
<td>Use of a blunt or sharp object</td>
<td>7</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Sexual harassment</td>
<td>13</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Voices and concerns not attended to</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

There was a statistically insignificant difference (Fisher’s exact test p>0.05) in the occurrence of any of the above mention types of violence by sex. A statistically significant difference was noted in the experience of threatening behaviours by departments (Fisher’s exact test p<0.05). A high prevalence (94%) of threatening behaviours was reported in the psychiatric department. No incidents of threatening behaviours were reported from the ICU. Figure 4.4 below demonstrates the prevalence of experiencing threatening behaviours according to department.
Using Fisher’s exact test, there was a statistically significant difference (p<0.05) in the experience of physical assaults by department. Physical assaults were reported to have occurred in three departments only (Medical, Paediatric and Psychiatry). Figure 4.5 below demonstrates the results.
Occurrence of Physical Assaults According to Department

There was a statistically insignificant difference (Fisher’s exact test, p>0.05) in the occurrence of verbal abuse or occurrence of violence with use of a blunt or sharp object by department. There were seven reported incidents of violence by use of objects and these occurred in a medical department (2 incidents); ICU (1 incident); Maternity department (2 incidents); psychiatry (2 incidents). No statistically significant difference (Fisher’s exact test p>0.05) was noted in the occurrence of sexual harassment by department or sex of victim. Most incidents (58%) of sexual harassment occurred at the psychiatric department. A higher proportion of female respondents (19%, n=59) reported experiencing sexual harassment compared to male respondents (10%, n=20).

4.4.1 Reaction of nurses to the experience of a violent incident

The nurses who experienced workplace violence reacted differently to the incidents. Some nurses reported numerous responses to the incident, therefore the total of reactions is more than the number of nurses who experienced workplace violence. The majority (62%, n = 49) of them reported the incident to a senior person or manager; 56% (n = 44) told a trusted friend about the incident; 11% (n = 9) took some time off following the incident; another 11% (n = 9) retaliated; (all instances of retaliation were if the perpetrator was a fellow health care worker and not a patient or a patient’s visitor). 19% (n = 15) reacted by crying; other reported reactions were refusing to work, consulting
for legal action, calming the situation by discussing with the perpetrator, ignoring the situation and seeking a transfer from the facility. Table 4.8 below represents these findings.

Table 4.8: reaction of nurses to experience of a violent incident

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Frequency</th>
<th>% (n = 79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting to senior person or manager</td>
<td>49</td>
<td>62</td>
</tr>
<tr>
<td>Telling a trusted friend</td>
<td>44</td>
<td>56</td>
</tr>
<tr>
<td>Taking time off</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Retaliated</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Cried</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>15</td>
</tr>
</tbody>
</table>
4.5 Perpetrators of workplace violence

The nurses were asked to select from a list of possible perpetrators of workplace violence, five groups of people and rank them according to their likelihood of being violent towards nurses. Figure 4.6 below demonstrates the results.

Figure 4.6: Likely Sources of Violence

The nurses were also asked to mention other groups of people they think are likely to be violent. Table 4.9 below is a list of the other likely sources of violence.
Table 4.9: Other groups of people/patients likely to be violent

<table>
<thead>
<tr>
<th>Source of violence</th>
<th>Frequency</th>
<th>Percentage (n = 112)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory technicians</td>
<td>14</td>
<td>12.5</td>
</tr>
<tr>
<td>Pharmacy staff</td>
<td>11</td>
<td>9.82</td>
</tr>
<tr>
<td>Matrons</td>
<td>11</td>
<td>9.82</td>
</tr>
<tr>
<td>Psychiatric patients</td>
<td>10</td>
<td>8.92</td>
</tr>
<tr>
<td>Fellow nurses</td>
<td>7</td>
<td>6.25</td>
</tr>
<tr>
<td>Community members</td>
<td>4</td>
<td>3.57</td>
</tr>
<tr>
<td>Politicians</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Elite people</td>
<td>2</td>
<td>1.79</td>
</tr>
<tr>
<td>Security staff</td>
<td>2</td>
<td>1.79</td>
</tr>
<tr>
<td>Auxiliary nurses</td>
<td>2</td>
<td>1.79</td>
</tr>
<tr>
<td>Police officers</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>Traditional leaders</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>HIV positive patients</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>Anaesthetists</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>Clinical officers</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>Journalists</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>Religious leaders</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>Members of NMCM</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>Spouses</td>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>Patients in private wards</td>
<td>1</td>
<td>0.89</td>
</tr>
</tbody>
</table>
For the 79 nurses who experienced workplace violence, the perpetrators are shown in figure 4.7 below.

**Figure 4.7 perpetrators of violence against nurses**

<table>
<thead>
<tr>
<th>Perpetrators</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male pt</td>
<td>45</td>
</tr>
<tr>
<td>Pt's relative</td>
<td>40</td>
</tr>
<tr>
<td>Female pt</td>
<td>35</td>
</tr>
<tr>
<td>Nurse</td>
<td>25</td>
</tr>
<tr>
<td>Doctors</td>
<td>20</td>
</tr>
<tr>
<td>CO or MA</td>
<td>15</td>
</tr>
<tr>
<td>Snr nurses</td>
<td>10</td>
</tr>
<tr>
<td>Hospital attendant</td>
<td>5</td>
</tr>
<tr>
<td>Hospital Managers</td>
<td>2</td>
</tr>
<tr>
<td>Politicians</td>
<td>1</td>
</tr>
</tbody>
</table>

**Legend**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Clinical Officer</td>
</tr>
<tr>
<td>MA</td>
<td>Medical Assistant</td>
</tr>
<tr>
<td>Pt</td>
<td>Patient</td>
</tr>
<tr>
<td>Snr</td>
<td>Senior</td>
</tr>
</tbody>
</table>

4.6 Patterns of violence in relation to time and days of the week

There were varying opinions regarding the time of day when violent behaviours are displayed against nurses. Seventeen percent of the respondents thought that violence occurred at all times of the day. The majority (83%) believed that the day of the week and time of day influenced occurrences of violence. Figure 4.8 below represents the pattern of violence against nurses according to time and days of the week.
There are statistically significant differences in the opinions based on facility. For Facility 1 and Facility 2, more acts of violence were reported between 6am and 5:59pm everyday. For Facility 3, most acts of violence occurred between 6pm and 11:59am everyday, whilst during weekends violence took place throughout the day. For Facility 4 and Facility 5 most acts of violence happened during weekdays only between 6am and 5:59pm.

**4.7 Nurses’ perceived effects of violence on their personal and professional lives**

Most of the respondents (87.5%, n = 112) believed that violence had an effect on them. There was a statistically insignificant difference (p>0.05) in the effect of violence for those who experienced it and those who did not, or in the effect of violence based on sex of the respondents. Table 4.10 below gives generalised linear models for the prevalence ratio of the effect of violence by sex, and for those who experienced violence. It was not possible to compute the prevalence ratio of effect of violence by the categories of nursing, facility and work experience because some variables contained the value “0”.

---

*Figure 4.8: Times that violent incidents are displayed*

There are statistically significant differences in the opinions based on facility. For Facility 1 and Facility 2, more acts of violence were reported between 6am and 5:59pm everyday. For Facility 3, most acts of violence occurred between 6pm and 11:59am everyday, whilst during weekends violence took place throughout the day. For Facility 4 and Facility 5 most acts of violence happened during weekdays only between 6am and 5:59pm.
Table 4.10: Generalised linear models for the prevalence ratio of effect of violence for sex and those who experienced workplace violence.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>% effect of violence</th>
<th>Crude prevalence ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>26</td>
<td>76.9</td>
<td>1.0 (ref)</td>
</tr>
<tr>
<td>Female</td>
<td>86</td>
<td>90.7</td>
<td>1.2 (0.9 – 1.15)</td>
</tr>
<tr>
<td>Have you personally experienced violence?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>33</td>
<td>78.8</td>
<td>1.0 (ref)</td>
</tr>
<tr>
<td>Yes</td>
<td>79</td>
<td>91.1</td>
<td>1.2 (0.9-1.4)</td>
</tr>
</tbody>
</table>

In an open ended question, the nurses were asked to explain how violence affected them. Table 4.11 below gives the frequency and percentage of the responses for those who said violence had effect on them. The respondents gave multiple responses therefore the total frequency is more than 98 (number who said violence has an effect on them).

Table 4.11: effects of violence on nurses

<table>
<thead>
<tr>
<th>Effect</th>
<th>Frequency</th>
<th>Percentage (n = 98)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with fear</td>
<td>17</td>
<td>17.35</td>
</tr>
<tr>
<td>Demoralised</td>
<td>23</td>
<td>23.46</td>
</tr>
<tr>
<td>Poor work performance</td>
<td>28</td>
<td>28.57</td>
</tr>
<tr>
<td>Embarrassment</td>
<td>1</td>
<td>1.02</td>
</tr>
<tr>
<td>Psychologically disturbed</td>
<td>15</td>
<td>15.3</td>
</tr>
<tr>
<td>Lose interest in nursing</td>
<td>12</td>
<td>12.24</td>
</tr>
<tr>
<td>Became stronger/sharp thinker</td>
<td>1</td>
<td>1.02</td>
</tr>
</tbody>
</table>

Of the 14 who said violence had no effect on them, two provided explanations for their response. One stated that he/she was able to cope with the violent incidents and the other expressed that his/her belief in God enabled forgiveness, thus mitigating the effects of violence.

4.8 Conclusion

The prevalence of violence in the five facilities that were sampled was 70.54%. The highest prevalence was reported at Facility 3 (psychiatric hospital) where all participants (n= 17) reported to have experienced violence. The lowest prevalence found was at Facility 1 (Central Hospital 1) where 59.3% of the respondents reported experiencing violence. There was no statistically significant difference in the occurrence of workplace violence according to sex, category of nursing and work
experience. At all five facilities, most violent incidents occurred between 6am and 5:59pm. There was however a statistically significant difference in the times of violence by facility. Patients’ relatives and male patients are the most common perpetrators of violence against the nurses. The majority of the respondents (87.5%) felt that workplace violence has an effect on their personal and/or professional lives regardless of whether they personally had experienced violence or not. The common perceived effect of workplace violence on the nurses was that it leads to demoralisation and poor work performance by the nurses.
Chapter Five

Discussion

5.1 Introduction
The aim of the study was to investigate and describe the nature of and extent of violence against nurses and the perceived effects thereof on them in selected health facilities in the southern region of Malawi. To the best of the researcher’s knowledge, this was the first known study to investigate violence against nurses in the country. The results demonstrate that violence against nurses exists in Malawi and it is considered to be a problem. The prevalence of violence varied significantly across the five facilities that were sampled. This chapter discusses the results presented in Chapter 4 under the following headings: the problem of violence against nurses; patterns of workplace violence in relation to time and days of the week; and the nurses’ perceived effects of workplace violence on their personal and professional lives. Recommendations from the study are made for policy makers, nursing education, nursing practice and for further research.

5.2 The prevalence of violence against nurses
The study results show that violence against nurses is considered a problem in Malawi. The study results concur with those reported by Estryn-Behar (2008:113) in Europe; Farrel et al., (2006:783) in Australia; Feringa (2008:135) in Botswana; Khalil (2009:210) in Cape Town, South Africa and Shield and Wilkins (2009:14) in USA. This confirms that violence against nurses is a global concern as has been suggested by Needham et al. (2008:6).

The period prevalence of reported workplace violence against nurses for all the five facilities for the preceding twelve months was 71%. A similar rate of violence (76%) within a 12-month period was reported by Kwok et al. (2006:7) in Hong Kong. This contrasts with findings reported by Abbas et al. (2010:29) in Egypt where only 27.7% of the nurses reported to have experienced workplace violence in the twelve months preceding their study. High rates of violence against nurses have been attributed to the predominance of women in the nursing profession world wide, who generally have a submissive character (Ferns, 2006:41; Kwok et al., 2006:9). Similarly in Malawi, a large proportion of the nurses are females, estimated at 75% according to WHO (2006). Traditional norms in the
country expect women to be gentle and submissive which could in turn make the nurses vulnerable to being victims of workplace violence from various sources.

The proportion of females in this study was 77% and males was 23%. Although more males (77%, n=26) than females (68%, n=86) reported having experienced violence, there was no statistically significant difference. Previous studies have also found that a higher proportion of males experience violence compared to females (Abbas et al., 2010:29; Campbell et al., 2011:87; Hegney et al., 2006:228; McKinnon & Cross, 2008:12; Shields & Wilkins, 2009:11). A possible reason why a lower proportion of female nurses are found to have experienced workplace violence could be that the female nurses under report their experience of violence due to their submissive nature (Ferns, 2006:40). Kamchuchat et al. (2008:206) have however argued that gender is not a significant determinant of the risk of workplace violence due to the predominance of females in the nursing profession.

Both psychological and physical forms of violence were reported to have been experienced by the nurses who participated in the study. The form of violence reported as being the most prevalent was psychological violence and this is consistent with findings from preceding studies (Celik et al., 2007:359; Senzun Ergun & Karadakovan, 2005:154). Psychological violence was experienced in the form of: verbal abuse; threatening behaviour; sexual harassment; and feeling that their voice or concerns are not heard by seniors. Verbal abuse was found to be the most commonly experienced form of psychological violence in all departments and this is consistent with findings from other studies (Abe & Henley, 2007; Celik et al., 2007:359; Khalil, 2009:211; Rowe & Sherlock, 2005:245; Shields & Wilkins, 2009:11).

The prevalence of sexual harassment for this study was relatively low (16.46%). Other studies have also found the reported prevalence of sexual harassment to be low [1.5% in Astrom et al. (2002:70); 0.7% in Kamchuchat et al. (2008:203); 12% in Kwok et al. (2006:8) and 30% in McKenna et al. (2003:69)]. The prevalence of sexual harassment may be much higher than reported, as people tend to be reluctant to report the experience of sexual harassment for fear of stigma (Kumchuchat et al., 2008:206). For this study, there was a statistically insignificant difference in the occurrence of sexual harassment by facility, however most incidents of sexual harassment occurred in the psychiatric
hospital. Both male and female nurses had been victims of sexual harassment with a higher proportion of the victims being female. In all cases of reported sexual harassment the perpetrators were of the opposite sex to the victim. Although the reported prevalence of sexual harassment was low, it has detrimental physical and psychological effects. Sexual abuse such as rape can lead to transmission of Sexually Transmitted Infections to the victim (Allsworth et al., 2009:532).

A few respondents (2.53%) reported experiencing another form of violence which they referred to as not having their voice and concerns heard or addressed. Yildirim and Yildirim (2007:1447) described the situation of not being able to express oneself and have your voice heard or not getting an answer to your requests as a form of mobbing behaviour. This form of mobbing behaviour was experienced by 19.4% (n = 505) of the participants in their study. Although this type of mobbing behaviour was reported to have been experienced by only a few respondents in this study, it needs to be prevented. Listening to nurses’ concerns or giving them a forum of expressing their concerns would create a free working environment that would boost their morale to work efficiently.

The reported incidents of physical violence in this study occurred with use of a weapon or without a weapon. The prevalence of physical assaults without a weapon was about 13% while that for physical assaults with use of a sharp or blunt object was about 9%. Other studies elsewhere have also found that violence against nurses with use of a weapon was low (AbuAlRub et al., 2007:284; Kansagra et al., 2008:1270; McKinnon & Cross, 2008:13). Although the prevalence of physical assaults (with or without a weapon) was low, it is very dangerous. In the USA there have been media reports where physical assaults at the workplace had resulted in the loss of nurses’ lives (Carrol, 2008:62).

All the respondents (n = 112) indicated that they had observed some form of violence perpetrated against their colleagues. This has also been reported by AbuAlRub et al. (2007:286) and Opie et al. (2010:21). The observed forms of violence were: verbal abuse (88.39%); threatening behaviour (66.69%); physical assault 27.68%; sexual harassment (3.57%); oppression (0.89%) and witchcraft (0.89%). The study found no association between all the observed forms of violence and facility, sex, category of nursing, work experience or department of work for the respondent. The observed physical assaults were relatively higher than what was experienced within the same period probably
because more than one nurse might have observed the same incident. A notable finding in this study by one respondent was the mentioning of witchcraft as a form of violence. This is an area of violence that may be specific to traditional societies and is worth further investigation. Observing violence occurring against work colleagues could be threatening and can have psychological effects to the nurses.

5.2.1 Prevalence, types and perpetrators of violence against nurses according to facility

The psychiatric hospital (Facility 3) had the highest prevalence of violence, with all the nurses who responded indicating that they had experienced some form of violence in the preceding year. All forms of violence were significantly higher at the psychiatric facility. The types of violence which the nurses experienced in the psychiatric hospital were mostly verbal abuses, followed by threatening behaviours, then physical assaults and sexual harassments. The finding that the psychiatric hospital had the highest prevalence of violence is consistent with findings by Bilgin (2009:255) in Turkey; Lawoko et al. (2004:50) in England and Sweden; Maguire and Ryan (2007:125) in Ireland; and Franz et al. (2010) in Germany. This study also found that most of these violent incidents were perpetrated by psychiatric patients. Male patients perpetrated more incidents of violence against nurses than female patients. Psychiatric patients tend to be violent against nurses mostly due to confusion (May & Grubbs, 2002:14; Mullan & Badger, 2007:37). As such, psychiatric hospitals are regarded as violence “hot-spots” for nurses (Hegney et al., 2006:227).

The facilities in which the next highest levels of violence were reported were the community health care centres (Facility 4 and Facility 5). In Hong Kong, Kwok et al. (2006:8) also found that nurses working in community services were most susceptible to violence with a prevalence of 100% in twelve months. The forms of violence that were experienced by nurses in the community health care centres were mostly verbal abuses and threatening behaviours. Most of these violent incidents were perpetrated by patients, and some incidents by patients’ relatives. Community health care centres in Malawi operate on an outpatient basis. Each of these facilities in this study attend to over 300 clients a day, with just two medical assistants and 3-6 nurses on duty per day. Therefore, it is possible that long waiting times may be a reason why service users become angry and violent towards nurses. In the USA, May and Grubbs (2002:14) reported that anger due to long waiting times is one of the reasons why patients and/or their visitors become violent towards nurses.
Although the psychiatric hospital and community health care centres had higher rates of violence, just a few incidents were perpetrated by work colleagues. This could probably be because these facilities are under staffed and most times there is only one nurse on duty per unit. In addition, the community health care centres also have no medical doctors (instead they have two to three medical assistants) while the psychiatric hospital has only one psychiatrist. This increases the possibility of conflict which can result in violence against nurses unlike the central hospitals which have a relatively higher complement of nurses and doctors.

The central hospitals (Facility 1 and Facility 2) reported lower rates of violence as compared to the psychiatric hospital and community health care centres. Most of the violence was in the form of verbal abuses, followed by threatening behaviours and a few cases of physical assaults and sexual harassments. Roche et al. (2009:18) suggested that violence against nurses is also present in general hospitals and not just psychiatric hospitals and emergency departments as is usually emphasised. In the central hospitals, the violence was mostly perpetrated by patients’ visitors. This is consistent with findings by Esmaeelpour et al. (2010:11) in Iran where incidents of physical and psychological violence against nurses working in emergency departments were mostly perpetrated by patients’ visitors. In Iraq, AbuAlRub et al. (2007:284) also came to the conclusion that incidents of physical violence against nurses working in general hospitals were mostly perpetrated by patients’ visitors. In USA, May and Grubbs (2002:14) found that patients’ visitors tend to be violent against nurses. The reasons most cited were anger related to the patient’s situation, long waiting times and towards the health care system in general. These reasons may also be similar in the current study however this was not specifically investigated.

The respondents in this study however gave numerous opinions in an open ended question why they felt violence against nurses had increased; for instance, some of them believed that violence against nurses has increased due to poor health care services. Shortage of nurses and other resources were the factors given as causing poor health care services which results in long queues and delayed services. The respondents also felt that because nurses are frontline health care providers in Malawi, they are more likely to be exposed to violent incidents than other health care professionals.
Within the central hospitals and community health care centres, most incidents of violence were reported to have occurred in the maternity department with patients’ relatives being the main perpetrators. The form of violence mostly experienced was verbal abuse. The existence of violence in maternity units has also been reported by Khalil (2009:37-abstract) in Cape Town hospitals. Farrel et al. (2006:783) in Australia also found that verbal abuse by patients or their visitors was the most common form of violence experienced by nurses in the maternity/midwifery setting. Maternity units in Malawi are consistently full and busy. With the inadequate staffing, this could be a contributing factor for the reported violence in these units.

Patients were not perceived to be major perpetrators of violence in the central hospitals as compared to the psychiatric hospital and community health care centres. Patients in the central hospitals are admitted with serious illness conditions and for the most part the risk of violence is limited. In this study, other reported perpetrators of violence against nurses in central hospitals were work colleagues (medical doctors, nurses, clinical officers, and medical assistants) and hospital management staff (administrators, accountants and human resource officers). Other studies have also found that medical doctors, fellow nurses and allied health care professionals are perpetrators of violence against nurses (Campbell et al., 2011:84; Hegney et al., 2006:224, Yildirim & Yildirim, 2007:1449). Violence against nurses by other health care professionals is attributed to differences in professional values which cause conflict and result in violence (Standmark & Hallberg, 2007:336).

In all the facilities, there were nurses who reported to have experienced violence from senior nurses mostly in the form of threatening behaviours and verbal abuses. Violence occurring between junior and senior staff is referred to as vertical violence (Khalil, 2009:211). Vertical violence is a form of bullying (Abe & Henly, 2010; Johnson & Rea, 2009; Khalil, 2009:211). It is possible that some senior nurses have an authoritative management style which their subordinates find threatening and regard it as violence. In addition, senior nurses assume managerial positions at the workplace which create a hierarchy of power, competence and superiority of the nurses (Strandmark & Hallberg, 2007:338). These can lead to tension and disagreements which can result in violent situations (Strandmark & Hallberg, 2007:338).
Although not statistically significant, a unique finding in this study was the mentioning of politicians as being perpetrators of verbal abuse in the central hospitals. Although only reported by a small number of respondents, this is a finding that should be taken seriously, due to the positions of power held by such individuals. 1.27% of the violent incidents against nurses were perpetrated by politicians while 2.5% of the nurses mentioned politicians as a group of people likely to be violent against nurses. In addition, one respondent reported having experienced verbal abuse outside a health facility by officers at the Ministry of Health headquarters offices. Although this was a single report, it is worth noting that nurses are exposed to violence incidents even outside the hospital setting. Other incidents of violence against nurses outside the hospital setting have been reported in Australia by Opie et al. (2010:21) where some nurses were attacked in the community whilst off-duty. Incidents of violence experienced outside the work setting increases the feeling of insecurity for the nurses and can affect their work performance (Opie et al., 2010:21).

5.2.2 Prevalence, types and perpetrators of violence against nurses according to category of nurses

There were no indications from the results that violence is directed towards a specific category of nurses. The prevalence of violence against nurses was the same for all categories of nurses. There was no statistically significant difference (p>0.05) in the experience of violence based on category/cadre of nursing. A minority 14% (n = 112) of the respondents were of the opinion that violence was directed towards a specific category of nurses. Vertical violence (from junior to senior staff as well as from senior to junior staff was considered to be a problem by this group of respondents. Strandmark and Hallberg (2007:337) argued that an individual's strength due to academic success and competence can create envy in his/her colleagues. The colleagues then strive to weaken the academically strong individuals to avoid competition and being criticised. This results in the academically strong individuals experiencing workplace violence. In addition, belonging to different cadres in nursing was seen as a contributing factor to the rise in violence amongst nurses. This could be because the different cadres in nursing create a hierarchy of power, competence and superiority of the nurses (Strandmark & Hallberg, 2007:338). As a result, there is a struggle of power amongst co-workers which creates tension and disagreements which can end in violence amongst them (Strandmark & Hallberg, 2007:338).
Most respondents on this issue in the current study were of the opinion that junior nurses are the ones most vulnerable to violence from senior nurses and other health care professionals. Other studies have found that nurses belonging to a lower level cadre of nursing (nursing aids/assistants) were also more exposed to incidents of violence from patients, patients’ visitors, fellow nurses, nurse managers and medical practitioners than registered nurses (Estryn-Behar et al., 2008:111; Hegney et al., 2006:228). An opinion expressed by respondents in the current study was that violence is directed towards more nurses who work in the clinical settings rather than those whose work is office-based. This is consistent with an argument offered by Hegney et al. (2006:229) that junior nurses could be more prone to violence because they provide the bulk of clinical care while registered nurses assume supervisory roles.

5.2.3 Causes of increased violence against nurses

This being the first known study to examine violence against nurses in Malawi, it was not possible to determine if the prevalence of violence against nurses had increased. The majority of the respondents (66.07%) however believed that violence against nurses in Malawi was on the increase. Religious beliefs were felt to be one of the contributory factors for the increase in violence against nurses. One respondent cited an instance in which the parents of an anaemic child had refused on religious grounds, permission for the child to receive a blood transfusion. The nurse reported having attempted to persuade the parents to give permission for the transfusion, and had nearly been assaulted by the angry father. Strandmark and Hallberg (2007:336) argued that conflict in values (in this case religious values and professional values) results in a struggle where both parties believe that their way of thinking is correct. This struggle then leads to violence in the workplace.

Another reason believed to have contributed to the increase of violence against nurses was that in Malawi nurses are working in an emotionally draining environment with a high workload, low incentives and do not feel appreciated for their efforts. These frustrating factors reduce the nurses’ productivity which in turn makes patients and their relatives angry with the nurses and results in violence against the nurses. A study with middle level cadres of health care providers in Malawi has indeed shown that nurses are dissatisfied with their work environment and salaries (McAuliffe, Bowie, Manafa, Maseko, Maclachlan, Hervey, Normand & Chirwa, 2009). Lack or inadequate incentives may be a contributory factor in the overall work satisfaction of nurses. It is not evident however, that there is any direct link between nurses’ productivity and violence displayed toward them.
The perception of being undermined by society, reported in this study, could be a manifestation of low self-esteem. Research has shown that nurses who have been victims of workplace violence have low self-confidence and also feel that they command no respect (McKenna et al., 2003:61; Yildirim & Yildirim, 2007:1448). There is no information however from this current study to conclude that the society in Malawi undermines or disrespects nurses.

Poor communication and rudeness between nurses and clients or their colleagues was another reason given as a contributing factor to the rise of violence against nurses. This is consistent with findings from the studies of Bilgin (2009:259); Khalil (2009:214); Kumchuchat et al. (2008:203); Shield and Wilkins (2009:14) who found that nurses’ miscommunication and poor interpersonal life styles cause violence, and recommend that nurses maintain good interpersonal relationships as a professional responsibility and for their own safety.

Confusion and alterations in mental state of the perpetrators is a cause of violence, particularly with reference to psychiatric patients. Confusion and violence in relatives in response to a patient’s deaths was also noted by respondents in this study. Confusion as a cause of violence was reported by Mullan and Badger (2007:37) in a study in which nurses who had experienced workplace violence by patients attributed the incident of aggression to confusion of the patients. May and Grubbs (2002:14) also found that confusion is one of the reasons patients or their visitors become violent towards nurses.

Perceived lack of support for the victims of violence from nurse managers and other seniors was reported by some of the respondents (n = 3) in the current study. The perception that lack of support from managers leads to increased violence was also reported by Kumchuchat et al. (2008:206), May and Grubbs (2002:14) and Shield and Wilkins (2009:14). If managers support victims of violence by making the perpetrators of violence accountable for their actions, it would caution others from being violent against nurses. This would contribute to the reduction of subsequent incidents of violence against nurses. Victims of violence may also need psychological support to lessen psychological effects of the violence.
5.3 Reaction of nurses following the experience of a violence incident

Following the experience of a violent incident, the nurses reacted in various ways. The majority (62%) of those who experienced a violent incident had reported the issue to a senior person or a manager. This is in contrast to findings from other studies where the majority of incidents of violence against nurses go unreported (Esmaeilpour et al., 2011:134; Farrel et al., 2006:785; Kwok et al., 2006:8; Senuzun Ergun & Karadakovan, 2005:159). The reason for the high reporting in the current study may be that those incidents were viewed as intentional and were perpetrated by patients’ visitors or work colleagues and not patients. Nurses tend not to report incidents of violence if they perceive that the perpetrator lacked intent such as when the perpetrator appears confused (Luck et al., 2008:1074).

Fifty six percent of those who experienced violence reported that they told a trusted friend. In addition, 89% of the nurse respondents indicated that at least one person shared with them about having experienced a violent incident. Talking with a colleague is a common action taken by nurses following an experience of workplace violence (Farrel et al., 2006:782; Kwok et al., 2006:6). In Australia, Farrel et al. (2006:782) found that most nurses felt that talking with a colleague was most helpful in relieving feelings of distress following experience of workplace violence than talking to their managers.

This study also found that other nurses respond to violence by taking some time off; seeking a transfer or retirement from the facility; and refusing to work with the violent patients. These reactions to violent incidents have also been found in other studies. McKenna et al. (2003:61) found that some nurses who had experienced workplace violence took some time off following the event and other nurses refused to work with the patient who had been violent. Previous studies also found that nurses who had been victims of violence resort to leaving their job (Farrel et al., 2006:782; King & McInerney, 2006:70; Yildirim & Yildirim, 2007:1452). Reactions to violent incidents by nurses where the nurse stays away from working such as given above has the potential of worsening the nurses shortage in Malawi.

Nineteen percent of the nurses who experienced violence cried following the event. Such emotional reactions to workplace violence have also been reported by Yildirim and Yildirim (2007:1450) in
Turkey. In their study, other nurses (11%) reported that they retaliated against the perpetrator. Of note is that for all those (n = 9) who indicated that they did retaliate, the perpetrator was a fellow work colleague. Kwok et al. (2006:9) also found that some nurses took revenge if they experienced a violent incident. Taking revenge has the potential of perpetuating violence and cannot contribute to the solution of workplace violence.

A few nurses reported that they were able to calm the violent situation by talking to the perpetrator. Nurses need to be encouraged in such positive ways of conflict resolution when faced with workplace violence. Only one respondent took legal advice about the incident. A number of studies have also established that a few nurses take legal action if they have been victimised at work (Farrel et al., 2006:784; Hegney et al., 2006:228; Kwok et al., 2006:9; Yildirim & Yildirim, 2007:1452). Taking legal action against perpetrators of violence could help to make them accountable for their actions, however, this is often a costly process and not always possible to finance.

5.4 Patterns of violence in relation to time and days of the week
In all the five facilities, most nurses perceived that violent incidents occur on a daily basis, and day time (6am - 5:59pm) incidents were reported as being the most prolific. Kamchuchat et al. (2008:203) and Lundstrom et al. (2007:86) also noted that most violent incidents occurred during the day. Facility 1 and Facility 2 (central hospitals) revealed that more acts of violence are likely to be displayed between 6am and 5:59pm everyday. Most activities (such as ward rounds, out-patient clinics, patients’ visiting hours, nurses’ supervisors’ visits) occur during the day. In the course of these activities, conflicts, which can result in violence, can occur.

At Facility 3 (psychiatric hospital), the perceived patterns were different. The respondents were of the view that violence mostly occur during the night and on weekends. The nature of the illness conditions for which patient are admitted to psychiatric hospitals increase the risk of violence. There is often a smaller staff complement on duty in psychiatric hospitals over weekends when fewer activities are scheduled. Shields and Wilkins (2009:12) found that inadequate staffing levels for nurses is associated with an increased risk for violence. Another reason why violence may occur more often at night in psychiatric hospital is that some psychiatric patients suffer nocturnal disturbances due to their illness and this can increase the risk of violence.
The community health centres (Facilities 4 and 5) in this study are open only during day time (7:30am – 5:00pm), with the exception of the maternity unit. Therefore, incidents of violence are likely to occur within the time that most of its sections are open for service provision.

5.5 Nurses’ perceived effects of violence on their personal and professional lives

Most (87.5%, n = 112) of the nurses perceived that violence had an effect on their personal and professional lives. There was no association between exposure to violence and perception that violence has an effect on the individual. This suggests that violence affects all nurses regardless of whether they personally experienced an act of violence.

In an open-ended question the nurses were asked to explain how violence affects them. The effects described were all psychological in nature. Some of the respondents explained that presence of violence at the workplace results in poor work performance. Others felt demoralised to work due to experience of workplace violence. This suggests that violence against nurses has an impact on the quality of care rendered to patients. Consistent with this are findings by Roche at al. (2009:18) that an increase in violence against nurses resulted in an increase in medication errors and patient falls.

Workplace violence has a number of possible effects on nurses. In the current study, the respondents expressed concern that physical violence can result in injuries or physical disability, which in turn puts the nurse at risk of losing her/his job. Even nurses who had not experienced violence in the preceding twelve months were afraid that they may also become victims of violence. Working in an environment that is frightening can also result in a compromise of the quality of care that nurses would provide to patients. Previous studies have also found that nurses who have been victims of workplace violence live in fear and most nurses feel that being a nurse compromises on their safety (Franz et al., 2010; McKinnon & Cross, 2008:13).

One of the consequences for persons who have experienced workplace violence is the need for psychological support, reported in several studies (Inoue et al., 2006:31; Nhiwatiwa, 2003:565). Inoue at al., (2006:31) found that nurses who had been victims of workplace violence become psychologically disturbed and subsequently developed PTSD. This study also reported that the experience of workplace violence caused anger and embarrassment in the victims. Similar finding
were described by Franz et al. (2010) where 75.8% of the nurses reported that they felt angry following the experience of workplace violence. Nhiwatiwa (2003:565) found that 64% of nurses reported feeling upset following an experience of workplace violence. This may compromise the nurse’s ability to provide adequate and quality care to their patients. Reducing workplace violence against nurses could help to improve the quality of nursing care in the hospitals.

Another effect of workplace violence is that it contributes to loss of interest in the profession. In the current study, some (n = 12) respondents reported loss of interest in nursing and had considered leaving the profession as a consequence of workplace violence. This has been reported in other studies (Farrel et al., 2006:782, King & McInerney, 2006:70; Yildirim & Yildirim, 2007:1452). Workplace violence therefore can affect retention of qualified nurses which would increase the shortage of nurses in the country.

The experience of workplace violence, although initially negative, may have a potentially positive outcome. One respondent described how her experience of workplace violence was a lesson which made her stronger and a sharp thinker. Nurses who experienced violence at workplace have reported that they became more careful at work to avoid being victims again (Franz et al., 2010; Yildirim & Yildirim, 2007:1450). Nurses may need to be assisted in working through a violent incident with a skilled supportive professional or counsellor in order to be able to deal with situations which may lead to violence if not effectively managed. There is also a risk that nurses, believing that they may have been at fault, do not report violent incidents and therefore do not access help when needed.

Two respondents in the current study who had been victims of violence in the previous twelve months, stated that the incident had not had any impact on them. One respondent felt able to cope while the other explained that a belief in God made it possible to forgive and forget the experience of violence, which mitigated the possible effects. Luck et al. (2008:1074) found that when nurses experience an episode of violence, they make judgements which influence their reactions. Some acts of violence that nurses experience have little meaning for them, therefore, they would not regard them as violence or feel affected by the acts (Luck et al., 2008:1074). There is need however for further research on long term effects of workplace violence on the individuals.
5.6 Limitations of the study

The study achieved a response rate of 60%. Although this is an acceptable response in a survey, it cannot be assumed that the non-responders would have been similar. The non-responders might be different to those who responded in some aspects regarding experiences of violence. Data were collected using a questionnaire which required the participants to recall information that occurred in the past twelve months which may have introduced recall bias.

Although the research assistants were briefed on the data collection process, there was a possibility of selection bias due to use of different individuals in the distribution of questionnaires to eligible participants. In addition, the findings from the study cannot be generalised to all the Malawian nurses as the sample was not representative of the whole population of nurses since the study used a non-probability sampling technique.

Although the study elicited information regarding effects of workplace violence on the nurses, it cannot be concluded that there is a cause-effect as the research was cross-sectional could not establish causation. In addition, data were collected only for a period of six weeks. A study which included qualitative data may have informed the statistical results.

5.7 Implications for nursing practice

The study provides evidence that violence against nurses in Malawi is perceived to be a problem. Most nurses indicated that they feel demoralised, lose interest in the nursing profession and work with fear because of workplace violence. Reducing levels of violence against nurses would therefore reverse these feelings and there will be nurses who are energetic, inspired and with nursing profession at heart. This would help promote provision of quality nursing care in the public hospitals in the country. Nurses that are inspired and motivated will act as role models who will inspire school leavers to join the nursing profession. There is need to recruit more nurses to curb the problem of shortage of nurses in the country. Therefore eradicating workplace violence against nurses could be one way of retaining nurses in the country.
5.8 Recommendations

Arising from the results of this study, the following recommendations are made:

5.8.1 Recommendations for policy makers

Hospitals and other health facilities should adopt a “violence free policy”. In addition, NONM and other stakeholders should embark on a campaign for “no violence against nurses” to raise awareness of violence in health care and particularly that which is perpetrated against nurses. Acts of violence towards nurses must be condemned.

In order to prevent and minimise the incidence and impact of violence against nurses, there should be clear policies for all health care facilities. In particular, a policy on reporting, provision of support for victims where necessary and management of perpetrators should be developed and implemented. Consultation with nurses and hospital managers is essential in the development of the policy.

In addition, reported acts of violence should be analysed to identify what caused them and to find possible means of preventing such situations in future. There is also a need for managers in health facilities to conduct continuous risk assessment for workplace violence so as to find possible solutions of minimising those risks. Policy makers should strategise on how to improve security in the health facilities in order to prevent violence for nurses and all other workers. All other staff members in health facilities should be trained in the prevention of workplace violence and the effects thereof.

5.8.2 Recommendations for nursing education

Topics on nurses’ rights, types of violence, prevention of violence and dealing with violence should be included in nursing education at undergraduate level and provided during in-service training for qualified nurses. This would help to promote nurses’ assertiveness and encourage nurses to recognise violence and deal with this with minimal risk to themselves. Nurses should be supported in claiming their right to a safe working environment and not feel inferior to any other person who violates their rights.
5.8.3 Recommendations for nursing practice

In order to minimise the risk of interpersonal violence among nurses, use of the appropriate structures should be encouraged. These would include support services for nurse when working in particularly stressful settings, effective management structures, training in management of potentially risky situations for health care administrators. Collegial support should be encouraged.

Effective interpersonal communication skills should be a component of all in-service training programmes. This should include recognition and management of potentially violent situations.

5.8.4 Recommendations for research

There is need for more research with a larger sample and more health facilities to examine the risk factors for violence and to develop and evaluate strategies of reducing violence against nurses. Studies which incorporate qualitative data would provide in-depth understanding of some of the issues raised in this study.

5.9 Conclusion

The study has identified violence against nurses in the five facilities in Malawi as a perceived problem by nurse respondents. Violence against nurses was perceived to be a particular problem in the psychiatric hospital, community settings and maternity departments. All cadres of nursing experienced violence and there was no association between experience of violence and sex of the nurse. The types of violence nurses experienced were psychological and physical. Psychological violence was reported as the most common form experienced by respondents in this study. Most violent incidents were perpetrated by patients and/or their relatives.

Nurses however also experienced violence from fellow nurses, doctors, hospital managers and other personnel working in the health facilities. Senior nurses and hospital managers were also perpetrators of violence. Although incidents of violence were reported as occurring throughout the day, most incidents occurred at times when the hospitals were busy and when the nurse – patient ratio was low. Shortage of nurses and other material resources in the hospitals were perceived to be the main contributing factors to the increase of violence against nurses.
Reporting of violent incidents was inconsistent. Following an experience of a violence incident, some nurses either report to managers or tell a trusted friend.

The findings of this study are consistent with research conducted in various countries in the USA, Europe, Middle East and Asia. Limited research has been conducted in sub-Saharan Africa, and in particular in Malawi. Workplace violence affects nurses psychologically, may result in poor work performance and may be a causative factor in the attrition of nurses from the nursing profession. The working environment of the nurse should be conducive to the provision of quality patient care. It is therefore important that measures are taken to create a safe working environment and minimise workplace violence against nurses.
6.0 References


on workplace violence in the health sector, together creating a safe work environment. I.


health care workers in Germany—-a cross sectional retrospective survey. BMC Health Services


Hegney, D., Eley, R., Plank, A., Buikstra, E. & Parker, V. 2006. Workplace violence in Queensland,
Australia: the results of a comparative study. International Journal of Nursing Practice.

Hutchinson, M., Vickers, M.H., Jackson, D. & Wilkers, L. 2006. ‘They stand you in a corner; you are
not to speak’: Nurses tell of abusive indoctrination in work teams dominated by bullies.

Inoue, M., Tsukano, K., Muraoka, M., Kaneko, F. & Okamura, H. 2006. Psychological impact of verbal
abuse and violence by patients on nurses working in psychiatric departments. Psychiatry &

International Labour Organisation, International Council of Nurses, World Health Organization &

Nursing Administration. 39(2):84-90.

violence directed at nursing staff at a general hospital in southern Thailand. Journal of


Manafa, O., McAuliffe, E., Maseko, F., Bovie, C, MacLachlan, M., & Normand, C. 2009. Retention of


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http://www.africanews.com/site/Why_a_nurse_is_a_friend_to_everyone/list_messages/30659  
[2010, March 18].

Roche, M., Diers, D., Duffield, C. & Catling-Paul, C. 2009. Violence Towards Nurses, the Work  
Available: from Ebscohost. [2011, March 30].

Rowe, M.M. & Sherlock, H. 2005. Stress and verbal abuse in nursing: do burned out nurses eat their  
[2010, March 23].

Available: from Ebscohost. [2010, March 20].

general and psychiatric hospitals in Taiwan. *International Archives of Occupational and  


Available: from Ebscohost. [2010, March 30].

Strandmark, K.M. & Hallberg, L.R. 2007. The origin of workplace bullying: experiences from the  
perspective of bully victims in the public service sector. *Journal of Nursing Management.*  

Ebscohost. [2011, February 10].

Printers.

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World Health Organisation. 2006. *Health workforce demographics.* [Homepage of World Health Organisation], [Online]. Available: [http://apps.who.int/globalatlas/docs/HRH/HTML/Age_ctry.htm](http://apps.who.int/globalatlas/docs/HRH/HTML/Age_ctry.htm) [2010, April 08].


Appendix A: Map of Malawi

Source: http://www.nationsonline.org/oneworld/map/malawi_map.htm
Appendix B: Ethics approval Letter (Health Sciences Research Ethics committee)

UNIVERSITY OF CAPE TOWN

Health Sciences Faculty
Faculty of Health Sciences Human Research Ethics Committee
Room E52-24 Groote Schuur Hospital Old Main Building
Observatory 7925
Telephone [021] 406 6338 • Facsimile [021] 406 6411
e-mail: surmayah.arief@uct.ac.za

15 December 2010

HREC REF: 544/2010

Ms C Banda
Nursing & Midwifery
F-Floor
OMB

Dear Ms Banda,

PROJECT TITLE: AN INVESTIGATION INTO VIOLENCE AGAINST NURSES IN THE SOUTHERN REGION OF MALAWI

Thank you for addressing the comments raised by the committee.

It is a pleasure to inform you that the Ethics Committee has formally approved the above-mentioned study.

Approval is granted for one year till the 15 January 2012.

Please submit an annual progress report if the research continues beyond the expiry date. Please submit a brief summary of findings if you complete the study within the approval period so that we can close our file.

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please quote the REC. REF in all your correspondence.

Yours sincerely

PROFESSOR M. BLOCKMAN
CHAIRPERSON, HSE HUMAN ETHICS

Federal Wide Assurance Number: FWA00001637.
Institutional Review Board (IRB) number: IRB00001938

[Signature]
Appendix C: Ethical Approval Letter from
NHSRC (Malawi)

Telephone:  + 265  789  400
Facsimile:    + 265  789  431
e-mail doccentre@malawi.net
All Communications should be
addressed to: The Secretary for Health
and Population

INreply please quote No. MED/4/36c
MINISTRY OF HEALTH
P.O. BOX 30377
LILONGWE 3
MALAWI

1st August 2011

Chimwemwe Chikoko
University of Cape Town

Dear madam,

RE: Protocol # 948: An investigation into violence against nurses in the Southern Region of Malawi

Thank you for the above titled proposal that you submitted to the National Health Sciences Research Committee (NHSRC) for review. Please be advised that the NHSRC has reviewed and approved your application to conduct the above titled study.

- **APPROVAL NUMBER**: NHSRC # 948
  - The above details should be used on all correspondence, consent forms and documents as appropriate.
- **APPROVAL DATE**: 01/8/2011
- **EXPIRATION DATE**: This approval expires on 31/07/2012

After this date, this project may only continue upon renewal. For purposes of renewal, a progress report on a standard form obtainable from the NHSRC secretariat should be submitted one month before the expiration date for continuing review.

- **SERIOUS ADVERSE EVENT REPORTING**: All serious problems having to do with subject safety must be reported to the National Health Sciences Research Committee within 10 working days using standard forms obtainable from the NHSRC Secretariat.
- **MODIFICATIONS**: Prior NHSRC approval using standard forms obtainable from the NHSRC Secretariat is required before implementing any changes in the Protocol (including changes in the consent documents). You may not use any other consent documents besides those approved by the NHSRC.
- **TERMINATION OF STUDY**: On termination of a study, a report has to be submitted to the NHSRC using standard forms obtainable from the NHSRC Secretariat.
- **QUESTIONS**: Please contact the NHSRC on Telephone No. (01) 724418, 0999218630 or by e-mail on moh@gmail.com
- **Other**: Please be reminded to send in copies of your final research results for our records as well as for the Health Research Database.

Kind regards from the NHSRC Secretariat.

FOR CHAIRMAN, NATIONAL HEALTH SCIENCES RESEARCH COMMITTEE
Appendix D: Participant’s information sheet and Questionnaire

Code number:........

Study Title: An investigation into violence against nurses in the southern region of Malawi

Information about the study (English version)

Introduction:
The aim of the study is to describe the nature and extent of violence which is committed against permanently employed registered and enrolled nurses, which occurs while on duty in this health facility. To be able to participate in this study, you need to be permanently employed in this health facility and be registered or enrolled in one of the following categories: State Registered Nurse (SRN), State Registered Nurse Midwife, State registered midwife, State registered psychiatric nurse, Enrolled nurse midwife, Enrolled community nurse (midwife), Enrolled psychiatric nurse (midwife), Psychiatric nursing technicians, Nursing midwifery technicians, and nursing technicians.

Kindly spend time to read through and answer all questions. The questionnaire is divided into two sections to help you focus your responses. Section A has questions asking your background information. Section B has questions about incidents of violence against nurses at your work. The questionnaire has a combination of closed or structured questions and open-ended questions. Tick the appropriate response for the closed or structured questions and write your answer in the space provided for the open ended questions. It will take you approximately 20 minutes to fill the questionnaire.

Participation in this survey is voluntary and you are free to not complete the questionnaire. By returning a completed questionnaire, it means you have given consent to participate. There is no anticipated risk to your completing this questionnaire. If, however, the questions cause you any distress and you would like to seek any assistance for this, please contact the researcher who will arrange for a referral to an appropriate service. There is no remuneration for participation in this study.

This study is being conducted in partial fulfilment of the requirement for the M Sc Nursing degree for which I am registered at the University of Cape Town. Ethics approval has been obtained from the Faculty of Health Sciences Human Research Ethics Committee (HREC REF: 544/2010), and the National Health Sciences Research Committee (NHSRC 948) in Malawi.
Thank you for being willing to take part in this survey. The results, once analysed and written up will be made available in a report to this facility. No identifying information will be included in the report.

Should you have any questions please contact Mrs Chimwemwe Chikoko Banda (Researcher) on (265) 881944716. Email: chimwemwe.chikoko@uct.ac.za

Or DR Pat Mayers (supervisor) on (021) 406 6464. Email: pat.mayers@uct.ac.za

Or Prof Sinegugu Duma (Co-supervisor) on (021) 406 6321. Email: sinegugu.duma@uct.ac.za

You can also contact the Faculty of Health Sciences Research Ethics Committee, F45 Old Main Building, Groote Schuur Hospital, Observatory 7925

Telephone: (021) 406 6059

Or the National Health Sciences Research committee, P.O box 30377, Lilongwe 3.

Telephone: (265) 1789 321
Information about the study (Chichewa version)

Kafukufuku wankhanza kwa anamwino kumwera kwa dziko la Malawi.

Chidziwitso cha kafukufuku amuneyu

Cholinga chakafukufuku amuneyi ndi kufuna kupeza ndikufotokoza nkhanza zomwe anamwino ogwira ntchito pachipatala pano amakumanana zo pamene akugwira ntchito yawo.

Kuti mulowe nawo mkafukufuku amuneyu muyenera kuti mkhale woolembedwa ntchito pachipatala pano komanso muli ndi satifiketi/dipuloma/digiri ya unamwino.


Monga ndanena kale poyambirira, kafukufuku amuneyu akupangidwa pofuna kudziwa zankhanza zomwe amakumanana nazow anamwino pogwira ntchito yawo komanso ndimbali imodzi yazinthu zomwe ndiyenera kukwaniritsa pa maphunziro anga awu kachenjede paza unamwino (Masters degree in nursing) womwe ndikupanga ndi Univesite ya Capetown. Chilorezo chakafukufuku amuneyu chapelekedwa ndi Faculty of Health Sciences Human Research Ethics Committee (HREC REF 544/2010), komanso National Health Sciences Research Committee (NHSRC 948) ku Malawi omwe amaona kuti ufulu wa anthu otenga nao mbali pakafukufuku uli otetezedwa.


Ngati muli ndifunso lilironse mutha kufunsa Mrs Chimwemwe Chikoko Banda (yemwe akupanga kafukufuku) pa (265) 881944716. Email: chimwemwe.chikoko@uct.ac.za

kapena DR Pat Mayers (mphunzitsi otsgolera) pa (021) 406 6464. Email: pat.mayers@uct.ac.za
kapena Prof Sinegugu Duma (mphunsitsi othandizila) pa (021) 406 6321. Email: sinegugu.duma@uct.ac.za

mungathenso kufunsa ku Faculty of Health Sciences Research Ethics Committee, F45 Old Main Building, Groote Schuur Hospital, Observatory 7925

nambala ya lamy: (021) 406 6059

kapena a National Health Sciences Research committee, P.O box 30377, Lilongwe 3.

Nambala ya lamy: (265) 1789 321
Please answer all questions that apply to you. Each question has specific instructions. Thank you.

Section A: Demographic information

1. In what category of nursing are you currently registered/enrolled? Please mark ONE item only.

<table>
<thead>
<tr>
<th>Category</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State registered nurse (SRN)</td>
<td></td>
</tr>
<tr>
<td>State Registered Nurse Midwife</td>
<td></td>
</tr>
<tr>
<td>State Registered Midwife</td>
<td></td>
</tr>
<tr>
<td>State Registered Psychiatric Nurse</td>
<td></td>
</tr>
<tr>
<td>State Registered Community Nurse</td>
<td></td>
</tr>
<tr>
<td>Enrolled Nurse</td>
<td></td>
</tr>
<tr>
<td>Enrolled Nurse Midwife</td>
<td></td>
</tr>
<tr>
<td>Enrolled community nurse/midwife</td>
<td></td>
</tr>
<tr>
<td>Enrolled psychiatric nurse/midwife</td>
<td></td>
</tr>
<tr>
<td>Nursing midwifery technician</td>
<td></td>
</tr>
<tr>
<td>Nursing technician</td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
</tr>
</tbody>
</table>

2. Please indicate your sex

<table>
<thead>
<tr>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
</tbody>
</table>

3. How long have you been practising as a registered or enrolled nurse? Please tick only one box

<table>
<thead>
<tr>
<th>Duration</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than one year</td>
<td></td>
</tr>
<tr>
<td>1-2 years</td>
<td></td>
</tr>
<tr>
<td>3-4 years</td>
<td></td>
</tr>
<tr>
<td>5-6 years</td>
<td></td>
</tr>
<tr>
<td>7-8 years</td>
<td></td>
</tr>
<tr>
<td>9-10 years</td>
<td></td>
</tr>
<tr>
<td>11-12 years</td>
<td></td>
</tr>
<tr>
<td>13-14 years</td>
<td></td>
</tr>
<tr>
<td>15-16 years</td>
<td></td>
</tr>
<tr>
<td>More than 16 years</td>
<td></td>
</tr>
</tbody>
</table>

4. In which area of nursing do you currently practice/work?

<table>
<thead>
<tr>
<th>Area</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical [including oncology]</td>
<td></td>
</tr>
<tr>
<td>Surgical [including orthopaedic]</td>
<td></td>
</tr>
<tr>
<td>ICU</td>
<td></td>
</tr>
<tr>
<td>Community centre [primary level care]</td>
<td></td>
</tr>
<tr>
<td>Paediatric</td>
<td></td>
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<tr>
<td>Maternity</td>
<td></td>
</tr>
<tr>
<td>Psychiatric</td>
<td></td>
</tr>
<tr>
<td>Emergency unit</td>
<td></td>
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<tr>
<td>Outpatients [hospital based]</td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
</tr>
</tbody>
</table>

5. How many years have you worked in your current department/unit? Years

Section B: Violence against nurses

6. Please indicate on the scale below your response to the following statement:

   Violence against nurses in the workplace is a problem

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

7. In your opinion, which of the following groups tend to be violent against nurses?
Please number the categories according to the groups which you feel are most likely to be violent against nurses: 1 = most likely to be violent and 5 = least likely to be violent.

<table>
<thead>
<tr>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male patients</td>
</tr>
<tr>
<td>Female patients</td>
</tr>
<tr>
<td>Young children</td>
</tr>
<tr>
<td>Adolescent males</td>
</tr>
<tr>
<td>Adolescent females</td>
</tr>
<tr>
<td>Drug/alcohol abusers</td>
</tr>
<tr>
<td>Doctors</td>
</tr>
<tr>
<td>Patients' relatives</td>
</tr>
</tbody>
</table>

8. Are there any other categories of patient or staff whom you think are likely to be violent against nurses? If so, please names these categories/groups below:

1. .................................. 
2. ..................................
3. ..................................

9. On which of these days and time in your opinion, do people display violent behaviour against nurses?

<table>
<thead>
<tr>
<th>Days of the week</th>
<th>12midnight-5:59am</th>
<th>6am-11:59am</th>
<th>12noon-5:59 pm</th>
<th>6pm – 11:59 pm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Wednesday</td>
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<tr>
<td>Thursday</td>
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<tr>
<td>Friday</td>
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</tr>
<tr>
<td>Saturday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. What types of violent incidents have you observed in your areas of practice? Please tick all that apply.

<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Yes</th>
<th>No</th>
<th>sometimes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threatening behaviours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical assault</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal abuse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. How many nurses have discussed their experiences of violent incidents with you in the last 12 months? Please mark the appropriate block.

<table>
<thead>
<tr>
<th>Nurses Discussed</th>
<th>None</th>
<th>1 nurse</th>
<th>2-3 nurses</th>
<th>4-5 nurses</th>
<th>6-7 nurses</th>
<th>8-9 nurses</th>
<th>10 or more nurses</th>
</tr>
</thead>
</table>

12. Have you personally experienced any form of violence in the past 12 months?

<table>
<thead>
<tr>
<th>Experience</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If your answer is no, skip to question number 17
13. In what department/area of speciality were you practicing at the time you experienced that violent incidence?

<table>
<thead>
<tr>
<th>Medical [including oncology]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical [including orthopaedic]</td>
<td></td>
</tr>
<tr>
<td>ICU</td>
<td></td>
</tr>
<tr>
<td>Community centre [primary level care]</td>
<td></td>
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<tr>
<td>Paediatric</td>
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<tr>
<td>Maternity</td>
<td></td>
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<tr>
<td>Psychiatric</td>
<td></td>
</tr>
<tr>
<td>Emergency unit</td>
<td></td>
</tr>
<tr>
<td>Outpatients [hospital based]</td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
</tr>
</tbody>
</table>

14. What types of violent incidents have you experienced personally? Please tick all that apply.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threatening behaviours</td>
<td></td>
</tr>
<tr>
<td>Physical assault</td>
<td></td>
</tr>
<tr>
<td>Verbal abuse</td>
<td></td>
</tr>
<tr>
<td>Use of blunt or sharp object</td>
<td></td>
</tr>
<tr>
<td>Sexual harassment</td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
</tr>
</tbody>
</table>

15. If you have experienced any form of violence, what was your reaction/response? Please tick ALL that apply.

<table>
<thead>
<tr>
<th>Reporting to senior person/manager</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Telling a trusted friend</td>
<td></td>
</tr>
<tr>
<td>Taking time off</td>
<td></td>
</tr>
<tr>
<td>Retaliated</td>
<td></td>
</tr>
<tr>
<td>Cried</td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
</tr>
</tbody>
</table>

16. Who was the source of the violent incident/s that you experienced? Please mark ALL that apply

<table>
<thead>
<tr>
<th>Male patient</th>
<th>Female patient</th>
<th>Medical doctor</th>
<th>Clinical officer/medical assistant</th>
<th>Fellow nurse</th>
<th>Other (Specify)</th>
</tr>
</thead>
</table>

17. In your view, is violence directed against a specific category of nurses? Please mark ONE category only.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
</table>

If yes, please elaborate

-------------------------------------------------------------------------------------------------------------------------------------
18. In your opinion or experience, which of these categories of nurses tend to be exposed to violent incidents? Please indicate below the frequency for each category.

<table>
<thead>
<tr>
<th>Categories of nurses</th>
<th>Frequency of violent incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Often</td>
</tr>
<tr>
<td>Enrolled nurses</td>
<td></td>
</tr>
<tr>
<td>Nurse technicians</td>
<td></td>
</tr>
<tr>
<td>Registered nurses</td>
<td></td>
</tr>
<tr>
<td>Student nurses</td>
<td></td>
</tr>
<tr>
<td>Midwives</td>
<td></td>
</tr>
<tr>
<td>Matrons</td>
<td></td>
</tr>
<tr>
<td>In-charge nurses</td>
<td></td>
</tr>
<tr>
<td>Psychiatric nurses</td>
<td></td>
</tr>
<tr>
<td>Paediatric nurses</td>
<td></td>
</tr>
</tbody>
</table>

19. In your view, is violence directed against nurses from specific groups as specified below?

<table>
<thead>
<tr>
<th>Cultural</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20. From your observations, would you say violence against nurses is on the increase?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
</table>

21. If your answer to question 19 is yes, what are some of the factors that have contributed to the increase of violence against nurses?

- ...
- ...
- ...

22. Does the violence in nursing have any effect on you? Please explain

- ...
- ...
- ...

End of questions. Thank you for taking part in this study
Appendix E: Referral Letter

To: The clinic manager/ human resource officer

From: Mrs Chimwemwe Chikoko Banda

Date: ............................................................

Re: ..................................................................

Dear Sir/Madam,

I refer to you ............................................................... who is an employee at ......................................

He/She participated in my study on “violence against nurses in the southern region of Malawi” reports to have the following problem due to the participation:

..................................................................................................................................................................

......

May you please assist him/her accordingly.

Yours,

Mrs Chimwemwe Chikoko Banda
Appendix F: Clearance letter from Queen Elizabeth Central Hospital

INSTITUTIONAL ENDORSEMENT REQUIRED

Statement from the Institution:
The NHSRC will only accept for review and approval research proposals that have been found scientifically acceptable by our institution. The acceptable Institutional endorsement will be that from the Institution in which the research is to be conducted or one from the Institution conducting the research.

We, representing

QUEEN ELIZABETH HOSPITAL

(Name of Institution conducting the research/in which the research is to be conducted)
do certify that we have reviewed the research proposal titled

VIOLENCE IN NURSING

Submitted by

CHIMWEMWE CHIKOKO KACHO-JE ZANU - BANDA

We attest to the scientific merit of this study and the competency of the investigator(s) to conduct the project and do hereby recommend the proposal to the NHSRC for review and approval.

SIGNATURES

Signature
Institutional representative
Name (Please Print)

Signature: Head of Institution
(or other authorized signatory)
Name (Please Print)

Contact Tel. Number
E-mail address

OFFICIAL STAMP OF INSTITUTION

*Institution includes Universities, Hospitals, Research Institutes or Companies.

Executive Committee: C. Mwamwaya (Chairperson), Prof. Ifafunwa Bongo (Vice-Chairperson)
Registered with the USA Office for Human Research Protection (OHRP) as an International IRB
DBS Number HB000005595 PW44000075

The Director
Queen Elizabeth Central Hospital
22 JUL 2010
P.O. Box 35
Blantyre

Date 23-07-10
Appendix G: Clearance letter From Blantyre DHO

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INSTITUTIONAL ENDORSEMENT REQUIRED

Statement from the Institution:
The NHSRC will only accept for review and approval research proposals that have been found scientifically acceptable by our institution. The acceptable institutional endorsement will be that from the institution in which the research is to be conducted or one from the institution conducting the research.

We, representing

BLANTYRE D.H.O.

(Name of Institution conducting the research in which the research is to be conducted)

do certify that we have reviewed the research proposal titled

VIOLENCE IN NURSING

Submitted by

CHIMWEMWE CHIKOKO KWANZO - BANDA

We attest to the scientific merit of this study and the competency of the investigator(s) to conduct the project and do hereby recommend the proposal to the NHSRC for review and approval.

SIGNATURES

Signature
Institutional representative
Name (Please Print)
Signature: Head of Institution (or other authorized signatory)
Name (Please Print)

Date
District Health Officer
20/07/10

OFFICIAL STAMP OF INSTITUTION

*Institution includes Universities, Hospitals, Research Institutes or Companies.

Executive Committee: Dr C. Manyemusango (Chairperson), Prof. Nkape Sango (Vice Chairperson)
Registered with the USA Office for Human Research Protections (OHRP) as an International IRB
IRB Number IRB00002955 FOA0002976
Appendix H: Clearance Letter from Zomba Central Hospital

In reply please quote No.

Ministry of Health,
ZOMBA CENTRAL HOSPITAL
P.O. Box 21,
ZOMBA,
17th September 2010.

Chairman
National Health Sciences Research Committee,
P.O. Box 30377,
Capital City,
Lilongwe,

Dear Sir,

Re: VIOLENCE IN NURSING IN MALAWI

May you be informed that the hospital management has scrutinised the proposal on a research topic Violence in Nursing in Malawi to be carried out by Chimwemwe Chikoko Banda as a timely research that will assist in health systems to understand the effects of violence on nursing and its consequential effects on service delivery, quality of care, recruitment and retention of nurses, and impact on nursing as a profession in Malawi.

We recommend the research be considered by NHSRC for approval.

Yours faithfully,

Dr. Martias Joshua
Hospital Director
Appendix I: Clearance Letter from Zomba Mental Hospital

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INSTITUTIONAL ENDORSEMENT REQUIRED

Statement from the Institution:
The NNSRC will only accept for review and approval research proposals that have been found scientifically acceptable by our institution. The acceptable Institutional endorsement will be that from the Institution in which the research is to be conducted or one from the institution conducting the research.

We, representing
ZOMBA MENTAL HOSPITAL
(Names of Institution conducting the research or in which the research is to be conducted)
do certify that we have reviewed the research proposal titled
AN INVESTIGATION INTO VIOLENCE AGAINST NURSES IN THE SOUTHERN REGION OF MALAWI
Submitted by
CHIMWEMWE KWANZO-BINDA (NEE CHIWOMO)

We attest to the scientific merit of this study and the competency of the investigator(s) to conduct the project and do hereby recommend the proposal to the NNSRC for review and approval.

SIGNATURES

Signature: Institutional representative
Name (Please Print): BESPITY ACHIKILWE
Date: 12-12-10

Signature: Head of Institution (or other authorized signatory)
Name (Please Print): FOR DIRECTOR

Contact Tel. Number: 01536 3441
E-mail address: bospity吱@jynwzw.com

OFFICIAL STAMP OF INSTITUTION

*Institution includes Universities, Hospitals, Research Institutes or Companies

Executive Committee: Dr. C. Mwansa (Chairperson), Prof. A. Kangwa (Vice-Chairperson)
Registered with the USA Office for Human Research Protections (OHRP) as an International IRB
IRB Number IRB001099FWA0003974
Appendix J: Clearance Letter from Zomba District Health Office

INSTITUTIONAL ENDORSEMENT REQUIRED

Statement from the Institution:
The NHSRC will only accept for review and approval research proposals that have been found scientifically acceptable by our institution. The acceptable institutional endorsement will be that of the institution in which the research is to be conducted or one from the institution coordinating the research.

We representing

ZOMBA DISTRICT HEALTH OFFICE FOR MATAWALE HEALTH CENTRE

do certify that we have reviewed the research proposal titled

VIOLENCE IN NURSING
IN MALAWI

Directed by

MRS. CHIMWEWE CHIKOKO BANDA

We attest to the scientific merit of this study and the competency of the investigator(s) to conduct the project and hereby recommend the proposal to the NHSRC for review and approval.

SIGNATURES

Date

4/8/10

CONTACT DETAILS

WILLIAM GODLI MLOTHAT

426388835008

mlothawilliam@yahoo.com

OFFICIAL STAMP OF INSTITUTION

ZOMBA DISTRICT HEALTH OFFICE

04 AUG 2010