FEMALE NURSES' PERSONAL EXPOSURE AND RESPONSES TO HYPOTHETICAL CASE SCENARIOS ON DOMESTIC VIOLENCE IN EKURHULENI HEALTH DISTRICT

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DECLARATION

I, Pius Akhetuamen, hereby declare that this research is my own unaided work, except where due acknowledgement for assistance received has been made. It is being submitted for the degree of Master of Family Medicine at the University of the Witwatersrand, Johannesburg. It has not been submitted previously for any other degree or examination at this or any other University.

Signed : _____

Signature of Candidate

Date : __30/01/2021_____

DEDICATION

I want to dedicate this work to my family for their unconditional support and understanding throughout the time that I was preparing this research report.

ABSTRACT

Background: Domestic violence remains a major concern. It is even more a cause for concern when nurses required to manage patients are victims of domestic violence themselves due to its high prevalence in society. Many studies have been conducted on the effects and impact of domestic violence on nurses expected to manage victims of domestic violence in urban hospital settings. However, there is a paucity of studies in peri-urban settings such as the Ekurhuleni health district looking at the prevalence of domestic violence among PHC trained nurses and their responses to hypothetical case scenarios on domestic violence.

Methods: This study was a descriptive cross-sectional study of responses to self- administered hypothetical patient scenarios using convenience sampling. There were two hypothetical patient scenarios using a vignette and a demographic questionnaire. The qualitative part comprised of hypothetical case scenarios on domestic violence while the quantitative section consisted of demographic information of the nurses participating as well as screening information about current or previous experience of domestic violence.

Results: A total of 78 PHC nurses completed the questionnaires. The prevalence of domestic violence among the participants was 35%. The majority were married and/or living with their partners and IsiZulu speaking. On average they had 15 years of experience in nursing with a median age of 40 years (Table 1). The group of nurses aged 35years and younger were more likely to disclose being survivors of domestic violence (OR 2.14; 95% CI 0.77-5.96). This group was also 2.68 times more likely to claim having received training in management of domestic violence (OR 2.68; 95% CI 0.93-7.76). Those exposed to domestic violence within this age group were less likely to suggest the correct management options for the hypothetical patient scenarios and were also less likely to share a household with a partner.

Conclusion: This study highlights that domestic violence is common among nurses in Ekurhuleni health district. It also suggests that even when nurses received training in the management of domestic violence, it did not improve the likelihood of appropriate management for the survivors. If the Patient Scenario suggested trauma, it was more likely for nurses to consider domestic violence.

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TABLE OF CONTENTS

LIST OF TABLES

INTRODUCTION

Violence against women is a global scourge of pandemic proportions. Globally, at least one in three women has been coerced into sex, beaten or psychologically abused by an abuser known to the victim.[1] Countries in conflict or post-conflict situations (as in the case of South Africa) have a tendency to have existing violence exacerbated because it is seen as a strategy for not only resolving conflict but for gaining ascendency.[2]

Africa has the highest rates of intimate partner violence in the world with 45,6% of women experiencing one or more episodes of any form of violence in their lifetime, compared to a global average of 35%.[3] On the African Continent, Zambia (48%) has the highest prevalence rates and South Africa (26%) has the highest mean lifetime prevalence rate.[4] In Nigeria about 25% of women report having ever been physically assaulted in their lifetime.[5] The high prevalence can be explained by various factors such as culture, socio-political history and resource challenges.[6,7,8]

In South Africa, violence against women has reached alarming proportions and policy makers have to do more, as women's lives are at risk. A household survey by the Medical Research Council (MRC) found that 40% of men have hit their partners and one in four men has sexually abused a woman with three quarters saying they did so first as teenagers.[9] Although a quarter of the country's women have been sexually abused, only 2% actually reported the incident to the police with human rights organizations estimating that only one in nine cases of sexual violence ever get reported to the police while the national institute for crime prevention and rehabilitation (NICRO) suggests that only one in twenty cases of sexual abuse is reported to the police.[10]

Furthermore, research shows that women are more at risk from violence from people they know than from strangers, with a woman suffering violence or maltreatment every 18 seconds in South Africa which is one of the highest incidence in the world.[12] South Africa has six times the global average with about 24 women involved in domestic violence per 100,000 women compared to four women per 100,000 in the rest of the world.[13] In 2010 the MRC found that slightly more than half the women (51.2%) in Gauteng have experienced some form of violence such as emotional, economic, physical or sexual violence in their lifetime.[9]

Several definitions of intimate partner violence exist, depending on the region and the country as numerous factors such as culture modify how it is perceived. Intimate partner violence (domestic violence or abuse) is defined by the World Health Organization (WHO) as the behaviour in an intimate relationship that causes physical, psychological and sexual harm, including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviour. It also found that 13% of women in South Africa are affected and 10–69% of women aged 15–49 years have experienced physical abuse by a male intimate partner at least once in their lifetime.[14] Intimate partner violence and domestic violence have been used interchangeably in literature. However, for the purpose of this research it will be referred to as domestic violence.[11]

As a result of this high prevalence of domestic violence the United Nations (UN) initially declared 16 days annually from 25th November to 10th December to raise awareness on and campaign against the menace of domestic violence.[15]In South Africa the 16 days of activism against women and child abuse started in 1998.[16]Moreover, due to the very high rate of women and girls abuse here in South Africa it was subsequently extended to 365 days of activism in 2019.[17] This followed years after the UN conference on gender equality and empowerment of women in 1995 which was termed the Beijing conference where governments of the world were tasked, among others, to develop a holistic and multidisciplinary approach to the challenges of promoting families, communities and states that are free of violence against women.[18]

In addition to these efforts, the Domestic Violence Act (116 of 1998) was promulgated in South Africa and sought to protect the vulnerable in society. The Act defines domestic violence as an act of physical abuse; intimidation; harassment; stalking; damage to property; entry into complainant's residence without consent; any other controlling and abusive behaviour towards the complainant, where such conduct harms, or may cause imminent harm to, the safety, health or well-being of the complainant.[19] The Act is also an indication of the importance with which domestic violence is viewed in South Africa. It offers one form of protection to women who are victims of domestic violence, but it does not necessarily offer solutions to the problem.

While medico-legal interventions in South Africa have been firmly established to respond to sexual offences, no formal protocol on domestic violence interventions exists at primary healthcare level.[20] This, with other factors such as underreporting of domestic violence, has made it difficult for healthcare practitioners to properly manage cases of domestic violence as well as its accompanying health challenges such as anxiety, depression, chronic medical and gynaecological conditions.[21]

South African Primary Health care policy is largely nurse-driven hence nursing staff members are expected to see most patients who attend clinics. Nurses are in a unique position in that they are at the first point of care for health care in primary healthcare settings and can thus identify patients at risk of or survivors of domestic violence.

However, due to the high prevalence of violence against women in South Africa its very likely that one or more of the nurses could be victims of domestic violence themselves as found by a South African study done in North-West Province, that as high as 39% of the nurses participating in the study experienced either physical or emotional abuse at some point in their lives.[22] This is higher than the prevalence figure in an American study where Bracken found that nurses participating in the study reported lifetime physical or sexual abuse (25%) and emotional abuse (22.8%).[23]

Domestic violence remains a major concern. It is even more a cause for concern when nurses required to manage patients are themselves victims of domestic violence due to its high prevalence in society. Many studies have been conducted on the effects and impact of domestic violence on nurses expected to manage victims of domestic violence in urban hospital settings. However, there is a paucity of studies in peri-urban settings such as Ekurhuleni health district looking at the prevalence of domestic violence among PHC trained nurses and their responses to hypothetical case scenarios on domestic violence. Keeping this in mind we decided to undertake a study on female nurses' personal exposure and responses to hypothetical case scenarios on domestic violence in a peri-urban setting such as Ekurhuleni health district in Gauteng Province with a view to determining the proportion of that exposure and to assess their responses to the latter.

Judging by how common domestic violence occurs in South Africa and how health workers might misdiagnose patients presenting with non-specific symptoms, this study provided us with an opportunity to find out what nurses consider when they encounter such cases in their working environment and their responses on how to manage such cases.

RESEARCH METHODS AND DESIGN

This study was a vignette study which was carried out in all the subdistrict in Ekurhuleni health district in eleven different clinics. The estimated population of Ekurhuleni district is 2,865,611 people (DHIS 2010 Mid-Year population estimate).At the time of the research proposal in 2018 there were about 66 clinics in Ekurhuleni health district but as of today (January 2021) there are now more than 90 clinics that are located in both urban and peri-urban areas in the district. Health district services are mainly rendered in the peri-urban area and it was from this group the researcher sampled the

clinics since the researcher is also based in Ekurhuleni Health district as a registrar. Eleven clinics formed part of this convenience sample being within a radius of about 45km to collect data without too much disruption to service delivery.

The study population for this research was the total number of nurses working in the PHC setting in the selected clinics. Ninety-two nurses worked in these 11 clinics. The calculated sample size of the study was 84 for a confidence interval of 95% degree of variability of 50% and a margin of error of 5%. Due to a number of declines and nurses, being on leave the response rate was 85% (78 nurses). The inclusion criteria were all the female PHC nurses willing to participate in the research. The nurses in each facility were spoken to as a group and the study introduced to them after permission had been granted by the district research committee. The researcher met the nurses in both the day and night shifts on a particular day to prevent sensitization from colleagues about the questions in the questionnaire. Consent were obtained and the questionnaires were completed in two phases.

Data was collected using self-administered vignette methodology of two hypothetical patient scenarios and a demographic questionnaire. The use of vignette is a reliable and valid technique that is used in eliciting perceptions, opinions, beliefs and attitudes from responses or comments to stories depicting scenarios and situations. Vignettes are employed in different ways and for different purposes. It can be used in exploring potentially sensitive topics that participants might otherwise find difficult to discuss like domestic violence.[24] In comparison to other methodologies, vignettes can be a useful tool for investigating a wide range of research subjects and question types, with relatively low requirements in terms of time, personnel, funding, or other resources.[25] Using vignettes, researchers can represent particular scenarios accurately, concretely, and with a level of detail that supports their realism and credibility.[25] It should be noted that vignettes are not intended to re-create real world situations.[25] Rather, they are designed to approximate, isolate, manipulate, and measure key aspects of the decision-making processes that individuals use in real world situations. Another defining feature of vignette studies is that they employ participant-reported data collection strategies, which are characteristic of traditional survey methodologies.[25] These strategies can include quantitative and/or qualitative approaches that provide standardized questions to be answered by all participants.[25] They are recognized as a "hybrid" methodology that inherits the external validity strengths of survey research and the internal validity strengths of experimental methods.[25] The qualitative part comprising hypothetical case scenarios on domestic violence, assessed whether the nurses managed domestic violence according to PC 101. The PC 101 is a symptom based integrated clinical management guidelines for the management of common symptoms and chronic conditions in adults. The guidelines are intended for use by all health care practitioners, primarily nurses, working

at the primary care level in South Africa. [26] The PC 101 algorithms were developed using the approved clinical policies and guidelines issued by the National department of Health.[26] This document formed the minimum standard expected from nurses for the management of domestic violence in primary care settings, and baseline to compare their responses to.

Real patient information was used to build the scenarios. We used these two scenarios because they were the commonest presentations in patients presenting with domestic violence and the key issue in scenario 1 was the undifferentiated patient presenting at a healthcare facility and for scenario 2 was the patient with suggestion of trauma with the key issue being identification and management thereof. The first Patient Scenario represented asymptomatic presentation of domestic violence which was non-specific in nature: Patient Scenario1: A 43-year-old female patient presented in your consulting room complaining of non-specific body and abdominal pains. She has had three previous visits to the clinic with the same complaints. Her laboratory results are normal. She said she is adherent on fluoxetine 40mg daily(anti-depressant). List three possible causes for this patient's symptoms.

Participants could give more than one response. The second scenario was more specific with visible injuries namely: Patient Scenario 2: A 35- year-old female patient presented at the emergency room complaining of painful and swollen left ankle joint. When questioned she said she sustained the injury when she fell down the stairs. On examination, you noted a swollen and tender ankle joint with both fresh and healing bruises on her upper trunk and lower limbs. List three possible causes for this patient's symptoms.

A Pilot study was done with six nurses in a clinic that did not form part of the sample and it as found that the initial time allocated for the questions was not enough. The researcher thus did not rush them and allowed them more time to complete the vignettes.

The researcher did the information session and obtained consent after which the self- administered questionnaires were given to the nurse participants. Meetings were held separately with the nurses during their day and/or night shifts to prevent sensitization from colleagues about the questions in the patient scenarios. They firstly completed the qualitative section consisting of hypothetical cases on domestic violence before placing it in a sealed box. The second phase contained the quantitative section consisting of demographic information on the participants as well as screening information about current or previous experience of domestic violence. As stated earlier a vignette was used in this study with the aim of quantifying qualitative data and turning them into variables. This flexibility as well as the ability to control for bias increased both the internal validity and the reliability of

vignette study design. The questionnaires were numbered to ensure that the vignette and demographic questionnaire could be linked. The nurses could all speak English and answered the questions in English.

The PC101 management criteria was used for priori coding of the responses to the management of the hypothetical scenarios. The main outcome measures were to determine the participants' exposure to domestic violence, the type of violence they were exposed to as compared with their responses to questions on the diagnosis and management of domestic violence in hypothetical patient scenarios. The researcher was assisted by a senior researcher at The University of Witwatersrand to do the coding for qualitative content analysis of the answers to the hypothetical cases using MAXQDA 2018. The PC101 management suggestions were used as code categories and responses were grouped in these categories. After categorizing codes, the responses were quantified. STATA 9 software (64-bit Itanium) was used for the quantitative content analysis, descriptive statistics, odds ratio calculations and Fisher Exact test for associations between two groups. A confidence level of 95% with a confidence interval of 5 was used for all statistical calculations.

ETHICAL CONSIDERATIONS

Ethical approval to conduct the study was obtained from the Human Research Ethics Committee (Medical), University of the Witwatersrand, Johannesburg (Clearance Certificate Nº M161158). Permission to use the clinics was also granted by the Ekurhuleni Health District Research Committee, Gauteng Provincial Department of Health (Research Project Nº 08/03/2018-04).

RESULTS

Seventy-eight nurses (85% response rate) participated in the study. All of them were professional nurses with primary care nursing qualifications. The majority were married and/or living with their partners and IsiZulu speaking. On average they had 15 years of experience in nursing (Table 1).

Table 1: Demographic Data

Age	
Median in years (IQ range)	40 (27-62)
Experience	
Median in years of nursing experience (IQ range)	14 (1-36)
Training on Management of Domestic Violence	
No	58 (74%)
Yes	19 (25%)
Unspecified	1 (1%)
Marital Status	
Married	37 (47%)
Single	28 (36%)
Others	13 (17%)
Live in Partner	
No	35 (45%)
Yes	42 (54%)
Unspecified	1 (1%)
Ethnic Group	
Sotho	18 (23%)
Twana	12 (17%)
Zulu	29 (37%)
Others	19 (23%)
Domestic Violence	
Number of nurses exposed to domestic violence	27 (35%)
Emotional	15 (19%)
Physical	8 (11%)
Both Emotional and Physical	4 (5%)
Number of nurses unexposed to domestic violence	47 (60%)
Missing Data on exposure to domestic violence (Unspecified)	4 (5%)

The core of the study was the hypothetical patient scenarios. The participants were requested to name possible causes for the complaints in the patient scenarios. This would suggest whether they would consider domestic violence as a differential cause for the presenting complaint and thus screen for it. Two hundred and thirty responses were analyzed and grouped into frequency categories after coding them according to PC 101 guidelines.

In Patient Scenario 1, 57 (73%) participants more often mentioned mental health pathology as a

differential diagnosis versus the 4 nurses (5%) in Patient Scenario 2. The reference to trauma in Patient Scenario 2 increased the possibility of thinking in the line of social problems and/or domestic problems. Twenty-six (33%) participants specifically referred to domestic problems (violence or abuse) in Patient Scenario 1 and 45 (58%) participants referred to domestic problems in Patient Scenario 2. The undifferentiated hypothetical Patient Scenario triggered 48(61%) nurses to think of social related problems (including domestic violence and suggested trauma in Scenario 2 resulted in 69 (88%) thinking of socially related challenges. Individual results in Table 2.

For the management of Patient Scenario 1 participants more often mentioned offering support, referral to the police and counselling patient. The latter is assumed to be vague as it did not specify whether counselling was about management, health education or simply a general resource (Table 2). For the management of Patient Scenario 2, the suggestions often offered by the participants were referral to the police, trauma counselling, giving analgesics and to counsel patient. Safety plans were only suggested by 25 participants (32%) despite the obvious trauma sustained by the patient (Table 2).

Table 2 below showed the management suggestions by the participating nurses for both scenarios as well as comparison data between the two groups. It suggested that referral to police, trauma counselling, discussion of safety plans, giving analgesics and offering support were the only statistically significant management suggestions as represented by the highlighted p-values which showed a value less than <0,05. An example is referral to police. It means that the difference in the number of nurses between Scenarios 1 and 2 that referred to the police did not happen by chance. According to Table 2, there were more referrals to the police in Scenario 2 than in Scenario 1. If there is a referral to trauma in the presenting complaint, it is thus more likely that the nurses will consider a referral to the police. Listening to the patient was not statistically significant in both scenarios but is a crucial management point in PC101 standards to elicit any trauma.

Table 2: Management Suggestions for the Two Hypothetical Scenarios

PC101 Management Suggestion	Scenario I(%)	Scenario II(%)	p-value
Refer to police	59	83	
Did not refer	41	17	**<0,001***
Trauma counselling	0	81	
No trauma counselling	100	19	**<0,001***
Counsel Patient	47	38	
No counselling	53	62	0,252

Discuss safety plans	4	32	
	96	68	**<0,001***
Advice on shelter	8	17	
No advice on shelter	92	83	0,086
Interview patient	15	10	
No interview	85	90	0,393
Refer to NGO	6	5	
NO referral to NGO	94	95	1,000
Offer support (type of support not specified)	87	5	
No support offered	13	95	**<0,001***
Screen for mental health	1	4	
No screening for mental health	99	96	0,396
Reassure patient	5	3	
No reassurance	95	97	0,721
Listen to patient	1	1	
Listening not important	99	99	1,000
Help identify support structure	6	1	
No help to identify support	94	99	0,118
Give analgesics	23	40	
No analgesics			**0,015***

*Statistically significant (Fischer Exact Test)

No statistically significant associations were found amongst any of the variables such as type of abuse, sex, age, etc. Using the assumption that a person who was exposed to or had survived domestic violence, may have a higher sensitivity in terms of screening and management, odds ratio analysis suggested a few interesting clinically significant findings. The group of nurses aged 35 years and younger was 2.14 more likely to disclose being survivors of domestic violence. This group also was 2.68 times more likely to claim that training had been received in management of domestic violence. The group was less likely to share a household with a partner and had less than 15 years career experience (Table 3).

Table 3: Associating the Group who Disclosed being Exposed to Domestic Violence with Age, Training, Experience and Sharing a Household with a Partner

Parameter	**OR**	**95% Confidence Interval (CI)**

≤ 35 years old	2.14	0.77-5.96
Training in IPV	2.68	0.93-7.76
Sharing home with partner	0.53	0.21-1.37
Experience ≤15 years	0.66	0.26-1.70

When analyzing Table 4 which displays the exposed group and management strategies, it suggested that the specific exposed group younger than 35 years were less likely to suggest the correct management options for the hypothetical patient scenarios. Managing injuries, listening to the patient or finding support or resources for the patient were less likely to be suggested by majority of the exposed group.

Table 4: Management Suggestions of Group of Nurses Under 35 Exposed to Domestic Violence compared to nurses over age 35

Parameter	OR	95% Confidence Interval (CI)
Management of injuries	0.35	0.05-2.63
Listening	0.47	0.12-1.81
Identifying support	0.56	0.32-1.98
Referral to resources	0.62	0.22-2.67
Protection order	0.43	0.12-1.72

The next assumption was that nurses who had received training in the screening and management of domestic violence would suggest more appropriate management strategies. Unfortunately, training did not improve the likelihood of appropriate management of the survivors of domestic violence except for advice on protection order. There was no statistical difference in the management of survivors of domestic violence between trained and untrained nurses (Table 5)

Table 5: Management suggestions of nurses trained in Domestic Violence Management compared to those not trained

Parameter	OR	95% Confidence Interval (CI)
Management of injuries	0.98	0.09-10.03
Listening	0.53	0.14-2.11

Identify support	0.37	0.08-1.80
Referral to resources	0.30	0.04-2.32
Protection Order	1.0	0.24-4.15

DISCUSSION

This study yielded some clinically important findings. Thirty-five per cent (35%) of the nurses participating in this study reported that they have experienced at least one form of domestic violence in their lives. This proportion is much lower than that reported in Jordan 59% and India 60%.[27, 28] However, in a South African study conducted by Kim and Motsei, a prevalence of 39% was found among the participants[29] which was similar to that found in our study.

As with most studies on intimate partner violence the most reported type of abuse experienced by the participants in our study was: firstly, emotional abuse; secondly, physical abuse; and thirdly, a combination of both forms of abuse. This finding of emotional abuse as being the most common form of abuse was also found in a study by Khan and his colleagues, some 57.9% of the participants reported experiencing emotional abuse from their partners.[30] None of the nurses participating in the study reported any sexual violence, which is quite surprising given the high rate of sexual abuse in South Africa. This can be explained by factors such as an insufficient knowledge of rape in marriage, sexual violence as being an acceptable way of putting women in their place or punishing them, a cultural system of paying damages following sexual abuse and the role of possession of the other party and thus entitlement to sexual favours.[6,31,32,33]

In this study the participants not living with a partner were less likely to be abused. This is similar to the findings of a WHO multi-country study done in 2011, which showed that generally domestic violence was common with married women sharing a home with their partners.[34] However, Nyberg and her colleagues,[35] suggested that sharing a home with a partner decreases the chances of being abused. This couldn't be explained but there are various possibilities such as being protected by their partners and the possibility of a strong bond between their partners and hence less chance of being abused.

Regarding the results of this study on sharing a household with a partner, this must be interpreted with caution as the questionnaire did not allow a longitudinal measure of abuse or living with a partner. As the methodology measured a moment in time, abuse and living with or without a partner were only reported applicable to that particular moment, cause and consequence or even exposure

and outcome were irrelevant.

Similarly, this study, as with other studies, provided further factual evidence that participants under age 35 years were more likely to report abuse opposed to their older counterparts. This may be due to the fact that nurses under 35 are more likely to be in a relationship and exposed to the contemporary world's concept of abuse than older nurses, who are more traditional in lifestyle and hence view abuse as part of a relationship.[32] One can also postulate that due to the national activism campaigns,[36] the under 35 year old group have a greater awareness or are more knowledgeable about domestic violence and therefore more prone to disclosure. It may also be that the older generation still considers disclosure as disrespecting the sanctity or privacy of the household.[32]

Other findings of this study include the increased probability of participants having experienced abuse if they had undergone training in domestic violence. Similarly, a study conducted by Moore[37] and her colleagues found that nurses who underwent training in domestic violence management were more likely to have been abused. This training could have increased the awareness of abuse among this group of participants, hence increasing the number of nurses who reported abuse within this group.

However, training in the management of domestic violence and personal experiences of abuse did not contribute to more appropriate management of the hypothetical cases. Based on this the researcher concluded that appropriate awareness of the management may not translate to good patient care. If the patient discloses trauma, the nurses will more than likely screen and manage domestic violence, but the patient may not receive optimal care.

As mentioned in the previous paragraph and unlike many studies, training on domestic violence management did not have any impact on the correct management of patients presenting with domestic violence in this study. This finding is peculiar as many studies found that training in domestic violence management improves the ability of the health care workers to manage cases and allow for a better approach to patient care.[38,39,40] In fact in some parameters nurses who forewent training in domestic violence management managed their patients better (Table 5). For example, for the parameter:

With the management suggestion "Listening" (OR = 0.53) of trained nurses compared to those not trained the nurses who did not undergo training were more likely to think listening to their patients was a good management approach. Another example, for the parameter: "referral to resources" (OR = 0.3) means that thrice as many nurses who did not undergo training compared with those who underwent training in domestic violence management were more likely to suggest "referral to resources" as an

approach to management. This lack of impact on management of domestic violence by trained nurses may be due to the quality of the training they received as it has been shown that domestic violence management training and education within the nursing curricula must include the need of asking questions at intake about lifetime experiences of violence.[41] In addition to this, nurses should also be assisted with access to referral facilities in their practice area as well as training in crises counselling and facilitating a safety plan with women in an abusive relationship.[42,43]

STUDY LIMITATIONS

There are several limitations in this study. This includes the self-reported nature of the data collection process which may have led to information bias. In addition, this may have made some nurses not to be too keen to fully divulge whether they had been victims of domestic violence because of the stigma still associated with abuse.[44,45] Moreover, it may well have been the reason why none of the participating nurses divulged being sexually abused despite its high prevalence in South Africa. A study limitation could also be that due to personal and professional separations within the work context, nurses could have felt they wanted to protect the information about their personal experiences in the workplace. Being a vignette study if the participants do not give very comprehensive answers to the questions asked the researcher may find it difficult to interpret what the participants meant to say such as for the question on counseling it may be very difficult for the researcher to determine whether it referred to counseling associated with management of domestic violence, health education or simply as a general resource. Similarly, if the case scenarios are not designed properly the participants may struggle to understand the questions hence affect their responses. For this reason the researcher used real patient scenarios to keep it as realistic as possible. And lastly the small sample size of this study is considered a limitation as the result may not be generalized which is a threat to its external validity.

CONCLUSION

This study found that domestic violence is common among nurses and the indirect influence on patient care and omission to screen for domestic violence. It also suggests that receiving training in domestic violence management does not necessarily translate to appropriate management of survivors of domestic violence, unless there is a clear indication of trauma. Reflective practice of nurses is advisable to deal with their own trauma as well to be more aware to screen their patients regularly. Finally, there is also still room for further research in this field, for example comparing the management of cases of domestic violence with demographic factors and analyzing the effect of previous exposure to domestic violence on management.

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APPENDIX A1

- **INFORMATION SHEET**

Information Sheet: Identification and Management of Hypothetical Cases in the Primary Health Setting.

Good day,

I am Dr Pius Akhetuamen, a 6th year postgraduate student of Family Medicine in the University of the Witwatersrand working in Ekurhuleni health district. I am conducting a research on the identification and management of hypothetical case scenarios presenting at PHC settings in Ekurhuleni health district. This project is aimed at improving the care given to patients who present in our clinics. The results of the study may be published but you will not be named anywhere in the study.

I am inviting you to complete the attached questionnaire that contains two case scenarios. In one questionnaire you will have to identify the presenting complaint and differential diagnosis and in the second questionnaire you have to manage the hypothetical scenarios.

You will also be asked some personal information such as age, marital status and whether you have had any experience in interpersonal violence. It would take about Thirty to forty minutes to complete the questionnaires. You are requested to drop the answered questionnaires in a sealed drop-off box that will be provided and shown to you.

I will return to collect the questionnaires from the drop-off box and keep them in a safe place. All of your responses will be kept confidential by grouping them so as to prevent recognition of individuals or facilities. Your responses will be combined with others in order to determine how we can improve our services and the outcome of the survey may be published. **PLEASE DO NOT WRITE YOUR NAME OR THE NAME OF YOUR FACILITY ON THE QUESTIONNAIRE**. Your participation in this study is voluntary. There are no consequences for not participating and you may withdraw from the study at any time without consequence. You may also indicate refusal by depositing an incomplete form in the box.

If you need help completing this questionnaire or have any questions, do not hesitate to contact me on the contact details below. You may also contact the Chairman and secretary of the Human Research Ethics Committee (HREC) of University of the Witwatersrand on the contact details below for any queries or complaints.

Thank you for providing this information.

Yours truly.

Dr Pius Akhetuamen (Family Medicine Registrar)
Cell: 0794600583 E-mail: pius2md@yahoo.com

Professor Peter Cleaton-Jones
Chair, Human Research Ethics Committee (Medical)
Telephone: 0117172635
Email: peter.cleaton-jones1@wits.ac.za

Due to the unforeseen emotional reaction that may emerge as a result of completing the questionnaire the services of a counsellor have been pre-arranged should the need arise.

Ms Zanele Ndlovu
Social worker
Bertha Gxowa Hospital
Germiston.
Telephone No: 0740499033

APPENDIX A2

- **CONSENT FORM**

Consent Form: Identification and management of hypothetical cases in the primary health setting

I .....hereby give/do not give permission to Dr Pius Akhetuamen to use the content of the questionnaire for the purpose of research. The information sheet has been read to me and I understand and freely agree to answer the questionnaire which will provide information about me.

Name: ……. Signature: …….

Date: ……..……

N.B: Please kindly give comprehensive answers to the questions in the questionnaire as much as possible. Thanks

APPENDIX B

- **QUESTIONNAIRE 1**

dd…mm…yy

HYPOTHETICAL CASES IN THE PRIMARY HEALTH SETTING

There are two case scenarios in this questionnaire. Please begin with the case scenario below.

Patient Study B1

A 43 year old lady presented in your consulting room with complaints of non-specific body pains and abdominal pains. She has had three previous visits to the clinic with the same complaints. Her lab results are normal. She said she is adherent on fluoxetine 40mg daily (anti-depressants).

List three possible causes for this patient's symptoms:

_____

_____

_____

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_____

_____

Patient Study B2

A 35 year old lady presented at the emergency room with complaints of painful and swollen left ankle joint. When questioned she said she sustained the injury when she fell down the stairs. On examination, you noted a swollen and tender ankle joint with both fresh and healing bruises on her upper trunk and lower limbs.

List three possible causes for this patient's symptoms.

_____

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APPENDIX C

- **QUESTIONNAIRE 2**

MANAGEMENT OF HYPOTHETICAL CASES IN THE PRIMARY HEALTH SETTING

There are two cases scenarios in this questionnaire. Please begin with the case scenario below.

Patient Study C1

A 43 year old lady presented in your consulting room with complaints of non-specific body and abdominal pains. She has had three previous visits to the clinic with the same complaints. Her lab results are normal. She said she is adherent on fluoxetine 40mg daily (anti-depressants).

You suspect domestic violence. How would you manage her?

_____

_____

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Patient Study C2

A 35 year old lady presented at the emergency room with complaints of painful and swollen left ankle joint. When questioned she apparently sustained the injury when she fell down the stairs. On examination, you noted swollen and tender ankle joint with both fresh and healing bruises on her upper trunk and lower limbs.

The patient disclosed that her husband assaulted her. How would you manage her?

_____

_____

_____

_____

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_____

APPENDIX D

- **DEMOGRAPHIC INFORMATION**

DEMOGRAPHIC INFORMATION

Please answer the following questions below correctly.

1.	How old are you? (in years)
2.	How long have you been practicing as a nurse? (in years)

3.	Have you ever had any Training in the identification and management of domestic violence? (Tick the one that applies to you)	Yes	
		No	
4.	What is your marital Status? (Tick the one that applies to you)	Married	
		Single	
		Divorced	
		Widowed	
		Separated	
		Engaged/promised	
5.	Do you live with your Partner? (Tick the one that applies to you)	Yes	
		No	
6.	What is your ethnic group e.g. Zulu, Tswana, etc.?		
7.	Which area within the PHC setting do you currently work? (Emergency room, family planning, antenatal care, etc.)		

ABUSE BY AN INTIMATE PARTNER

Have you, in your capacity, any experience of domestic abuse? Yes □ No □

If yes, (please tick):

Physical □ Sexual □ Emotional □

Please add any comment you feel may be relevant:

_____

_____

_____

_____

APPENDIX E

- **PROVINCIAL PERMISSION**

City of Ekurhuleni

GAUTENG PROVINCE

EKURHULENI RESEARCH CLEARANCE CERTIFICATE

Research Project Title: Female nurses' personal exposure and responses to hypothetical case scenarios on domestic violence in Ekurhuleni Health district.

NHRD No: GP_201802_021

Research Project Number: 08/03/2018-04

Name of Researcher(s): Dr Pius Akhetuamen

Division/Institution/Company: University of Witwatersrand

DECISION TAKEN BY THE EKURHULENI HEALTH DISTRICT RESEARCH COMMITTEE (EHDRC)

- *THIS DOCUMENT CERTIFIES THAT THE ABOVE RESEARCH PROJECT HAS BEEN FULLY APPROVED BY THE EHDRC. THE RESEARCHER(S) MAY THEREFORE COMMENCE WITH THE INTENDED RESEARCH PROJECT.*
- *NOTE THAT THE RESEARCHER WILL BE EXPECTED TO PRESENT THE RESEARCH FINDINGS OF THE PROPOSED RESEARCH PROJECT AT THE ANNUAL EKURHULENI RESEARCH CONFERENCE*
- *THE RESEARCH COMMITTEE WISHES THE RESEARCHER(S) THE BEST OF SUCCESS.*

DR. J. SEPUYA

DEPUTY CHAIRPERSON: EKURHULENI METROPOLITAN MUNICIPALITY

Dated: 08/03/2018

Dr R. Mokwena

CHAIRPERSON: GAUTENG DEPARTMENT OF HEALTH (EKURHULENI REGION)

Dated: 08/03/2018

APPENDIX F

- **RESEARCH PROPOSAL**

UNIVERSITY OF THE WITWATERSRAND DEPARTMENT OF FAMILY MEDICINE

RESEARCH PROPOSAL

Female nurses' personal exposure and responses to hypothetical case scenarios on domestic violence in Ekurhuleni Health district

Pius Akhetuamen Student number: 700478

TABLE OF CONTENTS

SYNOPSIS OF RESEARCH

This research is about female nurses‟ personal exposure and responses to hypothetical case scenarios on domestic violence in Ekurhuleni Health district. The reason I want to carry out this research is because of the high prevalence of domestic violence in South Africa and the fact that only few research of this nature had been done in primary health care settings. By carrying out this research the participating nurses would be made aware of the various presentations of victims of domestic violence by the use of hypothetical case scenarios and also sensitize them on the management. The objectives of the research are to describe the socio-demographic characteristics of the nurses participating in the study, to determine the proportion of female nurses exposed to domestic violence in their lives, to assess the ability of the participating nurses to identify domestic violence with hypothetical case scenarios, to assess the ability of the participating nurses to manage domestic violence with hypothetical case scenarios according to relevant guidelines and to compare exposure to domestic violence with the ability to identify and manage domestic violence.

This study will be carried out by means of self-administered questionnaires containing questions about background demographic information, previous or current exposure to domestic violence, identification of domestic violence using hypothetical cases and asking how they would manage these cases using the PC 101 guidelines.

INTRODUCTION

In 2006 the World Health Organization (WHO) estimated that interpersonal violence was the second highest contributor (62%) to the burden of disease in South Africa after HIV/AIDS. Domestic violence continues to be a cause of severe stress to women in all spheres of life denying women equality, security, dignity, and basic right to enjoy fundamental freedom. This fundamental freedom is entrenched in the Bill of rights in the Constitution of the republic of South Africa (Section 12c) which states that everyone has the right to freedom and security, which includes the right to be free from all forms of violence from either public or private sources.[2] Nevertheless, this right is often infringed on because of the so-called culture of domestic violence in South Africa.

South Africa has the highest reported female homicide rate in the world, with a woman killed every six hours by an intimate partner.[3] The prevalence of domestic violence are fueled by perceived cultural values and norms that serve to condone and reinforce abusive

practices against women. Because of this high prevalence of IPV South Africa enacted the Domestic Violence Act (116 of 1998) which seeks to protect the vulnerable in the society. The act defines domestic violence as an act of physical abuse; economic abuse; verbal abuse; psychological abuse; emotional abuse; intimidation; harassment; stalking; damage to property; entry into complainant's residence without consent; any other controlling and abusive behaviour towards the complainant, where such conduct harms, or may cause imminent harm to, the safety, health or wellbeing of the complainant.[4]

The WHO defines intimate partner violence as the behaviour within an intimate relationship that causes physical, psychological and sexual harm, including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviour. It also found that 13 per cent of women in South Africa are affected and 10 -69 per cent of women aged 15-49 years" experience physical abuse by a male intimate partner at least once in their lifetime.[1] These abuse may lead to various health concerns such as infertility, preterm labour, anxiety disorder, depression and even death.[1]Many researchers have focused on the health consequences of IPV.[10,14]

However, most research has focused on the nature and prevalence of IPV, but relatively little has been published on interventions or models for care. Baldwin-Ragaven testified to the proliferation of peer-reviewed articles measuring the problem of domestic violence and documenting the consequences of our failure to act, commenting: "For any other disease process as costly in financial and human measures we would demand answers, find cures, and disseminate evidence about interventions. What is it about IPV?" She further stated that physicians must become advocates to break the silence and end the complicity that endangers our patients'lives.[2]

However, this may be impossible as we ourselves may be victims, survivors, perpetrators or purveyors.[2] This was evident from the result of the study done in the North West province of South Africa in 2002 by Christofides and Silo where the prevalence of domestic violence among the participating nurses was found to be thirty nine per cent (39%) hence constituting a great burden to the already stretched health care system. This prompted the researchers to suggest that policy makers should introduce intimate partner violence to the curriculum of nurses during training.[6]

The South African primary health care is by policy nurse-driven hence nursing staff are expected to see most of the patients that come to the clinics. This places nurses in unique position to identify patients who are victims of domestic violence that may have presented
with other complaints. However, these patients are sometimes missed either because of lack of

adequate training on domestic violence or because of the fact that some nurses may themselves be going through domestic violence in their lives and hence choose not to ask.[5]

Furthermore, due to the high prevalence of violence against women in South Africa and the fact that nursing is one of the most women-centered professions it is very likely that one or more of the nurses could be victims of domestic violence. While this may lead to improved care given to patients by some nurses, in others this process may awaken images, emotions, internal confusion and conflict. These reactions may have a negative impact on their health and hence affect their ability to work bringing us to the question: How do nurses‟ personal exposures to domestic violence affect their responses to hypothetical case scenarios on domestic violence?

For this reason, any research on domestic violence must take into consideration these unintended emotional reactions and make provision for their management according to the WHO ethical and safety recommendations for research on domestic violence against women as well as the South African good clinical practice guidelines.[7,8] These guidelines serve to protect research participants against the emotional reactions that may accompany their participation in the research about their personal experiences of domestic violence by providing appropriate care to those in need of counselling. In view of this, the contact details of a pre-arranged counsellor will be provided should the need arise.

RESEARCH HYPOTHESIS

Female nurses' personal exposure to domestic violence will not influence their responses to hypothetical case scenarios on domestic violence.

LITERATUREREVIEW

Socio-Demographic Characteristics

Intimate partner violence has long been associated with certain socio-demographic characteristics in women. These characteristics are sometimes contradicting depending on where the study was done. Hence studies done mainly in South Africa will be looked at.

Jewkes conducted a cross-sectional study in 2005 on the causes and prevention of intimate partner violence in South Africa. She examined the social and demographic characteristics of the participating women and found that poverty, alcohol abuse and low educational level were among

the risk factors for domestic violence. These factors were common in about 64% of the participating women with poverty being the most common (37%).[9] Although factors such as poverty and low educational status may not be significant in my study since my study participants are nurses, it will be interesting to find out what significant risk factors will be common in my study.

In the same year the WHO multi-country study on domestic violence was published. The study was conducted in many countries including South Africa among women who were victims of domestic violence. It was conducted by trained interviewers with the use of validated questionnaires adapted to each country. The study focused on the prevalence, health outcomes and women's responses to domestic violence and found that in addition to the above, younger age for women, previous exposure to abuse either as a victim or witnessed, cohabitation, pregnancy and being an immigrant were all risk factors for domestic violence.[10] The participants of this study were drawn from all nine provinces hence giving us a broader representation of the extent of domestic violence in South Africa.

The result of this study was complimented by the cross-sectional study on violence against women undertaken in three provinces in South Africa by Levin and colleagues. They measured the prevalence of physical, sexual and emotional violence and assessed the risk factors for domestic violence in South Africa. They found a positive association between violence in early childhood, alcohol abuse, either partner financially supporting the home and domestic violence. Interestingly, no significant association were found with the partners‟ age, employment status and cohabiting with partner.[11]

By contrast, Bracken et al in their study on the prevalence and risk factors for intimate partner violence and abuse among female nurses and nursing personnel found that increased age greater than 40yrs and co-habiting with partners were positively associated with domestic violence. They also found that not being married and experiences of childhood abuse were risk factors for abuse.[12] It would be interesting to see which of these demographic factors would be highlighted in my study.

Proportion of Female Nurses Exposed to Domestic Violence

A study done by Sharma and colleague in India showed that as much as forty per cent (40%) of nurses reported that their marital partner perpetrated controlling behavior, 35% reported emotional abuse, 43.3% reported physical violence and a further 30% reported sexual violence. Of these only 15% of the nurses reported the IPV to the authorities. The study was a facility-based study conducted in India with the use of self-administered standardized questionnaire among 60 nurses that are currently or previously married. The aim of the study was to determine the prevalence, characteristics and impact of domestic violence against nurses by their marital partners and to identify nurses‟ perceptions

regarding acceptable behavior for men and women about violence.[13] The result of this study may not be generalized as the study was done in one facility with a small sample size.

The result of this study is also similar to the study done by Christofides and Silo on how nurses‟ personal experiences of domestic violence affect service provision to victims of domestic violence. This study showed that as much as 39% of the participating nurses experienced either physical or emotional abuse at some point in their lives. It was carried out in 2 health districts in the North West province among 212 nurses using a standardized questionnaire. They measured socio-demographic characteristics, quality of care in the areas of rape and domestic violence management, and experiences of domestic violence in their own life. In addition to the above, they also found that having ever intervened in a domestic dispute was associated with higher quality of care.[6]

Another study focusing on the prevalence of domestic violence among nurses was the one done by Bracken et al examining the prevalence and risk factors for intimate partner violence and abuse among female nurses and nursing personnel. They found that 25% of the participants reported a lifetime physical or sexual abuse and 22.8% reported emotional abuse.[12] The result of this study can be generalized as a large sample size (1981) was used and data were collected through online survey thus eliminating reporting bias.

To Assess the Ability of the Participating Nurses to Identify and Manage Victims of Domestic Violence

Several studies have been done on nurses‟ ability to identify and manage patients who are victims of domestic violence in their health care settings. One of such study was done by Ellis on the barriers to effective screening of domestic violence by registered nurses in the emergency department. He found that nurses with more experience in the profession and more in-service training on domestic violence were more able to identify patients who are victims of domestic violence and manage them better. This study was done among nurses who work in the emergency department hence more likely to come across patients who are victims of domestic violence.[15] The result of this study should however be taken with care as it was based on nurses‟ reported management of domestic violence.

Similarly, Christofides and Silo showed that having personally experienced domestic violence had no influence on domestic violence identification and management. They also showed that nurses who reported no personal experiences of domestic violence, either in their own lives or among friends and family, reported a lower quality of care. Interestingly, the study also found that having ever intervened

in a domestic violence was associated with better management of patients. This suggests that the greater the degree to which nurses identify with domestic abuse and intervene, the more likely they are to produce higher quality ofcare.[6]

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The fact that the above research was done in a largely rural setting where male dominance may be encouraged and perpetuated by the local tradition contributed to the high number of nurses exposed to domestic violence. It would be interesting to see how the prevalence would be in a more peri-urban setting like Ekurhuleni health district where nurses are expected to have undergone training on domestic abuse.

A study done by Nathan on the knowledge and attitudes of nurses regarding domestic violence showed that nurses with prior training on domestic violence were able to identify and manage patients who are victims of domestic violence better.[16] The result reiterates the importance of training on identification and management of domestic violence among nurses.

Kim and Motsei in their study entitled: Women enjoy punishment, found that female nurses initially felt it was justifiable for men to beat their wives especially when infidelity was the cause. However, following the intervention of the researchers by viewing a film depicting the nature and consequences of domestic violence and subsequently discussing it, the nurses felt domestic violence was not justifiable no matter the circumstance.[17] The intervention changed their perspective about domestic violence and hence improved their preparedness to identify patients who are victims of domestic violence in their work setting.

Similarly, De Boer in his study "What are the barriers for nurses screening for intimate partner violence?" found that nurses with previous experiences of domestic violence either personally or professionally identified patients who are victims of domestic violence better than nurses with no experience.[18] The outcome of this study again underscores the need for training of nurses on domestic violence.

STUDY AIM AND OBJECTIVE

Study Aim

To assess female nurses' personal exposure and responses to hypothetical case scenarios on domestic violence in Ekurhuleni health district.

Study Objectives

1. To describe the socio-demographic characteristics of the nurses participating in the study.
2. To determine the proportion of female nurses who are exposed to domestic violence in their lives.
3. To assess the ability of the participating nurses to identify domestic violence with hypothetical case scenarios.
4. To assess the ability of the participating nurses to manage domestic violence with hypothetical case scenarios according to relevant guidelines.
5. To compare exposure to domestic violence with the ability to identify and manage domestic violence.

METHODOLOGY

Study design

A cross-sectional study of responses to self-administered questionnaires using convenience sampling. The questionnaire has two parts. A qualitative part comprising of hypothetical case scenarios on domestic violence which the nurses had to manage theoretically. The standard management as

prescribed by PC 101 was considered as the correct management. This document also forms part of the standard teaching nurses receive on screening and management of IPV. The second part which is the quantitative part contains questions on demography and previous or current exposure to domestic violence.

Study setting:

The study will be carried out in Ekurhuleni health district. The estimated population of Ekurhuleni district is 2,865,611 people (DHIS 2010 Mid-Year Population Estimates). There are sixty six (66) clinics in the district which are located in both urban and peri-urban areas. Eleven (11) clinics will be used for the study. The clinics are as follows:

1. Dukatole Clinic.
2. Philip Moyo CHC.
3. Elsburg clinic.
4. Nokuthula Ngwenya CHC.
5. Leondale clinic
6. Tembisa main Clinic.
7. Germiston Civic centre Clinic.
8. Mary Moodley Clinic.
9. Bertha Gxowa Family Medicine Clinic.
10. Daveyton CHC.
11. Dresser clinic.

Study Population

The study population for this research is the total number of nurses working in the PHC setting in the selected clinics.

Sample size

The total number of nurses working in the PHC setting in the selected clinics is 92. The minimum sample size that meet the inclusion criteria will be calculated using the online sample size calculator known as the creative research systems. Using a confidence level of 99%, degree of variability of 50% and a margin of error of 5%, a study sample of 84 is derived. This sample of eighty-four (84) nurses will be spread equally among all the selected clinics making at least 8 nurses for each clinic and in some clinics where I may not get up to 8 nurses I will have to make up the number from the other clinics. However, I will aim to get 92 responses.

Inclusion criteria

All female PHC nurses willing to participate in the study.

Data collection process

The nurses in each facility will be spoken to as a group and the study introduced to them after permission has been granted by the district research committee. I will meet the nurses in both the day and night shifts on a particular day to prevent sensitization from colleagues about the questions in the questionnaire. Consent will be obtained (Appendix A). The questionnaire will be completed in two phases. The nurses will be given the questionnaire (Appendix B) containing the hypothetical cases. It will be important to see if they will consider IPV as a differential to screen for. The questionnaires are divided into 2 sections as follows: The qualitative section comprising two hypothetical case scenarios, one on the somatic presentation of domestic violence and the second on trauma caused by domestic violence and the second is the quantitative section, which comprise of:

1. Demographic information which will contain age, years of experience as a nurse, training in the identification and management of domestic violence, marital status, ethnic group and co-habitation with partner.

2. Screening information about previous or current exposure to domestic violence.

It is thus important to have a specific order to complete the questionnaires. This was done to eliminate sensitization of the nurses on the topic of the research. On completion of the first questionnaire they will be placed in an envelope and dropped in a sealed box. The second questionnaire (Appendix C) required the participating nurses to manage the hypothetical cases as domestic violence. The 3rd questionnaire (Appendix D) contains the demographic information of the participating nurses as well as screening information about previous or current exposure to domestic violence.

Pilot study

Six nurses will be piloted to ascertain time, improve the demographic content of the questionnaire and assess the reaction of the participating nurses to the questionnaire.

Data analysis

Socio-demographic characteristics, ability to identify domestic violence, management of domestic violence and exposure to domestic violence will be analyzed for all the participating nurses. The samples will be divided into two groups: Exposed (to domestic violence) group and non-exposed

group. All the variables will be analyzed and compared between the two groups. Factors to be analyzed will be the age, years of experience as a nurse, training in the identification and management of domestic violence, marital status, ethnic group and co-habitation with partner. In addition, the exposed and non-exposed group of nurses will also be compared according to their ability to identify domestic violence. The group of nurses that are able to identify domestic violence from their differential diagnosis will be coded as 1 and those that are not able to identify domestic violence will be coded as 0.

After coding the result an excel spread sheet will be used to capture the data and import into Stata 9 software. Descriptive statistics and frequency distributions will be analyzed by means, standard deviation of means, proportions and comparisons. Participants' demographic variables and characteristics will be analyzed. The association between two numeric and continuous variables will be analyzed by using the student t-test. Statistical significance will be set at 5% level and will be denoted by the p-value < 0, 05. The main outcome measure is the proportion of female nurses who are exposed to domestic violence, the ability of the participating nurses to identify domestic violence with hypothetical case studies, the ability of the participating nurses to manage domestic violence and to compare exposure to domestic violence with the ability to identify and manage domestic violence.

ETHICALCONSIDERATIONS

Permission from the district research committee will be sought and obtained to carry out this research as well as permission from the Health Research and Ethics committee of the University of Witwatersrand. The participants will be informed that participation in the study is voluntary, that completion of the questionnaire implies consent and that they may withdraw from the survey at any time. They will be informed that they may also indicate refusal by depositing an incomplete form in the box with no consequences.

To ensure confidentiality, the names of the participants will not be requested on the questionnaires. Due to the fact that some clinics may have few participants, the names of the clinics will also not be requested on the questionnaires. In view of the possible emotional reaction that may be evoked by the questionnaire, the contact details of a pre-arranged counselor will be provided should the need for counseling arise.

TIMING

The study is expected to commence in March 2018 with collection of data and concluded by December 2018 with submission of the final draft report. The Gant chart below shows the estimated duration of the component parts of the project.

Activity	Feb 2018	March 2018	April 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep-Oct 2018	Nov-Dec 2018
Final protocol									
Ethics Submission									
Data Collection									
Data Analysis									
Write Up									
Submission									

BUDGET

The study will be fully funded by the researcher. The budget estimate is as follows:

ITEM	COST	TOTAL
Paper	R1 Per page	R630
Pen	R15 Per pen	R165
Travelling	R3 000	R3 000
Assistant (lunch)	R1 000	R1 000
Language Editing	R3 000	R3 000
Statistician	Available at wits	R0
SUM TOTAL		**R 7 795**

LIMITATIONS ENVISAGED

The reliance on participants' self-reporting of domestic violence may skew the result towards many reporting that they have not experienced domestic violence in their personal lives which may lead to reporting bias. However, this bias would be reduced by making the questionnaire anonymous for both the participants and the clinic. The participating nurses may refer to the guidelines to answer the questions in the questionnaire even though they don't necessarily follow the guidelines when treating patients who are victims of domestic violence.

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