PREVALENCE AND CONTRIBUTING FACTORS OF HORIZONTAL VIOLENCE AMONG NURSES WORKING IN MATERNAL – CHILD HEALTH AND FAMILY PLANNING CLINICS OF NAIROBI CITY COUNTY.

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November, 2013

Declaration

I, Dorothy Stella Nyirongo declare that this thesis is the result of my original work and that it has not been submitted to this or any other institution for similar purposes.

Signature…… Date……..

Certificate of Approval

This is to certify that this thesis titled 'Prevalence and contributing factors of horizontal violence among nurses working in Maternal-Child Health and Family Planning clinics of Nairobi' has been submitted for the award of Master of Science in Nursing (Community Health) of the University of Nairobi with our approval as internal supervisors.

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Dedication

I dedicate this work to my children Tiwonge, Wanangwa and Alinafe for their patience, my sister Yvette who was taking care of my daughters and son during the period I was at college.

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I thank the Lord God, the Almighty, for the physical and spiritual health and strength and support He provides me daily.

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Abbreviations & Acronyms

AFSCME: American Federation of State, County, Municipal Employees.

CDC: Centre for Disease Control and prevention

CFNU: Canadian Federation of Nurses Union

CAN: Canadian Nurses Association.

ICN: International Council of Nurses.

ILO: International Labour Office

JPS: Joint Position Statement

KNH: Kenyatta National Hospital

MCH/FP: Maternal-Child Health and Family Planning

NACNEP: National Advisory Council on Nurse Education and Practice.

NHSRU: Nursing Health Services Research Unit.

NIOSH: National Institute for Occupational Safety and Health

NSHN: National Survey of Health and Nurses

PWV: Proceedings of Workplace Violence.

PSI: Public Service International

SPSS: Statistical package on social science

WHO: World Health Organization

UK: United Kingdom

USA: United Sates of America

USDLBLS: United States Department of Labor, Bureau of Labor Statistics.

Operational Definitions

Intimidation: An intentional act by a nurse toward nurse colleague. The act causes the nurse victim to have fears and, have a feeling lower than the perpetrator.

Threats: Any willful behavior by a nurse toward the other nurse that causes the other nurse to fear for her/his safety. The threat can be verbal or written.

Gossip: Workers indulging in inappropriate topics of conversation about other workers.

Humiliation: When a nurse belittles other nurse's opinion or actions, or criticizes the other nurse in front of other health workers in such a way that the offended nurse feels devalued and ashamed.

Shout at: a nurse yelling or screaming at her colleague - a nurse

Sharp words: Bitter or harsh words from a nurse to another.

Aggressive behavior: A behavior from a nurse that is violent and unpredictable and it constitutes intended harm to another nurse.

Verbal aggression: A message behavior which attacks a nurse's self-concept in order to deliver psychological pain.

Hostility: A form of emotionally-charged angry behavior between nurses.

Sabotage: A dysfunctional but common method of dealing with frustration.

Sexual harassment: Unwelcome words or actions of sexual nature directed at a specific nurse that annoys or cause emotional distress to the nurse.

Criticize excessively: A nurse or supervisor criticizing a nurse more than necessary.

Horizontal violence: Within nursing, horizontal violence is defined as nurse to nurse aggression e.g. a nurse intimidating/humiliating a nurse colleague.

Abstract

Horizontal violence is a real entity within the health care facilities. The objective of this study was to explore prevalence and factors contributing to violence among nurses at their place of work and the effect violence had on their interrelationship and performance in provision of maternal-child and family planning services in the health facilities that directly serve their surrounding communities.

The study design was a cross-sectional descriptive study of nurses working in health facilities with Maternal-Child Health and Family Planning (MCH/FP) clinics of Nairobi City County. Seven health centres that had MCH/FP and cervical cancer screening clinics were chosen for the study. The sampling frame comprised a comprehensive itemized list of all nurses in the fourteen health facilities with MCH/FP and cervical cancer screening clinics. Simple random sampling method was used to come up with seven health facilities with MCH/FP clinics. A sample of 170 participants was recruited for the study out of a calculated sample of 187.

Quantitative data was collected using a self-administered structured questionnaire and an observational checklist. Each nurse included in study sample filled a questionnaire. SPSS version 17.0 was used to analyse quantitative data. Inferential statistics using Chi-square, and correlation were used to determine the relationship between the dependent variables and the independent variables.

Results and findings of the study indicated that 77.6% (n=132) of the participants reported experiencing many of the negative behaviors associated with horizontal violence and 22.4% (n=38) of the participants had not experienced horizontal violence in last twelve months preceding this study. The prevalence of horizontal violence among the

participants was 36.2% or 362 nurses per 1000. The following horizontal violence behaviors were experienced by participants: gossiped (51.8%), shouted at (34%), humiliated (30%), intimidated (24.7%), threatened (20%), excessively criticized (19%) and sexually harassed (4%). The study findings indicated that there were statistically significant differences between age of the participants and humiliation, p=0.005; work experience of the participants and humiliation, p=0.039; professional qualification and threat experience, p=0.031; and professional qualification and intimidation, p=0.034. There were no statistically significant differences between the demographic profiles of the participants and the following horizontal violence behaviors: gossiping, shouting, excessive criticisms, and sexual harassment. The study findings revealed that non-physical violence was very high among nurses accounting for 76%. Of the non-physical violence gossiping was the most experienced among nurses in the workplace. However there was no statistically significant difference between horizontal violence behavior of gossiping and demographic profiles of the participants such gender, age, work experience and professional qualification. The findings demonstrate that horizontal violence occurs and that nurses were victims of violence and some nurses were perpetrators of violence amongst themselves as well. The findings are expected to assist policy makers, managers, and nurses on how to intervene in order to control workplace violence among nurses.

CHAPTER ONE: INTRODUCTION

1.0 Background

The Canadian Nurses Association and Canadian Federation of Nurses' Union describe workplace violence as physical acts, emotional abuse, sexual harassment, degrading remarks or bullying, backbiting (CNA & CFNU, 2007). Violence is mostly interpersonal.

Work place violence is a global problem. In 2002, an estimated 1.6 million people worldwide died as a result of self-inflicted and interpersonal violence (WHO, 2007). Studies done in US, Canada, Europe, Far East, Asia and African countries indicate high prevalence of workplace violence worldwide and it's a major health concern at global level (Needham, 2008, WHO, ICN, ILO, PSI, 2002).

Studies suggest that though patients and their visitors are the perpetrators, much of the violence encountered by health care workers is from co-workers and physicians and managers (Nursing Health Services Research Unit, 2008). The studies' figures on violence incidence may not reflect what is actually on the ground because underreporting in the health institutions is common and may be influenced by cultural factors on what constitutes violence. In addition some nurses' perception is that violence if it happens is part of the job. This makes it difficult to measure the extent of violence in the institution (RNAO, 2008 & NACNEP, 2005).

There are many causes of violence among nurses. Studies by Magnavita and Heponiemi, (2012), indicate that non-physical and physical violence among health care workers are associated with decreased job satisfaction, increased occupational strain due to inadequate staffing levels. On the other hand NACNEP (2005), reports that family violence on a nurse also influences the relationship between the affected nurse and the nurse-colleague, and lack of financial resources

to train nurses on violence prevention in a work place. Centre for American Nurses (2008) reports that violence among nurses can be prevented and managed by educating and training nurses on violence prevention; ensuring adequate staffing levels; adoption of zero tolerance for violence and recognizing and addressing the violence.

Violence among nurses results into physical and psychological complications. Psychological trauma, the most common form of violence among nurses, creates hostility among nurses as opposed to physical trauma (Leung, et al., 2006). Hostility in those affected nurses, leads to reduced communication amongst nurses resulting into medical and nursing errors.

McKenna, et al., (2002) reports that violence results into reduced confidence, anxiety, depression, frustration, mistrust, nervousness, stress, and fear in nurses. In addition violence causes physical injuries, bruises, cuts and deformities affecting their health and forcing them to take sick leave, thus worsening staff shortage (De Castro, et al., 2009).

1.2 Statement of the Problem

The magnitude of violence among nurses was a concern globally. Studies on horizontal violence demonstrate that the number of nurses affected by the syndrome remains alarming and continue to rise worldwide. The World Health Organization, International Labour Office, International Council of Nurses and Public Services International recognize the prevalence of violence as a major health priority (Hinchberger and Zielke-Nadkarn, 2008).

Nurses working in health facilities with MCH/FP clinics might define violence differently from the definitions described in literature due to differences in cultural norms and values of the society to which the nurses were exposed. Therefore there was need to explore horizontal

violence among nurses extensively in so that where there was violence preventive measures could be put in place.

Studies on violence amongst nurses had been done in most of the developed countries and in Botswana and eight Cape Town public hospitals in Africa and had demonstrated very high levels of psychological trauma in nurses compared to physical trauma. More over in Kenya, and particularly in health facilities with MCH/FP clinics where nurses provide the services to the community, no study had been done on horizontal violence. Therefore the aim of this study was to determine the prevalence of violence, looking at factors that were associated with violence and measures being taken to prevent violence among nurses in the health facilities.

1.3 Purpose of the Study

The aim of this study was to establish whether violence existed amongst nurses working in MCH/FP clinics and whether violence affected nurses' performance.

1.4 Justification of the Study

Presence of violence among nurses influences their work performance negatively. Nurses in health facilities with MCH/FP clinics provide services to the community. In addition maternal-child health and family planning health services is one of the elements of primary health care through which the government ensures universally acceptable, accessible, and affordable health services to the individuals and community in order to promote and maintain health and prevent diseases. The services are also a strategy of achieving millennium development goal number 4 on child health which calls for reduction by two-thirds, between 1990 and 2015, the under-five mortality rate and MDG 5 on Maternal Health, which calls for countries to reduce their maternal

mortality ratio by three quarters by 2015 and to increase reproductive health access and contraceptive use.

Psychological trauma which is the most common form of horizontal violence creates hostility among nurses resulting into negative attitudes toward each other (Leung, et al., 2006). Negative attitudes result into poor interrelationship among nurses and to clients as well. As a result clients may shun away from the clinics hence affecting the achievement of aims of primary health care and millennium development goals. Hostility also jeopardizes nurses to communicate and maintain appropriate social contacts among themselves and the community the nurses serve leading to unreported medical and nursing errors in clients due to poor coordination and collaboration. In addition stress which is the main cause of violence also affects the relationship of nurses towards the community they serve due to stress resulting into reduction of health seeking behaviors in clients.

Although findings on horizontal violence in studied countries demonstrated high levels of violence and aggression among nurses, it might not be possible to apply their findings to nurses working in MCH/FP clinics in Kenya because of different hospital managerial system, policies and culture and also staff professional qualification and type of care given to clients by the nurses.

Violence may be understood differently at regional, national and local level due to variations in culture and norms. Literature stated that there is no definite definition of violence let alone horizontal violence. Nurses working in health facilities with MCH/FP clinics may define violence quite differently from the definitions described in literature due to differences in cultural norms and values of the society to which the nurses are exposed.

Therefore there was need to study violence among nurses at the health facilities with MCH/FP clinics to determine whether violence existed.

1.5 Research Questions

1. How prevalent is the violence among nurses working in MCH/FP clinics?
2. What type of violence exists among nurses working in MCH/FP clinics?
3. What factors contribute to violence among nurses?
4. What are the interventions against horizontal violence set up by the clinics?

1.6 Broad Objective

To determine prevalence and factors influencing violence among nurses working in MCH/FP clinics.

1.7 Specific Objectives

1. To determine prevalence of violence among the nurses working in MCH/FP clinics.
2. To establish forms of violence among nurses working in MCH/FP clinics.
3. To identify factors contributing to violence among nurses working in MCH/FP clinics.
4. To identify availability of interventions for managing horizontal violence set up by the hospital.

1.8 Expected Benefits

The study findings will help to control hostility and any form of violence among nurses in the MCH/FP clinics, maintain appropriate interrelationship among nurses and to the community the nurses serve.

Barriers to high quality antenatal, postnatal, child, family planning and cervical cancer screening services resulting from violence would be removed resulting to high quality services rendered to the community in MCH/FP clinics.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

Centre for Disease Control and prevention (CDC) and National Institute for Occupational Safety and Health (NIOSH), defines workplace violence as violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty, commuting to and from work (OJIN, 2004).

Violence in the health care workplace can be classified by perpetrator type (NHSRU, 2008): Horizontal violence, perpetrated by co-workers, supervisors and other health care workers such as nurse to nurse violence; vertical violence is initiated by patients or patients' families against health care providers; external violence, perpetrated by people outside of the organization with a criminal intent.

2.1 Studies done on Violence

2.1.0 Europe and America

The Nursing Health Services Research Unit report that violence in health sector constitutes almost one quarter of all violence at workplace, with half of all health care workers affected (NHSRU, 2008). While the British Columbia Workers' Compensation Board, states that health care workers experience acts of violence more often than any other group of workers in the province, and account for 40% of all violence related claims despite making up less than 5% of the workforce. A US study showed health care workers were 16 times more likely at risk of violence than any other service workers (NHSRU, 2008).

In the European Union 9 million workers suffer physical violence; 3 million are subject to sexual harassment; 13 million to intimidation and bullying (European Foundation 2000).

The 2000 British Crime Survey findings showed that nurses are more assaulted and are second only next to security and protective services occupations, and the risk for threats of violence is above the average than that of workers in the non-health care industries.

The United States Department of Labor, Bureau of Labor Statistics data also showed that while two in 10,000 employees overall in the private sector suffer injuries annually that require time off from work, rates of injuries are significantly greater for health care employees. Annually, 9.3 in 10,000 employees in the health services sector suffer injuries that require time off from work. In nursing and personal care facilities, 25 in 10,000 employees suffer such injuries – more than 10 times the overall private sector rate (USDLBLS, 2001).

In nursing, nearly one-third of violent acts against nurses are committed by health care providers and family members of patients (Gerberich et al., 2004).

The Literature categorizes more commonly seen sources of violence in the health care in the following types: patients, co-workers, physicians and visitors of patients (NHSRU, 2008).

In nursing, despite the fact that primary sources of verbal and physical aggression and assault are mostly patients and visitors of patients, a large source of non-physical violence, responsible for more than half of the emotional abuse and verbal harassments is the violence perpetrated by co-workers and physicians (NHSRU, 2008).

Nursing institutions are also vulnerable. Love and Morrison (2003) noted studies documenting increased verbal threats, harassment, intimidation, and pestering of nursing faculty by students who are experiencing academic problems or facing termination from the program. As a result

many nursing schools have instituted criminal background check policies for students and faculty in efforts to address this problem (Burns, et al, 2004).

Tade and Moody (2005) discussed extending authority to conduct criminal background checks for nurses. The study also proposed conducting checks for students upon entry to clinical nursing courses and as a pre-requisite for graduation and application for licensure (National Council of State Boards of Nursing, 2005).

Violence indeed negatively affects nurses and the nursing profession. Rosenstein (2002) reports that 30% of the surveyed nurses knew of nurses who had left the organization because of disruptive and verbal abuse while Sofield and Salmond (2003) found that physicians were the most frequent source of verbal abuse, followed by patients, peers, supervisors, subordinates and patient's families. The study found that the amount of abuse and intent-to-leave were significantly related. The authors found that 12 percent of the nurses surveyed planned to actively look for a new job within the next year and 22 percent would consider resigning as a result of verbal abuse. This also indicates that violence free working environment among nurses and nurse-physician is a prerequisite for health and well-being of nurses and nurse's intention to stay at a job.

Violence can also have an impact on recruitment. It is one of the factors that often make nurses reluctant to recommend nursing as a career choice. Over half (53 percent) of nurses who were surveyed would not recommend the nursing profession as a career choice for their children and 23 percent would actively discourage someone close to them from entering the profession (Keough, Schlomer, & Bollenberg, 2003).

In community health and home health settings, the USDLBLS, reports that in just four years (1996-2000), there were 9 homicides to health care workers in private residences (Mc Govern et

al., 2000). And a Texas study by Schulte et al, 1998, found that more than a third of public health field workers who provided sexual and infectious disease follow-up to clients in their homes and places of business experienced 611 violent events in the course of their employment. The figures show that community health and home health workers like other health workers are more likely to suffer threats and assaults.

2.1.2 Australia

Dunn (2003) also states that presence of sabotage in nurses is an indicator that horizontal violence and oppression exist in the workplace. The study was done to describe the effects of oppression with subsequent displays of horizontal violence as measured by the degree of sabotage in the operating room and how it relates to job satisfaction. Findings were that lack of respect for colleagues has had damaging effects on the development of the nursing profession.

2.1.3 Asia

Lakhan and Gillan, (2008) conducted a study on economic burden of workplace violence in the health sector in Pakistan. The results showed that losses from stress and violence at work estimates from 1% to 3.5% of gross domestic product (GDP) of several countries. The direct costs were mainly resulting from the act of violence such as costs of legal services, medical, security costs, and judicial costs. Whereas, indirect costs included long-term effects of the violence such psychological disturbance, work loss, decrease work productivity, bad publicity, insurance costs, new hiring. The study recommended that to increase economical costs in health industries, there is a need of training programme for employees regarding violence's prevention. In the training programme, all employees should understand their rights, and responsibilities through organization's policies. They should know about rate and risk factors of violence in their

organization. Lastly, role of management should emphasize on policy making regarding reporting system of workplace violence in health organization. Whereas Mumtaz and Rajani, (2008) studied the impacts of sexual harassment on the female nurses in Pakistan. The results showed that sexual harassment has very destructive effects. It not only disturbs the individual life but it ultimately decreases the image of the institution.

2.1.4 Africa

Studies in Botswana also indicated a high prevalence of workplace violence among nurses and between nurses and other health workers and their care recipients. The incidences were both physical and psychological violence. Nurses were the most affected since the nurses are the majority of health workers in Botswana. This was evidenced by the increasing reports of the incidences both in the media and to the Nurses' Association of Botswana (Feringa, in PWV, 2008).

A study done on horizontal violence amongst nurses in the eight Cape Town public hospitals in South Africa revealed that violence in the society has seeped into the nursing profession.

Participants were nurses who provided general, maternity, psychiatric and paediatric services. Results showed there were psychological violence in form of humiliation, vertical violence (in this context, a negative behavior towards senior or junior colleagues), covert violence (any violence done in secret against other nurses), horizontal violence and physical violence among nurses.

Psychological violence (45% of nurses) was more prevalent among nurses. Humiliating and shouting forms of violence were much more common amongst the nurses. Professional nurses are usually the ward/clinic in-charge were identified as the main culprits that resort to shouting to other nurses (Khalil in PWV, 2008).

2.1.5 East Africa

A study on workplace violence and gender discrimination in the health sector in Rwanda, showed that violence was a severe problem in Rwandan health workplaces. Approximately 39% of the 297 respondents reported experiencing at least one form of abuse in the workplace in the preceding year. Verbal abuse 80 (27%) was the most prevalent form followed by bullying 48 (16%) then sexual harassment 21 (7%). Physical violence 12 (4%) was the least prevalent. The majority of perpetrators of workplace violence were health personnel—victims' colleagues, followed by hierarchical superiors. A smaller portion of perpetrators were members of the general public, including patients and their families. Both men and women engaged in acts of violence. Men committed most acts of sexual harassment, bullying and physical violence, while women in this sample perpetrated most acts of verbal abuse. Female health workers were twice as likely as men to be victims of sexual harassment. Many respondents held perceptions of the men "in charge" as perpetrators of violence. In most cases of violence, especially cases of verbal abuse, bullying and physical violence, the victim disclosed the incident to colleagues. However in sexual harassment cases, 40% of victims did not disclose the occurrence to anyone. The impact of violence was felt primarily on the worker's psychological health (feelings of trauma, loss of dignity, fear, frustration, obsessive thoughts), but other effects included absenteeism (an average of three days following an incident), lower energy, disturbed interpersonal relations at work or at home and a feeling of decreased productivity. Consequences also included thoughts of quitting or actually quitting, the latter particularly for female workers who had experienced sexual harassment and bullying (Newman, 2009).

The Ugandan news paper quoted the minister of primary health care that ‘between 10% and 30% of Ugandan workers are likely to develop mental illnesses due to stressful working environments (Wabudeya, 2002).

2.1.6 Kenya

Study on violence against nurses was done in Kenya at Kenyatta national hospital (KNH) at the emergency departments which reported that health workers in these departments experience the highest levels of assault. The study revealed that emergency departments have become common places of daily violence which include verbal abuse and threats of assaults that are tolerated and widely under reported. The violence is perpetrated by patients, family/visitors of patients (Isinta & Tsinaga, in PWV, 2008).

Kamau (2011) presented a report on bullying in a peri-operative set-up at a symposium held by the University of Dundee Health and Research Symposium at AMREF International Headquarters, Nairobi. The paper highlighted causes of bullying in the peri-operative set-up and explored the effects of bullying in operating theatres. It concurrently discussed the role of a nurse manager as a mediator in handling bullying and possible ways of overcoming bullying behavior among the peri-operative practitioners in their department and the organization at large at KNH.

A study conducted on violence against women in the workplace, on sexual harassment in the commercial agriculture and textile manufacturing sectors revealed that women in export industries suffer from violent sexual abuse by their employers and supervisors. The report indicated that over 90% of all the respondents had experienced sexual abuse within their workplace. In addition 90% of all women who had suffered sexual abuse in the workplace were afraid to report the problem for fear of losing their jobs. Women who reported the problem were

often fired or demoted. Surprisingly, 70% of the men interviewed viewed sexual harassment of women as normal and natural behavior.

2.2 Predisposing Factors of Workplace Violence

In most of the studies done the common predisposing factors include a complex set of institutional and social forces that aggravate the problem. The forces include a) cost pressures make it difficult to train staff to deal with violence in the workplace in a hospital setting and a community setting combined with paying the salaries of other staff to cover for those in training, the overall costs can be prohibitive (Roll, 2005 in NACNEP, 2005) b) staffing shortages: Staffing shortages have resulted high stress and lower standards of hiring to cover staff shortage (Bradley & Moore, 2004). c) Family violence is also pervasive, and nurses who often encounter violent family situations that make their way into health care settings (Gerberich et al., 2005).

2.3 Theoretical Framework

2.3.1 Roy's Adaptation Model

Roy's Adaptation Model (1984) has been chosen as the theoretical framework for this study. Roy's model is based on a systems theory approach and focuses on the concept of individual's adaptation to the environment (George, 2005).

A stimulus is that which provokes a response, and it is the point of interaction between the person and the environment. Roy identifies stimuli that originate both externally to the person, and those that originate from within the person. These can be further categorized as focal, contextual, and residual stimuli (Roy, 1984).

A focal stimulus is stimulus that is most immediately confronting the person and the one to which the person must make an adaptive response, that is, the factor that precipitates the behavior" (Roy, 1984, p. 43). In this study the person is the nurse and the focal stimuli in a nurse are personal and external stimuli such as verbal and non-verbal assault/ abuse manifested by excessive criticism, humiliation, intimidation, physical injury, backbiting, disrespect, verbal threats and sexual harassment. Contextual stimuli are "all other stimuli present that contribute to the behavior caused or precipitated by the focal stimuli" (Roy, 1984, p. 43). The contextual stimuli in this study are inadequate staffing levels which lead to work strain and stress in a nurse, lack of supervisory support, inadequate education in nurses on violence prevention. Residual stimuli are "factors that may be affecting behavior but whose effects are not validated" (Roy, 1984, p. 43). The environment is the unit in which the nurses have to work, and the nurses represent the adaptive systems that respond to this external stimulus. The nurses' ability to cope with and/or prevent verbal or non-verbal abuse will also be affected by contextual and residual stimuli.

There are two interrelated subsystems in Roy's model for processing or coping with the stimulus (Roy, 1984). These systems act to maintain integrated life processes for the person and are known as the regulator and the cognator subsystems.

The regulator subsystem describes a major coping process that involves the neural, chemical, and endocrine systems. Responses from the regulator system are unconscious and automatic and have a role in the performing of perceptions.

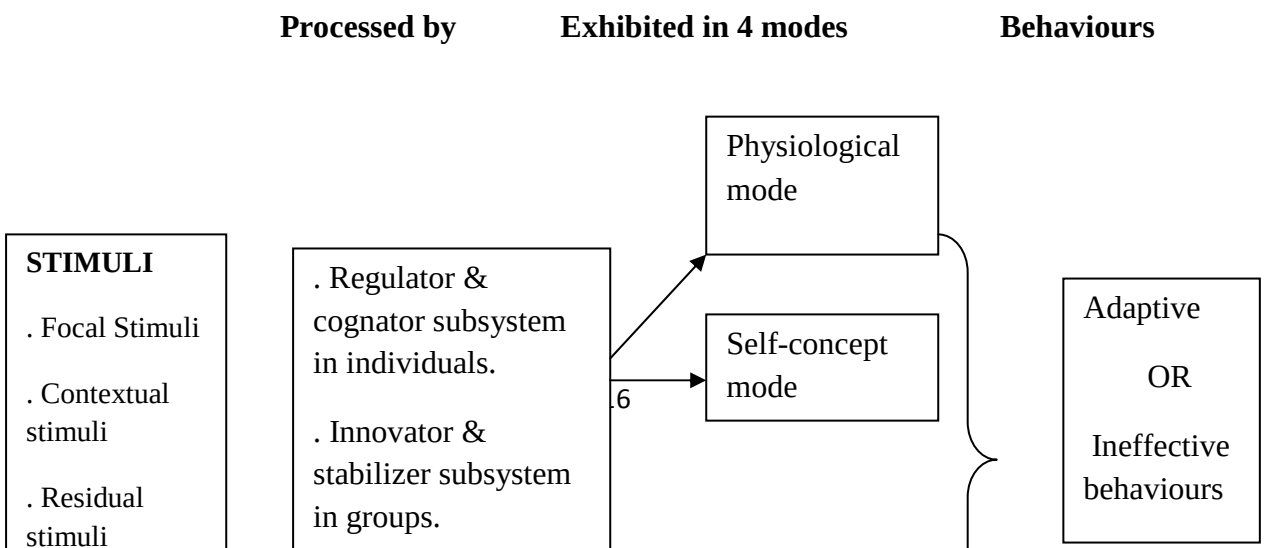
The cognator subsystem describes a major coping process that involves information processing, memory, and selective attention (Roy & Andrews, 1999).

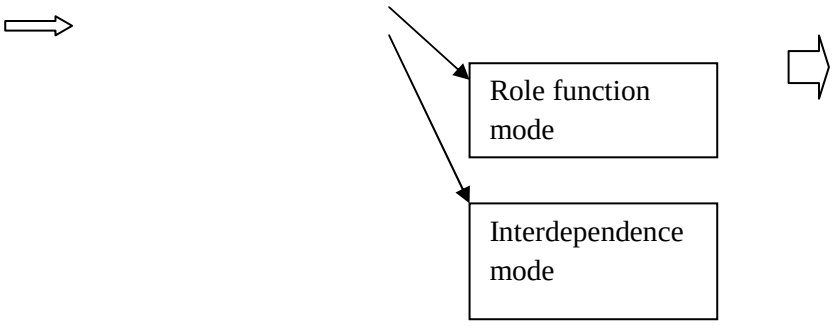
The nurse is not passive in relation to the environment. He/she is a "bio- psycho-social being in constant interaction with a changing environment" (Roy & Corliss, 1993 as cited in Parker, 1993, p. 233). Adaptive behavior is evidence of effective response to focal stimuli while ineffective behavior indicates a problem (Roy & Andrews, 1999).

Individuals have the ability to change their own adaptation level by responding to deficits in their coping ability. This may mean through access to education, training, or by seeking out additional resources.

Verbal or non-verbal abuse incidents are processed by the regulator and cognator subsystems and will produce behaviors that reflect adaptation in this situation. The impact of verbal or non-verbal abuse is manifested through adaptive modes of behavior that affect physiological and psychological well-being, self-concept, role functioning, and interdependent relations. An ineffective response to verbal or non-verbal abuse leads to disruption of the integrity of the person and this psychological and physical trauma may affect their present functioning within their role. The result may lead to increased stress, lowered staff morale, decreased job satisfaction, and high job turn over. This can have a significant impact for health and well-being of the nurse and nursing care.

2.3.2 Relationship of the key concepts of Roy's adaptation Model*:*

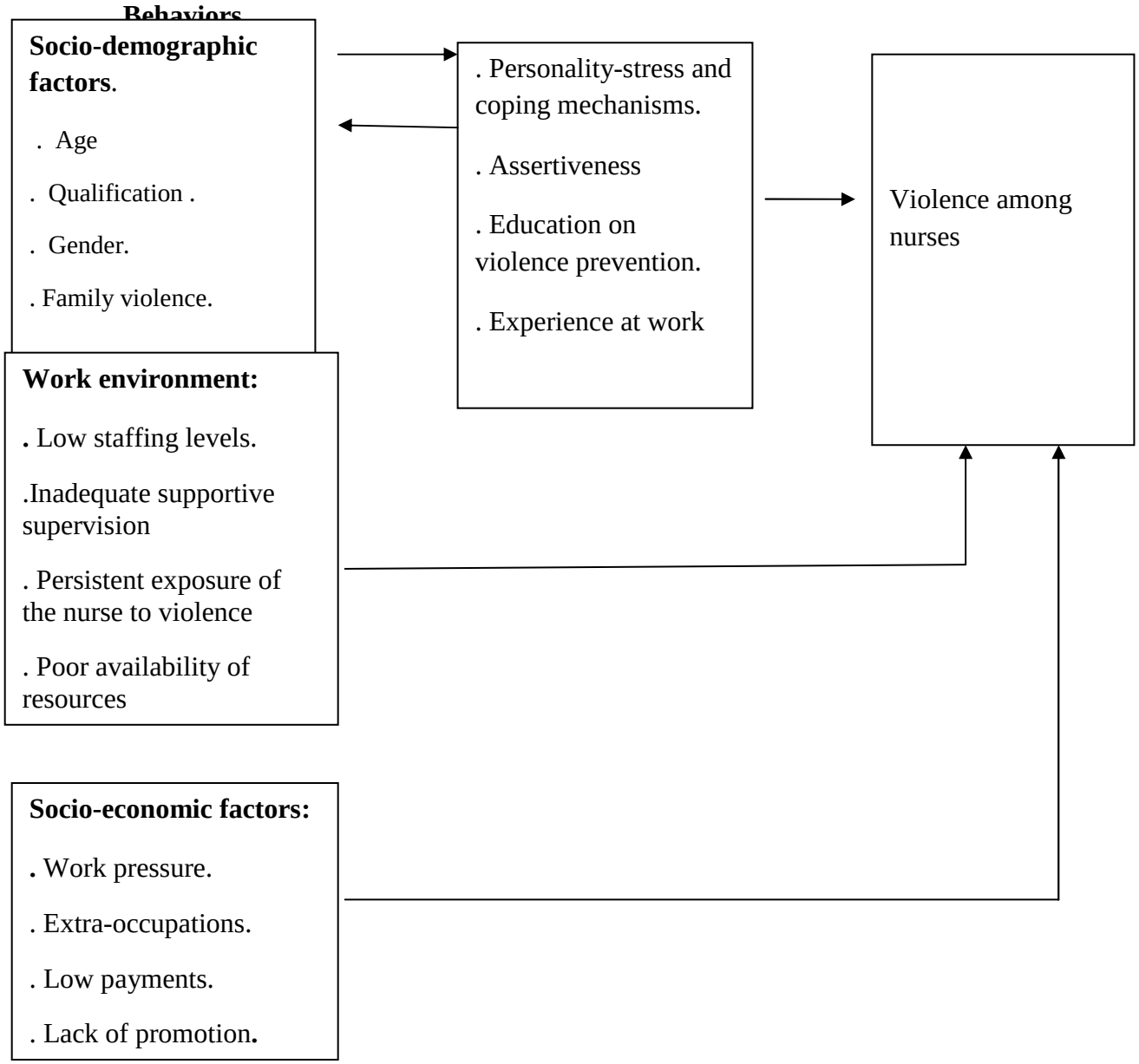




This study falls on focal stimuli which are the causes of violence among nurses such as work pressure, low staffing levels, age and cadre differences, inadequate supportive supervision and persistent exposure to violence. Contextual stimuli which are other factors contributing to violence such as the confounding variables. The self-concept, role function and interdependent modes are ways through which the focal stimuli are exhibited. The four modes are ways of manifesting the processed behaviors in nurses which can be ineffective behaviors such as verbal and physical assault among nurses, or adaptive behaviors such as non-violent behaviors.

2.3.3 Conceptual Framework:

Independent variables **Confounding variables** **Dependent variables**



Adapted from: Callister Roy's Adaptation Model.

In the conceptual framework the environments are regarded to consist of focal stimuli which are socio-demographic profiles, work environment and socioeconomic factors. The focal stimuli provoke response in a nurse and are the point of interaction between the nurse and the environment in 'Roy's Adaptation Model'. The socio-demographic factors may influence the adaptive behavior in a nurse if the nurse is not young, has vast experience at work. In addition studies have shown that nurses who are not assertive do not have the courage to sort out the problem with the one confronting them. Moreover, nurses with vast experience at work and with high qualifications like nurse practioners are rarely confronted with violence from other nurses. Nurses with persistent exposure to violence learn to live with and negatively adapt and practice violence on other nurses and those with family violence tend to transfer violent behavior to the work place and victimize other nurses. Interms of gender, female nurses are more affected by the violence than the male nurses. Work environment and socio-economic factors are all other stimuli present in the environment that can cause violent behaviors amongst nurses.

Socio-demographic factors can influence the confounding variables and vice versa. The independent variables which are socio-demographic profiles, work environment and socio-economic factors in nurses may cause violence amongst them. Violent behaviors amongst nurses are the dependent variables. These dependent variables are humiliation, excessive criticisms towards each other, shouting at a fellow nurse, gossiping about the other nurse, beating, sexual harassment and making verbal or written threats. Nurses' adaptation to no-violent behaviors among themselves can be attained by modifying the stimuli such as the independent and confounding variables. Modification can be achieved through education on what violence is and how to control it, and adequate staffing levels.

CHAPTER THREE: MATERIALS AND METHODS

3.0 Study Design

The study design was a cross-sectional descriptive study in which nurses who were health care service givers to the community including mothers and children in MCH/FP clinics were interviewed to collect data on prevalence and factors that influence horizontal violence. It was a cross-sectional study because the researcher was also trying to describe type of violence existing among nurses at one point in time (Gerrish and Lancey, 2011).

3.1 Study Area

The study was conducted in Nairobi City County, which is a cosmopolitan city with inhabitants of various social economic backgrounds. Nairobi County has a population of about 3.2 million people with a population density of 4,515 people per square kilometer. It has 71 health centers with 14 maternity homes and 21 nursing homes (City of Nairobi: Environment Outlook, 2007). There are approximately 1,000 nurses employed to provide the nursing services to communities surrounding the health centers.

Nairobi city council has 25 health centers with 14 MCH/FP clinics. There were 365 nurses employed in 14 MCH/FP clinics. Seven MCH/FP clinics were randomly chosen to represent 50% of the total MCH/FP clinics with 187 nurses employed to provide MCH/FP services in Westlands, Langata, Kangemi, Riruta, Ngara, Ngailo and Ngong health centres.

3.2 Study Population

The study population targeted all nurses registered and working in the MCH/FP clinics under the administration of Nairobi city council. There are 365 nurses working in the 14 health centres

providing antenatal care, PMTCT, postnatal care, family planning and cervical cancer screening services to mothers and child health care services to children.

3.3 Study Sample

The calculated study sample was 187 nurses. However, 170 nurses, working in the chosen seven clinics and who provided antenatal, PMTCT, family planning, postnatal, child health, cervical cancer screening clinics preceding time of this study were recruited for the study. Nine nurses did not consent for the study and eight nurses were not on duty at the time of study hence seventeen nurses were not recruited for the study.

3.4 Eligibility

3.4.1 Inclusion Criteria

Nurses who had more than one year work experience. Those nurses on duty at the seven MCH/FP clinics which were under Nairobi City council administration at the time of the study and those who gave consent to participate in the study.

3.4.2 Exclusion Criteria

The exclusion criteria of subjects from the study were as follows: Nurses with less than one year of service; those who did not give consent; nurses away from duty on either annual, maternity, or study leave and nurses who were away from duty for any other reason at the time of study.

3.5 Sample Selection Method

Nairobi City council has fourteen maternal and child health clinics which provide antenatal, family planning, postnatal check-ups, child health and cervical cancer screening services. Seven clinics were chosen for the study. The sampling frame comprised a comprehensive itemized list of all nurses in the 14 health facilities that had MCH/FP and cervical cancer screening clinics.

Probability sampling using Simple random sampling method was used to come up with 7 health facilities with MCH/FP clinics. This was achieved by writing each name of the 14 MCH/FP clinics on a piece of paper and folded each paper and 7 people were asked to pick one paper each from the 14 pieces of paper then the names of the seven health centres were read from the 7 picked pieces of papers and chosen for the study. There were approximately 365 nurses in the seven clinics and 170 nurses participated in the study out of 187 calculated sample. Five sister-in-charges in the MCH/FP clinics were interviewed using the observation checklist to assess the availability of interventions for managing violence among nurses.

3.6 Sample Size Determination

A sample of n nurses was calculated using the Fisher's formular, 1998.

$$n = \frac{Z^2 P (1-P)}{d^2}$$

Where; n=the desired sample

z=95% confidence interval or 1.96

d=degree of precision usually set at 0.05

P= 0.5%

The prevalence of 50% was used based on Mugenda and Mugenda (2003).

$$n = \frac{1.96^2 \times 0.5 (05)}{0.05^2}$$

$$n = \frac{1.96^2 \times 0.25}{0.05^2}$$

$$= \frac{1.96^2 \times 0.25}{0.0025}$$

$n= 1.96^2 \times 2500/25$

$n= 3.84 \times 100$

$n= 384$

But for the population less than 10,000, the following formular was used;

Nf = n/1+ (n/N) (Mugenda and Mugenda, 2003).

Where nf = desired sample for a population less than 10,000

n = desired sample size for a population greater than 10,000.

N = estimate of the population size = 365

Therefore the desired sample is; 384/1+ (384/365)

nf=384 (1+1.05)

nf =384/2.05

nf = 187

3.7 Study Tools

Quantitative data was collected using a structured self-administered questionnaire administered. The observation checklist was used to obtain the data from the sister-in-charges on availability of interventions for controlling violence among nurses.

3.8 Pre-Testing of data collection tools and training of research assistants

Pre-testing of the questionnaire was carried out at MCH/FP clinics in Loco health centre because the clinics provide similar services. Nineteen nurses were recruited for piloting the study representing 10% of the target population to identify any errors and omissions in questionnaire and an Observation checklist. Corrections were made on the questionnaire. Two qualified BSc.N

nurses were recruited as research assistants. The assistants were trained on the objectives of the study, questionnaires and an observation checklist.

3.9 Data Collection

Data was collected from the participants by the researcher and two research assistants. The researchers and research assistants distributed the questionnaires. That is, the nurses who were available and accessible during that period were invited to participate in the study. In the setting where the personnel were difficult to access, a person working there was invited to assist in distributing and collecting questionnaires.

Procedures were explained to that person. The observation checklist for the nurse-in-charges and a self-administered questionnaire was used to collect the data on various issues of prevalence and forms of violence and contributing factors to violence; prevention and elimination of violence from the workplace. In addition analysis of incidences of violence reported during the study period in seven health facilities that had MCH/FP clinics of NCC and their contributing factors was be done by the principal investigator. A self administered questionnaire which consisted of three sections was used for the study.

The first section assessed the bio- occupational data while the second section assessed types of violence experienced by the nurse, and violence observed by the nurse happening on other nurses on the following variables of humiliation, threatened, shouted at, gossiped, intimidated, criticized excessively, sexually harassed and physical injury and effects of violence on nurse-nurse interrelationship and perpetrators of violence amongst nurses. The third section consisted of consideration on causes, prevention and elimination of violence as perceived by the respondents.

3.10 Data Cleaning

At the end of each day, after data collection, all the questionnaires were checked for completeness and consistency. At the end of each day incomplete questionnaires were discarded. Complete questionnaires were entered into a data base using SPSS software version 17.0.

3.11 Data Analysis and Presentation

Data from the structured questionnaires were analyzed using SPSS software version 17.0 and presented in descriptive form using frequency tables, cross tabulation tables, pie charts, bar graphs and in narratives to describe each presentation. Measures of central tendency namely mean, mode and median were also used to analyze social demographics to find the average. Inferential statistics of Chi-square and correlation the P-value were used to compare relationship between dependent and independent variables.

3.12 Study Limitations

Limitations are utility of the study findings which may be confined to the health facilities that have MCH/FP clinics of Nairobi. In addition the findings may be generalized to the nurses and staff of the said health facilities.

3.13 Dissemination of Results

The findings of the study were compiled and communicated in report form to Nairobi city county health department; a dissertation to the University Of Nairobi School Of Nursing; a manuscript would be submitted for publication in open access nursing journals. An abstract would be presented in nursing conferences.

1.14 Ethical Considerations

Approval to conduct research in health facilities that had MCH/FP clinics under the management of Nairobi city council was sought from and granted by the Ethical and Research Committee of University of Nairobi and Kenyatta National Hospital.

Authority to conduct research in the said health facilities was sought and a clearance permit granted by the Nairobi City Council and the Ngong sub-district hospital.

Informed consent was sought from and obtained from potential study subjects before they were enrolled into the study. All information obtained was treated with confidentiality and used for study purposes only.

CHAPTER FOUR: RESULTS

4.0 Demographic Profiles of the Participants.

4.1 Work Stations of the Participants

A total of 170 health care providers participated in this study. The participants were recruited from seven (7) MCH clinics namely: antenatal, prevention of mother to child transmission (PMTCT), family planning, well-child, postnatal and cervical cancer screening clinics in Nairobi.

The majority (57%) of the participants were from child welfare clinics. Less than half (23%) of the participants were from family planning clinics. The least (1%) were from cervical cancer screening clinics. The health care providers' work stations are presented below.

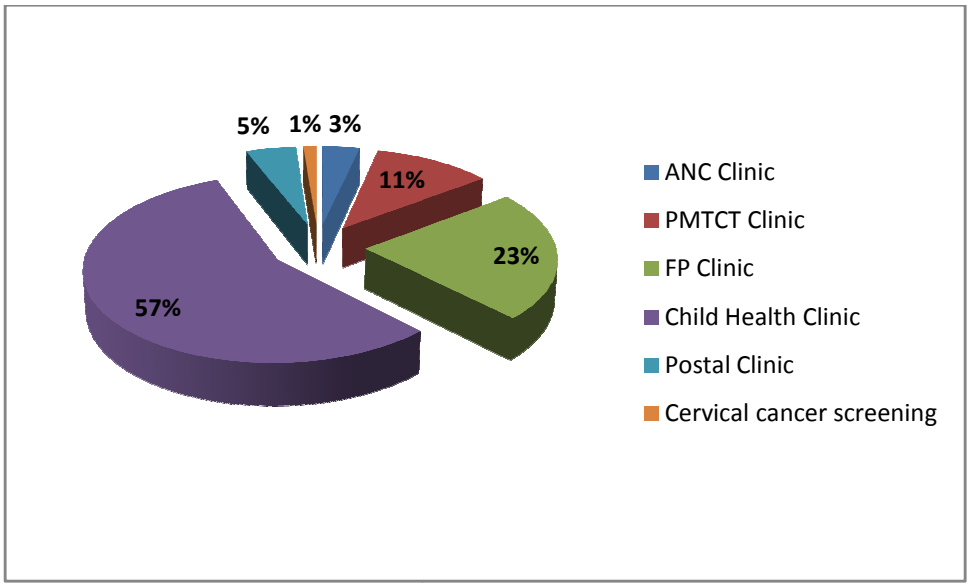


Figure 1: **Work Stations of the Participants.**

4.2 Demographic Profiles of the Participants.

There were 170 participants recruited in the study. Of all the participants, 82.9% (n=141) were female while 17.1% (n=29) were male.

Majority (40%) of the participants were between 31-40 years of age. While the least (11.8%) of the participants were above 50 years.

The mean age of the participants was 38, mode 35, median of 36, with a standard deviation of 9.5 and a variance of 90.3. The youngest participant was 20 years old and the oldest was 55 years old, giving an age range of 35 years.

The largest proportion of the participants, 85.3% (n=145) were married and 12.9% (n=22) were single. Most participants 60.0% (n=102) held a diploma in nursing, and majority, 25.9% (n=44) of the participants had five to seven years work experience as illustrated in Table 1.

Table 1: **Demographic Profiles of the Participants.**

Demographic Profiles of Participants		**N**	**Percentage**
Gender	Female	141	82.9
	Male	29	17.1
Age in Years	20-30 years	40	23.5
	31-40 years	68	40
	41-50 years	42	24.7
	51years and above	20	11.8
Marital Status	Single	22	12.9
	Married	145	85.3
	Divorced	2	1.2
	Separated	1	0.6
Professional qualifications	Masters in Nursing	4	2.4
	Bachelors of Science in Nursing	24	14.1
	Diploma in Nursing	102	60,0
	Certificate in Nursing	40	23.5

Work Experience in Years	1 year 2-4 years 5-7 years 8-10 years 11 years and above	16 39 44 34 37	9.4 22.9 25.9 20 21.8
Total		**170**	**100%**

4.3 Experience of Horizontal Violence Behaviors among Nurses

Majority (77.6%) of the respondents reported experiencing at least one form of horizontal violence in the workplace for the past one year preceding this study. Prevalence is a measure of violence behaviors that allow determining a nurse's likelihood of experiencing horizontal violence behaviors at the work place at a particular period of time. Therefore, the number of prevalent cases is the total number of nurses experiencing horizontal violence in the study population. The prevalence of the horizontal violence behaviors among nurses was 36.2% or 362 nurses per 1,000.

4.4 Forms of Horizontal Violence Behaviors Experienced by Nurses

Table 2 shows that in the last twelve months, majority (51.8%) of the participants reported to have been gossiped, while less than half of the respondents had been either shouted at (34.1%), or humiliated (30%), or intimidated (24.7%), and threatened (20%) by their fellow nurses. While 19.4% of the respondents were criticized excessively and 4.1% reported that they experienced sexual harassment.

Table: 2 Forms of horizontal violence behaviors experienced by nurses

Forms of Violence experience by nurses	**N**	**Percentage**
Gossiped	88	51.8

Shouted at	58	34.1
Humiliated	51	30.0
Intimidated	42	24.7
Threatened	34	20.0
Criticized excessively	33	19.4
Sexually harassed	7	4.1

4.5 Relationship between Gossiping and Demographic Profiles using Chi-square-X^2, Correlation, and P value.

Although a large proportion (51.8%) of participants reported to have been gossiped, but gossiping and demographic profiles of participants were not statistically significantly associated: gender p=□0.005, age p= □0.005, professional qualification, p=□0.005 and work experience, p=□0.005 of the participants (Table 3).

Table 3: Relationship between Gossiping and Demographic Profiles of Participants.

Demographic Profiles	Gossiped			X^2 (df)	R	P-value
	Yes	No	(N)			
Gender						
Male	18(62.1%)	11(37.9%)	29	1.487(1)	0.094	0.224
Female	70(49.6%)	71(50.4%)	141			
Age in years						
20 – 30	26(65.0%)	14(35.0%)	40	4.916(3)	0.084	0.178
31 – 40	30(44.1%)	38(55.9%)	68			
41 – 50	23(54.8%)	19(45.2%)	42			
50 and above	9(45.0%)	11(55.0%)	20			
Professional qualifications						
Masters	2(50.0%)	2(50.0%)	4	0.689(3)	0.076	0.876
Bachelors	12(50.0%)	12(50.0%)	24			
Diploma	51(50.0%)	51(50.0%)	102			
Certificate	23(57.5%)	17(42.5%)	40			
Years worked						

1year	12(75.0%)	4(25.0%)	16	9.067(4)	0.149	0.059
2 – 4years	22(56.4%)	17(43.6%)	39			
5 – 7years	24(54.5%)	20(45.5%)	44			
8 – 10years	11(32.4%)	23(67.6%)	34			
11 and above	19(51.4%)	18(48.6%)	37			

4.6 Frequency of Occurrence of Horizontal Violence Behaviors Experienced by Participants.

Majority (55) of the participants reported to have been gossiped five times the last 12 months. Thirty eight respondents had experienced humiliation 5 times or less, 41 respondents had been shouted at by other nurses and 24 had been threatened and 25 respondents were intimidated 5 times by other nurses. Gossiping among nurses occurred most frequently than any of the seven horizontal violence behaviors as shown in Table 3.

Table 4. Frequency of horizontal violence behaviors self reported by participants.

Forms of Violence among Nurses	**Frequency**	**Percentage**
Humiliated		
Less than 5 times	38	74.5
6 – 10 times	10	19.6
11 – 15 times	3	5.9
Threatened		
Less than 5 times	24	70.6
6 – 10 times	6	17.6
11 – 15 times	4	11.8
Shouted at		
Less than 5 times	41	70.7
6 – 10 times	13	22.4
11 – 15 times	4	6.9
Gossiped		
Less than 5 times	55	62.5
6 – 10 times	13	14.8
11 – 15 times	20	22.7
Intimidated		
Less than 5 times	25	59.5
6 – 10 times	14	33.3
11 – 15 times	3	7.1
Criticized excessively		
Less than 5 times	16	48.5
6 – 10 times	13	39.4
11 – 15 times	4	12.1
Sexual harassed		
Less than 5 times	7	4.1
6 – 10 times	0	0
11 – 15 times	0	0

4.7 Frequency of Observations by Participants on Horizontal Violence Behaviors among Nurses.

When the participants were asked whether they have observed other nurse-colleagues being; humiliated, intimidated, threatened, shouted at, criticized excessively, gossiped or harassed sexually while on duty and: 82 (60.7%) of the participants had observed nurses being gossiped by nurse-colleagues more than four times in the last twelve months preceding this study. Table 4 shows the frequency of nurses experiencing the horizontal behaviors as observed by participants.

Table 5: Frequency of Observations by Participants on Horizontal Violence Behaviors on Nurse-Colleagues in the Last One Year Preceding this Study.

Variable	How many times observed				
	Once	**Twice**	**3 times**	**≥ 4 times**	**Total**
Intimidated in the last 12 months	14	27	14	0	**55**
Threatened in the last 12 months	18	7	8	24	**57**
Shouted at in the last 12 months	22	31	29	23	**105**
Criticized excessively in the last 12 months	20	15	8	34	**77**
Humiliated in the last 12 months	8	30	14	11	**63**
Gossiped in the last 12 months	7	28	18	82	**135**
Sexually harassed in the last 12 months	6	0	0	0	**6**

4.8 Relationship between Humiliation and Demographic Profile of Participants.

The Chi-square and correlation statistical analysis were used to determine the relationship between a dependent variable horizontal violence behavior and independent variables the demographic profiles of participants.

There was a statistically significant difference between age of the participants and humiliation (X^2 =9.882, R=0.182, p□ 0.005). More participants in the age group 31-40 years, n=26 (38.2%) experienced humiliation than participants in other age groups.

There was also a statistically significant difference between work experience of the participants (X^2 =10.104, R= 0.029, p□ 0.039) and humiliation. More participants with 5-7years of work experienced humiliation than participants with one year work experience.

Gender and humiliation were not significantly associated (X^2 =0.572, R=0.078, p□ 0.449), however, more female nurses n=44 (31.2%) experienced humiliation than male nurses n=7 (24.1%).

Participants with Master's degree in nursing n=4, (100%) did not experience humiliation, while participants who had Certificate in nursing n=14, (35%) reported experiencing humiliation than participants who had a Diploma n=30, (29.4%) and a Bachelor's degree n=7, (29.2%) (Table5).

Table 6: Relationship between Humiliation and Gender, Age, Professional Education, and Work Experience of Nurses.

Demographic Profiles	Humiliation			X^2 (df)	R	P-value
	Yes	No	(N)			
Gender						
Male	7(24.1%)	22(75.9%)	29	0.572(1)	0.078	0.449
Female	44(31.2%)	97(68.8%)	141			
Age in years						
20 – 30	3(7.5%)	37(92.5%)	40	9.882 (3)	0.182	**0.005**
31 – 40	26(38.2%)	42(61.8%)	68			
41 – 50	15(35.7%)	27(64.3%)	42			
50 and above	7(35.0%)	13(65.0%)	20			
Professional qualifications						
Masters in nursing	0	4(100.0%)	4	2.215(3)	0.086	0.529
Bachelors of degree in nursing	7(29.2%)	17(70.8%)	24			
Diploma in nursing	30(29.4%)	72(70.6%)	102			
Certificate in nursing	14(35.0%)	26(65.0%)	40			
Years worked						
1 year	2(12.5%)	14(87.5%)	16	10.104(4)	0.029	**0.039**
2 – 4 years	10(25.6%)	29(74.4%)	39			
5 – 7 years	21(47.7%)	23(52.3%)	44			
8 – 10 years	8(23.5%)	26(76.5%)	34			
11 and above	10(27.0%)	27(73.0%)	37			

4.9. Relationship between Horizontal Violence Behavior of Threat and Gender, Age, Professional education, and Years of Work experience of Nurses.

There was statistically significant difference between professional qualification of the participants and the exposure to threats (X^2 8.906, R= 0.099, p=0.031). More participants with Bachelor's degree in nursing n=10 (41.0%) experienced threats than participants who held Diploma in nursing n= 17 (16.7%) and Certificate in nursing n=7 (17.5%).

More females experienced threats n=29 (20.6%) than males n=5 (17.2%). However, there was no statistically significant difference in experience to threats between males and females (X^2 0.166, R 0.03, P=0.683).

There was no statistically significant difference between age of participants and experience to threats (X^2 5.335, R 0.118, p□0.149); work experience of participants and exposure to threats (X^2 5.998, R 0.030, p□0.199) (See table 6).

Table 7: Relationship between Threats and Gender, Age, Professional education, and Work Experience of Participants using Chi-square, Correlation.

Demographic Profiles	Threatened			X^2 (df)	R	P-value
	Yes	No	(N)			
Gender						
Male	5(17.2%)	24(82.8%)	29	0.166(1)	0.031	0.683
Female	29(20.6%)	112(79.4%)	171			
Age in years						
20 – 30	3(7.5%)	37(92.5%)	40	5.335(3)	0.118	0.149
31 – 40	17(25.0%)	51(75.0%)	68			
41 – 50	9(21.4%)	33(78.6%)	42			
51 and above	5(25.0%)	15(75.0%)	20			
Professional qualifications						
Masters in nursing	0	4(100.0%)	4	8.906(3)	0.099	**0.031**
Bachelors of science in nursing	10(41.7%)	14(58.3%)	24			
Diploma in nursing	17(16.7%)	85(83.3%)	102			
Certificate in nursing	7(17.5%)	33(82.5%)	40			
Work Experience						
1 year	2(12.5%)	14(87.5%)	16	5.998(4)	0.030	0.199
2 – 4 years	5(12.8%)	34(87.2%)	39			
5 – 7 years	14(31.8%)	30(68.2%)	44			
8 – 10 years	7(20.6%)	27(79.4%)	34			
11 and above	6(16.2%)	31(83.8%)	37			

4.10: Relationship between Intimidation and Demographic Profiles of Nurses.

Statistically, there was a significant difference between professional qualification and intimidation (X^2 8.664; R 0.080; p= 0.034). Participants with a master's degree did not experience any intimidation while more participants with bachelor's degree n=11, (45.8%) reported intimidation. Participants with Diploma in nursing n=20, (19.6%) were the least intimidated.

More females n=36, (25.5%) experienced intimidation than males n=6, (20.7%). However there was no statistically significant difference between gender and Intimidation (X^2 0.303; R 0.042; p□0.582).

There were no statistically significant differences between the age of the participants and intimidation (X^2 0.878; R 0.023; p□0.761); Work experience of participants and intimidation (X^2 4.141; R 0.076; p□0.387) (see table 7).

Table 8: Relationship between Intimidation and Gender, Age, Professional education and Work Experience of Nurses.

Demographic Profiles of Nurses	Intimidated			X^2 (df)	R	P-value
	Yes	No	(N)			
Gender						
Male	6(20.7%)	23(79.3%)	29	0.303(1)	0.042	0.582
Female	36(25.5%)	105(74.5%)	141			
Age in years						
20 – 30	8(20.0%)	32(80.0%)	40	0.878(3)	0.023	0.761
31 – 40	19(27.9%)	49(72.1%)	68			
41 – 50	10(23.8%)	32(76.2%)	42			
50 and above	5(25.0%)	15(75.0%)	20			
Professional qualifications						
Masters in nursing	0	4(100.0%)	4	8.664(3)	0.080	**0.034**
Bachelors in nursing	11(45.8%)	13(54.2%)	24			
Diploma in nursing	20(19.6%)	82(80.4%)	102			
Certificate in nursing	11(27.5%)	29(72.5%)	40			
Work Experience						
1 year	5(31.3%)	11(68.7%)	16	4.140(4)	0.076	0.387
2 – 4 years	9(23.1%)	30(76.9%)	39			
5 – 7 years	12(27.3%)	32(72.7%)	44			
8 – 10 years	11(32.4%)	23(67.6%)	34			
11 and above	5(13.5%)	32(86.5%)	37			

4.11 Factors Contributing to Horizontal Violence Behaviors amongst Nurses.

More (27.6%) participants reported that differences in age and cadre in nurses were the major causes of aggressive behaviors of horizontal violence in nature. Whilst 18.3% of the participants reported heavy workload, and 17.1% of the participants said that jealousy and hatred were the contributing factors of violence among nurses at the workplace (Figure 2).

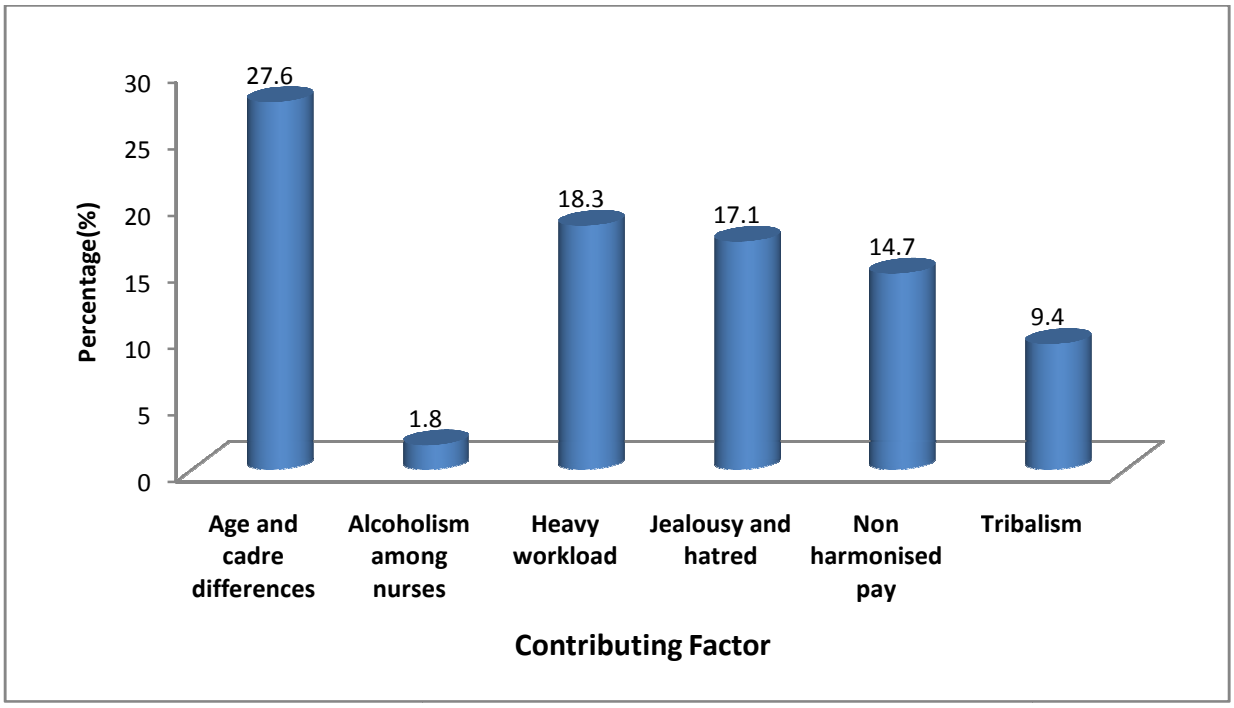


Figure 2: Contributing factors to horizontal violence among nurses as reported by participants.

4.12 Effects of Horizontal Violence Behaviors amongst Nurses as Reported by Participants

More 38.7% participants reported that horizontal violence behaviors cause poor communication amongst nurses. Whilst 37.6% of the participants reported that horizontal violence behaviors make nurses hate each other resulting into poor interrelationship (figure: 3).

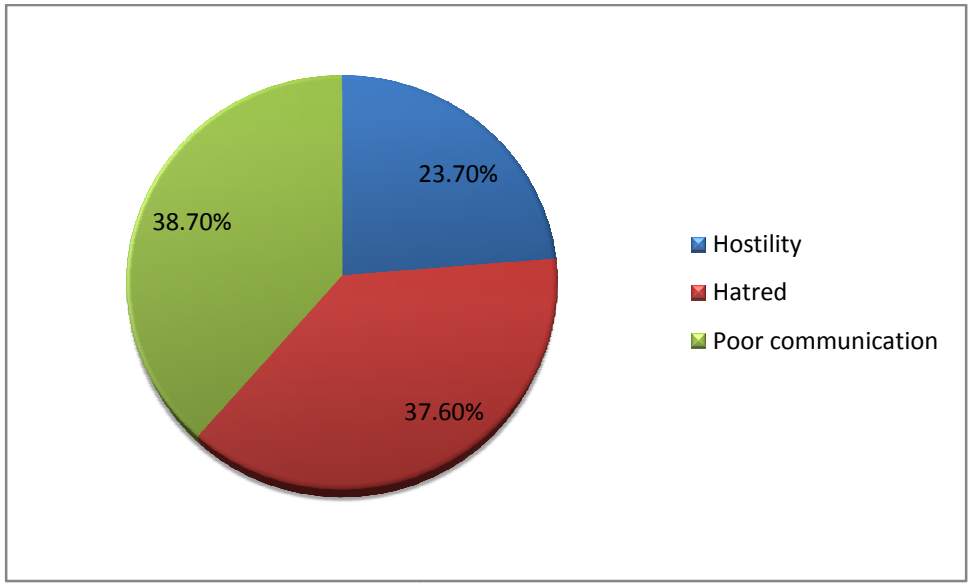


Figure 3: Effects of violence behaviors amongst nurses

4.13 Recommendations to Eliminate Violence in Nurses as Reported by Participants

Majority (39.5%, n=67) of participants reported that equipping nurses with knowledge about violence behaviors among nurses and how to control the behaviors as an intervention to control horizontal violence behaviors among nurses. 21.7% of the participants recommend salary harmonization as one way of controlling violence among nurses (See table 9).

Table 9: Interventions to Eliminate Violence in Nurses

Action Item	**Frequency**	**Percentage**
Equip nurses with knowledge on violence prevention	67	39.5
Salary harmonization	37	21.7
Regular meetings to solve issues	29	17.1
Ensure good communication	18	10.5
Customer care sensitization	13	7.7
Allow time for in-service to update knowledge & skills	6	3.5
Total	170	100%

4.14 Observed availability of records on incidences, control measures, social support, policy on management and types of horizontal violence behaviors recorded.

More (n=3; 60%) of the MCH/FP had incidence record books in which the sister-in-charges record incidences of violence behaviors, however, most of them had no record of forms of violence recorded. Only 1(20%) of the clinics had records of forms of violence such as gossiping and threats. There were no violence control measures in 60% of the total clinics interviewed. 60% of the clinics reported that there was no social support for the victims of violence (Table 10).

Table 10: Observed interventions available on horizontal violence behaviors in the health facilities.

Item	Frequency	Percentage
Record books on incidence of horizontal violence are available	3	60
Control measures on horizontal violence are available	1	20
Violence behaviors amongst nurses recorded in record book	1	20
Is social support for victims of horizontal violence available?	2	40
Policies on management of horizontal violence in nurses are available in the institution?	2	40

CHAPTER FIVE: Discussion, Conclusion and Recommendations.

5.1 Discussion

The aim of the study was to determine the existence of horizontal violence behaviors among nurses and solutions to violence elimination. The study findings demonstrated that violence occurs amongst nurses in the health facilities and that nurses are victims of violence as well as perpetrators (NHSRU, 2008).

There are two main forms of violence physical and non-physical violence. The study findings demonstrated that non-physical violence such as, intimidation and humiliation, gossiping, criticizing excessively, and shouting at a fellow nurse and threatening behaviours was found to be the most frequently experienced among nurses than sexual harassment. Majority n=132 (77.6%) of the participants in this study reported experiencing many of the horizontal violence behaviors such as gossiping, intimidation, humiliation, threats, shouting at a nurse, criticized excessively and sexual harassment. Whilst n= 38 (22.4%) of the participants did not experience any horizontal violence behaviors. The prevalence of violence among nurses was 36.2%. The study findings are similar to the previous study findings done in South Africa by Khalil (2008) whereby 29% of the participants experienced horizontal violence behaviors at the work place. Nienhaus and Schoblon, (2012), in their study findings in a German hospital revealed that 56.2% of respondents had experienced physical violence and 78% verbal violence. 44% of respondents said they experienced physical violence and 68% verbal violence once or more per month.

The study findings indicated that there were statistically significant differences between humiliation and age of the participants, (p=0.005); years worked and humiliation (p=0.039); between threats and professional qualification of the participants (p=0.031); and intimidation and

professional qualification of the participants, (p=0.034). These study findings indicate that humiliation was significantly associated with age and work experience of the participants and that intimidation and threats were significantly influenced by professional qualification of the participants. More participants in the age group 31-40 years, n=26 (38.2%) experienced humiliation than participants in other age groups. This may be because these participants in this age group (31-40) had large responsibilities in their marriage homes coupled with the work at the workplace which could make them stressed up thereby affecting their work performance, compared to the participants in the younger age group (20-30) whom most of them may be single hence less responsibilities and less stressed up and be able to work efficiently and effectively resulting to less exposure to humiliation. The study findings are in contrast to other previous studies findings done by Sripichyakan et al, (2011) in Thailand, in the study there was a statistically significant difference between age and violence behaviors. The younger personnel experienced violence more than did older personnel. Among the personnel aged between 20 and 44, the 20-24 years old group experienced violence significantly more than the 30-34, 35-39, and 40-44 years old groups.

On the other hand, there was no statistically significant difference between the demographic profiles of the participants and the horizontal violence behaviors of gossiping, shouting, criticized excessively, and sexual harassment. Therefore the demographic profiles of the participants had no significant influence on the behaviors of horizontal violence.

Although there were no statistically significant differences between gender and horizontal violence behaviors such as humiliation, threats, shouting, criticized excessively, intimidation, gossiping and sexual harassment, more female participants (n=44; 31.2%) experienced humiliation than their male counterparts (n=7; 24.1%); more females (n=29; 20.6%) received

threats than male participants (n=5; 17.2%); more females (n=36; 25.7%) than males (n=6;20.7%) were intimidated and more females (30;20.3%) were criticized excessively than males (3;10.3%) and less males (1;3.4%) were less sexually harassed than females (6;4.3%). However, a large proportion of males (18; 62.1%) than females stated that they were gossiped by their fellow nurses. High experiences of horizontal violence in females than males could be due to the fact that males are more assertive than females.

Of the non-physical violence gossiping (51.8%) was the most experienced form of violence among nurses followed by being shouted 34.1% and humiliation at 30.0% and intimidation at 24.7%. While 19.4% were criticized excessively and 20.0% of the nurses were threatened and 4.1% were sexually harassed. Although gossiping is ranking high among nurses, there was no statistically significant difference between gossiping and socio-demographic profiles of the nurses.

The study findings are in contrast to the study done by Khalil (2008) on horizontal violence amongst nurses in eight Cape Town public hospitals in South Africa which found that humiliation, shouting and discrimination were the most experienced type of violence amongst the nurses. The study findings are similar to study done by Aiken et al, (reported in proceedings of 3rd workplace violence, 2012) in Jamaica on lateral violence in nursing. The study found that verbal abuses in form of backstabbing, humiliation were experienced amongst nurses.

The study findings are also similar to study carried out in South Africa by Khalil (2008), whereby non physical violence was significantly the predominant type of workplace violence amongst nurses. The study results showed psychological violence as the most common form of

violence among nurses in all participating clinics. The current study findings were also concurring with the international findings confirming the presence of violence among nurses and the extent of violence amongst nurses and that violence was a major health concern because of its magnitude by the ICN, ILO, WHO, and PSI (Hinchberger & Zielke-Nadkarn, 2002).

This study findings showed that sexual harassment was the least (4.1%) experienced by the participants in the past twelve months. This was similar to the findings of the study done by Motamedi, (2008) on situations and contributing factors of workplace violence among nurses in Isfahan, Iran, and in Thailand (0.7%), where sexual violence was the least common type of violence reported by the participants in the study. The low prevalence of sexual abuse in this study could be due to under reporting of findings secondary to shame and guilt associated with such incidents. In Thailand the low prevalence of sexual abuse could be because of the better image of nursing, where it is considered a respectable profession and it has been mentioned by authors in the article that hospitals that they had chosen for the study had structured training facilities for nurses to provide quality care to clients and to prevent violence in them (Kamchuchat et al., 2008).

Participants were asked of the frequency of the observed violence behaviors amongst nurses. Majority (n=82) of the participants had observed nurses being gossiped by nurse colleagues more than four times in the last twelve months while thirty four (34) of the participants said they had observed a nurse being criticized excessively by a nurse colleague more than four times. Twenty four (24) participants reported to have observed a nurse being threatened by a nurse colleague more than four times, and twenty three (23) participants observed a nurse being shouted at by nurse colleague less than four times. However, though negative behaviors of criticizing

excessively, shouting, and gossiping amongst nurses were frequently occurring, there was no statistically significant difference between the negative behaviors and the demographic profiles of the participants.

Participants were also asked about factors contributing to violence amongst nurses. Twenty seven percent (27.6%) of the participants stated that differences in age and cadres in nurses were the causes of aggressive behaviors of horizontal violence in nature. Whilst 18.3% of and 17.1% of the respondents reported that heavy workload, and jealousy and hatred were the contributing factors of violence among nurses at the workplace. Tribalism (9.4%) was also reported. The least cause of violence was alcoholism (1.8%) in nurses.

Age differences, whereby age was determining factor to some behaviors of horizontal violence, it was observed that participants in age group 30-40 years were more exposed to horizontal violence than the youngest age group (20-30 years) in the study. This is in contrast to a study done by Sripichyakan et al, (2001) whereby the study findings showed that the younger participants experienced violence more than did older personnel. Among the participants aged between 20 and 44, the 20-24 years old group experienced violence significantly more than the 30-34, 35-39, and 40-44 years old groups.

Cadre differences were also reported by participants to be one of the contributing factors to violence among nurses. However, there was no statistically significant difference between the participants' cadres and the horizontal behaviors humiliation, intimidation, gossiping, shouting, threatened, criticized excessively and sexual harassment. This is similar to previous study findings by Khalil, (2008), different cadres of the nursing profession perpetrated the violence among nurses and professional nurses such as the sister-in-charges were the most perpetrators of

violence. Inequalities in salary remunerations in nurses were also reported to be a contributing factor to violence amongst nurses. Some respondents reported that their salaries were un-harmonized in nurses with same qualifications. The study findings are similar to the study done in Thailand by Sripichyakan et al, (2001) where findings showed that economic matters, low education, envy and feelings of inferiority were the contributing factors across all types of violence behaviors in health care workers in the work place

Alcoholism was also mentioned as a causative factor of violence among nurses. Reihl, (2012) in managing lateral violence and its impact stated that an individual could be at risk of being a victim of lateral violence if the individual was working with one who was under the influence of alcohol because alcohol makes an individual to have a volatile mind. Heavy work load was also reported as one of the causes of horizontal violence. Quine, (1999) indicated that heavy workload result to work pressure and stress. Working under stress is unhealthy for an individual because it affects his/her psychological and physiological well-being, consequently, quality of work is affected resulting to low productivity.

The other factors were ethnicity related. Respondents reported tribalism as one of the causes of violence among nurses. Tribalism is defined as behaviour and an attitude portrayed by an individual based on strong loyalty to those persons belonging to the individual's own tribe. Tribalism leads to fragmentation and divisiveness as people identify with an in-group, and biases leading to poor interrelationship among workers.

The study also sought to find out the consequences of violence amongst nurses. Many (38.7%) of the participants reported that horizontal violence behaviors result to poor communication among nurses, (37.6%) of the participants reported that violence behaviors result to hostility among

nurses, and 23.7% of the participants said violence behaviors result into hostility and poor interrelationship between the victim and the perpetrator. The study finding is similar to the findings of the previous studies by Leung, et al., (2006); Di Martino (2002) which demonstrated that violence behaviors result into physical complications such as injury and physical disability resulting from beating or slapping that cause physical or psychological harm to the worker. Psychological trauma, the most common form of violence amongst nurses, creates hostility among nurses as opposed to physical trauma (Leung, et al. 2006). Hostility in those affected nurses, leads to reduced communication between the victim and the perpetrators resulting into medical and nursing errors. Medical and nursing errors affect the outcome of nursing care in clients resulting in poor quality health care, consequently delaying effectiveness of Primary Health Care and attainment of MDGs number 4 and number 5 on reduction of child mortality by two thirds and reduction in maternal mortality ratio by three quarters by 2015 from the year 1990.

The study sought to find out from participants recommendations to eliminate horizontal violence among nurses. Majority (39.5%, n=67) of the participants recommended equipping nurses with knowledge about violence behaviors and how to control the behaviors; 21.7% recommended salary harmonization and 17% of the participants stated about having regular meetings with staff on horizontal violence. Participants also stated that nurses should also refrain from tribalism if violence amongst them was to end.

The reported recommendations should be implemented in the health facilities to control violence behaviors. Literature states that violence behaviors are learned in individuals hence the need to control horizontal violence behaviors among nurses. The literature about horizontal violence in the workplace revealed that individuals tend to emulate the behaviors of the group members they

most intimately engage with as a way to be accepted by them. In Roy's adaptation model, an individual is a biopsychosocial human being who interacts and adapts to the environment she is in. When maltreatment of an employee(s) is

occurring, members of the work unit may model the behavior of the individuals participating in the negative behavior as a way to be accepted by them. Literature on horizontal violence recommends effective policies regarding workplace violence, grievance procedures, and counseling as methods to reduce workplace violence (Howard, 2001).

The study sought to establish the availability of incidence record books on violence and control measures if they were available in the health facilities; if social support was available for the victims of violence; types of violence amongst nurses that were recorded. The investigator using a check list and with assistance of sister-in-charges observed for the availability of the interventions. More half (n=3, 60%) of the MCH/FP had incidence record books in which the sister-in-charges recorded of violence behaviors committed by nurses , however, most of them had no record of forms of violence recorded, only n=1,(20%) of the clinics had records of forms of violence such as gossiping and threats. There were no violence control measures in n=2, (60%) of the total clinics interviewed and that n=2 (40%) of the clinics indicated that there was no social support for the victims of violence. The study findings show that there is inadequate recording of horizontal violence behaviors in the health care facilities. These findings are similar with the previous studies that reported that there was under reporting of violence incidences or no record at all in most of the health care facilities, making it difficult to be precise in severity of violence in nurses (RNA, 2008 & NACNEP, 2005).

The findings of this study validated the appropriateness of Roy's Adaptation Theory as the framework to guide this study. Roy's Adaptation Model is based on a systems theory approach and focuses on the concept of individual's adaptation to the environment (George, 2005). The environment is anything that is surrounding or is within the individual. The environment could be nurses' peers or co-workers, atmospheric ambience, and the nurse's internal physiological and psychological environment.

In this study a stimulus is that which provoked a response in a nurse, and it was the point of interaction between the nurse and the environment she/he was exposed to. Roy identifies stimuli as those originate both externally to the person, and those that originate from within the person. These could be further categorized as focal, contextual, and residual stimuli (Roy, 1984).

A focal stimulus, is stimulus that is most immediately confronting the person and the one to which the person must make an adaptive response, that is, the factor that precipitates the behavior.

In this study the person was the nurse and the focal stimuli in a nurse were personal and external stimuli such as low staffing levels and work pressure which lead to work strain and stress in a nurse; age and professional differences; jealousy and hatred; unharmonized salaries in nurses with equal qualifications and tribalism. Contextual stimuli are "all other stimuli present that contribute to the behavior caused or precipitated by the focal stimuli" (Roy, 1984, p 43). The contextual stimuli in this study were the confounding variables such as personality interms of stress and coping mechanisms, assertiveness, education on violence prevention, and work experience of the nurse. Residual stimuli are factors that may be affecting behavior but whose effects are not validated (Roy, 1984, p. 43) in this study. The environment was the unit in which

the nurses had to work, and the nurses represented the adaptive systems that responded to this external stimulus. The nurses' ability to cope with and/or prevent the focal stimuli could be affected by contextual and residual stimuli. Callista Roy adds that the person (nurse) is not passive in relation to the environment. He/she is a "bio- psycho-social being in constant interaction with a changing environment" (Roy & Corliss, 1993 as cited in Parker, 1993, p. 233). Adaptive behavior is evidence of effective response to focal stimuli while ineffective behavior indicates a problem (Roy & Andrews, 1999). In this study the adaptive response could be a violence free workplace environment while ineffective response could be a harsh environment such as intimidation, humiliating a co-worker or gossiping and shouting at a co-worker, criticizing a co-worker excessively. Roy in her model stated that individuals have the ability to change their own adaptation level by responding to deficits in their coping ability. In this study finding this may mean that nurses' negative behaviors towards others could be prevented through access to education, training, or by seeking out additional resources. This may also mean that if nurses are educated and trained on horizontal violence prevention in the health facilities, they would be empowered with knowledge and skill on how to prevent or control horizontal violence among themselves.

5.2 Conclusion

The study finding verified that horizontal violence amongst nurses in the health facilities exists with a prevalence of 36.2% and that nurses are victims and perpetrators of violence as well. Majority of participants experienced at least one form of horizontal violence behavior for the past one year preceding this study. Psychological violence behaviors such as humiliation, gossip, intimidation, threats, excessive criticisms, shouting and sexual harassment were committed among nurses. Age, cadre differences, heavy workload, jealousy and hatred and tribalism were

contributing factors of violence among nurses. Violence among nurses contributes towards various physical and psychological negative consequences in nurses working in the healthcare facilities. Negative consequences of horizontal violence include hostility, lack of teamwork due to poor interrelationship among nurses; adverse effect on patient care/safety because nurses who are stressed by the effects of a hostile environment are more likely to make nursing errors, lack of trust and respect. Age, professional qualification and work experience of nurses have significant association on horizontal violence behaviors such as humiliation, intimidation and threats. These findings are consistent with international findings confirming the presence and extent of violence among nurses.

5.3 Recommendations

The presence of violence among nurses in the workplace makes it difficult for an organization to improve the quality of care they provide because nurses are traumatized physically or mentally by their nurse colleagues. Therefore:

1. Increase awareness in nurses on what horizontal violence is and how to prevent and control it.
2. Nurses play an important role in changing the work environments by respecting one another regardless of age, professional qualification and ethnic differences.
3. Proper record of any incidence of violence behaviors be done in the health facility for proper documentation of horizontal violence events.
4. Improve working systems such as ensuring adequate nurse-staffing levels, harmonious salaries in order to reduce stress and conflicts in nurses.
5. Further research in large scale on violence among nurses should be conducted in the country to generalize the results.

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APPENDICES

APPENDIX I: CONSENT INFORMATION FORM

Dear Participant, my names are Dorothy Nyirongo, I am a Master of Science in nursing student at University of Nairobi. One of the requirements for the award of the degree is to carry out a

study. I wish to request you to participate in this study whose purpose is to "Explore prevalence of violence amongst nurses in health facilities with MCH/FP clinics in Nairobi."

I have developed a questionnaire to help me obtain the required information. You are free to participate or withdraw from the study at any time without coercion or giving an explanation. There is no penalty for declining to participate and the information that you give will be treated with confidentiality. No names will be put on the questionnaires.

There are no risks involved in the study and it will not involve any invasive procedures. There are no financial costs attached to your participation and apart from the time now and when responding to the questionnaire.

In case you need more information, please contact the Principal Investigator on phone number 0733443125; Secretary to KNH-UON-ERC on Cell: +254 735274288, Tel: +254202725698.

Respondent's Statement

I agree to participate in the study. I have been given the copy of this form and understood the contents thereby.

Respondent's signature..... Date.....

Principal Investigator's signature..... Date.....

APPENDIX I1: QUESTIONNAIRE

Questionnaire number..... Clinic.....

INSTRUCTIONS

Please answer the following questions in the space provided or tick the appropriate option in the box provided.

Section A. Demographic Data

1) Age in years, a) 20-30 years ☐

b) 31-40 years ☐

c) 41-50 years ☐

d) 51 years & over ☐

2) Gender; Male 1= ☐ Female 2 = ☐

3) Marital status single 1 = ☐ married 2 = ☐ brced 3= ☐ rs 4=……

4) Nationality; K☐n 1= others (specify) 2=.....

5) Place of residence.....

6) Educational qualification (tick where appropriate): Masters in nursing 1= ☐

Bachelor's degree in nursing 2 = ☐

Diploma in nursing 3 = ☐

Certificate 4 = ☐

7) Nursing cadre; enrolled nurse 1= ☐ diploma nurse 2= ☐ degree nurse 3= ☐

Others (specify) 4= …….

8) Years worked (tick where appropriate) 1year 1 = ☐

2-4 years 2 = ☐

5- 7 years 3 = ☐

8-10years 4 = ☐

11 years & over 5= ☐

9) Work station: Antenatal clinic 1= ☐

PMTCT clinic 2 = ☐

Family planning clinic 2 = ☐

Child health clinic 3 = ☐

Postnatal clinic 4 = ☐

Cervical cancer screening clinic 5= ☐

Others clinic (Specify) 6=…….

SECTION B

Answer all questions

Tick the appropriate option in the box provided

Experience of violence and aggressive behavior among nurses.

(10**) A**. Have you ever been humiliated or intimidated or threatened or shouted at, or criticized excessively or gossiped or sexually harassed by a nurse in your clinic for the past twelve months? (Tick appropriate option)

Humiliated 1 = ☐ Threatened 2 = ☐ Shouted at 3 = ☐ gossiped 4= ☐

Intimidated 5 = ☐ criticized excessively 6= ☐ sexually harassed 7= ☐

Others (specify) 8=……..

B. How often?

a) Humiliated 1= Less than 5 times ☐ 6-10 times ☐ 11-15 times ☐

b) Threatened 2= Less than 5 times ☐ 6-10 times ☐ 11-15 times ☐

c) Shouted at 3= Less than 5 times ☐ 6-10 times ☐ 11-15 times ☐

d) Gossiped 4= Less than 5 times ☐ 6-10 times ☐ 11-15 times ☐

e) Intimidated 5= Less than 5 times ☐ 6-10 times ☐ 11-15 times ☐

f) Criticized excessively 6= Less than 5 times ☐ 6-10 times ☐ 11-15 times ☐

g) Sexually harassed7= less than 5 times ☐ 6-10 times ☐ 11-15 times ☐

h) Others ……

(11) Have you had an injury on any part of your body caused by another nurse in your clinic in the last twelve months?

Yes. ☐
No. ☐

If yes, how often?

a) Once ☐

b) Twice ☐

c) Three times ☐

d) More than 4 times ☐

12) Do you happen to know a nurse who was assaulted by a nurse in your clinic for the past twelve months?

Yes ☐

No ☐

12) Have you observed a nurse being humiliated by a nurse in the last twelve months?

Yes. ☐
No. ☐

If yes,

a) Specify the type of violence behavior……...
b) How often?

i) Once ☐

ii) Twice ☐

iii) Three times ☐

iv) More than 4 times ☐

12) Have you observed a nurse being intimidated by a nurse in the last twelve months?

Yes. ☐

No. ☐

If yes, How often?

i) Once ☐

ii) Twice ☐

iii) Three times ☐

iv) More than 4 times ☐

13) Have you observed a nurse being threatened by a nurse in the last twelve months?

Yes. ☐

No. ☐

If yes, How often?

i) Once ☐

ii) Twice ☐

iii) Three times ☐

iv) More than 4 times ☐

16) Have you observed a nurse being shouted at by a nurse in the last twelve months?

Yes. ☐

No. ☐

If yes, How often?

i) Once ☐

ii) Twice ☐

iii) Three times ☐

iv) More than 4 times ☐

17) Have you observed a nurse being excessively criticized by a nurse in the last twelve months?

Yes. ☐

No. ☐

If yes, How often?

i) Once ☐

ii) Twice ☐

iii) Three times ☐

iv) More than 4 times ☐

18) Have you observed a nurse being gossiped by a nurse in the last twelve months?

Yes. ☐

No. ☐

If yes, How often?

i) Once ☐

ii) Twice ☐

iii) Three times ☐

iv) More than 4 times ☐

19) Have you observed a nurse being sexually harassed by a nurse in the last twelve months?

Yes. ☐

No. ☐

If yes, How often?

i) Once ☐

ii) Twice ☐

iii) Three times ☐

iv More than 4 times ☐

20) What types of violence have you observed among nurses for the past twelve months in your clinic? (List them; start with the commonest type of violence).

1=……

2=...…….

3=...……

4=……...

5=……..

None (tick) ☐

21) In your knowledge, what are the contributing factors to violence amongst nurses? (please, explain briefly)

1=…….

2=……

3=……

4=……

5=……

Don't Know.6= ☐

22) What were the effects of injury on the nurse victim? (describe briefly)

Sick leave 1= ☐

Sought legal address 2= ☐

Resigned 3= ☐

Other 4= (specify)……

23) What were the effects of humiliation, intimidation, excessive criticism, gossiping, being shouted at on interrelationship between the victim and the perpetrator?

Hostility 1= ☐ Hatred 2= ☐ poor communication 3= ☐

Other 4= (specify)…….

23) Mention type of nurse cadres perpetrating the violence?

1=…….
2=…….

3=……

4=……

PARTISPANT'S RECOMMENDATIONS ON VIOLENCE PREVENTION AND ELIMINATION:

24) What do you think should be done to prevent violence in your clinic? (Explain briefly).

1=……

2= ……

3=……

4=……

5=……

25) What do you think should be done to eliminate violence in your clinic? (Explain briefly).

1=……

2=……………………………………………………………………………………

3=……………………………………………………………………………………

4=…………………………………………………………………………………….

Key Informant Interview Schedule with Nurse-in-Charges of MCH/FP clinics

ITEM	YES	NO	COMMENT
Violence incident record books/ files available?			
Control measures on violence available in the institution?			
Are control measures being utilized?			
Is social support for violence victims available?			
What are the types of violence amongst nurses recorded?			
Are policies on management available in the institution?			

APPENDIX 111: ETHICS APPROVAL

UNIVERSITY OF NAIROBI
COLLEGE OF HEALTH SCIENCES
P O BOX 19676 Code 00202
Telegrams: varsity
(254-020) 2726300 Ext 44355

KNH/UON-ERC
Email: uonknh_erc@uonbi.ac.ke
Website: www.uonbi.ac.ke

Link:www.uonbi.ac.ke/activities/KNHUoN

KENYATTA NATIONAL HOSPITAL
P O BOX 20723 Code 00202
Tel: 726300-9
Fax: 725272
Telegrams: MEDSUP, Nairobi

Ref: KNH-ERC/A/193

5th July, 2013

Dorothy Stella Nyirongo
School of Nursing Sciences
College of Health Sciences
University of Nairobi.

Dear Dorothy

RESEARCH PROPOSAL: PREVALENCE OF HORIZONTAL VIOLENCE AMONG NURSES WORKING IN MATERNAL CHILD HEALTH AND FAMILY PLANNING CLINICS OF NAIROBI (P152/4/2013)

This is to inform you that the KNH/UoN-Ethics & Research Committee (KNH/UoN-ERC) has reviewed and **approved** your above proposal. The approval periods are 5th July, 2013 to 4th July, 2014.

This approval is subject to compliance with the following requirements:

a) Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
b) All changes (amendments, deviations; violations etc) are submitted for review and approval by KNH/UoN ERC before implementation.
c) Death and life threatening problems and severe adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH/UoN ERC within 72 hours of notification.
d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH/UoN ERC within 72 hours.
e) Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (*Attach a comprehensive progress report to support the renewal*).
f) Clearance for export of biological specimens must be obtained from KNH/UoN-Ethics & Research Committee for each batch of shipment.
g) Submission of an *executive summary* report within 90 days upon completion of the study
This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/or plagiarism.

For more details consult the KNH/UoN ERC website **www.uonbi.ac.ke/activities/KNHUoN.**

Yours sincerely

PROF. M. L. CHINDIA
SECRETARY, KNH/UON-ERC

c.c. Prof. A.N. Guantai, Chairperson, KNH/UoN-ERC
The Deputy Director CS, KNH
AD, Health Information, KNH
The Principal, College of Health Sciences, UoN
The Director, School of Nursing Sciences, UoN
Supervisors: Dr. Waithira Mirie, Mrs. Angeline Kirui

APPENDIX IV: NAIROBI CITY COUNTY AUTHORIZATION LETTER

NAIROBI CITY COUNTY

Governor's office
Fax:22217704
Telephone:2224281
email:governor@nairobicity.go.ke
web: www.nairobicity.go.ke

City Hall
P.o box 30075-00100
Nairobi
Kenya

COUNTY HEALTH SERVICES

REF. NO.PHD/1/14/9/ac

5TH AUGUST, 2013

Dorothy Stella Nyirongo
School of Nursing Sciences
College of Health Sciences
University of Nairobi
P. O. Box 30197
NAIROBI, KENYA

Dear Madam,

RE: REQUEST FOR AUTHORIZATION TO CONDUCT A RESEARCH AT NAIROBI CITY COUNTY HEALTH FACILITIES IN WESTLANDS, DAGORETI,LANGATA AND STAREHE DISTRICTS

Thank you for your letter dated 15th , July , 2013.

This is to inform you that the Nairobi City County, Public Health Departments/County Health Services has reviewed and approved your above research subject to compliance with the following requirements:

- Payment of **Kshs. 5,000/-** (Five thousand shillings only) research fee.
- You will be expected to adhere to the rules and regulations pertaining to the Nairobi City County.
- That during your research there will be no cost devolving to the County.
- That you undertake to indemnify the Nairobi City County against any claim that may arise from the research.
- A copy of the findings must be submitted to the office of the undersigned.
-

We look forward to continued collaboration to improve the health of the Kenyan people.

By a copy of this letter the District Medical Officers of Health of the respective health facilities are requested to give you the necessary support.

DR. ROBERT K. AYISI, OGW
FOR: INTERIM COUNTY SECRETARY

CC. DMOH /FACILITY INCHARGE