PTSD psychological management guidelines for raped survivors in the North West Province

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DECLARATION

I, Nombulelo Veronica Sepeng, declare that this thesis on **PTSD Psychological Management Guidelines for Raped Survivors** is submitted for the degree of Doctor of Philosophy in Nursing in the School of Nursing Science, Faculty of Health Sciences at the Mafikeng Campus of the North West University, is my own original work and I acknowledged all the sources and references used in this thesis accordingly.

Signature: NV Sepeng (Signed) Date: 06 June 2019

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Prof. L. Makhado (Promoter)

DEDICATIONS

I am dedicating this thesis to three beloved people who have meant and continue to mean so much to me. Although they are no longer of this world, their commemorations continue to regulate my life. Primarily, to my maternal grandmother Lydia Sekgabo Maqungela whose love for me knew no restrictions and who showed me the value of hard work. Thank you so much "Madibanse", I will never forget you. You always believed in me, knowing that you were raising a legend who was always dreaming about her future.

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- All multi-disciplinary mental health care professionals who critically reviewed and evaluated PTSD Psychological Management Guidelines for Rape Survivors in the North West Province.

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ABSTRACT

Background

South Africa reports a high prevalence of rape. Rape care requires comprehensive medical and mental health care from the onset and during follow-up care visits. Regardless of such care, rape is associated with Post-Traumatic Stress Disorder (PTSD) more than any other disorder. However, PTSD psychological management seems to be a challenge in the North West Province.

Aim

The study aimed to develop and validate PTSD psychological management guidelines for raped survivors in the North West Province of South Africa.

Method and process

The research method of this study is done in the following four phases.

1. **First phase: Systematic review method and process**

The study used an exploratory systematic review research design to describe present psychological management guidelines needed for rape survivors to prevent PTSD and the related consequences, as well as to manage PTSD in its onset phase.

2. **Second phase: Empirical phase**

The research strategy used in the study is a sequential mixed method strategy and design. This strategy and design were divided into two stages.

Stage one: Quantitative research design

The study used s cross sectional survey to determine prevalence of PTSD among rape survivors consulted in the Thuthuzela Care Centres of the North West Province of South Africa. Cross sectional survey design was also used to describe the present practice regarding rape care management and related consensus that is provided among rape survivors in the Thuthuzela Care Centres of the North West Province.

Stage two: Qualitative research design

Qualitative, exploratory, descriptive and contextual research design were used to explore and describe practitioners' perspectives regarding the psychological management of rape survivors suffering from Post-Traumatic Stress Disorder.

3. Third phase: Meta-inference and conceptualisation of findings

Meta-inferences were used to integrate quantitative and qualitative findings. The findings were conceptualised into a conceptual framework that is used to guide the development and validation of PTSD psychological management guidelines for raped survivors.

4. Fourth Phase: Kish method and process

Kish's method was used to develop and validate PTSD psychological management guidelines for rape survivors.

Results

The results of the study are discussed in four phases.

1. First phase results

The results of the exploratory systematic review illustrated that there are no available PTSD psychological management guidelines for rape survivors in the North West Province of South Africa.

2. Second phase results

2.1. Stage one: Quantitative research results

The results of stage one, the descriptive analysis, illustrated high prevalence of PTSD at 74.5% of rape survivors surveyed. The results of the Chi-square ($\chi 2$) test and Phi Cramer's (φc) illustrated that there were no significant differences in PTSD experience by age, marital status, and level of education; with most of the survivors diagnosed with PTSD, having less than matric ($p > 0$ .05). Similarly, there was no difference in PSTD diagnosis by work status and cultural orientation. However, those who saw the importance of religion was a significant predictor of PTSD among rape survivors with $\beta = 1$ .35, $t = 2$ .99, $p < 0.004$.

In addition, descriptive analysis illustrated that most of survivors consulting in the Thuthuzela Care Centres of the North West Province, receives general rape care management. There are fewer of rape survivors who receives acute mental health care management and none of the survivors are assessed and managed for chronic mental health management that is PTSD in this study.

2.2.Stage two: Qualitative research results

Tesch's method of qualitative data analysis revealed five themes that need to be considered for offering PTSD psychological management. The first theme explained that barriers, for example centralised psychosocial services, need to be considered for provisional psychological management needed by rape survivors diagnosed with PTSD. The second theme explained that there is a need for Thuthuzela Care Centres to adapt assessment procedures for example, use of Post Traumatic Diagnostic Scale for diagnostic statistical manual 5 (PDS-5) to diagnose PTSD among rape survivors.

The third and fourth themes suggested the use of various psychotherapeutic pharmacological and non pharmacological interventions, for example trauma focused cognitive behavioural therapy and selective serotonin reuptake inhibitors to manage rape survivors diagnosed with PTSD. The fifth theme illustrated that there is a need for involvement of various stakeholders in thecare of rape survivors diagnosed with PTSD, for example trained mental health care practitioners that are able to assess, prevent and manage out-patient and admitted out-patient rape survivors diagnosed with PTSD. Other stakeholders, namely family, were seen as important for provision of social support among rape survivors diagnosed with PTSD.

3. Phase three: Meta-inferences and conceptualisation of qualitative and quantitative results

Meta-inferences findings illustrated that in the conceptual framework, agent is regarded as a mental health care practitionersand the recipients are raped survivors. This implies that in the conceptual framework, mental health care practitioners are the ones responsible to provide care among raped survivors diagnosed with PTSD. Added to that, meta-inferences findings illustrated that in the conceptual framework of this study it is procedurally for mental health

care practitioners to start with assessment of PTSD using PDS-5 dianostic tool. Following that is the use of non-pharmacological and pharmacological interventions to manage rape survivors diagnosed with PTSD. The conceptualised finidngs illustrated that in this conceptual framework of the study there is a need of including other stakeholders, family in the care of rape survivors diagnosed with PTSD to offer them support. However, those stakeholders it should be that a rape survivor undergoing treatment of PTSD has given a consent for provision of social support.

4. **Phase four: Guideline development and validation**

The use of PDS-5 as a diagnostic tool of PTSD and the use of non-pharmacological and pharmacological interventions to manage PTSD were adopted to develop PTSD psychological management guidelines for rape survivors. Blind review of various mental health care practitioners working in public mental health institutions and the Thuthuzela Care Centres as well as scholars in the field of mental health, gender-based violence and PTSD validated the developed PTSD psychological management guideline for rape survivors.

Conclusion: North West Province report a high prevalence of PTSD among rape survivors. This study developed and validated PTSD psychological management guidelines for raped survivors consulting in the Thuthuzela Care Centres, in the North West Province, South Africa and those that will be admitted in public mental health care institutions. Therefore, it is hoped that those guidelines will assist to improve mental health care services needed by rape survivors consulting in rape care clinics and public mental health institutions.

Keywords: Rape, rape survivors, PTSD psychological management, guidelines, South Africa

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LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
BWRT	Brain Working Recursive Therapy
CBT	Cognitive Behavioural Therapy
CMCM	Comprehensive Medical Care Management
CPT	Cognitive Processing Therapy
DoH	Department of Health
DSM-5	Diagnostic and Statistical Manual of Mental Disorders- Fifth Edition
EC	Eastern Cape
EMDR	Eye Desensitization and Reprocessing
EX	Exposure Therapy
FGD/s	Focus Group Discussion/s
FS	Free State
HIV	Human Immune Deficiency Syndrome
HREC	Human Research Ethics Committee
KZN	KwaZulu-Natal
NICE	National Institute for Health Care
NWP	North West province
NWU	North West University

PEP	Post Exposure Prophylaxis
PDS-5	Post-Traumatic Stress Diagnostic Scale aligned to DSM-5
PHC	Primary Health Care
POT	Practice-Oriented Theory
PTSD	Post-Traumatic Stress Disorder
SA	South Africa
SAPS	South African Police Service
SPSS	Statistical Package for Social Science
SSRIs	Selective Serotonin Reuptake Inhibitors
SPO	Structure Process Outcome
STIs	Sexual Transmitted Infections
TCCs	Thuthuzela Health Care Centres
USA	United States of America
WHO	World Health Organisation

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THESIS LAYOUT

This thesis is on the development of PTSD Psychological Management Guidelines for Raped Survivors written in an article format. The PhD candidate, Ms Nombulelo Veronica Sepeng, conducted the study and wrote the manuscripts under the supervision of Prof. Lufuno Makhado. The thesis is presented in the following manner:

Section one: Overview of the study

Section two: Manuscripts

- Manuscript one: Psychological management intervention guidelines for rape survivors with Post Traumatic Stress Disorder (PTSD): A brief exploratory systematic literature review (Published).
- Manuscript two: Correlates of Post-Traumatic Stress Disorder diagnosis among rape survivors in the North West Province: Results and Implications of a South African Study (Published).
- Manuscript three: Present practices of rape care management in The Thuthuzela Care Centres of the North West Province (Under review).
- Manuscript four: Post Traumatic Stress Disorder psychological management for rape survivors: Practitioner's perspective (Accepted for publication in African Journal of Nursing and Midwifery).
- Manuscript five: Conceptual Framework for PTSD Psychological Management of Rape Survivors in the North West Province of South Africa (Under review).
- Manuscript six: PTSD Psychological Management Guidelines for Rape Survivors in the North West Province of South Africa (Under review).

Section three: Conclusions, recommendations and limitations

SECTION ONE: OVERVIEW OF THE RESEARCH

1. Introduction

The psychological management of rape-related Post Traumatic Stress Disorder (PTSD) appears to be a serious problem that needs to be addressed in African countries (Henttonen, Watts, Roberts, Kaducu & Borchert, 2008: 123). Campbell (2008:702) indicated that rape survivors encounter problems with receiving medical, legal and mental health care assistance and indicated that the assistance survivors receive, leaves them overwhelmed by doubts, victimisation and blame. This shows that there is a need to develop and validate guidelines that can be used by health care workers to facilitate survivors' management and healing process post rape. Hence, the researcher aimed at developing and validating PTSD psychological management guidelines for raped survivors that can be employed by mental health care practitioners working in the Thuthuzela Care Centres (TCCs) and public mental health care institutions in the North West Province (NWP) to assist survivors post-rape.

1.1. Background of the study

The background of the study described the magnitude of the problem, poor reporting of rape cases to police stations/centres, acute medical and mental health care management, the mental health consequences of rape experienced by survivors, and the psychological management of PTSD related to rape health care management.

1.1.1. Magnitude of the problem

The World Health Organisation (WHO) (2016:1) reports that approximately 35% of women worldwide experience sexual assault in their lifetime. However, South Africa is regarded as the leading country in terms of sexual assault, particularly rape (Jewkes, Dunkle, Nduna & Shai, 2010:42). The South African Police Service (SAPS) reported approximately 39 828 cases of

rape per 100 000 citizens within the period of March 2016 to March 2017 (SAPS, 2017:48). Provincially, the SAPS report revealed differences in rape cases statistics as follows: Gauteng was found to have the highest incidence rate at 7 700 cases per 100 000 citizens; Kwa Zulu-Natal (KZN) followed with 7 032 cases per 100 000 citizens; Eastern Cape (EC) with 6 836 cases per 100 000 citizens; Western Cape (WC) with 4 771 cases per 100 000 citizens and NWP with 3 615 cases per 100 000 citizens (SAPS, 2017:48). Furthermore, the other four provinces reported a lower incidence rate, as follows: Limpopo had 3 321 cases; Mpumalanga 2 708 cases, Free State (FS) 2 702 cases and Northern Cape (NC) 1 143 cases per 100 000 citizens (SAPS, 2017:48) (see fig. 1). As compared to the previous rape statistics of 2014/2015, the NWP increased by 5.3% in the SAPS 2016/2017 rape statistics, which was regarded as the highest increase of rape cases among all the provinces of South Africa who reported rape per province (SAPS, 2017: 48). Jewkes and Abrahams (2002:1233) also show that the South African statistics do not reflect the overall percentage of rape cases due to poor or no reporting from rape survivors.

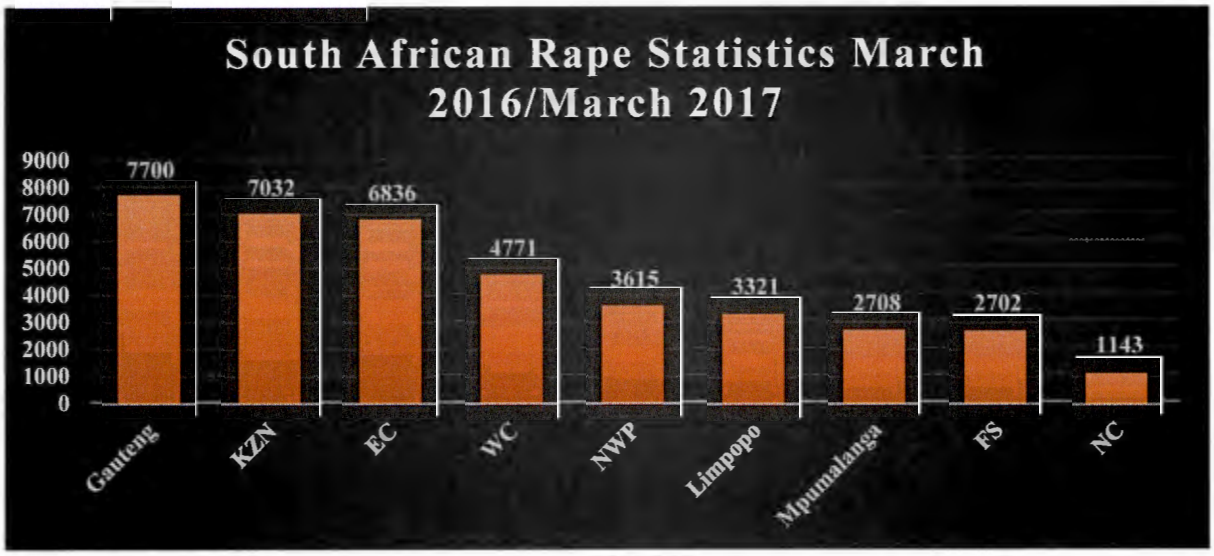

Figure 1. 2016/2017 rape statistics ratio per 100 000 citizens in each of the South African provinces

1.1.2. Poor reporting of rape cases at police stations/centres

Poor reporting of rape cases has been found to be one of the major challenges for SAPS in terms of accounting and providing the clear picture of rape/sexual assault-related crime. In addition, Jewkes and Abrams (2002:1233) highlighted that SAPS statistics is severely affected by high rates of underreporting caused by lack of access to police stations, self-blame, the nature of the relationship a survivor has with the perpetrator, and fear of disclosure. This shows that there are many rape survivors who deal with rape cases without the SAPS. Therefore, the use of guidelines will be helpful when diagnosing and managing the mental health consequences of rape – even for those who report their rape experiences at health care centres at a later stage.

1.1.3. Acute medical and acute mental health care management post rape experiences

Prior to the assessment and management of long-term disorders, that is PTSD in our context, survivors being assisted within the Department of Health [DoH] institutions (DoH, 2003:18). According to DoH (2003:18) survivors should receive comprehensive acute medical care, including forensic information and specimens extracted for forensic evidence, counselling and testing for Human Immune deficiency Virus (HIV) and Acquired Immune deficiency Syndrome (AIDS). The DoH (2003:18) also recommends other acute medical care that survivors should receive such as Post-Exposure Prophylaxis (PEP), pregnancy management and Sexual Transmitted Infections (STIs) management. DoH (2003:19) also recommended other comprehensive mental health care that is crisis management and rape trauma counselling for survivors consulting in TCCs post rape experiences. However, the suggested mental care management by DoH (2003:20) caters only for acute mental health care disorders other than chronic mental health care disorders that is PTSD. In support of this, Campbell (2005:1); Henttonen *et al* (2008:124); Patel, Roston, Tilmon, Stern, Roston, Patel and Keith (2013:24), illustrated that it is very common for raped survivors to receive acute medical and acute mental

health care than to receive chronic mental health care management. Similar findings regarding the provision of acute medical management needed by rape survivors were reported in the Gauteng Province of South Africa (Kim, Martin & Denny, 2003:101). However, Kim *et al* (2003:101) did not study whether rape survivors are given either acute or chronic mental health care management post rape experiences. Regardless of this available information, it seems as if no research has been done in the NWP to prove that rape survivors indeed receives the provision of both acute medical, acute mental health care management as well as the provision of chronic mental health care management that is PTSD management needed by survivors post-rape in this context. Thefore, this clearly shows that despite the fact that there is a problem with regard to managing rape survivors diagnosed with PTSD, it is also imperative to determine rape care services that should be received by rape survivors comprehensively. This information will assist the researcher to indetify gaps of the services that are not provided among rape survivors and their possible impact in the prevention or management of PTSD.

1.1.4. Mental health consequences of rape experienced by survivors

Rape is associated with PTSD more than with any other psychological health problem (Littleton Buck, Rosman & Grills-Taquence, 2011:316). PTSD impairs the psychological functioning of rape survivors (Cassano & Fava, 2002:852) and is also associated with long-term morbidity, mortality, economic burden and impairment in occupation, social functioning, depression and health risk behaviours such as substance abuse in an attempt to cope (Zinzow, Resnick, McCauley, Amstadter, Ruggiero & Kilpatrick, 2010:708). This necessitated for the development and validation PTSD psychological management guidelines that can be employed by mental health care practitioners to assist rape survivors in coping with the aftermath of rape. Therefore, the development and validation of PTSD psychological management guidelines to manage rape survivors diagnosed with this disorder can be employed to minimise their PTSD symptoms and potentially lower the risk of all the consequences associated with PTSD.

1.1.5. Psychological management of PTSD related rape care management

In an attempt to manage PTSD specific to a traumatic event namely rape, countries such as the United States of America (USA) (Foa, Keane & Friedma, 2000:539), Britain (National Institute for Health and Care Excellence [NICE], 2005:4) and Switzerland (WHO, 2013:178), have developed guidelines using non-pharmacological interventions for example, Cognitive Behavioural Therapy (CBT) and pharmacological interventions that is the provision of Selective Serotonin Reuptake Inhibitors (SSRIs). Studies have found that these psychological management intervention programmes were effective in managing rape-related PTSD (Mendes, Mello, Ventura, Passarela & Mari, 2008:254; Resick, Nishith, Weaver, Astin & Feuer, 2002:14). Currently, the care of rape survivors in South Africa is provided in TCCs following a protocol of rape care management (DoH, 2003:17).

It is noted that this protocol emphasize that mental health care practitioners should refrain from offering psychotherapy or detailed counselling during the first visit to report experiences of rape, and should rather give crisis management or trauma counselling during the second visit (DoH, 2003:17). This crisis management or trauma counselling should only be given at least three days post-rape, and they should begin with PTSD assessment as well on this follow-up care visit (DoH, 2003:19). Despite this, the DoH (2003:22) protocol does not specify the tools that can be used to assess and diagnose PTSD and the management advice to be given to raped survivors in case they present with PTSD symptoms at day three of follow-up care onwards.However, the researcher argues that is is highly impossible to assess and diagnose PTSD in day three of follow up care. This is supportted by the recent study Foa, McLean,Zang, Zhong, Powers, Kauffman, Rauch, Porter and Knowles (2016:302) which illustrated that PTSD

PTSD can be assessed and diagnosed from four weeks onwards using PTSD diagnosed tools aligned with the Diagnostic and Statistical Manual of Mental Disorders (DSM), for example the PDS-5 PTSD diagnostic tool. Therefore, recent practice in the TCCs which is done according to the protocol proposed by (DoH, 2003:18) set to manage the aftermath of rape reveals that the psychological impact of rape, particularly the PTSD experienced by raped survivors, is neglected. Hence, this practice and literature calls for specific evidence based PTSD psychological management guidelines for survivors consulting in public mental health care institutions that is TCCs and possibly public mental health care institutions for those who will be in need of admission post rape experience

1.2. Problem statement and rationale

Rape care requires acute medical and both acute and chronic mental health care management at the time the rape is reported and during follow-up visits. Despite that the DoH (2003:16) have clearly indicated acute medical and acute health care management that should be provided among rape survivors. However, there is no study found in the literature describing if rape survivors consulting in the NWP does receive the proposed acute medical and acute mental health care management.

Added to that, literature is silent about the psychological management of chronic mental health care disorders in the context of the NWP of South Africa.Nevertheless, the fact is that PTSD is a chronic primary disorder caused by rape trauma or rape experiences among women as compared to men (American Psychiatric Association, 2013). Apart from that, rape experiences are associated with multiple predictors that may cause severity of PTSD syptoms (Ullman & Filipas, 2001:374; Cohen, Fabri, Cal, Shi, Hoover, Binagwaho Culhane, Mukanyonga, Kareyega & Anastos, 2009:1367). Those multiple preditcors include forced sexual intercourse,

physical injuries, threats as well as testing for HIV and AIDS which can be traumatic and lead to experiences of stigma (Ullman & Filipas, 2001:374; Cohen *et al.,* 2009:1367).Therefore this shows that the lack of evidence which shows that there is no psychological management that can be used to manage rape survivors diagnosed with PTSD particulary in the NWP which has recently reported high increase of rape cases among nine provinces of South Africa cannot be ignored. That goes to lack of evidence of which acute medical and acute mental health care management post rape experiences cannot be ignored as well.

Therefore, the researcher is interested in conducting a study which will provide the evidence of provision of acute medical and both acute and PTSD managmenent among rape survivors consulting in the TCCs of the NWP.The information with regard to the provision of acute medical and acute mental health and PTSD psychological management will identify gaps and provide the evidence of service delivery that are given anf those that are not given to rape survivor consulting in the TCCs of the NWP.

1.3. Overall aim

The overall aim of the proposed study was to develop and validate PTSD psychological management guidelines for raped survivors in NWP. However, in order to achieve this aim, the study was conducted in four phases. The first phase is the exploratory systematic review, the second phase is the empirical phase of a sequential mixed method that has two stages, which were quantitative and qualitative research. Phase three which involved meta-inferences and interpretation for conceptualisation of findings into a conceptul framework to guide the development and validation of PTSD psychological management guidelines. Phase four in

which PTSD psychological management guidelines for rape survivors was developed and validated. Each phase had its own research questions and objectives.

Research objectives

In order to achieve the above-mentioned aim, this study described the following research objectives, which were also provided in accordance with the phases and guided the writing of each manuscript for this thesis. The objectives were:

Phase one

- To conduct an exploratory systematic review and critically analyse the evidence psychological management intervention guidelines for the management of PTSD among rape survivors diagnosed with PTSD in international setting. This was done to provide the evidene and identify gaps regarding lack of evidence of psychological management intervention guidelines for the prevention and management of rape survivors diagnosed with PTSD (Article 1)

Phase two: stage one

- To determine the prevalence of PTSD among rape survivors consulted in TCCs of the NWP in SA. This was undertaken in order to determine the magnitude of the problem in the NWP (Article 2)
- To establish the demographic correlates of PTSD among rape survivors consulted in TCCs of the NWP in SA (Article 2)
- To describe the current practice of medical management, acute mental health care and PTSD management received by rape survivors at TCCs of the NWP in SA (Manuscript 3)

Stage two

- To explore and describe perceptions of mental health care practitioners regarding the present practices and provision of PTSD psychological management for rape survivors in the NWP in SA (Manuscript 4)

Phase three

- To integrate quantitative findings with qualitative findings (Meta-inference and interpretation) for conceptualisation of findings into a conceptual framework that is used to guide the development of and validation of PTSD psychological management guidelines for rape survivors (Manuscript 5)

Phase four

- To develop and validate a PTSD psychological management guidelines for raped survivors consulted in public institutions of the NWP of SA following the Kish guide for development and validation of guidelines tool and that was based on a conceptualised framework of the study (Manuscript 6)

1.4. Significance of the study

The findings of this study, i.e. the developed and validated PTSD psychological management guidelines, which will assist health care practitioners to provide holistic health care management for rape survivors with great recognition of both assessment and management of PTSD symptoms that is known as the number one disorder associated with rape. Implementing the findings of this study will assist survivors to receive PTSD psychological management post-rape experiences to improve their mental health care. The study should also inform education systems through adding PTSD psychological management guidelines for rape survivors in the curriculum of multidisciplinary health care practitioners.

The policy makers and DoH may adopt this PTSD psychological management guideline and incorporate it in the general rape care management provided for survivors consulted in TCCs and admitted in public mental health care institutions post-rape to increase the availability of mental health care services needed by rape survivors. The study contributes to the body of knowledge through adding the level of PTSD, adding mental health care management for rape survivors diagnosed with PTSD in the NWP of South Africa and possibly transferability of these findings for management of rape survivors diagnosed with PTSD in all regions of South Africa.

The findings of this study contributed to a theory, through using Structure Process and Outcome (SPO) and Process Theory and Outcome (PTO) features to conceptualise findings of this study in a conceptual framework that is used to guide the development and validation of PTSD psychological management for rape survivors. Different methodologies were used to conduct this study to achieve the aim of the study. Among the different methodologies that are used, to conduct this study, a mixed method strategy is regarded as a unique empirical research methodology because mostly the guidelines that are developed following a literature review only. However, the case is not the same in this study, because the use of a sequential mixed method allowed the researcher to conduct interviews among both rape survivors and health care practitioners to inform the baseline of the development and validation of PTSD psychological management guidelines following the findings of a literature review.

1.5. Conceptual and operationalised definition of concepts

Under this heading, the researcher explains the conceptual definition of the concepts and how they are operationalised or applied in this study.

1.5.1. Comprehensive medical care management (CMCM) is defined as the process of providing care and support to people with complex needs where the care required by that

person, is provided by a health care practitioner (Goodwin, Dixon, Anderson & Wodchis, 2014:2). In this study, CMCM refers to the provision of acute medical and both acute and chronic mental health care management provided by a health care practitioner to a rape survivor consulted in TCCs.

1.5.2. Health care practitioners refers to the "psychiatrist or registered medical practitioner or a mental health care psychiatric nurse practitioner, occupational therapist, psychologist or social worker who has been trained to provide prescribed mental health care, treatment and rehabilitation services; or multi-disciplinary" (Mental Health Care Act No. 17 of 2002). In this study, the term health care practitioner/s refers to trained and qualified mental health care psychiatric nurse practitioners registered with South African Nursing Council as a professional nurse to provide mental health care management and rehabilitation in a public mental health care institution of the NWP. Added to that is mental health care practitioner are social workers, psychologists, and psychiatrists and a doctor registered with Health Professions Council of South Africa to provide mental health care management and rehabilitation in a public mental health care institution of the NWP.

1.5.3. Psychological management in this study refers to an umbrella term of any management that is suggested by health care practitioners for the prevention and management of all clusters of symptoms of PTSD post-rape. The suggested psychological management in this study is the use of debriefing for possible prevention of PTSD or alternatively an intervention that can be used to identify rape survivor who are at risk of developing PTSD from four weeks and onwards. In addition, psychological management in this study is the use of non-pharmacological and pharmacological effective interventions, for example Exposure Therapy and provision of SSRIs, that can be used to minimise or completely manage PTSD symptoms among rape survivors consulted in TCCs and admitted in mental health care institutions of the NWP.

1.5.4. Post-Traumatic Stress Disorder: According to the Diagnostic Statistical Manual-5 (DSM-5) ***PTSD*** is the development of characteristic symptoms following exposure to one or more of traumatic events for the past one month (American Psychiatric Association, 2013). In this study PTSD is the development of characteristic symptoms following exposure to rape experiences and reported in TCCs of the NWP from four weeks ago and onwards.

1.5.5. The TCCs are defined as a one-stop facility that provides rape care in SA with the aim of reducing secondary victimization (Vetten, 2016:230). In this study, TCCs are defined as a rape care clinic situated in the NWP where the aftermath of rape is managed. The terms TCCs and rape care clinic are used interchangeably in this study because other manuscripts prefer the generic term rape care clinic instead of TCCs.

1.5.7. Rape is defined as an act that is performed by somebody, who has illegally and deliberately committed an act of sexual penetration with a complainant without his or her agreement, and that person is then guilty of the crime of rape (Criminal law [sexual offences and related matters] amendment act 32 of 2007). Rape in this study refers to any rape experience reported to TCCs of the NWP.

1.5.8. Rape survivor refers to any person reporting that rape crime has been perpetrated against his or her will (Criminal law [sexual offences and related matters] amendment act 32 of 2007). In this study, a rape survivor or survivor is defined as a woman only, of at least 18 years old, who has reported rape and consulted the TCCs of the NWP of SA. In addition to this, in this study the terms "rape" and "raped" survivors are used interchangeably in the document. In the title and overview of the study, the term raped survivors is used as it was approved by the North West University (NWU) institution and the DoH prior to the data collection stage of this study. In the thesis, the term rape survivor is preferred, as required by the manuscript reviewers.

1.6. Research methods and design

1.6.1 Research methods and strategy

The study used a sequential mixed method design and strategy. In a sequential mixed method research design and strategy, the researcher starts by performing quantitative research, subsequently analysing the results and then building on the results to explain them more in detail by means of qualitative research (Creswell, 2013:15). This design was found suitable for this study because the researcher started by determining the level of PTSD and determined the current practice of medical management, acute mental health care and PTSD management received by rape survivors at TCCs. Then followed a qualitative research method to build and refine quantitative data to provide a general understanding of a research problem and provide solution to such problem. In order to carry out all processes of a sequential mixed method strategy and approach, the study was sub-divided into four phases, namely phase one, phase two, phase three and phase four and each phase had its own research methods and design .

In phase one, the researcher conducted an exploratory systematic review to critically analyse evidence of psychological management intervention guidelines for the prevention and management of PTSD among rape survivors diagnosed with PTSD in international setting. This was done to describe and identify gaps in the psychological management intervention guidelines for rape survivors with PTSD globally. In phase two the study included two stages of empirical research. Stage one consisted of cross sectional research design to determine the level of PTSD, to specify the demographic data as it relates to PTSD and to describe current practice of medical management, acute mental health care and PTSD management received by rape survivors at TCCs of the NWP in SA. Stage two used exploratory, descriptive and contextual qualitative research to explore and describe perceptions of mental health care

practitioners regarding the present practices and provision of PTSD psychological management for rape survivors in the NWP in SA.

In phase three, the study conducted meta-inferences to intergrate both quantitative and qualitative research findings using SPO and POT features for conceptualisation into a conceptual framework that is used to guide the development of PTSD psychological management guidelines. In phase four, the researcher used Kish's (2001) guide for development and validation of PTSD psychological management guidelines for rape survivors based on the conceptual framework of the study. See Figure 1 below where all these research methods and designs are described in detail.

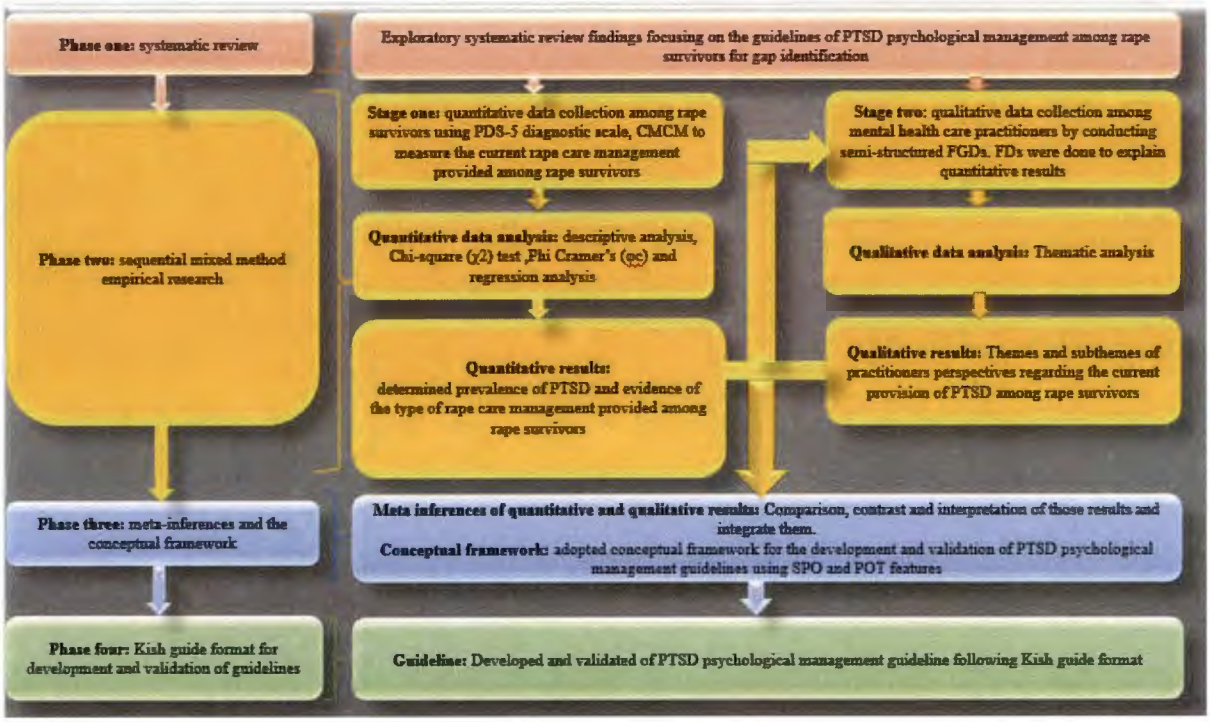

Figure 2: Illustration of research strategy

1.7. Phase one: Exploratory systematic literature review

Phase one of this study consists of the overview of the research design and methods as stipulated below. The overall explanations of this phase are seen in manuscript one in section two.

1.7.1. Methods

An exploratory systematic review was done to critically analyse evidence of psychological management interventions employed by different guidelines and country specific internationally for the prevention and management of PTSD among rape survivors. A systematic review is defined as a type of literature review, which uses specific methods to gather secondary information, and evaluate and synthesize research studies critically (Grimshaw, Thomas, MacLennan, Fraser, Ramsay, Vale & Wensing, 2004:8). In this phase, five steps of a systematic review to conduct an exploratory systematic review of the study as described below were adhered to.

1.7.1.1. Formulation of a research question

The review question was:

- "Is there any available literature to conduct an exploratory systematic review to critically analyse and summarise the evidence on psychological management interventions for health professionals working with rape survivors who exhibit PTSD symptoms?

1.7.1.2. Gathering and classifying the evidence

Gathering and classifying the evidence in this phase was done using the population, intervention, comparison, outcome (PICO) search strategy (Grimshaw *et al*, 2004:8) to review the guidelines that are available in the literature. A combination of keywords which are PTSD, guidelines of PTSD, psychological interventions of PTSD and rape survivors, were used to review the guidelines to maximize the identification of the relevant guidelines. Databases including JSTOR, Google Scholar, PubMed, etc. were used to identify such guidelines that helped and had the potential to answer the research question of this phase.

1.7.1.3. Performing critical appraisal

The critical appraisal process of the guidelines that were relevant for management of PTSD among rape survivors was used following the Johns Hopkins Evidence-Based Practice Appraisal tool (Newhouse, Dearholt, Poe, Pugh & White, 2007:54). The purpose of using the Johns Hopkins Evidence-Based Practice Appraisal tool was to ensure that all the selected guidelines answer the systematic review research question of this study.

1.7.1.4. Summarizing the evidence and interpretation or discussion of the findings

A summary of the evidence was made through documenting all the processes of searching for guidelines which were scrutinized according to the inclusion and exclusion criteria to ensure transparency and applicability (Grimshaw *et al.*, 2004:8). Therefore, the results of the exploratory systematic review in this phase of the study illustrated that guidelines advocate for the use of CBT, Exposure Therapy, Cognitive Processing Therapy, Eye Desensitization and Reprocessing (EMDR), SSRIs, because they are the most effective interventions that can used to manage PTSD among rape survivors. The results of this review support the results of numerous studies by Foa, Keane, Friedman and Cohen (2008:46); Kirkpatrick and Heller (2014:337); Resick, Nishith and Griffin (2003:340) that the use of CBT, Exposure Therapy, Cognitive Processing Therapy, EMDR and SSRIs can be used to manage PTSD effectively post rape experiences.

1.8. Phase two: Empirical Research Phase

The empirical research phase consists of a sequential mixed method research strategy which has two stages. Stage one consists of quantitative research design and method and stage two consists of qualitative research design and method. The study explained all the research methods and designs in detail in each stage, as stipulated below. However, a detailed explaination of these stages is seen in manuscript two, three and four in Section two.

1.8.1. Stage one: Quantitative research method

The quantitative research method is defined as the method that uses structured procedures and formal instruments to collect information (Poli & Beck, 2008:78).

1.8.1.1. Research design

The study applied cross sectional survey, which is used to examine the relationship that exists in a situation (Burns & Grove, 2009:246). This design was found to be appropriate because the objectives of this stage described the level of PTSD, determined the demographic data as it relates to PTSD among rape survivors consulted in TCCs of the NWP in SA. Added to that, cross sectional survey was used to describe the current practice of medical management, acute mental health care and PTSD management received by rape survivors at TCCs of the NWP in SA.

1.8.1.2. Study setting

The study was conducted in TCCs in four districts of the NWP, namely one in Ngaka Modiri Molema, one in Bojanala, two in Dr Kenneth Kauda and one in Dr Ruth Segomotso Mompati district. The TCCs are embedded within public hospitals to cater for survivors who are seeking help in public health care setting following the aftermath of rape. These institutions work collaborately with National Procecuting Authorities, police stations and life line centres.

1.8.1.3. Population

This study targeted all raped survivors who consulted in the TCCs in four districts of the NWP in SA and who had reported rape experiences four weeks prior to data collection. The participants who agreed to participate in this study were rape survivors who had reported rape six weeks ago and onwards prior to data collection.

1.8.1.4. Sampling

Purposive non-probability sampling was applied in this study – a technique based on the researcher's judgement regarding the participants that are knowledgeable about the question at hand (Brink, Van der Walt & Van Rensburg, 2012:141). The main reason of choosing survivors who are raped four weeks prior to data collection was:

- to measure the level of PTSD related to their rape experiences
- to determine current practice of medical management, acute mental health care and PTSD management perfomed among them when reporting rape in TCCs and during follow-up care visits.

The inclusion criteria were raped survivors aged 18 years and above. Focused among all women who consulted in one of the TCCs of the NWP of SA and experienced rape four weeks ago and onwards prior to data collection.

1.8.1.5. Sample size

The Raosoft software sample size calculator was used to determine the sample size with a margin error of 5%, a confidence interval of 95% and a response distribution of 50%. The sample was therefore calculated from a total population of 210 rape survivors and thus led to a sample size of 137. However, only 98 rape survivors have met the inclusion and exclusion criteria of this study.

1.8.1.6. Instrumentation

The researcher collected data by administering a questionnaire which was divided into three sections (see Appendix A). Section one included the demographic data of rape survivors, for example, age, marital status, ethnicity, education level and level of income.

Section two consisted of the PTSD diagnostic scale (PDS-5) which has been developed, validated and found reliable at Cronbach's alpha of .95 (Foa *et al.*, 2016:302). The researcher interviewed the participants using self-administered PDS-5 scale to diagnose the level of PTSD experienced by rape survivors. See the questionnaire in Appendix A.

Section three included 15 items of Comprehensive Medical Care Management (CMCM). The survey instrument by Patel, Simons, Piotrowski, Shulman and Petraitis (2008:428) was used to interview rape survivors to determine and describe the current practice of medical management, acute mental health care and PTSD management performed among them when reporting rape in TCCs and during follow-up care visits.

The researchers tested validity and reliability of the 15-items of CMCM survey instrument in this current study and it was found to be reliable at Cronbach's alpha of .91. The purpose of conducting interviews among rape survivors was to simply the concepts that are written in a questionnaire. However, prior to data collection, language expert translated the questionnaire into Setswana which is a local and language in the NWP and back translated to English to check it is still measuring what is supposed to measure. This was done to cater for all the participants who doesn't not know English and use Setswana as their local language.

1.8.1.7. Data analysis

The Statistical Package for Social Sciences (SPSS) (PASW statistical version 25) software was used to capture, clean and analyse data (Babbie, Wagner and Zaino 2018:73). The researcher used frequency distribution to summarize and describe the demographic data (Babbie *et al.*, 2018:73). Descriptive statistics was used to analyse the level of PTSD experienced by raped survivors, as well as to determine and describe the current practice of medical management when reporting rape in TCCs and acute mental health care and PTSD management perfomed among rape survivors during follow-up care visits. Secondly, the researcher applied the Chi-

square ($\chi 2$) test and Phi Cramer's (φc) to measure the associations between categorical or nominal variables in relation to PTSD diagnosis. Finally, the regression analysis was computed to predict PTSD severity from sociodemographic variables. A significance level of 0.05 was set on SPSS.

1.8.2. Stage two: Qualitative research method

Qualitative research is used when little is known about a phenomenon, or when the nature, context, or boundaries of a phenomenon are poorly understood or defined (Bothma *et al,* 2010:120). Added to that, qualitative research is conducted when the goal is to develop a program or an intervention to benefit the population (Burns & Grove, 2013:694).

1.8.2.1. Research design

The study used a qualitative, exploratory, descriptive and contextual research design in order to explore the research problem and to identify possible solutions (Grove, Burns, and Gray 2013, 694). This design was appropriate because the objectives of this stage were to explore and describe the perceptions of mental health care practitioners regarding the current psychological management of PTSD post-rape. The perceptions of mental health care practitioners focused on exploring the research problem of lack evidence of guidelines that can be used for provision of PTSD psychological management in public institutions of the NWP of SA. With the aim of providing the solution of this problem through suggesting different intervetions that can be used to develop and validate PTSD psychological management guidelines for raped survivors.

1.8.2.2. Study setting

The study was conducted in four public mental health care institutions of the NWP. The public mental health care institutions were chosen because this is where mental health care practitioners such as mental health care psychiatric nurses, clinical psychologists, social

workers and doctors or psychiatrists specializing in mental health care, can be found. They were also chosen because they treat PTSD resulting from any traumatic event, including rape, in their daily routine.

1.8.2.3. Population

The study targeted all mental health care practitioners that is mental health care psychiatric nurses, clinical psychologists, social workers and doctors/psychiatrists specializing in mental health care and working in public mental health care institutions in the NWP in SA.

1.8.2.4. Sampling criteria

Purposive sampling was used to select mental health care practitioners employed in public mental health care institutions of the NWP and at least had five years' experience and above. All of them had experience in managing mental health care complications and PTSD resulting from any traumatic event or associated variables for the past five years. In addition to that, mental health care practitioners are chosen because they can provide the information with regard to the best type of psychological management interventions that can be used to develop and validate PTSD psychological management guidelines for raped survivors. All of the mental health care practitioners who had experience of less than five years were excluded in this study.The sample size of this data collection was determined by data saturation of each focus group (Brink, Van der Walt & Van Rensburg, 2018:173).

1.8.2.5. Data collection

The researcher collected data by conducting semi-structured focus group discussion/s (FDG/s) with five or six participants per group using an interview guide which led to 21 participants. A FDG is a process of gathering a group of people together with similar backgrounds or experiences with the aim of discussing a specific problem of interest (Brink *et al.,* 2012:152).

Therefore, this technique was found to be appropriate for the study because the researcher was targeting a group of people who were knowledgeable about PTSD psychological management. The questions were semi-structured because the researcher posed the questions that were likely to appear in quantitative results, for example the question was asked: what are the psychological management interventions that can be used to manage PTSD among rape survivors? (See appendix B). The researcher adhered to principles of data collection such as tape recording, bracketing and making field notes.

1.8.2.6. Trustworthiness

The researcher adhered to the five criteria of trustworthiness such as credibility, confirmability, neutrality, dependability, and transferability to ensure data quality (Moule & Goodman, 2009:209). In the interest of credibility, the researcher ensured trust and rapport with the participants and wrote the report that is valid and presents the true perceptions of the participants (Brink, Van der Walt & Van Rensburg, 2018:189). With regard to conformability or neutrality, the researcher quoted the direct words of the participants and avoided being bias (Brink *et al.,* 2018:189). In the interest of dependability, data coding and categorizing in the analysis was done and these were given to a promoter to cross-check data coding and categorisation. Transferability was determined by data saturation and the ability to apply the findings in other contexts or to other participants (Brink *et al.,* 2018:189).

1.8.2.7. Data analysis

Tesch's method of qualitative data analysis was used to analyse all perceptions obtained from the participants in the FGDs (Creswell, 2014:44). Tesch's methods used for data analysis stipulate the following procedures:

1. Reading all the FGDs transcripts with the aim of understanding them.

2. Following that, an interesting FGD answering the research question was selected by the researcher to create a theme and those that had similar meanings were grouped together as broad themes.
3. The statements were reduced to quotations and were written next to the appropriate text.
4. From those quotations, the one that conveyed the meaning of quotations was turned into a sub-theme.
5. Lastly, the sub-themes and direct quotations from the data were discussed with the literature to establish the ultimate meaning of those sub-themes.

Prior to data analysis, the researcher transcribed the data from the recorded tape (verbatim). The transcription was followed by grouping data from all the FGDs through quotations of the participants in each FGD.

1.9. Ethical considerations

The researcher presented the study to the school board and the Human Research Ethics Committee (HREC) of the board for ethical clearance of the NWU, in the interest of conducting the study. The approval of ethical clearance by the NWU was granted (NWU- NWU-00477-17-A9) (see Appendix C). Approval to conduct the study was sought from the Provincial DoH of the NWP (see Appendix D). The researcher presented the ethical clearances and wrote a letter to the hospital managers prior to conducting the study, for her to receive approval for collecting data from the participants (refer to Appendix E).

The researcher wrote an invitation letter to the participants, requesting autonomous participation and those interested were given the informed consent form seen in Appendix F, concerning participation in the study (Brink *et al.,* 2012:35). The consent form clearly specified the rights of the participants to terminate their participation in the study at any stage and that

they will not be penalised or discriminated against by the researcher for doing so (Brink *et al.*, 2012:35). In case the participants were to experience emotional disturbances, the researcher had an experienced and qualified registered counsellor to provide psychological assistance. The consent form explained that participants were going to be referred to her immediately because she is stationed at the public hospitals that the TCCs are embedded within them. The interviews were coded and kept under lock and key, and only the researcher accessed those questionnaires and transcripts. In this manner, privacy, confidentiality and anonymity were protected (Brink *et al.*, 2012:35). Further details of ethical considerations and consent forms can be referred to in Appendix F.

1.10. Phase three: Meta-inferences of findings and the conceptualisation of findings into the framework of the study

Meta-inferences were done to integrate quantitative and qualitative findings to conceptualise findings into a framework. Conceptualisation of the framework was done following the Structure Process Outcome (SPO) model of Donabedian (1966:1) as the main model. However, Practice-Oriented Theory's (POT) Dickoff, James and Wiedenbach's (1968:1) features were embedded within SPO to strengthen the conceptual framework of the study. The SPO and the POT were combined to establish and strengthen a framework that is used to guide the development and validation of PTSD psychological management guidelines for raped survivors.

Donabedian (1966:1) explained that "*structure*" refers to the context that has human resources, physical capacity and the equipment or technique that are needed to administer the management that is required by the recipients. In that aspects, it was discovered that *agent* from Dickoff *et al.* (1968:4) is the person or things that perform the activity within the structure.The *recipient* is explained as the person or things that receive a certain action from the *agent* (Dickoff *et al.*,

1968:5).Therefore, in this conceptual framework suggested that the *agent* that should to administer any equipment or PTSD psychological management interventions reguired by *recipients* in the structure of this conceptual framework is trained multidisciplinary health care practitioners.

The *recipient* from the conceptualised findings, are adult female raped survivors diagnosed with PTSD. The raped survivors are those that possess certain features of the demographic data, for example those that were either married or single during data collection. In addition, (Dickoff *et al.,* 1968) explained that other non-professional *stakeholders* can be regarded as the people who can support the *recipient* who is undergoing a treatment. Therefore, the conceptual framework of this study should identify other relevant stakeholders who can provide support among survivors who went through rape experiences, diagnosed with PTSD and undergoing treatment to enhance their recovery.Based on these, *agent, recipients and other stakeholders* from Dickoff *et al.* (1968:4) in this study were embedded in the structure of Donabedian (1966:1).

The other feature that followed the structure in SPO model is *"process"* (Donabedian, 1966:6). Process is explained as the guiding principles that are referred to as the rules, technique, protocol, and routine governing activities that will be used to achieve the outcome (Donabedian, 1966:6).

Therefore, this conceptual framework, should suggest the *process* that should be followed for the development and validation of PTSD psychological management guidelines that can be used to prevent PTSD, assess and manage PTSD among raped survivors. Those suggested management to prevent PTSD should be provided a few days after the incident.

Following that, mental health care practitioners should use a specific tool that can diagnose PTSD among raped survivors who returns for a follow-up care visit in a specified period of

time. Execute the suggested management tool/steps to manage raped survivors diagnosed with PTSD effectively to achieve an outcome or terminus. Despite this, Dickoff *et al.* (1968:1) stated that there is a need for dynamic as the sources of power between activities. Meaning that in this conceptual framework there is a need of having a source of power that will enable an *agent* (mental health care practitioner) to perform the process (suggested guiding rules, techniques, protocol and routines governing activities) effectively to enhance a positive outcome or terminus of the recipients (raped survivors).

Outcome is explained as the final product of the activity (Donabedian, 1966:8). Similarly, Dickoff *et al* (1968:7) explained *terminus* or results as the product of the activities done by the agent to enhance the outcome of the recipients. Therefore, the two terms are combined because they mean the same thing and the conceptual framework of this study should be able to suggest the expected outcome of rape survivors who received psychological management for PTSD.

Context was added in the conceptual framework of this study because Dickoff *et al* (1968:7) explained that context is the environment that enables the agent to carry out activities required by the recipient. Therefore, in this conceptual framework there is a need to specify the context where rape survivors will be diagnosed with PTSD and will receive care. Figure 3 below illustrates the conceptual framework that is used for the development and validation of PTSD psychological management guidelines and the application of this framework is seen in manuscript five in section two

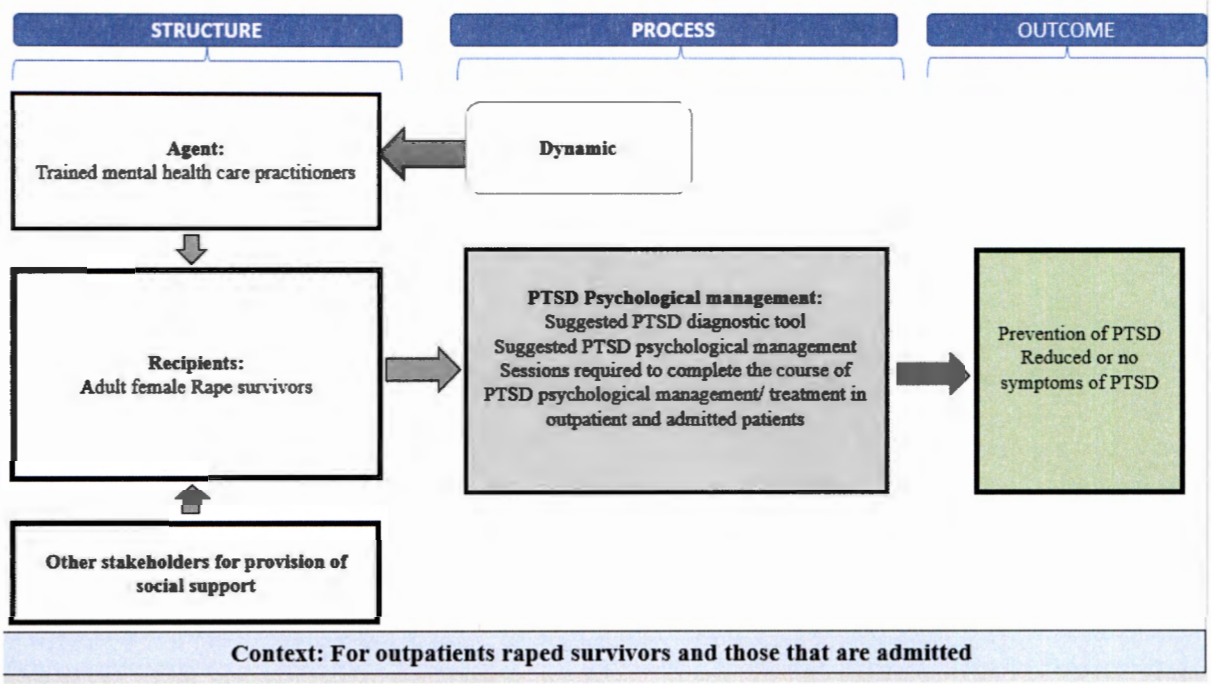

Figure 3: Illustration of the conceptual framework that is used for the development and validation of PTSD psychological management guidelines

1.11. Phase four: The development and validation of PTSD psychological management guidelines for rape survivors

The development and validation of the guideline of this study emerged from the conceptual framework that has used the SPO model of Donabedian (1966:1) and POT of Dickoff et al's (1968:1) features. The actual development and validation of PTSD psychological management for rape survivors consulting in TCCs and those that will be admitted in public mental health care institutions was done following Kish's (2001:851) guide for development and validation of practice guidelines format. Kish's (2001:851) format that is used for this guideline development included the name of the guidelines, purpose, target population and the audience. Evidences to grade (Kish, 2001:851) the suggested interventions of PTSD psychological management were also followed to ensure that the adopted intervention is effective to manage PTSD post-rape experiences.

Added to that, Kish (2001:852) suggested the need to have a scientific review committee to search for the evidence of the interventions used to develop guidelines and this is done to assist to grade the formulated recommendations of PTSD psychological management needed by a specific population. However, prior to this, Kish (2001:852) suggested that it is beneficial to choose six to ten panellist participants that represent various specializations that is sufficiently broad enough to adequately explore the topic chosen for development and validation of specific guidelines.

The purpose of having those panellists was to ensure validity, credibility of the developed guideline and to improve quality and gather feedback for informing final recommendations using five domains of Appraisal of Guidelines Research and Evaluation (AGREE) reporting checklist tool (Brouwers, Kerkvliet, Spithoff & AGREE Next Steps Consortium, 2016:352). Indication on how often the authors will update the guideline and why, suggested format, performance and outcome measures and areas for future research are needed (Kish, 2001:853). A detailed description of the development and validation of these guidelines are given in manuscript six in section two.

1.12. Thesis Layout

Section one: Overview of the study

Section two: Manuscripts

Manuscript one: Psychological management intervention guidelines for rape survivors with Post-Traumatic Stress Disorder (PTSD): A brief exploratory systematic literature review

Manuscript two: Correlates of Post-Traumatic Stress diagnosis among rape survivors in the North West Province: Results and implications of a South African study

Manuscript three: Present practices of rape care management in Thuthuzela Care Centres of the North West Province

Manuscript four: Post Traumatic Stress Disorder psychological management for rape survivors: Practitioner's perspective

Manuscript five: Conceptual framework for PTSD psychological management in the North West Province

Manuscript Six: PTSD Psychological management guidelines for rape survivors in the North West Province of South Africa

Section three: Conclusions, recommendations and limitations

1.13. Summary

The overview of this study addressed the introduction, aim of the study and all the phases followed to achieve the aim of the study. It has also described the adapted conceptual framework that is used to guide the development and validation of PTSD psychological management guidelines for rape survivors. PTSD psychological management guidelines for rape survivors was developed and validated. The study was sent for language editing (See Appendix G).

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SECTION TWO: MANUSCRIPTS

Section two consists of six manuscripts. Manuscript one, two, three, five and six were written following the Journal of Psychology in Africa (JPA)'s guidelines. See JPA guidelines for authors in Appendix H. The fourth manuscript was written following the African Journal of Nursing and Midwifery (AJNM)'s guidelines, see guidelines for authors in Appendix I. The first and second manuscript are published in JPA and fourth manuscript is accepted for publication in AJNM whilst the third, fifth and six manuscripts are submitted for publication in JPA but still under review. It should be noted that all the tables and figures of all non-published manuscripts written following JPA are not placed at the end of each manuscript purposefully to aid the flow within the manuscript. Rather, they are placed in between the text of each manuscript to simplify reading and examination of this PhD thesis and avoid referring to the table after reading the whole manuscript.

1. Manuscript one: Psychological management intervention guidelines for rape survivors with Post-Traumatic Stress Disorder (PTSD): An exploratory systematic review

(Published in JPA)

Abstract

This exploratory systematic literature review aimed to characterise the current evidence on psychological management intervention guidelines for use with rape survivors with post-traumatic stress disorder (PTSD) symptoms. For the data searches we accessed the following electronic databases: Google Scholar, Science Direct, EBSCOhost, and PsychInfo. We utilised search terms with variations of the following key words: psychological management guidelines of PTSD*, rape survivors*. Inclusion criteria were guidelines for rape survivors with PTSD that consider referral, treatment, and preventive and health promotion in an international setting. We excluded guidelines that did not address PTSD resulting from rape in an international setting. We employed a narrative synthesis data analysis approach to integrate the evidence from across studies. Findings suggest prevalent guidelines for rape survivors with PTSD focus on cognitive behavioural therapy and other psychological management interventions in highly specialised areas and Primary Health Care (PHC) settings in international countries, but not in other countries such as South Africa. Emerging guidelines are needed for PTSD psychological management interventions in rape care clinics situated in South Africa

Keywords: psychological management interventions or guidelines of PTSD, rape survivors

Introduction

The experience of sexual rape is a significant factor contributing to post-traumatic stress disorder (PTSD) (Breslau, 2000; Klump, 2006; Masho & Ahmed, 2007; Ullman, Filipas, Townsend, & Starzynski, 2007). Global prevalence estimates for PTSD among rape survivors range from 17 .3% in Australia (Creamer, Burgess, & McFarlane, 2001) to about 76% in the United States of America (USA: Littleton & Henderson, 2009). In South Africa (SA), PTSD among rape survivors is estimated at around 21 .3% (Nöthling, Lammers, Martin, & Seedat,

2015). The use of psychological management interventions to treat PTSD resulting from rape experiences is universal (AmoneP'Olak, Elklit & Dokkedahl, 2017). In South Africa there is a guideline that is used to treat PTSD among general population consulting in private institutions. However, this specified guideline does not cater for those who consult in public institutions (Emsley, Hawkridge, Potocnik, Seedat, Flisher, Stein & Szabo 2013). Currently, in South Africa many rape victims are managed in Thuthuzela Care Centres (TCCS) embedded within public hospitals in communities where report of rape incidences is high (United Children's Fund, Unicef, 2005). However, what is sorely lacking is evidence of the types of guidelines currently used and the treatment interventions, which are intended to manage rape survivors diagnosed with PTSD. In particular, there is a lack of evidence on stated or implied guidelines from rape care clinics in a public institutional setting in South Africa. This exploratory systematic review aims to summarise the evidence on psychological management interventions for health professionals working with rape survivors who exhibit PTSD symptoms

Goal of the study

We utilised an exploratory systematic review applied to the following items: (i) Were the appropriate stakeholders involved in the development of the guidelines? (ii) Are the groups to which guidelines apply or do not apply clearly stated? (iii) Is potential bias eliminated and what is the validity of the guidelines? (iv) What is the level of supporting evidence identified for each recommendation? (see also Newhouse, Dearholt, Poe, Pugh and White, 2007). As such, this study aimed to summarise the evidence on psychological management guidelines for use by professionals working with PTSD among rape survivors. Psychological management guidelines are important for benchmarking evidence-based standards of care to manage PTSD post the rape experience.

Methods

Search procedure

We searched from the following databases for relevant publications from 2000 to 2019: Google Scholar, Science Direct, EBSCOhost, PsychInfo, Medline JSTOR, and South African sources including the National Department of Health (NDoH), and the National Aids Convention of South Africa (NACOSA). The first author did the initial search and reviewed the guidelines to assess if they met the Population, Intervention, Comparison, Outcome and Time frame (PICOT: Riva, Malik, Burnie, Endicott, & Busse, 2012) strategy and clinical practice guideline appraisal criteria (Newhouse, Dearholt, Poe, Pugh, & White, 2007). Thereafter, the reviewed guidelines were interrogated by the second author to confirm if those guidelines adopted psychological management interventions to lessen the symptoms of PTSD as experienced by rape survivors. A total of 1 090 articles and guidelines were found in the initial search. However, after a rigorous process of selection using the inclusion criteria, only five guidelines were finally accepted for review as reflected in Figure 1

Inclusion criteria

The inclusion criteria were publications that explicitly addressed referral, treatment, and preventive and health promotion guidelines for rape survivors with PTSD in an international setting. Moreover, the guidelines had to be written in English and used as the current treatment guidelines of the country or context concerned.

Exclusion criteria

This study excluded publications which did not describe referral, treatment, and preventive and health promotion guidelines for rape survivors with PTSD in an international setting. Data analysis We utilised the critical appraisal process tool (Newhouse et al., 2007) to summarise the evidence. In using the tool, we considered the extent to which the guidelines applied to

psychological management of PTSD in rape survivors across the domains of care: referral, treatment, and preventive and health promotion. See Table 1 for a summary of the studies included

Table 1. Critical appraisal process

1. Psychological management treatment intervention option 1	Author (s)	Country where the guideline is developed	Population	Clinical practice guideline appraisal		
				Criteria	**Yes**	**No**
Individual and group trauma focused- CBT	Foa et al. (2000); NICE (2005); Foebes at al (2007); WHO (2013)	USA, United Kingdom, Australia and Switzerland	Different types of trauma however, the study only focused on adult sexual survivors of rape	Were appropriate stakeholders involved in the development of this guidelines?	✓	
				Are groups to which guidelines apply and do not apply clearly stated?	✓	
				Has potential bias been eliminated?	✓	
				Were guidelines valid (reproducible search, expert consensus, independent review, recency and level of supporting evidence identified for each recommendation)?	✓	
				Are recommendations clear?	✓	
Pertinent conclusions and recommendations from the guidelines	Individual trauma focused CBT was listed as one of the outpatient psychological management interventions that can be used to manage PTSD effectively post rape experiences among the guidelines developed in USA, UK, Australia and other countries represented by WHO. These guidelines recommended that rape survivors who are diagnosed with PTSD must receive at least eight to twelve sessions of trauma focused CBT to lessen PTSD symptoms. It should be noted that the evidence of Randomized Control Trial studies (RTC) that are used to grade the effectiveness of this intervention in these guidelines is mostly from the USA. However, the WHO guideline highlighted that it is better to consider individual CBT because is more effective than the use of group CBT.					
2. Psychological management treatment intervention option 2	**Author (s)**	**Country**	**Population**	**Clinical practice guideline appraisal**		
Exposure therapy	Foa et al. (2000); NICE (2005), Foebes at al (2007); WHO (2013)	USA, United Kingdom, Australia and Switzerland	Different types of trauma however, the study only focused upon adult sexual survivors of rape	**Criteria**	**Yes**	**No**
				Are groups to which guidelines apply and do not apply clearly stated?	✓	
				Has potential bias been eliminated?	✓	
				Were guidelines valid (reproducible search, expert consensus, independent review, recency and level of supporting evidence identified for each recommendation)?	✓	
				Are recommendations clear?	✓	

Pertinent conclusions and recommendations	All the guidelines recommended ET as one of the effective psychological interventions that can be used to lessen PTSD post rape experiences. However, the guideline was developed in the USA, and it is stated that ET was found to be the most effective psychological management intervention of PTSD compared to other interventions post traumatic experiences.

3. Psychological management treatment intervention option 3	Author (s)	Country	Population	Clinical practice guideline appraisal		
				Criteria	Yes	No
Eye movement desensitization and reprocessing	Foa et al. (2000); NICE (2005), Foebes at al (2007); WHO (2013)	USA, Australia, UK and Switzerland	Different types of trauma however, the study only focused among adult sexual survivors or rape	Were appropriate stakeholders involved in the development of this guidelines?	✓	
				Are groups to which guidelines apply and do not apply clearly stated?	✓	
				Have potential biases been eliminated?	✓	
				Were guidelines valid (reproducible search, expert consensus, independent review, recency and level of supporting evidence identified for each recommendation)?	✓	
				Are recommendations clear?	✓	

Pertinent conclusions and recommendations	All the guidelines used in this review illustrated that EMDR is the best treatment for PTSD and it should be administered at least eight to twelve times following traumatic experiences.

4. Psychological management treatment intervention option 4	Author (s)	Country	Population	Clinical practice guideline appraisal		
				Criteria	Yes	No
Stress management	Foa et al. (2000); NICE (2005), Foebes at al (2007); WHO (2013)	USA, Australia, UK and WHO Switzerland	Different types of trauma however, the study only focused among adult sexual survivors or rape	Were appropriate stakeholders involved in the development of this guidelines?	✓	
				Are groups to which guidelines apply and do not apply clearly stated?	✓	
				Have potential biases been eliminated?	✓	
				Were guidelines valid (reproducible search, expert consensus, independent review, recency and level of supporting evidence identified for each recommendation)?	✓	
				Are recommendations clear?	✓	

Pertinent conclusions and recommendations	All the guidelines used in this review illustrated that stress management cannot be regarded as an effective PTSD psychological management intervention. However, in the case of a lack of resources, the WHO guideline recommends the use of stress management in Primary Health Care (PHC) facilities in resource constrained areas.

5. Psychological management treatment intervention option 5	**Author (s)**	**Country**	**Population**	**Clinical practice guideline appraisal**		
				Criteria	**Yes**	**No**
Selective serotonin reuptake inhibitors	Foa et al. (2000); NICE (2005), Foebes at al (2007)	USA, Australia, UK	Different types of trauma however, the study only focused among adult sexual survivors or rape	Were appropriate stakeholders involved in the development of this guidelines?	✓	
				Are groups to which guidelines apply and do not apply clearly stated?	✓	
				Have potential biases been eliminated?	✓	
				Were guidelines valid (reproducible search, expert consensus, independent review, regency and level of supporting evidence identified for each recommendation)?	✓	
				Are recommendations clear?	✓	

Pertinent conclusions and recommendations	These guidelines recommended SSRIs as one of the treatment options that can be considered for treatment of PTSD post traumatic experiences.

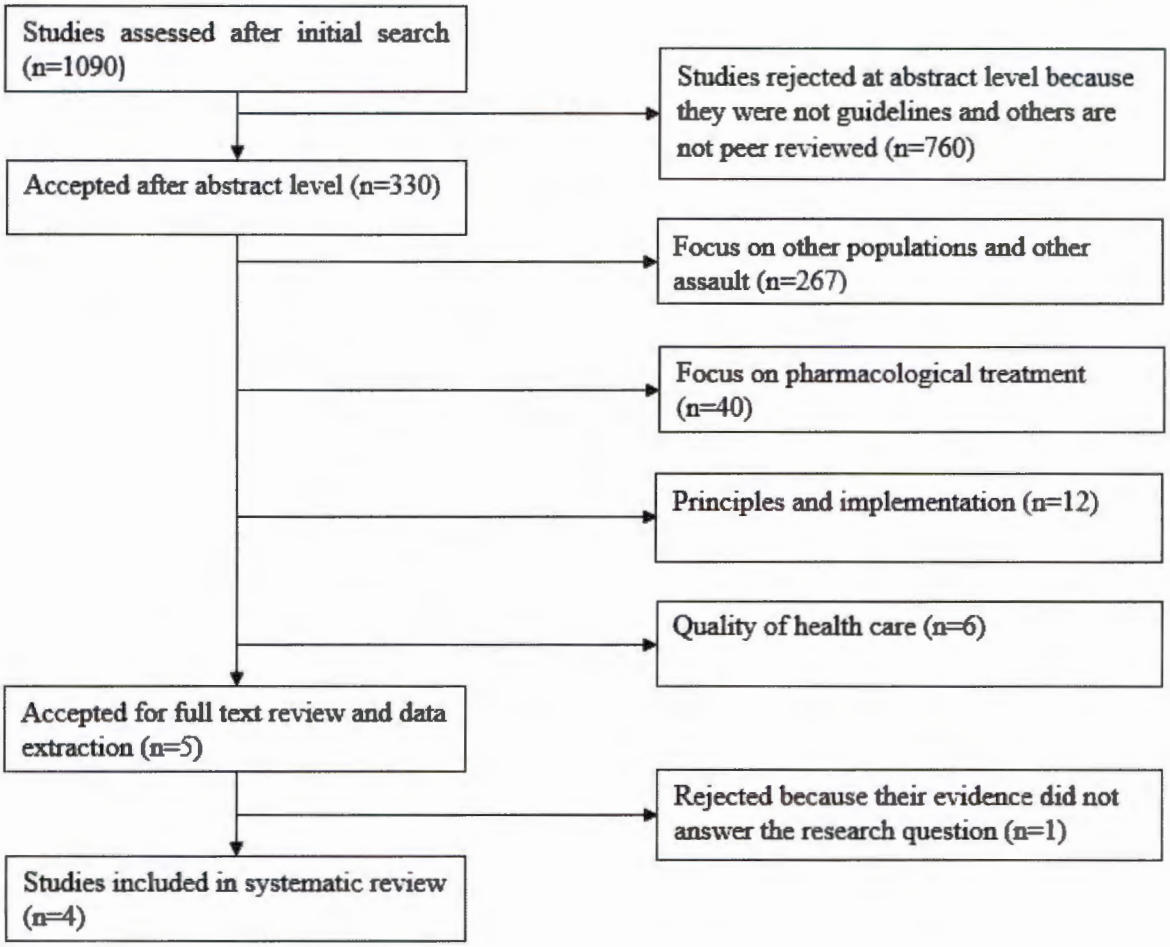
6. Psychological management treatment intervention option 6	**Author (s)**	**Country**	**Population**	**Clinical practice guideline appraisal**		
				Criteria	**Yes**	**No**
Non-directive therapy, psychodynamic therapy and systemic psychotherapy	Foa et al. (2000); NICE (2005), Foebes at al (2007)	USA, Australia, UK	Different types of trauma however, the study only focused among adult sexual survivors or rape	Were appropriate stakeholders involved in the development of this guidelines?	✓	
				Are groups to which guidelines apply and do not apply clearly stated?	✓	
				Have potential biases been eliminated?	✓	
				Were guidelines valid (reproducible search, expert consensus, independent review, regency and level of supporting evidence identified for each recommendation)?	✓	
				Are recommendations clear?	✓	

Pertinent conclusions and recommendations	The three listed guidelines above illustrated that non directive therapy, psychodynamic therapy and systematic psychotherapy were not recommended as interventions that can be used to treat PTSD post rape experiences.

Results and discussion

The results of this review support those of numerous previous studies (Bisson, Ehlers, Matthews, Pilling, Richards, & Turner, 2007; Foa, Keane, Friedman, & Cohen, 2008; Kirkpatrick & Heller, 2014; Posmontier, Dovydaitis, & Lipman 2010; Resick, Nishith, & Griffin, 2003; Shubina 2005), of the effectiveness of individual trauma focused-CBT, exposure therapy, Eye Movement Desensitisation and Reprocessing (EMDR), provision of Selective Serotonin Reuptake Inhibitors (SSRIs), supportive interviews and psychological management interventions guidelines to lessen PTSD symptoms postrape experiences. The results of this review illustrated that group trauma focused-CBT has less effect on PTSD management after a rape experience than other interventions, for example individual CBT. This result differs from that of Bisson and colleagues (2007) who illustrated that group trauma focused-CBT is effective in managing PTSD postrape experiences. Furthermore, non-directive therapy, psychodynamic therapy, and systemic psychotherapy appear to be less effective in managing PTSD post-rape experience (see also Bisson & Andrew, 2009; Forbes, Creamer, Phelps, Bryant, McFarlane, Devilly, & Newton, 2007; Ramchandani & Jones, 2003).

<Insert figure 1 here>



Conclusion

There are no specific guidelines that can be used by health care practitioners to assess, manage, and treat PTSD postrape experiences in rape care clinics situated in South African settings . We recommend the development of South African context specific psychological management interventions guidelines that will be used to manage PTSD post-rape experiences in order to optimise treatment and rehabilitation care of rape survivors

Limitations and recommendations

This review only focused on PTSD psychological management interventions, and as such, it cannot be generalised to other psychological problems associated with rape experiences. Furthermore, our study findings must be understood with the limitation that the effectiveness of psychological management interventions in these guidelines were based on studies conducted in the USA and UK. There is a need for documentation testing of guidelines specific to South African settings or contexts. South Africa, for example, annually reports among the highest rape incidences world-wide (South African Police service, 2017). Furthermore, 74 .5% of rape survivors in a specific region of South Africa were diagnosed with PTSD (Sepeng & Makhado, 2018). This indicates that survivors of rape are prone to PTSD without evidence of how it is assessed, managed or treated in rape care clinics situated in South Africa. This study is a small instalment towards understanding the lack of PTSD psychological management interventions in Africanist settings against an international background.

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a0ae3000000/ Guideline-for-the-treatment-of-patients-with-acute-stressdisorder-and-posttraumatic-stress-disorder .pdf

2. Manuscript two: Correlates of prevalence of Post-Traumatic Stress Disorder diagnosis among rape survivors in North West Province: Results and implications of a South African study

(Published in JPA)

Abstract

This study aimed to describe factors associated with the experience of Post-Traumatic Stress Disorder (PTSD) among rape survivors. Participants were female survivors attending a treatment centre in South Africa (black = 85%, coloured = 15%; age range = 18 to 55 years). Data were collected through interviewing all rape survivors who agreed to participate in this study, using the Post Traumatic Diagnostic Scale-5 (PDS-5). Descriptive statistics, chi-square, phi-crammer, and regression analysis were used to determine the relationship of PTSD and the demographic data. About 74 .5% of rape survivors had high PSTD, and PSTD symptoms were most elevated among those with high religiosity. These results show that PTSD is a reality for the majority of rape survivors, and that those with a strong religious belief system are at elevated risk for PTSD.

Keywords: prevalence of PTSD, rape, raped woman or survivors, South Africa

Introduction

According to the World Health Organisation (WHO), approximately 35% of women worldwide experience sexual assault or rape in their lifetime (WHO, 2016) . The experience of rape is a strong predictor of Post-Traumatic Stress Disorders (PTSD; Edwards, 2005; Littleton, Buck, Rosman, & Grills-Taquechel, 2012; Ullman, Filipas, Townsend, & Starzyinki, 2008) . PTSD is defined as a mental health condition that is elicited by a petrifying incident, whether a person is experiencing it or witnessing it (Osei-Bonsu, Bolton, Stirman, Eisen, Herz, & Pellowe, 2017). Symptoms of PTSD may include flashbacks, nightmares, severe anxiety, as well as uncontrollable thoughts about the event (Osei-Bonsu et al ., 2017) . Untreated PTSD following rape experiences is associated with long-term morbidity, mortality, economic burden, impairment in occupation, impaired social functioning, depression, substance abuse, and other risks to health (Zinzow, Resnick, McCauley, Amstadter, Ruggiero, & Kilpatrick, 2010). In rape survivors, PTSD typically manifests after six weeks, impairing the psychological functioning of survivors (Cassano & Fava, 2002) . About 65–81% of rape survivors in the USA and the UK reported with PTSD (Kilcommuns, Morrison, & Lobban, 2008; Ullman,

Starzynski, Long, Mason, & Long, 2008) . In contrast, a South African study reported a much lower 23 .3 % of rape survivors with PTSD post rape experiences (Nöthling, Lammers, Martin, & Seedat, 2015). It is unclear why there is this wide difference in self-reported PTSD symptoms between the USA and UK, and South African settings. Survivors of rape experience can be from any social class or educational background; although a greater proportion of rape survivors may be from violence-prone lower socio-economic status (SES) neighbourhoods (Ssenyonga, Owens, & Olema, 2012). Additionally, survivors of rape from deprived communities are less likely to report having been victimised from fear of retaliation or being disbelieved (Dosekun, 2007). Moreover, social services in low-income neighbourhoods may not prioritise sexual health safety (García-Moreno, Hegarty, d'Oliveira, Koziol-McLain Colombini, & Feder, 2015). This may result in many rape survivors being discouraged from reporting or seeking treatment care. Study goals This study aimed to explore factors associated with PTSD among rape survivors at a treatment centre in South Africa, a developing country . We sought to address the following questions:

What is the prevalence of PTSD among rape survivors consulted in Thuthuzela Care Centres (TCCs) of the North West Province of South Africa?

What is the relationship between PTSD and the demographic data among rape survivors consulted in TCCs of the North West Province of South Africa?

Method

Participants and setting

Participants were 98 of 137 rape survivors attending a treatment centre in the North West Province of South Africa (see Table 1). Their age range was from 18 to 55 years. Sixty-five percent of the survivors who participated in this study were not married. About 48% of the survivors had less than high school education and 71% of them were unemployed. Eighty-five

percent of the survivors self-reported to practising Christianity, whereas 55% selfidentified traditionalist in culture.

Measures

The participants completed the Post Traumatic Diagnostic Scale-5 (PDS-5; Foa, McLean, Zang, Zhong, Powers, Kauffman, & Knowles, 2016). Additionally, they selfreported their demographic information; including ethnicity, age, marital status, education, work status, religion, rape report, and cultural belief system. The PDS-5 comprises of 24 items to measure survivor experiences of unwanted upsetting memories, bad dreams or nightmares, and perceptions of re-living the traumatic event or feeling as if it were actually happening. The items were scored on a 4-point Likert scale including 0 = only one time; 1 = once in a while; 2 = half of the time; and 3 = almost always. The reliability of scores from the PDS-5 from a previous study conducted in the United States of America was 0 .95 (Foa et al., 2016). In the present study, scores from the PDS-5 achieved a reliability of 0 .89.

Procedure

The study was approved by the School of Nursing Science Board and the Ethics Committee of the Faculty of Agriculture, Science, and Technology (FAST) of the North-West University (NWU; # NWU-0477-17-A9). The Department of Health (DoH) in the North West also approved the study. Participants signed informed consent to participate in the study with assurances that their participation was voluntarily and that they had the right to terminate their participation at any stage without any penalty or discrimination

Table 1. Demographic information

Characteristics	Frequency (n=98)	Percentages (%)
Sociodemographic:		
Age		
From age 18 to age 30	72	73
From age 31 to age 43	18	18.4
From age 44 to age 55	8	8.2
Ethnicity		
Blacks	85	85%
Coloureds	15	15%
Marital Status		
Never married	64	65%
Married	34	35%
Level of Education		
Less than matric	47	48%
Matric	36	38%
Diploma/Degree	15	10%
Work Status		
Unemployed	70	71%
Employment	38	29%
Religion		
Christian	85	85%
Muslim or other	15	15%
When was rape reported		
At night	35	36%
During the day	63	64%
Importance of Religion		
Not at all important	24	25%
Somewhat important	32	33%
Very important	42	42%
Cultural believe system		
Yes	54	55%
No	44	45%
Importance of culture		
Not at all	53	54%
Somewhat important	21	24%
Very important	24	25%

Data analysis

We utilised the Statistical Package for Social Science (SPSS) version 25 for the data analysis (Babbie, Wagner III, & Zaino, 2018). Data analysis consisted of three phases. First, we computed descriptive statistics to summarise and describe the prevalence of PTSD among survivors of post rape experiences by demographics. Second, we applied the Chi-square ($\chi 2$) test and Phi Cramer's (φc) to measure the associations between categorical or nominal variables in relation to PTSD diagnosis. Finally, we computed regression analysis to predict PSTD severity from sociodemographic variables

Results

The results of this study revealed that 74 .5% of rape survivors presented PTSD post rape experiences. The prevalence of PTSD diagnosis in this study was comparable to that reported in the UK and the USA at 65-81% (Kilcommons et al., 2008; Ullman et al., 2008) and much higher than the 23 .3% of prevalence of PTSD diagnosis in one of the studies conducted in Cape Town, South Africa (Nöthling et al., 2015). As indicated in Table 2, there were no significant differences in PTSD experience by age, marital status, and level of education; with most of the survivors having less than matric, diagnosed with PTSD ($p> 0$ .05). Similarly, there was no difference in PSTD diagnosis by religion, work status, or cultural orientation. These findings are contrary to previous studies (see for example Ben-Ezra, Sternberg, Berkley, Eldar, Glidai, Moshe, & Shrira, 2010; Campbell, Dworkin, & Cabral, 2009; Nagel, Matsuo, McIntyre, & Morrison, 2005) that reported prevalent PTSD diagnosis by level of education, marital status, employment status, as well as both religious and cultural belief systems. Nonetheless, those with religiosity self-reported with higher PTSD symptoms. As indicated in Table 3, following regression analysis, the importance of religion was a significant predictor of PTSD among rape survivors with $\beta = 1$ .35, $t = 2$ .99, $p <0.004$. Additionally, religion showed a significance of proportion of variance with adjusted $r2 = 0$ .129, $F = 0$ .003n, $p <0$ .003n. In this regard, it was

only 34% of rape survivors who saw religion as very important in their lives, who were mostly affected by PTSD symptoms. Ben-Ezra and colleagues (2010) and Herman (1992) stated that the effects of rape changes how one believes in God, resulting in a lower religious belief system because survivors are most likely to feel abandoned by the faith they had in God. This could mean that, even if the survivors of this study see religion as important in their lives, they can still be prone to post rape complications such as PTSD because of the hope they had in God. In contrast to this, Calhoun and Tedeschi (1998) reported that, in some cases, traumatic events are likely to strengthen one's belief system and therefore prevent negative consequences that may result from rape

Table 2. PTSD cross tabulations with religion

Demographic Information	PTSD Score		Significance value(p>.001)or (p<.001)	Symmetric measures
Sociodemographic:	*No PTSD:*	*Having PTSD:*	*X^2 (P-value):*	*Phi Cramer's V:*
Age			1.9600 [a] (.375)	.141 (.375)
From age 18 to age 30	21%	51%		
From age 31 to age 43	3%	15%		
From age 44 to age 55	1%	7%		
Marital Status			.107 [a] (.743)	.033 (.748)
Never married	17%	47%		
Married	8%	26%		
Level of Education			2.171 [a] (.338)	.149 (.338)
Less than matric	9%	38%		
Matric	12%	24%		
Diploma/Degree	4%	11%		
Work Status			.193 [a] (.660)	-.044 (.660)
Unemployed	17%	53%		
Employed	8%	20%		
The time for reporting s the rape			1.004 [a] (.316)	-.101 (316)
During the day	63	64%		
At night	35	36%		
Religion			.283 [a] (.595)	.054 (.595)
Christian	22%	61%		
Muslim or other	3%	12%		
Importance of religion			10.143[a] (.006)	.322 (.006)
Not all important	12%	12%		
Somewhat important	5%	27%		
Very important	8%	34%		
Cultural believe system			.011 [a] (.917)	.011 (.917)
Yes	14%	40%		
No	11%	33%		
Importance of culture			2.256 [a] (.324)	.152 (.324)
Not at all important	12%	41%		
Somewhat important	8%	13%		
Very important	5%	19%		

Table 3. Regression analysis of PTSD and the demographic data such as the importance of religion and the time the rape was reported at the TCCs

Model	R	R^2	Adjusted R^2	SE		
	PTSD score> 47 (Selected)				**F**	**Sig.**
12	.359[l]	.129	.108	.331	**.003[n]**	**.003[n]**

Coefficients[a,b]

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
12	(Constant)	1.732	.149		11.596	.000
	Importance of religion	.135	.045	**.308**	**2.991**	**.004**
	Time rape occurred	-.125	.075	-.173	-1.675	.098

Model 12 Predictors: Constant, importance of religion and rape reported be it during the day or at night

Model 12 (a). Dependent Variable: PTSD score

Model 12 (b). Selecting only cases for which PTSD> 47

Limitations

The study only assessed prevalence of PTSD diagnoses in one district of South Africa and therefore the results of this study cannot be generalised to other regions of the country.Additionally, as the sample size was small, the findings could be unreliable.

Conclusion

In conclusion, PTSD post rape experiences are a reality for the majority of survivors. Furthermore, those with a strong religious belief system are at elevated risk for PTSD diagnosis, calling for the need to screen for religiosity in the treatment of rape survivors

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support. They also acknowledge all the rape survivors who agreed to participate in this study to share their experiences with the researchers

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3. Manuscript three: Present Practices of Rape Care Management in Thuthuzela Care Centres of the North West Province

(Submitted and under review to JPA refer to JPA in appendix H)

Abstract

This study was conducted with the aim to determine and describe present practices of rape care management given among rape survivors consulted in Thuthuzela Care Centre in the North West Province. Following a descriptive analysis, the results of this study showed that rape survivors received acute medical management, for example management of sexual transmitted infections, when they report rape. Specific to mental health, these results illustrated that only a few rape survivors received acute mental health care, which includes crisis management and counselling, during day three of follow-up care visits. These results showed that no one among rape survivors received assessment and management of Post-Traumatic Stress Disorders during day four of follow-up care visit. Therefore, recommendations such as the need to explore and describe the practitioner's perceptions regarding the present practices of PTSD psychological management were made for the development and validation of PTSD psychological management.

Keywords: Rape, rape care, rape management, raped woman, or survivors, South Africa

Introduction

Rape experiences lead to PTSD consequences in some parts of the world, including the North West Province of South Africa (Ullman, Filipas, Townsend, & Starzynski, 2008; Nöthling, Lammers, Martin, & Seedat, 2015; Sepeng & Makhado, 2018). The assessment of PTSD post-rape experiences has to begin from four weeks and onwards (American Psychiatric Association, 2013). When PTSD diagnosis is confirmed at four weeks, management should immediately be started (Foa, McLean, Zang, Zhong, Powers, Kauffman, Rauch, Porter, & Knowles, 2016; Bryant, 2007).

The effective management that should be employed immediately following the confirmed diagnosis of PTSD is individual or group Cognitive Behavioural Therapy (CBT), Exposure Therapy (EX), Cognitive Processing Therapy (CPT) and Eye Movement Desensitization and Reprocessing (EMDR) (Resick, Williams, Suvak, Monson, & Gradus, 2012; Rothbaum, Houry, Heekin, Leiner, Daugherty, Smith, & Gerardi, 2008). The National Institute for Health and Care Excellence [NICE] (2005); Foa, Keane and Friedman (2000) reported that the effectiveness of PTSD psychological management can only be seen among survivors who had a minimum of eight sessions to a maximum of twelve sessions with their mental health care practitioner. Therefore, this means that rape survivors diagnosed with PTSD need several return dates to meet with the mental health care practitioner in order to ensure continuity of care leading to less symptoms of PTSD.

Prior to the diagnosis and management of PTSD, Qi, Gevonden and Shalev (2016) and the Department of Health (2003) stated that rape survivors are supposed to receive crisis management and/or debriefing management at least during their first follow-up visit care and that should be given before four weeks. Qi et al (2016) stated that the main aim of giving rape survivors crisis management and/or debriefing is to use it as a risk indicator for those who may

likely develop long lasting mental health care disorders, for example PTSD. However, Linden (2011); MullickTeffo-Menziwa, Williams and Jina (2010) and the Department of Health (2003) indicated that rape survivors need to receive acute medical management when they report rape.

That acute medical management should include injury management and forensic examination, provision of counselling and treatment of Human Immunodeficiency Virus (HIV) (Linden, 2011; Mullick et al., 2010; Department of Health, 2003). Added to that, rape survivors should receive counselling and management of Sexual Transmitted Infections (STIs) and counselling and management of pregnancy immediately (Linden, 2011; Department of Health, 2003; Mullick et al, 2010; Killian, Suliman, Fakier, & Seedat, 2007). Therefore, this information shows that rape survivors need to receive comprehensive medical immediately when the rape is reported and receive acute and chronic mental health care management in different stages of follow-up care visits.

In an attempt to provide comprehensive health care management when rape is reported and during follow-ups, the developed and the developing countries introduced one rape station treatment care centre (Goldberg & Duffy, 2003; Patel, Roston, Tilmon, Stern, Roston, Patel, & Keith, 2013) known as Thuthuzela Care Centre in South Africa (Department of Health, 2003). The aim of introducing a rape care treatment centre was to gather all Multi-Disciplinary Team (MDT) members such as nurses, doctors, social workers, psychologist as well as lay counsellors to provide comprehensive management among rape survivors (Jina, Jewkes, Christofides & Loots, 2013; Patel et al.,2013; Kilonzo, Theobald, Nyamato, Ajema, Muchela, Kibaru, Rogenad, & Taegtmeyera, 2009; Campbell, 2008). Regardless of that, studies done by Patel et al (2013) and Kim, Askew, Muvhango, Dwane, Abramsky, Jan, Ntlemo, Chege and Watts (2009) highlighted that it is uncommon for rape survivors to receive comprehensive

medical and mental health care management after reporting rape in some rape care clinics in the United States of America (USA) and in the Gauteng province of South Africa.

However, Kim et al (2009) only looked at the provision of comprehensive acute medical care management that is acute medical care, STI's, pregnancy management, HIV management and crisis management, only without incorporating PTSD and/or other chronic mental health care disorders. Despite this, there is no study that described the provision of acute medical and both acute and chronic medical care management given to rape survivors in the North West Province (NWP). This information will assist the researcher to provide evidence of related to rape care management including the present PTSD psychological management given to rape survivors which is deemed as a crisis in some of the African countries and that includes South Africa (Bass, Annan, McIvor Murray, Kaysen, Griffiths, Cetinoglu, & Bolton, 2013, Sepeng & Makhado, 2019). The purpose of this study is to describe the present practices of rape care management in Thuthuzela Care Centres of the North West Province. Based on that, the researchers of the study at hand sought to address the following questions:

What is the present acute medical care management given to rape survivors in TCCs of the NWP the time the rape is reported?

What is the present acute mental health care management given to rape survivors in TCCs of the NWP for day three of follow up care?

What is the present PTSD psychological management given to rape survivors in TCCs of the NWP for four weeks follow-up visits?

Method

Participants and setting

The study recruited 98 of 137 rape survivors who underwent treatment in rape care centres of the North West Province. The majority of rape survivors who participated in this study were black women with the mean (Mμ) age of 27.6 and standard deviation (SD) of 8.6 derived among survivors aged between 18 and 55 years old (see Table 1 below). The majority of participants (56%) were single, 48% of them had less than matric education and 71% had no employment. With regard to their belief system, 85% of the rape survivors believed in Christianity while 55% believed in Culture.

Table 1. Demographic information of the participants of this study

Characteristics	Frequency (n=98)	Percentages (%)
Sociodemographic:		
Age		
(Mμ ± SD)	27.6 ±8.6	
Ethnicity		
Blacks	85	85%
Coloureds	15	15%
Marital status		
Never married	64	65%
Married	34	35%
Level of education		
Less than matric	47	48%
Matric	36	38%
Diploma/Degree	15	10%
Work status		
Unemployed	70	71%
Employed	38	29%
Religion		
Christian	85	85%
Muslim or other	15	15%
Rape report		
At night	35	36%
During the day	63	64%
Importance of religion		
Not at all important	24	25%
Somewhat important	32	33%
Very important	42	42%
Cultural belief system		
Yes	54	55%
No	44	45%
Importance of culture		
Not at all	53	54%
Somewhat important	21	24%
Very important	24	25%

Measures

Rape survivors were interviews using a 15-item Comprehensive Medical Care Management (CMCM) survey instrument developed by Patel, Simons, Piotrowski, Shulman and Petraitis (2008). This survey was used in the study because it measures items of acute medical care that

are explanations of medical forensic examination needed, screening of STIs, pre-and post-counselling and treatment of HIV and pregnancy testing (Patel et al., 2008). This 15-item CMCM survey also measures acute mental health care management that includes counselling and long-term rape care disorders which are depression and PTSD (Patel et al., 2008).

However, for this study and long-term disorders, the focus was on the management of PTSD post-rape experiences. Rape survivors answered the questions asked in a CMCM instrument survey through indicating either Yes or No on the questions about the management received or not. The reason for adapting this CMCM survey instrument is that it has a relatively similar acute medical and acute mental health management proposed by national Department of Health sexual assault management in South Africa (DoH, 2003).

Procedure

Ethical considerations

The study received ethical clearance from the Faculty of Agriculture, Science and Technology of the North West University ethics committee; ethics number (NWU-0477-17-A9). The study also obtained permission from the Department of Health in the NWP, as well as permission from the hospital managers to collect data from the participants. Those who voluntarily accepted to participate in the study were given an informed consent form to sign.

The consent form explained that their participation was voluntarily and that they could withdraw from the study at any time without being subjected to any form of punishment or discrimination. For the purpose of anonymity, privacy and confidentiality, participants were told that no names would be attached to their responses and that the questionnaire would be coded and locked in the cupboard, with only the researcher having access.

Data analysis

Data analysis was achieved through the process of capturing, cleaning and analysing with the use of IBM (version 25) of Statistical Package for Social Science (SPSS) (Babbie, Wagner & Zaino, 2018). The demographic data and the type of management received from the onset of reporting rape and follow-ups needed for each survivors' post-rape experiences, were analysed using descriptive statistics (frequency and percentage) and were provided in table form (Table 1 and 2).

Results

The findings of this study and Campbell (2005) study showed that most of the rape survivors received acute medical care that included information about injury management and forensic examination, information regarding STIs and management related to it. Added to that, this study supports the findings of the study done by Henttonen, Watts, Roberts, Kaducu and Borchert's (2008) which illustrated that rape survivors receive provision of oral contraception when consulting in rape care clinics. However, these results differ with the findings of the study done by Campbell (2005) on the aspects of HIV management. The results of this study illustrated that most rape survivors received counselling and treatment for HIV when consulting in rape care clinics. Refer to Table 2.

Table 2. Provision of acute rape care management given to rape survivors

Acute medical care management	**At the time of presentation (n=98, %)**	
*1. **Injury management***	***Yes***	***No***
Information about possible injuries and injury management and review on injuries during follow-up visits	(n=92, 96%)	(n=6, 4%)
Explanations of medical forensic examinations needed	(n=95, 99%)	(n=3, 1%)
*2. **STIs management***	***Yes***	***No***
Information regarding STI	(n=92, 94%)	(n=6, 6%)
Prophylaxis /review on the side effects of STIs prophylaxis	(n=92, 94%)	(n=6, 6%)
3. **Emergency contraception**	**Yes**	**No**
Counselling	(n=95, 99%)	(n=3, 1%)
Provision	(n=78, 80%)	(n=20, 20%)
4. **HIV management**	**Yes**	**No**
Testing, including pre-and post-counselling	(n=98, 100%)	(n=0, 0%)
Prophylaxis and review of the side effects during follow-up visits	(n=74, 75%)	(n=26, 25%)
Acute mental health care management	for day three of follow up care post rape experiences	
5. Rape counselling	***Yes***	***No***
Where you scheduled to come for follow up care in day three, to receive:Trauma or rape crisis management, debriefing and information and enhancement about coping strategies –Rape Trauma Syndrome (RTS)	(n=21, 27%)	(n=77, 73%)
6. Chronic mental health care management	**For four weeks and onwards follow up care post rape experiences**	
Where you scheduled to come for follow up care in four weeks or after four weeks to receive: An assessment of PTSD from four weeks follow-up care and onwards :PTSD management from four weeks and onwards	Yes= (0%)	No (100)

The results of this study illustrated that only a few rape survivors have been scheduled and received acute mental health care management, which includes either trauma or crisis counselling management and or debriefing. The percentage (23%) of rape survivors who received acute mental health care management is relatively low compared to the percentage (46%-55.2%) of those who have received this management, in studies done by Patel et al (2013) and Kim et al (2009). Burgess and Clements (2006) explained that RTS for older rape survivors is at an acute stage of disorganisation and long-term stage of reorganisation. In addition, the Department of Health (2003) reported that provision RTS information given on day three of

the follow-up care visit post-rape experiences, is beneficial because it is likely to enhance survivor's coping strategies leading to possible mental health care recovery.

Therefore, this means that there is a need of giving all adult rape survivors information regarding RTS, debriefing and or trauma counselling because it may assist them to seek help or management of symptoms of Acute Stress Disorders (ASD) at an early stage to prevent the development of PTSD where possible. The results of this study showed that rape survivors were not scheduled for four weeks follow up care to receive PTSD assessment and management in rape care clinics. These findings supports Bass et al (2013) who reported that there is no evidence of how rape survivors diagnosed with PTSD are managed in African countries. Added to that, the findings of the recent literarure revealed that there is no guideline that can be used to manage rape survivors consulted in the TCCs of South Africa and that include the NWP (Sepeng & Makhado, 2019).

Conclusion

Survivors who consulted rape clinics situated in the North West Province, received adequate acute medical management post-rape experiences from the time when the rape was reported and during follow-up visits. However, there only few participants have received provision of acute mental health care management and no provision for PTSD management post-rape because no rape survivors was scheduled for an appointment of follow up care from four weeks onwards.The implication of not assessing and managing PTSD can compromise the health of rape survivors leading to comorbid disorders associated with PTSD, for example depressive disorders and/or indulging in substance abuse to cope with the effects of rape (Kilpatrick, Ruggiero, Acierno, Saunders, Resnick, & Best, 2003).

Recommendations and limitations

Therefore, this finding recommends the need to consider PTSD assessment as part of rape care with the aim of improving and providing adequate health care services relevant and needed to promote timeous mental health care recovery for rape survivors. PTSD assessment and management can be catered for during rape care management with the aid of developing and validating PTSD psychological management guidelines, used by health care practitioners to guide them with regard to the assessment and management of PTSD among rape survivors. There is a need to form a base line for developing PTSD psychological management guidelines through exploring and describing practitioners' perspective regarding the present practices of psychological management for rape survivors diagnosed with PTSD. That goes to exploring and describing the possible barriers that are inhibiting the provision of PTSD assessment in rape care clinics.

The study focused on the present practices of rape care management including both acute medical, acute and chronic mental health care for rape survivors consulted at TCCS of the North West Province and therefore, the results of this study cannot be generalized to other provinces of South Africa. Furthermore, the chosen methodology of this study cannot prove if the provided rape care management among survivors had been effective or not.

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4 Manuscript four: Post-Traumatic Stress Disorder psychological management for rape survivors: Practitoners' persepctives

(AJNM guidelines in Appendix I and see Accepted letter in Appendix J)

Abstract

South Africa has consistently had high reports on the prevalence of rape, and post-traumatic stress disorder (PTSD) is the most common mental healthcare problem associated with rape. However, it seems that the provision of mental healthcare services for rape survivors is an acute challenge in the North West province and South Africa in general. Thuthuzela care centres provide care for rape survivors and these centres are located in public hospitals that mostly have mental health institutions that are well equipped with mental healthcare practitionersto assist rape survivors. This study explored and described the perceptions of mental healthcare practitioners regarding the psychological management of rape survivors suffering from PTSD in the North West province in South Africa. The study used a qualitative exploratory, descriptive and contextual research design to explore and describe the perceptions of mental healthcare practitioners regarding the psychological management of rape survivors suffering from PTSD. Data were collected using the purposive sampling method among mental healthcare practitioners through focus group discussions. Tesch's method was used to analyse perceptions obtained from the participants. Five themes emerged: barriers to the psychological management of PTSD, assessments confirming diagnosis of PTSD, the use of various psychotherapeutic interventions, psychopharmacological management, and the involvement of various stakeholders. Therefore, recommendation is made for the implementation of effective psychotherapies such as debriefing, supportive counselling, trauma-focused cognitive behavioural therapy, the provision of selective serotonin reuptake inhibitors, and brain working recursive therapy for the management of PTSD from post-rape experiences. Recommendations for the development of psychological management guidelines for rape survivors suffering from PTSD are also made for future research.

Keywords: PTSD; psychological management; rape survivors; mental healthcare services for rape survivors; mental healthcare practitioners

Introduction and Background Information

It is estimated that close to 35 per cent of women worldwide experience rape and sexual assault (WHO 2016, 1). South Africa is known as the one country that reported a high prevalence of rape with 39 828 cases of rape per 100 000 citizens within the period March 2016 to March 2017 (SAPS 2017, 18). Among the nine provinces of South Africa, the rape cases in the North West province (NWP) increased relatively with the highest percentage of 5.3 per cent compared to the reported percentage in the year of 2015 to 2016 (SAPS 2017, 18). Therefore, these reported statistics call for investigations into the effects related to rape ordeals in this province.

Rape is associated with post-traumatic stress disorder (PTSD) more than any other mental health problems (Yehuda et al. 2015, 57). In order to confirm the diagnosis of PTSD, mental healthcare practitioners must have the knowledge of both conducting history taking and the use of a diagnostic scale aligned in accordance with the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) known as the Posttraumatic Diagnostic Scale for DSM-5 (PDS-5) (Foa et al. 2016, 1). When the PTSD diagnosis is confirmed, there is a need for employing early management of PTSD to promote healing among rape survivors (National Institute for Health and Care Excellence – United Kingdom [NICE-UK] 2015, 13). The management of rape-related ordeals in South Africa is provided by various professionals such as nurses, doctors, social workers, psychologists, victim advocates and police officers at the Thuthuzela care centres (TCCs) (Hazelwood and Burgess 2016, 18).

TCCs are mostly located in institutions providing mental healthcare services that can be used either as their referral system or as work in collaboration with the TCCs when they have survivors who require psychological management of PTSD. In addition, the TCCs are also located either in the urban and rural provinces such as the one in the NWP. In this instance, the role of mental healthcare practitioners such as counsellors or psychologists and psychiatrists is to provide counselling and management in the aftermath of traumatic events such as rape (Gordon 2016, 31). However, based on the researcher's personal experience, there is a challenge with regard to the lack of PTSD assessment and offering PTSD-related management for rape survivors at the TCCs in the NWP.

Furthermore, in the context of South Africa, Abrahams and Gevers (2017, 6), and García-Moreno et al. (2015,79, state that there are various reasons that hinder mental healthcare provision such as not seeing mental health as an emergency, the lack of clinical coordination of services, healthcare providers lacking the knowledge of providing mental healthcare management such as the psychological management of PTSD. In addition, Abrahams and Gevers (2017, 6); Greeson, Campbell and Fehler-Cabral (2016, 100) also illustrate that other reasons that hinder mental healthcare provision in South Africa entail the manner in which rape is handled by various stakeholders and their attitudes such as blaming the survivor, the lack of resources as well as survivors' responses to rape experiences such as self-blame, feelings of shame, fear, guilt, and late reporting.

However, in an attempt to deal with rape-related mental health problems in South Africa, the existing guidelines and protocols (Lin, Dean, and Ensel 2013, 23; Ochberg, 2013, 34) list social support and crisis interventions as mental healthcare interventions practically applicable to

post-rape care for survivors. Therefore, such interventions cannot cater for PTSD because the cure of PTSD symptoms needs at least eight to twelve sessions with a therapist (NICE-UK 2015, 17).

Furthermore, evidence has shown that psychological management methods such as cognitive behavioural therapy (CBT), specifically exposure therapy, behavioural techniques and cognitive restructuring techniques, and eye movement desensitisation and reprocessing (EMDR) were effective in the management of PTSD, other than supportive counselling and group CBT (Foa and McLean 2016, 24). In spite of evidence about the effectiveness of psychotherapies, the researcher deemed it necessary to conduct this study to generate further insights into the psychological management of PTSD among rape survivors, particularly in the NWP, South Africa.

Problem Statement

Rape-related services in South Africa are conducted in only one station called the TCCs (Jina and Thomas 2013, 19). The care commonly provided by a multidisciplinary team (MDT) to rape survivors in those TCCs encompasses HIV- and AIDS-related services, and forensic and medical examinations without the collaboration of other services such as mental healthcare. In relation to this, several barriers including all the problems related to the shortage of staff, the lack of specialisation in mental healthcare and the lack of knowledge with regard to the management of PTSD in South Africa also pose a challenge to the management of PTSD post-rape (Abrahams and Gevers 2017, 6; García-Moreno et al. 2015, 79; Greeson, Campbell, and Fehler-Cabral 2016, 100). The shortage of staff, the lack of specialisation and/or the management of PTSD in TCCs located in South Africa are supported by anecdotal evidence observed by the researchers where there are possibilities of rape survivors who are seen by nurses only while those aged 14 years and above are seen by social workers only in the TCCs located in the NWP.

The other anecdotal evidence observed by the researchers is that other TCCs facilities of the NWP do not have resident clinical psychologists nor social workers, except those hired by the lifeline centres. In this instance, the shortage of staff, the lack of knowledge as well as the lack of coordination of TCCs services may contribute to poor assessment and management of PTSD among the TCCs in South Africa, including the one in the NWP. Furthermore, PTSD is associated with comorbid mental healthcare problems such as substance use and depression (Armour et al. 2014, 422; Ullman et al. 2013, 2221). Therefore, this information clearly shows that the management of PTSD cannot be ignored in the provinces of South Africa, including the NWP. Hence, the researcher deemed it necessary to conduct the study that explored and described the perceptions of those managing PTSD, mostly in their work routine with the aim of improving mental healthcare service delivery to rape survivors by developing guidelines specific to post-rape care of PTSD that can be adopted and implemented in the context of South African TCCs.

Aim of the Study

The present study aimed to explore and describe the perceptions of mental healthcare practitioners regarding the psychological management of rape survivors suffering from PTSD in the NWP of South Africa in order to make recommendations for mental healthcare practitioners regarding the development of psychological management guidelines of PTSD for rape survivors within the province.

Research Methodology

Research Design

The study used a qualitative, exploratory, descriptive and contextual research design in order to explore the research problem and to identify possible solutions (Grove, Burns, and Gray 2013, 694). This design was appropriate for this study since the perceptions of mental healthcare practitioners regarding the psychological management of rape survivors suffering from PTSD emerged from their own submissions in the context of TCCs, allowing for thick descriptions of the emerging themes.

Study Setting

The study was conducted at four public mental healthcare institutions in the NWP. These four public mental healthcare institutions were purposively selected because this is where mental healthcare practitioners such as nurses, clinical psychologists, doctors, psychiatrists and social workers assigned to provide mental healthcare services to rape survivors could be found.

Population

The study targeted mental healthcare practitioners working in four public mental healthcare institutions in the NWP.

Sampling

The purposive non-probability sampling technique was used to collect data from mental healthcare practitioners employed in four public mental healthcare institutions in the NWP. The study sampled the mental healthcare practitioners who specialised and worked in mental healthcare institutions and who provided the psychosocial mental healthcare management in the NWP. All of the mental healthcare practitioners who participated in this study were identified through the help of the clinical manager of the MDT, the nursing manager, and the manager of social workers and the other one for psychology. The reason for choosing those that are working and specialised in mental healthcare is that they provided relevant and first-hand information with regard to the psychological management of PTSD that can be used among rape survivors.

Sample Size

Data saturation is defined as the number of accomplished interviews or elements for the data that is actually collected (Brink, Van der Walt, and Van Rensburg 2012, 145). The sample size of this study was therefore determined by the data saturation which was reached after four focus group discussions (FGDs).

Data Collection

The researchers collected data by conducting four semi-structured FGDs with six participants per group including nurses, doctors, psychologists and social workers. This led to a total number of 21 participants for all the conducted FGDs. An FGD is a process of gathering together a group of people who have similar backgrounds or experiences with the aim of discussing a specific problem of interest (Brink, Van der Walt, and Van Rensburg 2012, 152). Therefore, FGDs were appropriate for the study as the researchers targeted a specific group of people knowledgeable about mental healthcare, treatment and rehabilitation services. During the FGDs, the participants were asked about their perceptions regarding the psychological management of PTSD among rape survivors. The researchers adhered to the ethical principles of data collection such as tape recording, bracketing and making field notes.

Data Analysis

Tesch's method of qualitative data analysis as explained by Creswell and Plano Clark (2017, 44) was used to analyse all FGD perceptions obtained from the participants. Before the data analysis, the researchers transcribed the data from the recording tape verbatim. That was followed by grouping data from all the FGDs through quotations of the participants in each FGD.

Trustworthiness

The researchers adhered to the five criteria of trustworthiness: credibility, conformability, neutrality, dependability, and transferability, to ensure data quality (Moule, Aveyard, and Goodman 2016, 104). In the interests of credibility, the researcher built trust and rapport with the participants and wrote a valid report that presents the true perceptions of the participants. With regard to conformability, the researcher embedded the direct words of the participants to ensure authenticity and to avoid bias. In the interest of dependability, data coding and categorisation were done and given to a supervisor and a co-coder to cross check. Transferability was determined by data saturation of each FGD and applying the findings to other contexts in PTSD research.

Ethical Considerations

The researchers presented the study to the School of Nursing Science Board and the Human Research Ethics Committee of the Faculty of Agriculture, Science and Technology of the North-West University (NWU), ethics number (NWU-0477-17-A9), for ethical clearance. The researcher sought permission from the Department of Health in the NWP to conduct the study. The researcher presented the ethical clearances to the hospital managers for approval to collect data from the participants.

The researchers wrote an invitation letter to the participants requesting autonomous participation, and those interested signed informed consent forms concerning their participation in the study. In the interest of the respect for the persons, the consent form clearly specified the rights of the participants to terminate their participation in the study at any stage and to be ensured that they would not be penalised or discriminated against by the researchers (Grove, Burns, and Gray 2013, 694). The principle of beneficence is defined as an act of assistance, compassion and gentleness with a strong association of doing well to others,

including moral commitment (Grove, Burns, and Gray 2013, 694). In this study, the principle of beneficence with regard to compassion, gentleness, doing well to others as well as moral obligation was applied through informing the participants that they should inform the researcher when they experienced any form of physical and emotional discomfort so that the researcher can refer them for debriefing sessions with the mental healthcare practitioner. The arrangements were made with the hospital management and the mental healthcare practitioner who could offer debriefing sessions for those in need of those services for free. However, during the data collection of this study, none of the participants experienced or reported emotional or physical discomforts.

Furthermore, the principle of justice in this study was ensured through selecting the participants who are knowledgeable about the research problem at hand, which is the psychological management of rape survivors suffering from PTSD. The appointment date and time for data collection that the researchers had with the participants were honoured. During the FGDs, the participants and the hospitals were given code names used during the data collection to ensure confidentiality. However, at times, the participants used the real names of the hospitals and then the researcher recoded those names to make sure that the data remained anonymous. The names of the hospitals where the interviews were conducted as well as the interviews of the FGDs were coded and kept in a password-protected computer. Only the researchers could access the transcripts and in this manner privacy and confidentiality of the data were ensured.

Results and Discussions

This paper focused on the perceptions of mental healthcare practitioners regarding the psychological management of rape survivors suffering from PTSD in the NWP and the findings are discussed below.

Demographic Data

The study focused on 21 mental healthcare practitioners working in different public mental healthcare institutions and units consisting of nine nurses, four psychologists, four doctors and four social workers to represent all categories in one group. The FGDs were based on the perceptions of mental healthcare practitioners regarding the psychological management of PTSD and the results of this study are presented under themes, sub-themes as well as literature control to support the results of this study as proposed in Table 1.

Table 1: Perceptions of mental healthcare practitioners regarding the psychological management of PTSD

Themes	*Sub-themes*
Barriers to the psychological management of PTSD	• Disappearance of the rape survivors from the health system • Lack of human resources such as mental healthcare practitioners • Centralised psychosocial services • Inadequate training of mental health practitioners • Lack of school health programmes that deal with PTSD • Blame by various stakeholders
Assessments confirming diagnosis of PTSD	• History taking • Good clinical interviews or application of the PCL scale • Laboratory tests
Use of various psychotherapeutic interventions	• Debriefing (e.g. using the Rogerian approach) • Counselling in a TCC • Supportive counselling • Trauma-focused CBT • Brain Working Recursive Therapy (BWRT) • Family therapy
Psychopharmacological management	Selective serotonin reuptake inhibitors (SSRIs) such as fluoxetine (Prozac)
Involvement of various stakeholders	• Family, community and police involvement • Acceptance by family and community • Strengthening of collaboration among MDT members • Proper training of mental health practitioners and other stakeholders

Theme 1: Barriers to the Psychological Management of PTSD

Sub-themes that emerged from the barriers to the psychological management of rape survivors suffering from PTSD were the disappearance of the rape survivors from the health system, the lack of human resources such as mental healthcare practitioners, centralised psychosocial services, inadequate training of mental health practitioners, the lack of school health programmes that deal with PTSD and blame by various stakeholders. These sub-themes which emerged from barriers to the psychological management of PTSD are supported by the literature control below.

Disappearance of the Rape Survivors from the Health System was a barrier emphasised by the mental healthcare practitioners. The participants added that rape survivors have a tendency of reporting rape and then disappearing from the health system. Confirmation of this result is captured in an FGD with participants as indicated below:

> … there are those instances that the doctor will indicate that he has examined the patient. So after that rape survivors usually go home and disappear from the healthcare system.

Another participant added:

> Most of them will tell you that 'I went to see the psychologist in the hospital two or three times, he never called or made follow up and that was it'.

Kantor, Knefel and Lueger-Schuster (2017, 57) concur with these findings of this study, indicating that rape survivors have a tendency of being reluctant to seek services from healthcare systems. This is because rape survivors are uncomfortable with being asked about the type of clothes they were wearing during their rape incidences and their sexual history. Rape survivors also do not have adequate information about follow-up visits and many indicate a lack of warmth and a welcoming atmosphere when consulting in rape care centres (Chacko et al. 2012, 6). Therefore, the findings of this study indicate that negative interaction of mental healthcare practitioners with rape survivors could be regarded as a significant barrier to survivors using rape care services. This in turn could affect the health of rape survivors negatively and they consequently develop PTSD as the victims are intimidated and unable to consult for proper management specific to the rape conditions suffered possibly because of such post-rape experiences.

The lack of resources such as mental healthcare practitioners was emphasised in most of the FGDs as one the barriers to providing adequate care needed by rape survivors. This finding is confirmed by the following direct quotation:

> We are unable to assist those people effectively in psychiatry because of a shortage of mental health experts who specialise in the management of those people, for example in Hospital A we don't have psychologists in rape care centres. Sometimes we use social workers to counsel the patient or alternatively refer the patients to hospital X which is 200 to 250 kilometres from us, where counsellors are available.

This submission supports the findings by García-Moreno et al. (2015, 79) who indicate that some rape survivors come from rural areas and have to travel long distances to reach rape care services. The National Prosecuting Authority and the Department of Health staff lack the skills of performing vital assessments of problems related to mental health as well as referrals of survivors to psychologists and psychiatrists because those staff members claim that there are no available psychologists and psychiatrists, and that waiting lists for referrals are long (García-Moreno et al. 2015, 79). Therefore, these results confirm that the lack of access to healthcare, unskilled professionals, and poor coordination of available resources break the continuity of rape therapy which could possibly predispose survivors to certain development of PTSD.

Centralised psychosocial services was stated in an FGD as one of the barriers to providing optimum care to rape survivors. To support this perception, the participants gave an example of the decentralisation of services to primary healthcare (PHC) as an option that could be used to promote access to psychosocial services for rape survivors. One of the participants said:

> … because of our limited resources, I think rape issues can be decentralised to PHC level where the patient can be assisted to prevent complications such as depression, e.g. previously the patient was admitted with depression and at a later stage, it was picked up that the patient had been raped …

The findings of this study confirm that resource-constrained countries, such as South Africa, are unable to pay highly qualified mental healthcare practitioners (Becker and Kleinman, 2013, 72). Instead, Lund et al. (2012, 1359), and Petersen et al. (2011, 42 suggest that it is advisable to appoint dedicated but less skilled community mental healthcare (CMHCs) providers who would focus on basic counselling. However, the limitations of these CMHC providers are that they cannot perform the best available interventions for PTSD, for example CBT (NICE-UK 2015, 4) implying therefore that rape survivors diagnosed with PTSD would still be referred back to the hospital for care from skilled mental healthcare practitioners who can perform such interventions.

Furthermore, Abrahams and Gevers (2017, 7) have proven that mental healthcare in rape centres is not well-integrated nor even regarded as a priority. Deriving from these discussions, the results of this study point towards the decentralization of mental healthcare services at the rape care clinics because most of them are embedded within the hospitals. This would ease the burden for mental healthcare practitioners to schedule appointments with rape survivors at their clinics that is at the same hospital where the service provider works. Alternatively, the mental healthcare practitioner working with mental health-related disorders such as PTSD could empower other mental health providers to obtain formal training in mental health work in rape clinics to integrate the services provided at such sites with mental healthcare from an acute phase to a chronic phase of rape.

Inadequate training of mental health practitioners emerged in an FGD as one of the barriers to providing treatment to rape survivors diagnosed with PTSD. In support of this result one of the participants in an FGD stated that:

> … but if you have mental health practitioners that are not trained adequately you are going to get the poor services.

The results of this study, along with the findings of Abrahams and Gevers (2017, 7), suggest that the majority of staff working in rape clinics for counselling had no official training in mental healthcare, treatment and rehabilitation services because they had no understanding of the differences between mental illness and mental health. Their knowledge about rape care was based on acute phases, focusing strictly on forensic examinations, legal advocacy and the collection of biomedical data (Abrahams and Gevers 2017, 6). So the results suggest that mental health-related problems should be dealt with by mental healthcare providers who have formal training in mental health and they ought to start providing mental health care from the onset.

The lack of school health programmes that deal with PTSD was emphasised in an FGD as another barrier to the psychological management of PTSD. The participants indicated that these programmes are needed for proper, effective and efficient management of PTSD among learners. This finding was emphasised through a direct statement from an FGD. A participant said:

> Even our schools should have a health programme that addresses rape and that can also assist learners with PTSD in schools. A programme that educates our girls about reporting these incidents of rape and so forth.

It seems there is no current evidence to support these findings. However, these results are in line with those of a study by Kataoka et al. (2003, 316) who found that programmes like school trauma-focused CBT interventions have played a positive and significant role in meeting present unmet mental health needs of learners who were diagnosed with PTSD. Therefore, if these programmes are developed in schools and practised accordingly, they would increase access to healthcare for communities that need such programmes.

Blame by various stakeholders was emphasised as a serious barrier to the effective management of PTSD. In an FGD a participant offered an example in support of this barrier as quoted below:

> Blame game by various stakeholders stresses the client and prevents her from reporting the cases and which will prevent them from getting help from the onset and sometimes they only come when they are sick.

Greeson, Campbell and Fehler-Cabral (2016, 100) confirm this submission in indicating that being blamed by others was one of the reasons women do not report rape. These results suggest

that everyone who is involved with a survivor should avoid acting in a manner that makes the survivor undergo the blame game which could result in a total dissuasion from mental health services that aim either to prevent or to manage PTSD.

Theme 2: Assessments Confirming Diagnosis of PTSD

Sub-themes that emerged from assessments to confirm diagnosis of PTSD before the management of PTSD were history taking, good clinical interviews or a PCL scale and laboratory test results. The sub-themes that emerged from assessments confirming diagnosis of PTSD are discussed in tandem with the literature control below.

History taking emerged as a diagnostic procedure that could be conducted among rape survivors in a second session for diagnostic purposes of PTSD. In support of this result, one of the participants in an FGD said:

> In psychiatry, history taking should be conducted in a second session and it is a very important component for diagnosis of conditions such as PTSD. History taking can also assist you to know if the patient is at risk or not.

This perception, along with the results of a study conducted by Kilpatrick et al. (2013, 547), reveals that events of rape experiences can predict signs and symptoms of PTSD. Therefore, the results of this study suggest that history taking of rape events should be conducted specifically during the follow-up visits by rape survivors in order to assess and establish the warning signs of PTSD.

Good clinical interviews or PCL scale emerged as one of the diagnostic criteria that could be used to diagnose PTSD among rape survivors. In support of this result the direct statement from a participant is presented verbatim below:

> … if there are possibilities of PCL test it can be done but we should just make sure that people have great information, specifically for those that are still going through training and working with those types of patients.

In support of this result, Foa et al. (2016, 1) illustrated that the diagnostic scales aligned with the DSM clinical interview guide were also found reliable and valid in the diagnosis of PTSD. For example, the recent PDS-5 aligned with the structured clinical interview (DSM-5) for possible assessment of diagnosing of PTSD in rape is a most convenient tool (Foa et al. 2016, 1).

Laboratory tests, particularly taking blood samples such as full blood counts (FBCs) emerged as one of the diagnostic criteria that could be used to exclude other infectious diseases for differential diagnosis of PTSD caused by rape. However, other participants felt that it would be unnecessary to take blood samples of rape survivors if the diagnosis of PTSD is made through a PCL test and in-depth clinical interview. This contradiction indicates that more research is needed on this topic. In support of this result, one of the participants in an FGD said:

> We can take blood such as FBC because it can show elevated white blood cells and sometimes stress could be caused by electrical imbalances or some of the illness the client had previously and not knowing that she has those illnesses.

The other participants rejected the test as unnecessary and the statement below conveys their negative perceptions from another FGD:

> I think the good clinical interview can give you the information you need. It's not necessary to conduct tests on patients.

Apparently there is no recent literature to support this statement. However, contrary to these findings, literature is not clear if there is a need for conducting FBC for differential diagnosis of PTSD among rape survivors. Kendall-Tackett (2009, 35) found that rape survivors reported high levels of the C-reactive protein from 1L-6 and above suggesting that they had high levels of inflammation compared to those that were not raped. However, the results of Kendall-Tackett (2009, 35) are not linked to taking blood with the aim of differential diagnosis of PTSD. Therefore, these results from other studies cannot offer conclusive justification for this finding in this study. It could suggest that other diagnostic criteria such as good clinical interviews as advocated by other participants could be used as a diagnostic tool of PTSD since the tool has a proven efficacy to diagnose PTSD. The other reason is that we cannot confirm if survivors had infections before the experiences of rape or not. That means even if they showed elevated inflammation in their blood results after the rape, one cannot categorically account if the infection is due to other diseases or rape. So the differential diagnosis of PTSD among rape survivors could be difficult to establish in this instance.

Theme 3: Use of Various Psychotherapeutic Interventions

Sub-themes that emerged from the use of various psychotherapeutic interventions were debriefing (for example using the Rogerian approach), counselling in a TCC, supportive

counselling, trauma-focused CBT, BWRT and family therapy. These sub-themes are described with the literature control below.

Debriefing (for example using the Rogerian approach) was singled out as one of the various psychotherapeutic interventions that mental healthcare practitioners such as nurses and psychologists could use from the time the rape is reported. This is supported through a direct quotation from a participant as indicated below:

> As a mental healthcare worker I will perform debriefing particularly using Rogerian approach when they first report the incident and if the incident is still fresh from the onset have now to be cognisant of the clinical observations then will take that information to therapy at a later stage.

Qi, Gevonden and Shalev (2016, 20) confirm that one non-delayed session of debriefing has been proven to reduce the intensity of acute stress among clients who went through traumatic experiences. Therefore, this suggests that any mental healthcare practitioner such as nurses, psychologists or medical doctors should perform debriefing immediately when survivors report rape.

Counselling at TCCs was equally identified as one of various psychotherapeutic interventions that could be used in managing rape survivors before they are diagnosed with PTSD. A participant from the FGD is quoted below:

> It's important for all rape survivors to receive counselling in TCC before developing PTSD because it is an after complication of acute stress disorders.

Bougard and Booyens (2015, 29) support this observation of counselling for rape survivors. However, the study conducted by Bougard et al. (2015, 29) only confirms HIV and AIDS counselling as having been received by survivors in a TCC. Therefore, based on this finding, assumptions could be made that counselling related to mental health is not given to survivors consulting in a TCC when reporting rape. This suggests that healthcare workers working in a TCC should give counselling related to HIV and AIDS as well as for mental healthcare needs, for example, crisis interventions (Gordon 2016, 36).

Supportive counselling was identified as one of the psychotherapies that could be used to manage PTSD among rape survivors. In support of this finding, one of the participants said:

> We can also give them supportive counselling especially when you have observed that this client is very withdrawn and doesn't keep up.

Foa et al. (2013, 2650) apparently do not share the same views as illustrated in their opinion that supportive counselling was identified as ineffective in the management of PTSD. However, since we do not have evidence of effective supportive counselling in the management of PTSD post-rape in the context of South Africa, the results of this study only tentatively suggest that studies focusing on supportive counselling ought to be conducted in order to consider its efficacy or otherwise for the management of PTSD post-rape in South Africa.

Trauma-focused CBT was specified as a psychotherapeutic intervention that could be used to lessen PTSD symptoms among rape survivors. In support of this result, one of the participants from an FGD said:

> … depending on how the survivor responds to treatment, I think six to seven sessions of trauma-focused CBT which is the best individual therapy can be used to treat PTSD.

These results concur with the results of the study by Foa and McLean (2016,24) which revealed that PTSD was successfully treated with CBT particularly CPT and EX among adult rape survivors after the therapist had given them seven to twelve sessions. Therefore, this advocates for the use of CBT as one of the psychotherapeutic interventions in treating PTSD post rape for a minimum of six to twelve sessions. However, the progress of the survivors needs to be taken into consideration to allow the continuation of more than twelve sessions or changing to another type of CBT if the survivor has still not yet responded to the treatment of choice offered by a therapist.

Brain working recursive therapy (BWRT) was identified as another psychotherapeutic intervention that could be used to lessen PTSD symptoms among rape survivors. To support this finding about the use of BWRT, participants in a FGD stated:

> We can also give them BWRT which is the new therapy that can be implemented post trauma.

According to reviewed literature, BWRT is the latest therapy developed in SA in treating conditions such as PTSD resulting from traumatic situations (Bellchambers-Wilson 2016, 6). Unfortunately, the literature is silent about confirming the efficacy of this therapy among rape survivors, even to other populations who experienced trauma. The efficacy of this therapy is only evident in testimonials in non-accredited websites. Therefore, such a gap calls for further studies to confirm the efficacy of this therapy in a group of people who have experienced rape trauma.

Family therapy is a sub-theme that emerged as one of the various psychotherapeutic interventions to manage PTSD among rape survivors. To confirm this result one participant in an FGD gave an example:

> We will engage into family reconstructive work therapy. If maybe now the family will be starting to take her as a black sheep in the family.

Ochberg (2013, 34) concurs with these findings in that engaging family members in post-trauma therapy has a direct influence on the healing process of a rape survivor. For example, the behaviours, myths and cultural beliefs of family towards the survivor can either assist the healing process or not. Therefore, based on these findings, Ochberg (2013, 34) suggests the use of family therapy in situations whereby the family gets directly involved in the healing of rape survivors. The involvement of the family should be suggested as an alternative therapeutic process, especially making them appreciate the trauma of the survivor and calling upon all the coping mechanisms embedded in their belief systems. So the results of this study also confirm the importance of family therapy in cases where the healing of a survivor is negatively influenced by their attitudes, belief systems and myths attached to rape experiences.

Theme 4: Psychopharmacological Management

A sub-theme that emerged from the psychopharmacological management was SSRIs such as fluoxetine (Prozac). This sub-theme is supported by the literature control below.

Selective serotonin reuptake inhibitors (SSRIs) emerged as one of the psychopharmacological management tools that can be used to treat PTSD. Participants in this study gave examples of drugs such as fluoxetine (Prozac) as SSRIs used to treat PTSD among rape survivors. A direct quote to support this finding from the FGD is as follows:

> From pharmacological treatment, we will give SSRIs to help the patient for example Prozac, with fluoxetinestarting with a low dose to help with mood elevation, insomnia (to sleep at night) and reduce levels of stress.

Kirkpatrick and Heller (2014, 342) concur that SSRIs such as fluoxetine and amitriptyline are effective in the management of rape survivors diagnosed with PTSD. However, owing to intolerance and side effects, some rape survivors are likely to disappear from the health system. It is suggested that these SSRIs be used by those survivors who can tolerate the side effects of these drugs or only those that present with extreme levels of PTSD (Kirkpatrick and Heller 2014, 342). This study suggests that these drugs should be administered to rape survivors who

have extreme PTSD and those that are admitted for the first few weeks in order to assess their tolerance to these drugs with the aim of stopping or considering other drugs or other effective non-drug management of PTSD.

Theme 4: Involvement of Various Stakeholders

Sub-themes that emerged from the involvement of various stakeholders were family, community and police involvement, acceptance by family and community, strengthening collaboration among MDT members, and proper training of mental healthcare practitioners. The aforementioned sub-themes are discussed with reference to what has been established in the literature below.

Family, community and police involvement is one of the sub-themes identified by participants, suggesting that there is a needed for involvement of these stakeholders in the psychological management of PTSD among rape survivors. In support of this finding, a participant in an FGD said:

> So we need to involve the family because it is forever giving full support and in most cases in mental health the involvement of the family and community is very important.

Gordon (2016, 32) concurs that the inclusion of social support in the care of rape survivors diagnosed with PTSD lessens the symptoms of PTSD because they assist them to cope with trauma experiences as well as to build long-lasting relationships with them. This clearly shows that rape survivors diagnosed with PTSD cannot manage on their own without the support from their loved ones. This goes to say that even if the rape care centre offers the best available treatment options, social support plays the bigger role in the recovery of rape survivors diagnosed with PTSD.

In support of this finding on the involvement of police officers, other participants gave an example about one reported case in their hospital as quoted below:

> She was referred for mental healthcare this side after finding out that she was raped but rape was not reported. So I think the police officers should be involved in the management of these people when these cases were not reported to them.

Conversely, Mason and Lodrick (2013, 36) in their study revealed that police officers do not investigate rape that is reported late because they argue that there is no physical or forensic evidence. In addition to the evidence needed to prove rape, Mason and Lodrick (2013, 36) state

that police officers are unable to consider factors that could make the rape survivors report rape late, for example issues of shame, self-blame, and just the readiness about reporting.

Therefore, the results of this study advocate for the inclusion of police officers from the time the rape is reported to healthcare services regardless of whether evidence can be established or not. Furthermore, police officers should also get trained about taking into consideration factors that cause delays in reporting rape in order for them to avoid blaming the rape survivors.

Acceptance by family and community is an important milestone that stakeholders should strive to reach in dealing with rape survivors and in their management of rape in general and PTSD. In an FGD a participant stated that:

> So acceptance by community members and the family, especially close relatives, as it is a tool that we can use to minimise the symptoms of PTSD.

The study by Wangamati et al. (2016, 249) confirms that the involvement of family and community is a critical component in the rehabilitation of rape survivors who are often rejected by their families as well as their communities. Such rejection and alienation engender feelings of isolation.

Strengthening collaboration among MDT members emerged as a sub-theme wherein various stakeholders need to be involved and work together when caring for rape survivors. A participant gave an example of an MDT in providing mental healthcare:

> We have MDT in this hospital side, I mean nurses, psychologists, social workers and doctors to participate there, so this side we all work together to assist our clients by giving feedback during our MDT meetings and TCCs can do the same like us this side.

Wangamati et al. (2016, 249); Moylan and Lindhorst (2015, 165) concur with the results of this study as the involvement of mandatory caring for rape survivors without coordination, cooperation, collaboration and promotion of an MDT approach is reported in their findings. Therefore, the results of this study suggest that an MDT working with rape survivors need to be considered through benchmarking in mental healthcare institutions to promote coordination, integration and cooperation through meetings and discussing the progress of their patients. This approach engenders collaborating with other healthcare services such as psychiatry to maximise the care of the patients who need psychiatry for admission and continuity of care.

Proper training of healthcare practitioners and other stakeholders was stated in an FGD suggesting that people who care for rape survivors need to be adequately trained on how to

handle rape cases and caring for rape survivors. In support of this result a direct quotation from an FGD is reported as follows:

> Training is also important for the people who are going to see the patient at first, for example nurses, doctors, psychologists, social workers and police officers have to be trained on how to conduct interviews as well as provision of privacy when reporting rape, the crime statement needs to be taken privately in police stations.

According to Campbell, Patterson and Bybee (2012, 240) rape survivors are victimised by mental healthcare practitioners and police officers who take on an impersonal approach in the questioning over rape experiences. The lack of sensitivity among doctors and nurses when performing examinations for forensic evidence, taking time before attending to the rape survivors as well as blaming them because of what happened were cited as critical factors. Based on this finding, Maier (2011, 172) suggested that training on the questioning of rape survivors should be provided by rape survivor advocates to the affected police officers as well as healthcare practitioners such that they are tutored to comfort and support survivors and reduce waiting times.

When victims feel protected rather than victimised, they are bound to experience closeness and consequently take on cooperative stances. Those charged with receiving this report should minimise secondary victimisation. The training in the emergency management of rape survivors was also achieved through the implementation of Sexual Assault Nurse Examiners (SANE) programmes because it has been reported that nurses who underwent such programmes exhibit more knowledge in emergency management of rape survivors as compared to doctors and non-SANE nurses (Campbell, Patterson, and Bybee 2012, 240; Maier 2011, 172). From the above discussion, this suggests that rape survivors advocate for training to be implemented in rape care centres as well as the development and implementation of SANE training programmes in order to offer skills for those that care for rape survivors at emergency level. The training suggested might play an important role in minimising the development of PTSD.

Conclusion

The psychological management of PTSD in public mental healthcare institutions needs to be prioritised like any other effects of post-rape such as HIV and AIDS. The psychological management of PTSD should start with the assessment of PTSD using history taking or

conducting clinical interviews with a rape survivor for a follow up. They would then implement and collaborate with effective psychotherapies such as debriefing, counselling, supportive counselling and trauma-focused CBT, provision of SSRIs and BWRT with other post-rape management activities that are currently being practised. Barriers to the provision of mental healthcare services such as the lack of human resources at the level of mental health practitioners should also be dealt with as a matter of urgency.

However, in order to increase access to mental healthcare and the provision of optimum mental healthcare services, the use of cross-referral systems should be adopted within the public mental healthcare institutions and TCCs. Staff working in TCCs might also adopt the management style of MDTs working in mental healthcare institutions, for example, have weekly meetings to discuss the progress of their clients diagnosed with PTSD. The adoption of MDTs could be done through benchmarking in mental healthcare institutions and through training provided by mental healthcare practitioners in TCCs to strengthen TCCs in MDTs. Various stakeholders such as close families, community and police officers should also be recognised when managing PTSD among rape survivors to reduce stigma and game-blaming.

Limitations of the Study

Public mental healthcare institutions are relatively few in the NWP and other public provincial hospitals that have psychiatric units were considered to increase the sites of data collection. Again, the results of this study cannot be generalised to other provinces of South Africa because the study was done in the NWP.

Recommendations

The study recommends further research on the development guidelines for the psychological management of PTSD for rape survivors in order to increase available services of mental healthcare for rape survivors. It is also recommended that training be conducted by mental healthcare practitioners to equip staff working in TCCs with knowledge on the management of PTSD. Training could also be provided by rape survivor advocates to police officers on how to handle rape-related cases when they are reported. Critical factors raised were that personnel need to offer privacy and respect for rape survivors, and to avoid game-blaming the rape survivors. In addition, policymakers ought to include the psychological management of PTSD in the protocols for rape management in TCCs to foster collaboration of mental care services

with those that are already practised, for example, counselling of HIV- and AIDS-related cases that include rape care services for rape survivors.

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5 Manuscript five: Conceptual Framework for PTSD psychological management guidelines for rape survivors in the North West Province of South Africa

(Submitted to JPA refer to JPA guidelines in Appendix H)

Abstract

Post-Traumatic Stress Disorders (PTSD) psychological management for rape survivors is a challenge in the North West Province. Given the lack of conceptual framework that can be used to provide a blueprint for PTSD psychological management in the North West province, this paper is sought to conceptualise findings of the parent study into a conceptual framework guided by the Practice Oriented Theory and the Donabedian Structure Process Outcome model features. The demographic findings of this study therefore revealed that the agent that should carry out PTSD psychological management is a trained mental health care practitioner, whereas the recipients of PTSD psychological management are a rape survivor. The findings further revealed that it is procedurally correct to assess PTSD firstly, then follow the effective PTSD psychological management interventions, for example using cognitive behavioural therapy to manage rape survivors diagnosed with PTSD.

Keywords: PTSD guidelines, rape survivors, PTSD psychological management, North West Province, South Africa, mental health care practitioners

Introduction

Rape is a global concern that affects the mental health of rape survivors, leading to the development of PTSD. Despite this, rape survivors consulted in the North West Province (NWP) of South Africa (SA), presented with high prevalence (74.5%) of PTSD following rape experiences (Sepeng & Makhado, 2018). It is within this enormous prevalence that the need for a blueprint for PTSD psychological management arose. In affirmation of this, decades ago Hoeffer (1983) and Mansfield (1980) highlighted the importance of having a clear conceptual base prior to development of any management of psychiatric-mental health care management following a specific model.

In the context of PTSD, it was found in Bosco, Gallinati and Clark (2013) when models developed by Gatchel, Peng Peters, Fuchs and Turk (2007); Sanders, Harden and Vicente (2005); Gatchel (2004) were used to conceptualise the literature review findings into a framework of PTSD and pain. However, as for this study, Dickoff, James and Wiedenbach's (1968) Practice-Oriented Theory (POT) and Donabedian's Structure-Process-Outcome (SPO) model (1966) were found to possess the most suitable features that can be used to conceptualise empirical findings of the recent study done by Sepeng and Makhado (2018) Sepeng and Makhado (*in press a),* Sepeng and Makhado *(in press b*) into a conceptual framework. Conceptualisation of these findings into a framework formed a clear conceptual base for PTSD psychological management of rape survivors consulting in rape care clinics and public mental health care institutions situated in the NWP of SA. The purpose of this paper is to establish a conceptual framework of PTSD psychological management for rape survivors consulting in Thuthuzela Care Centres (TCCs) of the NWP using SOP and POT features.

Conceptual framework

This study adopted, as its main model, the SPO model (Donabedian, 1966). The SPO model features include structure, process and outcome (Donabedian, 1966). The second model which is the POT Dickoff et al (1968) features were embedded within the SPO features to strengthen the conceptual framework for the development and validation of PTSD psychological management guidelines. The POT features that includes agent, recipients and other stakeholders, dynamic and terminus (Dickoff et al., 1968). The agent, recipients and the involvement of other stakeholders Dickoff et al (1968) are embedded within the structure of the SPO model (Donabedian, 1966). Other features that include dynamic was discussed as a stand-alone (Dickoff et al., 1968) and the terminus was embedded within the outcome because they mean the same thing (Donabedian, 1966; Dickoff et al., 1968). The researcher describes the adopted conceptual framework that has both SPO and POT, below.

Structure

Donabedian (1966) explained that structure refers to the context that has human resources, physical capacity and equipment that are needed to administer management that is required by recipients. In those aspects, agent from Dickoff et al (1968) was embedded in the structure because agent is explained as the person or things that perform the activity of the structure. Therefore, the agent that should perform PTSD psychological management activities from the conceptualised findings of this study, is referred to as multidisciplinary health care practitioners. Those mental health care practitioners should be those that are trained and eligible to prevent PTSD, conduct PTSD assessment, diagnosis and manage it accordingly.

Following that, recipient was embedded in the structure too and it is explained as the person or things that receive a certain action from the agent (Dickoff et al., 1968). From the conceptualised findings, the recipients are all adult female rape survivors diagnosed with PTSD. Those adult rape survivors should be the ones that possess certain features of demographic data, for example those that were married or single during data collection. In addition, Dickoff et al (1968) explained that other non-professional stakeholders can be regarded as the people who can support the recipient who is undergoing treatment. This conceptual framework should identify other relevant stakeholders who can provide support among survivors who went through rape experiences, diagnosed with PTSD and is undergoing treatment to enhance their recovery.

Process

The other feature that followed structure in SPO model is the process (Donabedian, 1966). Process is explained as the guiding principles that are referred to as the rules, technique, protocol, and routine governing activities that will be used to achieve the outcome (Donabedian, 1966). In this conceptual framework, the process that should be followed is the

guiding rules and protocols that can be used to assess Acute Stress Disorders using the Diagnostic Statistical Manual-5 (DSM-5) criteria and manage it to prevent the development of PTSD (American Psychiatric Association, 2013) . That should be followed by executing psychological management techniques to diagnose and manage PTSD effectively and the number follow-up visits that are needed by a rape survivor to complete the treatment to achieve an outcome or the terminus. Despite this, (Dickoff et al., 1968) there is a need for dynamic as the sources of power between activities, meaning that in this conceptual framework there is a need for sources of power that will enable an agent (mental health care practitioners) to perform the process (suggested guiding rules, techniques, protocol and routines governing activities) effectively to enhance a positive outcome for recipients (raped survivors).

Outcome

Outcome or results is explained as the final product of the activity (Donabedian, 1966). Similarly, Dickoff et al (1968) explained terminus or results as product of the activities done by the agent to enhance the outcome of the recipients. Therefore, in this conceptual framework, there is a need to specify the outcome that is expected when the agent has provided all the psychological management that are used to manage PTSD effectively.

Context

Context was added in the conceptual framework of this study because Dickoff et al (1968) explained that context is the environment that enables the agent to carry out activities required by the recipient. Therefore, in this conceptual framework, there is a need to specify the context where rape survivors diagnosed with PTSD, will receive care at.

Methods

Study design and analysis

An explanatory sequential mixed method research design was used for this study. The analysis of a sequential mixed method was done through analysing quantitative data and presenting the results independently (Sepeng & Makhado, 2018; Sepeng and Makhado *in press a*). This was followed by the analysis of qualitative data using Tesch's method of analysis independently as well (Sepeng and Makhado, *in press b*).

Population

Population of this study used the data that was derived from trained mental health care practitioners and rape survivors working and residing in the North West Province who participated in the studies done by (Sepeng & Makhado, 2018; Sepeng and Makhado *in press a*, Sepeng and Makhado, *in press b*).

Ethical considerations

The study received approval from the North West University (NWU)'s Human Sciences Research Ethics Committee, ethics number (NWU-0477-17-A9) and approval was also sought from the NWP's Department of Health (DoH) to conduct the study of PTSD Psychological Management Guidelines for Rape Survivors. Voluntary written consent was sought from the participants participated both in the quantitative and qualitative studies and their rights to participate in this study are clearly described in those papers, which are under review for publication, papers accepted and published papers in phase two of the study (Sepeng & Makhado, 2018; Sepeng & Makhado, *in press a;* Sepeng & Makhado, *in press b*).

Procedure of establishing a conceptual framework of this study.

Meta-inferences were conducted to integrate quantitative research findings with the qualitative findings. The integrated findings of quantitative and qualitative were incorporated in SPO and POT features in the results section to establish a conceptual framework for PTSD psychological

management. In the structure, the results of this study explain that the agent should perform care to the recipients diagnosed with PTSD, while other stakeholders will be responsible to support the recipients who are undergoing PTSD treatment. The agent is expected to carry the process to the recipients effectively to have a better outcome of PTSD. The agent needs to receive power sources that strengthen them to carry out the process effectively.

Results

The results of this study illustrated that the agent of this study is mental health care practitioners, including mental health care psychiatric nurses, psychologists, social workers and psychiatrists or doctors. These mental health care practitioners are the agent of this conceptual framework because they are those that are able all to execute PTSD psychological management with different and shared roles as prescribed by their scope of practice (Mental Health Care Act No. 17 of 2002).

The recipients of this conceptual framework are adult female rape survivors diagnosed with PTSD and who either educated or not, single or married, those who are employed or unemployed, reported rape at any time at night or during the day affiliated with a certain religion, believes strongly in religion and diagnosed with PTSD.

Other stakeholders of the framework are significant others that include the family and community, police officers to support survivors undergoing PTSD psychological management because they may assist them to cope with the rape ordeal and indirectly assist to lessen symptoms of PTSD (Gordon, 2016; Welch & Mason, 2007). However, the involvement of that social support, in this conceptual framework, is only those that the rape survivor consents to. This is done to prevent overriding their survivors and/or human rights such as the "right to be treated with privacy" (Department of Social Development, 1997).

The integrated findings of this study in the conceptual framework of the study illustrated that it is procedurally to assess PTSD among rape survivors using the PCL-s or PDS-5 tools, which was used to determine prevalence of PTSD. These findings confirm the findings of the studies by Kilpatrick, Resnick, Milanak, Miller, Keyes and Friedman (2013); Nöthling, Lammers, Martin and Seedat (2015) that diagnostic tools linked to DSM are accurate measures that can be used to diagnose PTSD among rape survivors.

The integrated and conceptualised findings from both quantitative and qualitative findings illustrated that there is a need for adequate history taking among raped survivors diagnosed with PTSD to explore the effects of rape in religiosity (Sepeng & Makhado, 2018). These findings concur with Kantor, Knefel and Lueger-Schuster (2017) and Ben-Ezra, Palgi, Sternberg, Berkley, Eldar, Glidai, Moshe and Shrira (2010) who stated that the rape effects are likely to lower the survivor belief system and/or the survivor might become reluctant to seek mental health care even when they feel sick.

The findings of this conceptualised framework and Abrahams and Gevers (2017) advocate for decentralisation of PTSD management in rape care clinics. However, contrary to this, Bass, Annan, McIvor Murray, Kaysen, Griffiths, Cetinoglu and Bolton (2013) illustrated that low and middle-income countries have no formal evidence of PTSD psychological management specific for rape survivors. This clearly shows that there is a need to adopt effective interventions that can be used to develop PTSD psychological management for rape survivors.The integrated findings of this study and Foa and McLean (2016); and Ochberg (2013) illustrated that once rape survivors are diagnosed with PTSD, mental health care practitioners should manage it effectively to prevent, reduce or diminish PTSD symptoms.

Debriefing counselling was advocated as the intervention that can be used to ease the burden of rape experiences and possibly to prevent PTSD. In support of this finding, Qi, Gevonden & Shalev (2016) have indicated that debriefing can be used to identify individuals who are at high

risk of developing PTSD symptoms at a later stage.However, the information regarding the provision of debriefing are not clear-cut: Welch, and Mason (2007) suggested that debriefing might be beneficial through applying educational strategic elements; including written information, creation of space for ventilation and anger exploration, reduction of shame and blame; and contemplation of surviving mechanisms, sexual problems, and social support and integration.

In contrast, Andij, Olff, Reitsma, Carlier and Gersons (2006) note that this is not always the case because debriefing may cause more harm rather than being helpful for alleviating distress as anticipated. Therefore, the provision of debriefing in this framework will be used to identify survivors who are at risk of developing PTSD at a later stage, rather than for management of Acute Stress Disorder and or for prevention of PTSD.

For management or remission of symptoms of rape survivors diagnosed with PTSD in an outpatient department, these findings and Foa and McLean (2016); Bellchambers-Wilson (2016); and Ochberg (2013) suggested the use of either cognitive behavioural therapy, Eye Movement Desensitisation and Reprocessing Therapy (EMDR), Exposure therapy, Cognitive processing therapy, Supportive counselling or Brain Working Recursive Therapy (BWRT) and Selective Serotonin Reuptake Inhibitors (SSRIs). The execution of PTSD management was performed among rape survivors in an outpatient department (Foa & McLean, 2016).

However, this finding and Kirkpatrick and Heller (2014) suggested that it is better to give SSRIs at least for a month among admitted patients because of their side effects and intolerance. Continue with treatment for at least one year coupled with follow up care in outpatient department (Kirkpatrick and Heller, 2014).Therefore, in this framework, other PTSD psychological management interventions, except SSRIs, will be inititated at an outpatient department which is the TCCs in the context of South Africa. The SSRIs will be initiated in

the mental health care public institution, and continue with the follow up care at outpatient department of rape care clinics or at the hospital outpatient deparment.

Despite, these the findings of this study suggested that this conceptual framework has to have dynamic sources that is training of mental health care practitioners working in rape clinics to carry PTSD psychological management effectively. These findings are supported by Abrahams and Gevers (2017) that mental health care practitioners need continuous in-service training for provision of PTSD psychological management among rape survivors to ensure that they deliver quality care. The in-service training can be done in case there are new developed diagnostic tools and emerging management interventions that are used to manage PTSD effectively to enhance their knowledge.

In addition, the findings of this study indicated that the other dynamic source that is needed by mental health care practitioners is collaboration with other mental health care practitioners working in hospitals, for support and supervision. These results are supported by Wangamati, Thorsen, Gele and Sundby (2016); Moylan and Lindhorst (2015) that there is a need to promote collaboration of multidisciplinary teams among mental health care practitioners for cooperation and coordination of mental health care services of rape survivors.

In summary, this conceptual framework states that mental health care practitioners, including mental health care psychiatric nurses, psychologists, social workers and the doctors or psychiatrists should perform adopted interventions to manage rape survivors diagnosed with PTSD effectively. Training, collaborating, support and supervision are needed to enable the mental health care practitioners to provide effective management of PTSD. The effective management should be done to prevent, reduce and or diminish PTSD symptoms among rape survivors at the TCCs and public mental health care institutions. Figure 1 below illustrates a conceptual framework that used SPO and TOP features for PTSD psychological management among rape survivors.

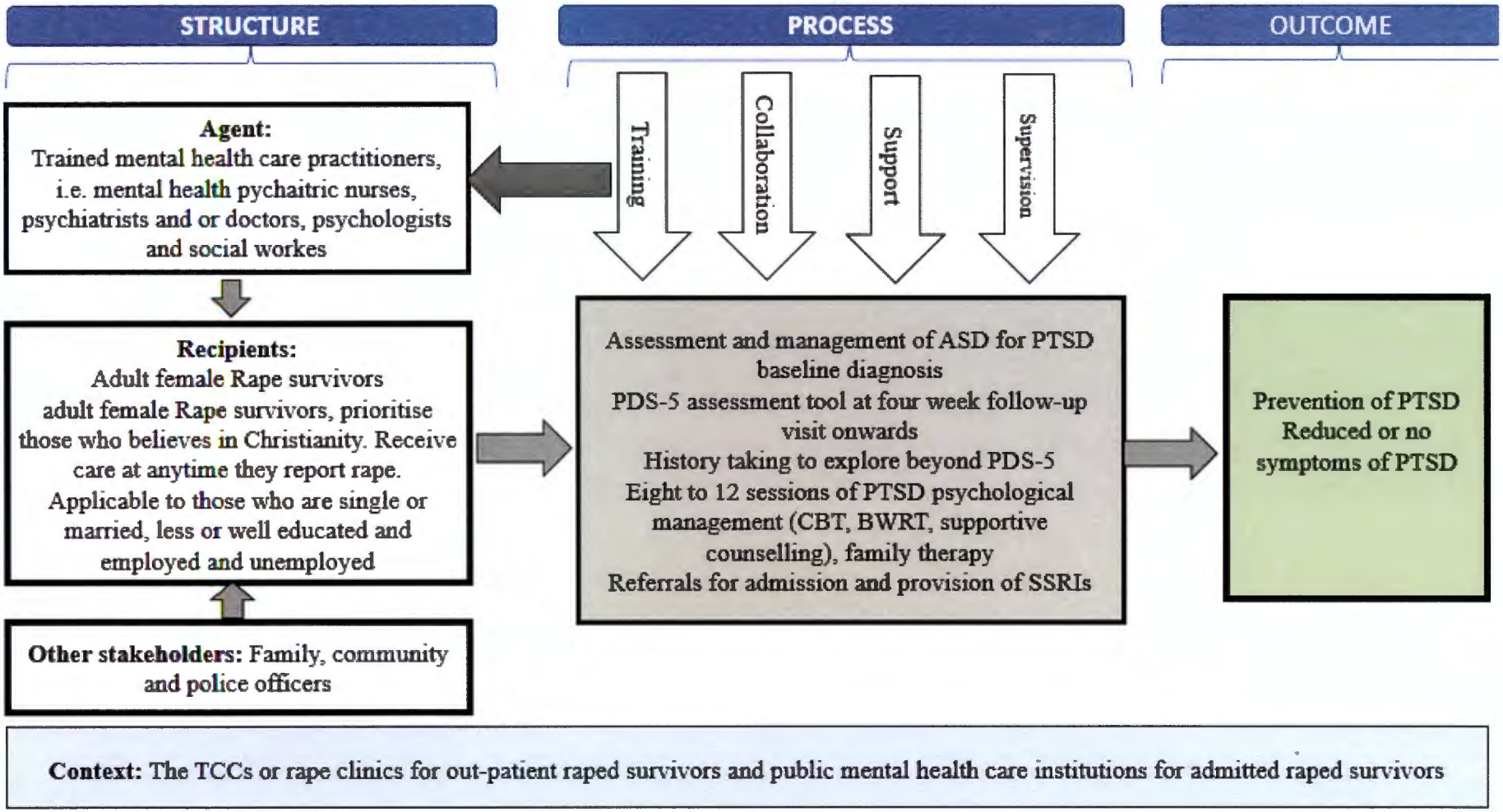

Figure 1. Conceptual framework for the development of PTSD psychological management guidelines

Limitations

This conceptual framework for PTSD psychological management was formulated based on adult female survivors who experienced rape trauma only and cannot be generalised to other psychological management post other traumatic events, however, can be used as a basis for such development.

Conclusion and recommendations

This study formulated a conceptual framework for PTSD development and validation of psychological management guidelines for rape survivors and this framework is of importance because it forms the base of psychological management and provides the blueprint in this management. This study therefore, recommend the development and validation of PTSD psychological management guidelines for rape survivors that is based in this conceptual framework feactures.

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6. Manuscript Six: PTSD psychological management guidelines for rape survivors in the North West Province of South Africa

(Submitted to JPA refer to JPA guidelines in Appendix H)

Abstract

Post-Traumatic Stress Disorders (PTSD) is a global concern. However, there is no specific guideline that is aimed at managing rape survivors diagnosed with PTSD in South Africa, particularly the North West Province. The aim of this study was to develop and validate PTSD psychological management guidelines in the North West Province. The development of these guidelines was informed by the conceptualised empirical findings into a conceptual framework which incorporated features of Practice-Oriented Theory and the Structure Process Outcome model. Those features of a conceptualised framework were applied using Kish's guidelines to develop and validate PTSD psychological management guideline. The purpose of using Kish's guidelines was to make sure that all aspects that are needed to develop and validate the guidelines, were followed. Non-pharmacological and pharmacological interventions were used to develop guidelines that can be used to manage PTSD among rape survivors consulting in rape clinics and public mental health institutions.

Introduction

South Africa (SA) is one of the countries that report among the highest rates of rape globally. Within the period March 2016 to March 2017, the South African Police Service [SAPS] (2017), reported 39 828 rape cases. During that period, statistics for rape in the North West Province (NWP) increased by 5.3%, which was the highest percentage increase among the nine provinces (SAPS, 2017). At the same time, rape-related PTSD disorders have become a global concern and the recent prevalence of PTSD varies from country to country.

Kilpatrick, Resnick, Milanak, Miller, Keyes and Friedman (2013) reported that 48.8% of women in the United States of America (USA) were diagnosed with PTSD following rape experiences, while Nöthling, Lammers, Martin and Seedat (2015) revealed that 23.3% of rape survivors in Cape Town were diagnosed with PTSD post-rape experiences. Davidson, Stein, Shalev and Yehuda (2004) reported that there is a need of having earliest and appropriate PTSD treatment interventions to

minimise PTSD symptoms, increase quality of life and prevent the of development of cormobid disorders associated with PTSD.

Therefore, in order to respond to the mental health care needs of rape survivors, countries like the USA, United Kingdom (UK), Switzerland and Australia developed evidence-based clinical practice guidelines for reducing PTSD symptoms among general population and those who have experienced rape (Foa, Keane, Friedman, & Cohen, 2008; Forbes, Creamer, Phelps, Bryant, McFarlane, Devilly, & Newton, 2007; National Institute of Clinical Excellence-NICE, 2005; World Health Organisation-WHO, (2013). The main reason for developing those guidelines is that mental health policy and practice have moved increasingly toward greater accountability in terms of evidence-based treatment (Forbes et al., 2008). However, and importantly, Foa et al (2008) stated that developing guidelines and its recommendations do not attempt to be a substitute for the knowledge and skill of competent individual practitioners, nor are they intended to limit treatment innovations.

Therefore, those developed guidelines employ effective psychotherapies that need multiple sessions with a rape survivor, such as individual or group Cognitive Behavioural Therapy (CBT), Exposure Therapy, Cognitive Processing Therapy, Eye Movement Desensitization and Reprocessing (EMDR), supportive counselling and Selective Serotonin Reuptake Inhibitors (SSRIs). Similarly, the South African Society of Psychiatrists (SASOP) has developed treatment guidelines for psychiatric disorders for general population consulting private health care institutions (Emsley, Hawkridge, Potocnik, Seedat, Flisher, Stein, & Szabo, 2013). This SASOP guideline includes a component for PTSD management (Seedat, 2013). As the situation stands right now in SA, most of rape survivors are consulting in public health care setting called Thuthuzela Care Centre (TCCs) (Department of Health, 2003).

The recent results illustrated that rape survivors consulted in TCCs of the NWP, presented with high level of PTSD at (74.5%) (Sepeng & Makhado, 2018) without any evidence of the guidelines that are used to manage them when presenting with these disorders.In support of this, Jina and Thomas (2013 have argued that there are various treatment guidelines for mental health disorders in the African

continent without incorporation of treatment guideline that is specific to rape survivors diagnosed with PTSD.Therefore, the researcher deemed it necessary to develop and validate PTSD psychological management guidelines for rape survivors consulting in public health care setting institutions of the NWP.

Procedure

The guideline of this study was informed by the conceptualised empirical findings which were incorporated into a conceptual framework guided by features of Practice-oriented Theory (POT) and the Structure Process Outcome (SPO) model (Dickoff, James & Wiedenbach's, 1968; Donabedian, 1966). In order to archive all the steps needed for development and validation of guideline development, the student used Kish (2001)'s guide for development of guidelines to draft the guideline of this study.

Kish (2001)'s guide to develop and validate the guidelines incorporate the following features: choosing the guidelines topic, specifying the purpose, choosing the panel participants. Kish's (2001) guide also include other features that is specifying the target population, specifying the target audience, exploring the diagnostic and therapeutic options, specifying the desired outcomes, scientific review, updating the guideline and suggested format.

Development and validation process of PTSD psychological management guidelines for rape survivors in the North West Province

Choosing the guidelines topic

The chosen topic for this guideline is PTSD psychological management guidelines for rape survivors in the North West Province

The purpose of the guideline

The purpose of developing and validating PTSD psychological management guidelines is to improve the mental health care services needed by rape survivors in this context. In addition, to open platforms of testing the adopted interventions in this guidelines in other regions of SA.

Panel

The guideline for PTSD psychological management for rape survivors diagnosed with PTSD was developed by the by the student under supervision of the promoter of the study using Kish's (2001) guide for development and validation of guidelines. Following that, the guideline was send to the panel of staff members working in TCCs and mental health care practitioners working at selected public mental health institutions of the NWP for review and validation using five domains of Appraisal of Guidelines Research and Evaluation (AGREE) reporting checklist (Brouwers, Kerkvliet, Spithoff, & AGREE Next Steps Consortium,2016). Added to that, the AGREE checklist was used for advancing the guideline development and validation, reporting and evaluation for the use in health care system (Brouwers et al., 2016) which is TCCs and a public mental health care institution in this study. The selection of mental health care practitioners was done by the Chief Executive Officers (CEO) of each hospitals for blind review and it was explained that the CEO has to include mental health care psychiatric nurse practitioners, doctors or pyschiatrists, social workers and psychologists respectively who have a vast experience of five years and above managing PTSD caused by any traumatic event in their daily routine work.

The selection of TCCs staff members was also done by the CEO of each hospital it was explained that it has to include staff members who worked at TCCs, obtained a qualification in that has mental health care and caring for rape survivors for five years and above. It was difficult for researchers to mention that it has to include staff members who worked with rape survivors who are diagnosed with PTSD because as the situation currently stands in TCCs is that all the rape survivors who participated in empirical research study were not given a follow up care for PTSD assessement and diagnosis of PTSD (Sepeng & Makhado, *in press a*). We hoped that based on their qualification that has mental

health care will assist with review of content validation of this guideline. The guideline was further sent to external reviewers of mental health care expert who are working in different Universities.

The selection of mental health care experts working in different Universities was done through asking one of mental health care expert working in one of the selected University and member of mental health board in the NWP to idenfity experts who want to voluntarily, blind review and validate this guideline. It was explained that the inclusion of mental health care expert should be those that have a vast experience in caring for mental health care users in the clinical field, published in the field of rape, PTSD and mental health care. Mental health care experts also used AGREE checklist Brouwers et al (2016) as well as Kish's (2001) grading criteria from evidence for recommendations to improve quality and gather feedback for informing final recommendations. The reviews of the all panellists both working in TCCs, selected public mental health care institutions and experts of mental health care working in different Universities resulted in further revisions of this guideline and these eventually became part of this thesis and a research paper for publication that will provide the evidence of PTSD psychological management guidelines for rape survivor's diagnosed eith PTSD.

The researchers used emperical research to capture level of PTSD and determining if they receice psychological assessment and management of PTSD post rape experiences.

The outcome of these illustrated that rape survivors consulted at the TCCs of the NWP do not receive assessement and management of PTSD for four weeks follow up care (Sepeng & Makhado *in press a*). This was further illustrated by the lack of the available guideline that can be used to manage rape survivors diagnosed with PTSD in different regions of SA Sepeng and Makhado (2019) and that include the NWP

Target population or the recipients of PTSD of psychological management guidelines

The first component of the conceptual framework that was used to inform the development of this guideline, is structure. Structure addressed three features namely agents and recipients and other relevant stakeholders. Dickoff et al (1968) and Donabedian (1966) features were found applicable for

the development and validation of this PTSD psychological management guidelines for rape survivors.

Dickoff et al (1968) and Donabedian (1966) in line with Kish (2001) indicated that the guideline need a target population that has to receive specific management of a certain disorder. Therefore, the target population of the developed and validated PTSD psychological management guideline will be all adult female rape survivors consulting in TCCs and/or admitted in public mental health institutions and diagnosed with PTSD following rape experiences. According to Sepeng and Makhado (*in press b*) those rape survivors should be those who are aged 18 years and above, who are able to identify their ethnicity, marital status, state their level of education, religious belief system and affiliated to a certain culture.

Furthermore, those rape survivors should be attended at any time regardless of whether the rape is reported at night or during the day (Sepeng & Makhado, *in press b*).Make follow-up visits with the rape survivor for PTSD assessment and diagnosis preferably during the day where all mental health care practitioners that need to attend to them, are available. This guideline excludes other rape survivors who do not meet the features of the conceptual framework that is used to guide the development and validation of this PTSD psychological management guidelines (Sepeng & Makhado, *in press b*).

Target audience or agent

The other component of structure that is drawn from the conceptual framework that is used to inform the development and validation of PTSD psychological guidelines is agent or target audience. Therefore, in this guideline the target audience or persons expected to implement the developed and validated PTSD psychological management guideline for rape survivors will be all multi-disciplinary mental health care practitioners such as mental health care nurses, psychologists, doctors and social workers working in the TCCs and public mental health care institutions during referrals and admission period (Dickoff et al., 1968); Donabedian, 1966; Sepeng & Makhado *in press b*).

Setting or context where PTSD psychological management can be performed

Context is another feature of SPO model (Donabedian, 1966). The setting or the context where this developed and validated PTSD psychological management guidelines will be implemented, is at the TCCs (rape care clinics) for out-patient rape survivors or all public mental health care institutions situated in the NWP. The public mental care institutions will be used to cater for survivors who are admitted for management of PTSD post rape experiences.

Other stakeholders needed to enhance PTSD psychological management

Other stakeholders needed to enhance PTSD psychological management guidelines, are those that are drawn from the conceptualised findings of the conceptual framework that guided this study, are the candidates closest to the survivor (Sepeng & Makhado *in press b*). However, it should be those that that the rape survivor has consented and disclosed about their rape care experiences. Their involvement is specific for provision of social support to enhance the recovery process of the rape survivor, rather than to worsen the condition of the survivor.

Process

The second component of the conceptual framework that was used to inform the development and validation of this PTSD psychological management guidelines, is the process. Sepeng & Makhado (*in press b*) in line with Kish (2001)'s guide for PTSD development and validation illustrated that the procedure and/or process that should be followed is exploration of the diagnostic tools, PTSD psychological management therapeutic options, as discussed below.

Exploration of the diagnostic tools

In these guidelines, psychologists, social workers and/or mental health care psychiatric nurse practitioners should make the assessment and diagnosis of PTSD in rape care clinics using the PDS-5 diagnostic tool when rape survivors come for their four weeks follow-up care and beyond. The PDS-5 diagnostic tool consists of 24 items measuring traumatic experiences including unwanted and upsetting memories, bad dreams or nightmares.

The PDS-5 allows the psychologist, psychiatrist, social worker or mental health care nurse practitioners to take a history specific to PTSD through asking the rape survivor to indicate if she has a specific symptom and to indicate how often she has been experiencing that particular symptom since her rape experience. Then, the psychologist, social worker or mental health care psychiatric nurse practitioner will determine the diagnosis of PTSD among survivors who have witnessed or experienced rape using Post Traumatic Diagnostic Scale-5 (PDS-5) which entails that it is aligned with Diagnostic Statistical Manual-5 (DSM-5) criteria. The DSM-5 criteria explains with the survivor should present "with one or more of the intrusion symptoms associated with traumatic rape event (American Psychiatric Association, 2013).

Followed by presenting with one of two of persistent avoidance of stimuli symptoms which began after the rape traumatic event occurred (American Psychiatric Association, 2013). Evidence of "two or more negative alterations in cognitions and mood associated with the rape traumatic event, beginning or worsening after the traumatic event has occurred (American Psychiatric Association, 2013). Evidence of two or more of the symptoms of marked alterations in arousal and reactivity associated with the rape traumatic event, beginning or worsening after the traumatic event has occurred (American Psychiatric Association, 2013). The duration should be of the symptoms per criteria of DSM-5 should be more than one month. Specify dissociative symptoms and delayed expressions using DSM-5 criteria (American Psychiatric Association, 2013).

When the health care practitioner has confirmed the diagnosis of PTSD, they will have to use history taking to explore beyond the PDS-5 scale. History taking will be used to identify possible predictors of PTSD, for example they will find out from the survivors how Christianity influences her recovery process of rape so that it can be covered during PTSD management. Christianity is specified in this guideline because the study done by Sepeng and Makhado (2018) clearly revealed that PTSD related more with Christianity than any other predictors of PTSD. However, this guideline doesn't limit the exploration of other predictors of PTSD or barriers that may contribute to lack of accessing the services, for example lack of resources experienced by rape survivors.

Prior to actual assessment of PTSD, health care practitioners or workers stationed in TCCs and or mental health care institution need to conduct assessment of Acute Stress Disorder (ASD) when rape survivors are coming for a follow-up care visit on day three of their post-rape experiences. Record and keep the assessment findings and/or information of ASD for future use because that information might assist to identify and diagnose those who are prone to develop PTSD at four weeks when they return for follow-up care.

PTSD psychological management therapeutic options

Following the diagnosis of PTSD, the procedure that should follow from the conceptual framework that is used to inform the development and validation of this guideline, is PTSD psychological management therapeutic options. Therefore, the recommended psychological management options in this guideline are effective non-pharmacological PTSD psychological management such as CBT, Exposure Therapy, Cognitive Processing Therapy, Brain Working Recursive Therapy (BWRT), EMDR and Supportive Counselling for outpatient rape survivors diagnosed with PTSD.

There is a need to manage identified barriers that have the potential to predict or worsen PTSD symptoms during therapy sessions with the mental health care practitioner, for example psychologist. Social workers may provide family therapy among those who have family problems that are likely to predict or worsen PTSD symptoms. The other recommended PTSD psychological management is the provision of SSRIs, psycho-pharmacological treatment, for example fluoxetine. However, in this guideline, those SSRIs will be provided among rape survivors who are admitted in public mental health care institutions to ensure close monitoring and identification of side effects.

Referrals of patients who need to be admitted to see the psychiatrist or the doctor for a possible prescription of SSRIs, will be made by a psychologist, social worker or trained mental health psychiatric nurse practitioner working in TCCs or in an outpatient department.

Following the prescription of SSRIs by the doctor or psychiatrists, it will be administered to rape survivors by a mental health care psychiatric nurse practitioner, who will continue to monitor the

response of medication and their side effects thereof. However, prior to prescription of these SSRIs, the psychiatrist will also use the PDS-5 diagnostic tool for PTSD diagnosis and monitoring of PTSD symptoms during the course of admission and in outpatient clinics during follow-up visits.

The provision of SSRIs in these guidelines should be given among rape survivors for a minimum period of one month during admission. The provision of SSRIs should continue for at least a year once remission of symptoms is obtained. Prior to PTSD management, on day three of follow-up care by rape survivors, mental health care practitioners such as nurses or psychologists should offer Rogerian or non-judgemental debriefing counselling to minimise acute stress disorder which could lead to PTSD symptoms. Offering of debriefing will depend on whether providing debriefing using the Rogerian approach is beneficial or not.

The outcome of implementing PTSD psychological management (Terminus)

The desired outcome is the last feature of the conceptual framework that is used to form the development and validation of PTSD psychological management guideline in this study. The desired outcome of this guideline is that health care practitioners to effectively apply one of PTSD psychological management steps, for example individual CBT, leading to reduced or no PTSD symptoms among rape survivors' post-rape experience.

Scientific Review

Kish (2001) proposed that there is a need of scientific review committee to conduct exploratory systematic review for development and validation of the guideline. This evidence review was done by the student, under supervision of the promoted and it subjected to validation which is done by different panels of members working in the public mental health care institutions and external reviewers of the people working in different universities.

The student and promoter followed Kish's (2001) guide to provide evidence review of the suggested inteventions that can be used to manage rape survivors diagnosed with PTSD. The panel working at

the hospital and the one at the University used AGREE checklist Brouwers et al (2016) to validate the evidence of the interventions suggested for rape survivors diagnosed with PTSD.

Evidence review

The evidence of this exploratory systematic review to support the suggested psychological management interventions to rape survivors diagnosed with PTSD, was done in articles that were published in English from Jan 1991 to May 2019 in international setting. Those articles were accessed through Google Scholar, Science Direct, EBSCOhost, Psych info, Medline JSTOR and PubMed.

Evidence of non-pharmacological interventions/therapies and the strength of evidence in each intervention

Non-pharmacological therapies reviewed in this guideline for the management of rape survivors diagnosed with PTSD, included debriefing, CBT, Exposure Therapy, Cognitive Processing Therapy, Supportive Counselling, EMDR and BWRT among rape survivors.

Debriefing

Foy, Eriksson and Trice (2001) stated that psychological debriefing has been offered as a preventative and inclusive intervention provided immediately when the survivor wakes up from trauma. The provision of debriefing following a traumatic event has been tested in different traumatic events and thus lead to a vast amount of literature that can prove the efficacy of this treatment to prevent the development of PTSD. However, specific to rape trauma, randomised controlled studies done by Foa, Hearst-Ikeda and Perry (1995) and Rose, Brewin, Andrews and Kirk (1999) revealed that debriefing is ineffective in the prevention of PTSD following rape. Therefore, this clearly indicates that debriefing cannot be given among rape survivors for the prevention of PTSD symptoms when they awake from their traumatic event. This is done based on the fact that, there is good evidence of properly randomised controlled studies to support a recommendation against the use of debriefing for the prevention of PTSD among rape survivors.

CBT

This study has used seven randomised control trial studies that tested the effectiveness of CBT for rape survivors diagnosed with PTSD (McDonagh, Friedman, McHugo, Ford, Sengupta, Mueser, & Descamps, 2005; Foa, McLean, Capaldi, & Rosenfield, 2013; Iverson, Gradus, Resick, Suvak, Smith, & Monson, 2011; Scheeringa, Weems, Cohen, Amaya-Jackson, & Guthrie, 2011; King,Tonge, Mullen, Myerson, Heyne, Rollings & Ollendick,2000; Cohen, Deblinger, Mannarino & Steer, 2004; Resick, Williams, Suvak, Monson, & Gradus,2012). Therefore, this indicates that CBT can be considered as one of the therapies that can be used to manage survivors diagnosed with PTSD post-rape experiences because there is good evidence drawn from properly randomised controlled trials to support the use of this therapy.

Exposure Therapy

This study used eight randomised controlled studies that have tested the efficacy of Exposure Therapy for the management of rape survivors diagnosed with PTSD (Resick, Nishith, Weaver, Astin, & Feuer, 2002; Resick et al., 2012; Foa et al., 2013; Stapleton, Taylor, & Asmundson, 2007; Foa, Dancu, Hembree, Jaycox, Meadows, & Street, 1999; Foa, Rothbaum, Riggs, & Murdock, 1991; Nishith, Nixon, & Resick, 2005). Therefore, this clearly indicate that Exposure Therapy can be used as one of the strategies to treat rape survivors diagnosed with PTSD because the evidence provided is drawn from randomised controlled studies.

Cognitive Processing Therapy

Four randomised control studies revealed that cognitive processing therapy can be used as one the therapies that can manage survivors diagnosed with PTSD following rape experiences (Resick et al., 2008; Nishith et al., 2005; Resick et al., 2002; Resick et al., 2012). This evidence shows that Cognitive Processing Therapy can be used to manage rape survivors diagnosed with PTSD because the randomised control studies provided good evidence to support the use of this therapy in this population.

Supportive Counselling

Randomised controlled studies done by Foa et al (2013); Foa et al (1991) revealed that Supportive Counselling was found ineffective to manage rape survivors diagnosed with PTSD. Therefore this implies that Supportive Counselling should be avoided from given to rape survivors diagnosed with PTSD until there is another evidence proven otherwise.

EMDR

This study used five randomised controlled studies, Rothbaum, Astin and Marsteller (2005); van der Kolk Spinazzola, Blaustein, Hopper, Hopper, Korn and Simpson (2007); Edmond, Rubin and Wambach (1999); Foa et al (1991);Stapleton et al (2007) found in the literature, which stated that EMDR is effective to manage survivors diagnosed with PTSD post-rape experiences. Therefore, this clearly shows that EMDR can be used to manage rape survivors diagnosed with PTSD because there is a strong evidence of randomised controlled studies to support the use of this intervention in this population.

Brain Working Recursive Therapy

Brain Working Recursive Therapy is a new intervention that is developed in SA (Bellchambers-Wilson, 2016). There is no literature to support the use of this therapy either in a general population or specific to rape survivors. Therefore, this shows that this intervention cannot be used to treat PTSD among rape survivors diagnosed with PTSD because its evidence is based on expert opinions rather than the evidence from controlled randomised and non-controlled studies. However, the use of BWRT will remain as one of the therapies that cannot be used to treat rape survivors diagnosed with PTSD until it is tested for its efficacy for the use or against its use, either using properly randomized and controlled studies and/or from well-designed clinical trial, without randomization; from cohort or case-controlled analytic studies, from multiple time-series; or from dramatic results from uncontrolled experiments.

Family therapy

There is no evidence of randomised control studies regarding the effectiveness of family therapy in the management of rape survivors diagnosed with PTSD. However, Erickson (1989) stated that the effects of rape are likely to affect the survivors and their family. The response of family members regarding rape experiences of the survivor might affect how the survivor is coping post-rape. For example, if the family's response to rape experiences is negative instead of supporting the survivor, it could lead to maladaptive coping strategies and consequently lead to PTSD (Erickson, 1989). Added to that, Davidson (2001) stated that following the diagnosis of PTSD, physicians do not need to rush to initiate treatment.

Instead, they need to educate the survivors and their family members regarding the effects of PTSD, while also encouraging the survivors to talk to their families regarding traumatic experiences (Davidson, 2001), which should be voluntarily.

Therefore, regardless of poor evidence of non-randomised and randomised control studies regarding family therapy in minimising PTSD symptoms, this clearly shows that the involvement of family for provision of social support is very important for rape survivors.

Family therapy will remain as one of the therapies that cannot be used to treat PTSD post rape experiences until there is evidence of randomised controlled or non-randomised controlled studies that can prove its efficacy to support the use or against use for treatment of PTSD.Foa et al (1999) stated that these non-pharmacological interventions should be given as first line treatment to minimise PTSD symptoms. Resick et al (2012) stated that the effectiveness of these non-pharmacological therapies can be seen in a duration of between eight to 12 sessions with a therapist meeting with a survivor once or twice weekly.

Evidence of pharmacological interventions/therapies and the strength of evidence in each intervention

Provision of SSRIs

Brady, Pearlstein, Asnis, Baker, Rothbaum, Sikes and Farfel (2000); van der Kolk et al (2007); Davidson, J. R., Rothbaum, van der Kolk, Sikes and Farfel (2001) revealed that fluoxetine and sertraline are effective SSRIs that can be used to manage rape survivors diagnosed with PTSD. The use of SSRIs are adopted as one of the interventions that can be used to manage rape survivors diagnosed with PTSD is based on evidence of randomised controlled studies. Added to that, Rothbaum et al (2001) stated that the provision of SSRIs should also be given as a first line treatment intervention because they have the ability to diminish PTSD symptoms from the onset.

Formulations of recommendations of each intervention described in this guideline

The formulation of the recommendation of each intervention for the management of rape survivors diagnosed with PTSD was done by the researchers following grading criteria from evidence for recommendations as summarised by Kish (2001). The five categories represent different levels of evidence for the use or against use of a specific intervention for a specific recommendation (Kish, 2001). Refer to the table 1 below. This grading system is used to assist mental health care practitioners in evaluating the intervention approaches presented in the guidelines.

Afterwards, those recommendations were subjected to validation by both panellists working at the health care system and among different Universities using AGREE checklists (Brouwers et al., 2016). Upon return of the review documents the researchers scrutinised the feedback carefully using a voting procedure of the outcome of the recomedation according to what most of the panellists have recommended. With regard to this the recommedations were adjusted accordingly to reach concensus.

Table 1. Kish's (2001) grading criteria from evidence for recommendations

Category, grade	Recommendations
Strength of recommendations	
A	Good evidence to support a recommendation against use
B	Moderate evidence to support a recommendation for use
C	Poor evidence to support a recommendation
D	Poor evidence to support a recommendation against use
E	Good evidence to support a recommendation against use
Quality of evidence	
I	Properly randomised and controlled trials
II	Well-designed clinical trial, without randomisation, from cohort or case controlled analytical studies (preferably from >1 centre); from multiple time-series; or from dramatic results from uncontrolled experiment
III	Opinions of respected authorities, based on clinical experience, descriptive studies or reports of experts

Table 2 and 3 below summarised the recommendations of each non-pharmacological and pharmacological management interventions adopted in this guideline.

Table 2. Non-pharmacological management interventions for rape survivors diagnosed with PTSD

Non-pharmacological management interventions	*Recommendation*	*Rationale*
CBT	A	It is ranked level A because there is a good evidence of properly randomised and controlled trials to support a recommendation for the use to manage PTSD
Exposure Therapy	A	It is ranked level A because there is a good evidence of properly randomised and controlled trials to support a recommendation/therapy for the use hereof to manage PTSD.
Cognitive processing Therapy	A	It is ranked level A because there is a good evidence of properly randomised and controlled trials to support this therapy for the use thereof to manage PTSD.
EMDR	A	It is ranked level A because there is a good evidence of properly randomised and controlled trials to support this therapy for the use thereof to manage PTSD.
Supportive counselling	E	It is ranked level E because there is a good evidence of properly randomised controlled trials to support this therapy against the use thereof to manage PTSD
Family therapy	E	It is ranked level E because of the use is the information from opinions of respected authorities and there is poor evidence to support this therapy for the use or against use of it in the management of PTSD in the literature.
Debriefing	E	It is ranked level E because there is a good evidence of properly randomised controlled trials to support this therapy against the use thereof for the prevention of PTSD
BWRT	E	It is ranked level E because of the use of information from opinions of respected authorities who stated that this is a new intervention. This clearly explains the reason of absence or poor evidence to support this therapy for use or against the use thereof for the management of PTSD in the literature.

Table 3. Pharmacological management interventions for rape survivors diagnosed with PTSD

Pharmacological management interventions	***Recommendation***	***Rationale***
Fluoxetine	A	It is graded A because there is good evidence of properly randomised and controlled trials to support a recommendation for the use thereof to manage PTSD.
Sertraline	A	Ii is graded A because there is good evidence of properly randomised and controlled trials to support a recommendation for the use thereof to manage PTSD.

The limitations of the body of evidence of each intervention

The limitations of these interventions are well studied and documented in the literature.With regard to exposure therapy, Foa, Keane and Friedman (2000) stated that is not everyone who can be a nominee for exposure therapy because some trauma survivors are unwilling to confront trauma re-minders and standing high anxiety and momentarily increased symptoms that sometimes complement exposure.

The effects of EMDR are relatively linked largely to imaginal exposure during sessions, which in turn may facilitate naturally occurring in vivo exposure (Taylor, Thordarson, Maxfield, Fedoroff, Lovell, & Ogrodniczuk, 2003). Hirschfeld (2003) reported that SSRIs are likely to produce side effects that emerge or persist within or after one month of treatment and that include sexual dysfunction and weight gain. Foa et al (2013); Taylor et al (2003) illustrated that generally all these interventions that are used to manage PTSD effectively are relatively conducted among small population size of rape survivors and thus limit generalisation of these findings to other regions or other countries.

The overall limitations of the study

Generally, it has been noted that the randomised controlled studies that are used to support the evidence of these psychological interventions are done is some parts of the world excluding the NWP and other regions of South Africa. Therefore, this call for randomised controlled studies that should be conducted in the NWP and other regions of South Africa to support the use or against use of these interventions among rape survivors diagnosed with PTSD in this context.Added to that, the interventions that are used to develop and validate this guideline cannot be generalised to other disorders resulting from the effects of rape because this study, only looked at PTSD psychological management for rape survivors.

Updating the guideline

Kish (2001) proposed that it is mandatory for the guideline to be reviewed after two years and therefore the authors will update this guideline every after two years. However, the authors will determine if the revision needed will be full scale revision, depending on whether there are some new changes or new proposed PTSD management modalities regarding the adopted PTSD psychological management interventions internationally and in SA. Literarure review will be conducted to such instances to update the guideline

Suggested format

The guideline is not a review or meta-analysis of the topic and it is short as it has less than 25 pages, single space. The document begins with an executive summary/abstract which includedkey recommendations.

Conclusion

There is a need to implement this guideline to manage rape survivors diagnosed with PTSD, consulting in rape care clinics and/or admitted in public mental health care institutions. The guideline may be adapted for local use, which is in the NWP of SA. However, transferability of the guideline can be ensured to other provinces of SA through conducting randomised, well controlled clinical

studies for rape survivors with PTSD in other provinces of SA. The randomized, well-controlled clinical trial studies, as well as well-designed clinical studies, without randomization or placebo comparison, will provide local evidence on how rape survivors diagnosed with PTSD in the context of South Africa at large, including the North West Province, respond to the said effective PTSD psychological management therapies. Added to that, this guideline which is subject to change each time, is reviewed by authors to update it based on the available literature and new interventions that can be used to manage PTSD effectively.

Recommendations for future research

This study recommends further studies that look into the rape care management of other long-term disorders post-rape experiences as well as finding the pathways to implementing this PTSD psychological management to enhance the optimum health care and recovery of rape survivors in TCCs of the NWP and possibly in all provinces of SA. This study also recommends researchers to conduct randomised, well controlled clinical studies to test the effectiveness of these interventions, including BWRT among rape survivors diagnosed with PTSD.

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Competing interests

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SECTION THREE: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

1. Introduction

The entire study is structured into three sections. Section one described an overview of the study and section two discussed six manuscripts that were written following the prescripts of the *African Journal of Nursing and Midwifery* (AJNM), as well as the *Journal of Psychology in Africa* (JPA) author guidelines. Therefore, this final section consists of the conclusions, limitations and recommendations of the overall study that is PTSD psychological management guidelines for rape survivors in the North West Province (NWP) of South Africa (SA), as described below.

2. Conclusions

The overall purpose of this study was to develop and validate Post-Traumatic Stress Disorder (PTSD) psychological management guidelines for rape survivors following four phases. Phase one of this study is a systematic review of PTSD psychological management guidelines for rape survivors. Phase two focused on the emperical research, which has two stages. Stage one was quantitative research and it described two manuscripts. The first manuscript aimed to describe factors associated with the experience of PTSD among rape survivors. The second manuscript, the quantitative research, described present practices of rape care management in Thuthuzela Care Centres of the North West Province. In stage two of the qualitative research, the study explored and described perspectives of mental health care practitioners regarding PTSD psychological management for rape survivors consulted in the TCCs of the NWP. In phase three, the study generated inferences and interpretations of QUANT- QUAL to conceptualise findings into a framework that is used to inform the development of PTSD psychological management guidelines for rape survivors. Therefore, this segment offers conclusions described according to each phase of the study. The last phase of the study developed and validated PTSD psychological management guidelines for rape survivors.

2.1. Conclusion: Manuscript one: Psychological management intervention guidelines for rape survivors with Post-Traumatic Stress Disorder (PTSD): A brief exploratory systematic literature review

Although it has been stated that rape experiences culminate in PTSD symptoms, the systematic review revealed that there are only five guidelines that adopted the effectiveness of PTSD, which is Cognitive Behavioural Therapy (CBT), Exposure Therapy (ET), Cognitive Processing (CPT) and Eye Movement Desensitization and Reprocessing (EMDR) psychological management in some parts of the world. Furthermore, those five guidelines further amplified the non-effective PTSD psychological management that are likely to be used among rape survivors which is group CBT and supportive counselling. Based on the five guidelines that are found in the literature search, it was concluded that little is known about the PTSD psychological management for rape survivors in some parts of the world, including the North West Province of SA. Therefore, based on this evidence, the researcher deemed it necessary to conduct other studies that measure the prevalence of PTSD, as well as how PTSD is currently managed in TCCs of the NWP in SA.

2.2. Conclusion: Manuscript two: Correlates of Post-Traumatic Stress diagnosis among rape survivors in the North West Province: Results and implications of a South African study

The results of this study revealed that 74.5% of rape survivors were diagnosed with PTSD at the time of data collection. Based on these quantitative results, it was concluded that PTSD is very high in the NWP and it should be assessed for each survivor who could be consulting in the TCCs of the NWP. Furthermore, correlational analysis, chi- square, Phi Cramer's v and regression analysis were used to determine the relationship between the survivors who see religion as very important in the manifestation of PTSD. The findings of this study illustrated that there is a significant relationship between PTSD and the importance of religion. Following these results, conclusions about giving rape survivors who see religion as very important, were drawn with the aim of prioritising their treatment at an early stage and thereby preventing complications related to PTSD. Furthermore,

recommendations such as conducting studies that determine the present practices of rape care management in Thuthuzela Care Centres of the North West Province, were made. This was done particularly with the aim of assessing if rape survivors who returned for follow-up visits were adequately managed for PTSD or not.

2.3. Conclusion: Manuscript three: Present practices of rape care management in Thuthuzela Care Centres of the North West Province

Rape survivors received management of acute medical care, Sexual Transmitted Infections management, emergency contraception and HIV management. During follow-up visits, few survivors have received rape trauma or debrefieng counselling in day three of follow up carein a local rape clinic, without being assessed and managed for PTSD from four weeks of follow up care. Based on this, it was concluded that there is a need to further explore what could be the possible perceptions of mental health care practitioners regarding the present PTSD psychological management among rape survivors who consulted in the TCCs of the NWP in SA.

2.4. Conclusion: Manuscript four: Post-Traumatic Stress Disorder psychological management for rape survivors: Practitioner's perspectives

Significant barriers influencing PTSD psychological management for rape survivors were revealed and these include disappearance of the rape survivors from the health system, shortage of mental health care practitioners, centralised psychosocial services, inadequate training of mental health practitioners, lack of school health programmes that address PTSD, and blame by various stakeholders. However, mental health care practitioners felt that for PTSD psychological management to be successful, there is a need for having common diagnostic tools for PTSD, provision of non-pharmacological management, which are CBT, Brain Working Recursive Therapy (BWRT), supportive counselling as well as the provision of pharmacological management of PTSD, for example SSRI's. There was an identified need to involve various stakeholders during the provision of psychological management of rape survivors diagnosed with PTSD. However, there was a gap

still, with regard to existing PTSD psychological management guideline that can be used to rape survivors diagnosed with PTSD in the context of the TCCs of the NWP, SA. Recommendations regarding the need of a conceptual framework that can be used a base to develop and validate PTSD psychological management guideline for rape survivors in the context of the NWP of SA were made.

2.5. Conclusion: Manuscript five: Conceptual Framework for PTSD psychological management among rape survivors in the North West Province

A sequential mixed method strategy was done to conceptualise findings into a framework following both Dickoff, James and Wiedenbach Practice Oriented Theory (POT) and Structure-Process-Outcome (SPO) model features of Donabedian for the development of PTSD psychological management guidelines for rape survivors in the NWP of SA. The conceptualised framework for the development of PTSD psychological management guidelines has a structure, which urges mental health care practitioners to provide PTSD psychological management among rape survivors. The context where PTSD psychological management could be provided included all TCCs and public mental health care institutions in the NWP. In order to achieve the adequate provision of PTSD psychological management, the conceptualised findings explained that there is a need for the inclusion of significant others for social support.

In the process, the conceptualised findings explained that mental health care practitioners should use PDS-5 from four weeks and onwards for PTSD diagnosis, provided PTSD psychological management is given immediately following the PTSD diagnosis, for example, provision of CBT and other effective psychological management to reduce PTSD symptoms. Thus led to recommendations regarding the development and validation of PTSD psychological management guidelines for rape survivors consulting in TCCs and public mental health care institutions.

2.6. Conclusion: Manuscript six: PTSD psychological management guidelines for rape survivors in the North West Province of South Africa

Kish's guide for the development of guidelines is used to develop and validate PTSD psychological management guidelines for rape survivors consulting in TCCs and public mental health care institutions. Panellists were involved for validation of this guideline.Non-pharmacological interventions and provision of pharmacological SSRI interventions are adopted for PTSD psychological management guidelines that can be used to treat rape survivors undergoing treatment of these disorders in TCCs and public mental health care institutions. The study recommended testing the effectiveness of the aforementioned therapies among rape survivors.

3. General conclusion

Even though there are several limitations noted in this study, there is significant contribution with regard to the knowledge of PTSD psychological management in the context of SA, particularly in the NWP. All the phases followed in this study assisted the researcher to achieve the main aim of the study, as follows:

The objective of this study in phase one was met since the findings of a systematic literature review has illustrated that psychological management options known as CBT, EX, CPT EMDR, SSRIs were adopted to manage PTSD symptoms post rape experiences in some parts of the world, excluding the NWP in SA. Therefore, recommendations that correlate PTSD diagnosis among rape survivors in the NWP as well as present practices of rape care management including PTSD management were made. Therefore, the study addressed this recommendation in phase two of the study that utilised both quantitative and qualitative research approaches. In stage one of the quantitative research, the objectives that assisted the researchers to achieve the aim of the study illustrated high prevalence of PTSD symptoms, great provision of acute medical care management, less provision of acute mental health care and absence of both PTSD assessment and psychological management. Following these findings, the recommendations of the practitioner's perspectives regarding PTSD psychological

management were made. Therefore, the second stage of the qualitative research in phase two was conducted. Its objective assisted the researcher to achieve the aim of the study through exploring and describing possible barriers to the provision of PTSD psychological management. The study therefore, suggested both the psychological management that could be used to manage PTSD post rape experiences and the strategies that could be used to enhance successful provision and adherence to PTSD psychological management.

The meta-inferences and interpretation of quantitative and qualitative findings was used to conceptualise findings into a framework using features of Dickoff, James and Wiedenbach POT and Donadedian's SPO model. This conceptualisation of findings was done to guide the development and validation of PTSD psychological guidelines as explained in detail in section one of the study and in manuscript five. Non-pharmacological interventions including CBT, EX, CPT EMDR and pharmacological interventions including SSRI's were adopted for the development of PTSD guidelines post-rape experiences. The guideline was developed and validated, described that the technigue that can be used to manage ASD is debriefing and should be provided only if it is beneficial among rape survivors consulted in TCCs in an acute stage of mental health care. The use of PDS-5 for diagnosis of PTSD and provision of effective non pharmacological and pharmacological interventions were recommended to management of rape survivors diagnosed with PTSD management.

There is also an inclusion of family members to provide social support that may enhance PTSD psychological management among rape survivors undergoing treatment in TCCs and public mental health care institutions. There is also a need for both provincial as well as the national Department of Health to take into consideration other recommendations submitted and developed in the whole study to make services available to rape survivors.

4. Limitations

The limitations of this study following the achievement of the overall purpose of the study, is that the systematic results of this study are relatively few PTSD psychological management guidelines as evidenced by five published guidelines in the world. The study further indicated that most of the studies that tested the effectiveness of the psychological management of PTSD that is CBT, EMDR, CPT and EX were mostly done in international countries including NWP and other regions of South Africa. With regard to quantitative results, the sample size that was expected to form part of the study could not be reached because of other rape survivors did not meet the inclusion criteria of the study. The results of the study relate only to the study done in one province of SA, so they cannot be generalised to other provinces of SA. However, transferability can applied to test the efficacy of the treatment in other provinces of SA.

The researcher experienced financial challenges during the process of quantitative data collection because the researcher had to reimburse the travelling expenses of all the rape survivors who participated in the study and most were travelling from communities far away to reach their respective TCCs that they consulted in during the time they reported rape. With regard to qualitative research, the data was collected in public mental health care institutions, of which there are very few in the NWP. However, regardless of the few public mental health care institutions in NWP, the nature of the methodology used in this study prevents generalisation of these results to other provinces of SA. Furthermore, regardless of documenting all the steps required for guidelines development and validation, the study did not conduct randomised or non randomised control studies to test effectiveness of the adopted interventions in this guideline.

5. Recommendations for practice, education, research and policy makers

The following recommendations may be considered to ensure that PTSD psychological management guidelines are implemented in the TCCs and public mental health care institutions in the NWP province of SA.

5.1. Recommendations for health care practice

For the purpose of ensuring that rape survivors receive quality health care, it is deemed necessary for the TCCs and public mental health care institutions situated in the NWP to implement this PTSD psychological management guidelines to increase access of health care service delivery, which include holistic care for all those that need PTSD psychological management post rape experiences. This study also recommends the application of the PDS-5 tool for PTSD diagnosis and providing PTSD psychological management from four weeks onwards in each follow-up care visit in order to ensure reduced or no development of PTSD symptoms among rape survivors.

The study also recommends a mental health care review board, national prosecuting authority officers and hospital management to coordinate, collaborate and support health care practitioners caring for rape survivors and training when these are needed. All the people who have the required qualifications should be hired in the NWP TCCs or refer rape survivors to the resident qualified mental health practitioners who are trained to carry out PTSD assessment and psychological management listed above to ensure continuity of care deemed essential for survivors of rape. It is strongly recommended to consider the family during the care period of rape survivor being diagnosed with PTSD for provision of social support among their loved ones. It is further recommended that the TCCs consider benchmarking on how to implement Multidisciplinary Team (MDT) style discussing of the progress of each survivor diagnosed with long term disorders including PTSD as is currently the practice in public mental health care institutions.

5.2. Recommendations for education

Mental health care practitioners and all the health care workers working in TCCs are recommended to provide health education and training among all rape survivors about the provision of rape care management needed by rape survivors and give follow-up visits to ensure continuity of care. Mental health care practitioners should educate all rape survivors about the importance of disclosing their experience to their family members and if possible, to the community to receive support that could

enable them to become resilient to the development of PTSD symptoms. Possibly the positive support received from family members and/or the community would also encourage them to return for follow-up visits without the fear of stigma which could culminate in PTSD symptoms following rape experiences.

It is advised, to inform the families about family therapy that is available at the health care institution in case they are indirectly affected by the rape experiences perpetrated against their loved ones. Provision of information regarding how families, community and police officers should handle rape survivors is of paramount importance as well as how full support can be made available for families, community and other stakeholders on the NWP Department of Health (DoH) website, posters, and pamphlets at all the DoH health care systems, to increase accessibility of information.

Higher education institutions or consultants who are either experienced or have researched rape care issues must educate all the MDT members about the possible barriers that prevent survivors to return for follow-up care visits. Higher education institutions must include mental health care management specific to rape ordeals in the curriculum of all health care professionals who provide psychological management of rape. There is a dire need to keep on offering those in-service training or refresher courses each time there is a new or updated diagnostic tool of PTSD and new or updated PTSD psychological management through acknowledging the recent findings of the particular subject at hand.

5.3. Recommendation for future research

There is a need to conduct future research aimed at determining other predictors of PTSD symptoms as well as how PTSD affect the state of religious belief of individual who experienced rape. Such research could develop a strategy that could be used to prevent possible predictors of PTSD symptoms among rape survivors. Further studies may find pathways of implementing PTSD psychological management guidelines to increase service delivery needed by rape survivors. Another facet is randomised controlled trail studies to test the suggested PTSD psychological management for rape

survivors consulting in TCCs and public mental health care institutions in the NWP and other regions of SA to assess if they have the desired effects of reducing PTSD symptoms. In addition, this study recommends future studies that develop and validate guidelines to enhance the psychosocial wellbeing of health care practitioners caring for rape survivors to improve their sense of wellbeing.

5.4. Recommendation for policy making

The study recommends that policy makers adopt the PDS-5 diagnostic tool for use in PTSD diagnosis from four weeks of follow-up care visits onwards. It is recommended that policy makers must include PTSD psychological management from four weeks follow-up care visits and onwards in the general rape care management provided in TCCs to provide optimum and holistic quality health care service for rape survivors.

6. Summary

This section provided a substantive conclusion of all six manuscripts and general conclusions, limitations and recommendations of the whole study. It was evident from the findings of the systematic review of this study that there are relatively few guidelines of PTSD psychological management post rape experience. The systematic review findings also confirmed that the NWP of SA and other countries do not have the PTSD psychological management guidelines that could be used for rape survivors diagnosed with these disorders. Despite the fact that there are no PTSD psychological management guidelines in SA, the study findings revealed that 74.5% of rape survivors who consulted in TCCs of the NWP presented with PTSD symptoms during the time of data collection of this study.

Furthermore, the rape survivors did not receive assessment and management of PTSD when they returned for scheduled follow-up visits at the centre. Furthermore, countless barriers hindering the provision of PTSD psychological management in the NWP TCCs were identified in this study and the main gap was that there is no guideline currently used to assess and manage PTSD among rape survivors in the NWP. However, in order to bridge the main gap identified, this study developed and

validated guidelines for PTSD psychological management in the context of SA, NWP. However, several limitations such as small sample size of rape survivors as well as fewer public mental health care institutions, were adverse in this study. The study ultimately provided recommendations for health care practice, education and training, and for future research and policy makers.

APPENDIX A: QUESTIONNAIRE

Date.....

Participant ID.....

Welcome, thank you for your involuntary participation in the study titled: 'Psychological management guidelines for PTSD experienced by rape survivors in the North West Province.' I would like to ask you questions about your experiences, how they are affecting you and the treatment you have received during consultation. If you have any questions or need to stop, please let me know.

Section A: Demographics

We'd like to get some information about you and the history of psychological management received during consultations in rape clinics. I am going to read you some questions and please answer to the best of your ability.

A1. How old are you? _____

A2. What is your marital status?

0. Never married
1. Married, living with husband
2. Married, but not living with husband
3. Separated
4. Divorced
5. Widowed

A3. What is your relationship status?

0. You have not had a relationship in the past 3 months
1. You live with one partner
2. You see/date one person regularly
3. You see, date more than one person regularly
4. You date occasionally

A4. What is your level of education?

0. None
1. Less than matric
2. Matric
3. University degree
4. Diploma
5. Other (specify): _____

A5. What is your work status?

0. Unemployed
1. Unable to work
2. Retired
3. In school
4. Working part time
5. Working full time
6. Other (specify): _____

A6. What is your religion?

0. No religion
1. Christian (e.g. Protestant, Baptist, Methodist, etc.)
2. Eastern (e.g. Muslim)
3. Judaism
4. Other (specify): _____

A7. How important is your religion in your life?

1. Not at all
2. Somewhat
3. Very

A8. What is are your cultural practices or what is your cultural belief system other than religion?

_____

A9. How important is your culture in your life?

1. Not at all
2. Somewhat
3. Very

Section B: Provision Of Comprehensive Rape Care Management Post Rape Experiences

Now I am going to ask you about history of rape and the management received when consulted at the rape clinic and during follow-ups.

B1. When did you report rape incident?

1. Immediately after the incident
2. A few/a day after the incident
3. A few months after the incident
4. Other (Specify)

B2. Was it at night or during the day?

1. During the day
2. At night

B3. Was it on a weekend or during the week?

1. During the week
2. Weekend

B4. Who assisted you on your first day of reporting rape in a health care centre?

1. A doctor
2. A nurse
3. All of them
4. Other (Specify)
5. Other (Specify)

B5. What is the current rape care management you have received in this clinic for the first time and during follow up visit in a health care centre in the following?

Acute medical care management	At the time of presentation	
1. ***Injury management***	***Yes***	***No***
Information about possible injuries and injury management and review on injuries during follow up visits		
Explanations of medical forensic examination needed		
2. ***STIs management***	***Yes***	***No***
Information regarding STI		
Prophylaxis /Review on the side effects of STIs prophylaxis		
3. Emergency contraception		
Counselling		
Provision		
4. ***HIV management***	***Yes***	***No***
Testing including pre and post counselling		
Prophylaxis and review of the side effects during follow up visits		

5. Acute mental health care management	For day three follow up care post rape experiences	
Where you scheduled to come for follow up care in day three, to receive:Trauma or rape crisis management, debriefing and information and enhancement about coping strategies -RTS	*Yes*	*No*
6. Chronic mental health care management	**For four weeks and onwards follow up care post rape experiences**	
Where you scheduled to come for follow up care in four weeks or after four weeks to receive: An assessment of PTSD from four weeks follow-up care and onwards :PTSD management from four weeks and onwards	Yes	No

Section C: PDS-5 Scale for PTSD diagnosis

Now I am going to ask you about the symptoms of PTSD encountered post rape experiences. I am going to read each statement carefully and circle the number that best describes how often that problem has been happening and how much it upset you over THE LAST MONTH. Rate each problem with respect to the traumatic event that you wrote above.

C1. PTSD diagnostic scale for DSM-5 (PDS 5)

Item	0	1	2	3	4
1. Talking to other people about the trauma	Not at all	Once a week or somewhat	2 to 3 times a week/ very much	4 to 5 times a week/ almost always	6 or more times/always
2. Unwanted upsetting memories about the trauma					
3. Bad dreams or nightmares related to the trauma					
4. Feeling very EMOTIONALLY upset when reminded of the trauma					
5. Having PHYSICAL reactions when reminded of the trauma (for example, sweating, heart racing)					
6. Trying to avoid thoughts or feelings related to the trauma					
7. Trying to avoid activities, situations, or places that remind you of the trauma or that feel more dangerous since the trauma					
8. Not being able to remember important parts of the trauma					
9. Seeing yourself, others, or the world in a more negative way (for example"I can't trust people," "I'm a weak person")					
10. Blaming yourself or others (besides the person who hurt you) for what happened					
11. Having intense negative feelings like fear, horror, anger, guilt or shame					
12. Losing interest or not participating in activities you used to do					
13. Feeling distant or cut off from others					
14. Having difficulty experiencing positive feelings					
15. Acting more irritable or aggressive with others					
16. Taking more risks or doing things that might cause you or others harm (for example, driving					

recklessly, taking drugs, having unprotected sex) 17. Being overly alert or on-guard (for example, checking to see who is around you, being uncomfortable with your back to a door)					
18. Being jumpy or more easily startled (for example when someone walks up behind you)					
19. Having trouble concentrating					
20. Having trouble falling or staying asleep					

C2. Distress and interference

Item	**0**	**1**	**2**	**3**	**4**
21. How much have these difficulties been bothering you?	Not at all	Once a week or somewhat	2 to 3 times a week/ very much	4 to 5 times a week/ almost always	6 or more times/always
22. How much have these difficulties been interfering with your everyday life (for example relationships, work, or other important activities)?					

C3. Symptoms Onset and Duration

Item	**1**	**2**
23. How long after the trauma did these difficulties begin?	Less than 6 months	More than 6 months
24. How long have you had these trauma-related difficulties? [Circle one]	Less than one month	More than one month

APPENDIX B: INTERVIEW GUIDE

Welcome, thank you for your involuntary participation in the study titled: 'management guidelines for PTSD experienced by rape survivors in the North West Province.' I would like to ask you a few questions about the psychological management that can be given to rape survivors diagnosed with PTSD and the follow-ups that can be given to them. If anyone has any questions or need for the group to stop, please let us know.

1. What are your perceptions regarding the present PTSD psychological management for rape survivors consulted in TCCs?

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2. What are the psychological management interventions of PTSD that can be performed among rape survivors diagnosed with PTSD post rape experiences?

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3. How often should rape survivors diagnosed with PTSD come for follow care?

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4. What are the diagnostic measures that can be used to diagnose PTSD and when should health care practitioners begin to assess PTSD symptoms following rape experiences?

APPENDIX C: ETHICAL CLEARANCE FROM NWU

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

Private Bag X6001, Potchefstroom,
South Africa, 2520

Tel: (018) 299-4900
Faks: (018) 299-4910
Web: http://www.nwu.ac.za

Institutional Research Ethics Regulatory Committee

Tel: +27 18 299 4849
Email: Ethics@nwu.ac.za

ETHICS APPROVAL CERTIFICATE OF PROJECT

Based on approval by the **Health Science Ethics Committee (FAST-HSEC)** on **07/09/2017** after being reviewed at the meeting held on **07/09/2017**, the North-West University Institutional Research Ethics Regulatory Committee (NWU-IRERC) hereby **conditionally approves** your project as indicated below. This implies that the NWU-IRERC grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the project may be initiated, using the ethics number below.

Project title: PTSD Psychological Management Guidelines for Raped Survivors

Project Leader/Supervisor: Prof M Davhana-Maselesele
Student: Zulwayo NV

Ethics number: N W U - 0 0 4 7 7 - 1 7 - A 9

Application Type: Single Study
Commencement date: 2017-09-07 **Expiry date:** 2020-09-07 **Risk:** Medium

Special conditions of the approval (if applicable):

- There should be provision for counselling during the interview in case the victim retapses from the memories of the horrible event. The applicant should include in their application the name of possible counsellor.
- Insert a sentence in the application that indicate that the participant has the right to withdraw at any point if she/he might feel uncomfortable.

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following:

- *The project leader (principle investigator) must report in the prescribed format to the NWU-IRERC via HSEC:*
  - *annually (or as otherwise requested) on the progress of the project, and upon completion of the project*
  - *without any delay in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.*
  - *Annually a number of projects may be randomly selected for an external audit.*
- *The approval applies strictly to the protocol as stipulated in the application form. Would any changes to the protocol be deemed necessary during the course of the project, the project leader must apply for approval of these changes at the HSEC. Would there be deviated from the project protocol without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.*
- *The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date, a new application must be made to the NWU-IRERC via HSEC and new approval received before or on the expiry date.*
- *In the interest of ethical responsibility the NWU-IRERC and HSEC retains the right to:*
  - *request access to any information or data at any time during the course or after completion of the project;*
  - *to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process.*
  - *withdraw or postpone approval if:*
    - *any unethical principles or practices of the project are revealed or suspected,*
    - *it becomes apparent that any relevant information was withheld from the HSEC or that information has been false or misrepresented,*
    - *the required annual report and reporting of adverse events was not done timely and accurately,*
    - *new institutional rules, national legislation or international conventions deem it necessary.*
- *HSEC can be contacted for further information via Lesetja.Motadi@nwu.ac.za or 018 299 2598.*

The IRERC would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the IRERC or HSEC for any further enquiries or requests for assistance.

Yours sincerely

Prof LA Du Plessis

Digitally signed by Prof LA Du Plessis
Date: 2017.10.12 08:55:53 +02'00'

Prof Linda du Plessis
Chair NWU Institutional Research Ethics Regulatory Committee (IRERC)

APPENDIX D: NORTH WEST DEPARTMENT OF HEALTH PROVINCIAL APPROVAL LETTER

health
Department of Health
North West Province
REPUBLIC OF SOUTH AFRICA

3801 First Street
Nice Office Park
MMABATHO, 2735

Enq: Mhabhanu Maseko
Tel: 018 391 4504
NVaocog@nwpg.gov.za
www.nwhealth.gov.za

POLICY, PLANNING, RESEARCH, MONITORING AND EVALUATION

Name of researcher : Ms. N.V. Zulwayo
North West University

Physical Address (Work/ Institution) Corner and Dr Albert Lithuli and University drive North West University Unit 5, Mmabatho 2735

Subject : Research Approval Letter- PTSD Psychological management guidelines for raped survivors.

This letter serves to inform the Researcher that permission to undertake the above mentioned study has been granted by the North West Department of Health. The Researcher is expected to arrange in advance with the chosen facilities, and issue this letter as proof that permission has been granted by the Provincial office.

This letter of permission should be signed and a copy returned to the department. By signing, the Researcher agrees, binds him/herself and undertakes to furnish the Department with an electronic copy of the final research report. Alternatively, the Researcher can also provide the Department with electronic summary highlighting recommendations that will assist the department in its planning to improve some of its services where possible. Through this the Researcher will not only contribute to the academic body of knowledge but also contributes towards the bettering of health care services and thus the overall health of citizens in the North West Province.

Kindest regards

Dr. FRM Reichel
Director: PPRM&E

LEPAPHA LA BOITEKANELO
DEPARTMENT OF HEALTH
Kgetsana Poso Private Bag X2068
Mmabatho 2735
01 DEC 2017
NORTH WEST PROVINCE
REPUBLIC OF SOUTH AFRICA

01/12/2017
Date

Researcher

01/12/2017
Date

Healthy Living for All

APPENDIX E: PERMISSION TO CONDUCT THE STUDY IN NWP HEALTH CARE INSTIUTIONS

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
MAFIKENG CAMPUS

Private Bag X2046, Mmabatho
South Africa 2735

School of Nursing Sciences
Tel: 071 923 6362
Email: 18008240@nwu.ac.za
01.December.2017

Department of Health:
North West Province
Ngaka Modiri Molema (Mafikeng Provincial/Bophelong Hospital)
Bojanala District (Job Shimankane Hospital)
Kenneth Kaunda District (Klerkesdorp/ Tshepong Hospital)
Dr Segomotsi Mompati District (Taung Hospital)

Dear Sir or Madam

REQUEST FOR PERMISION TO CONDUCT A STUDY

This communiqué bears reference.

I am currently conducting a research project as a Doctoral student in nursing candidate in the North-West university Mafikeng campus. We are currently **developing PTSD Psychological Management Guidelines for Rape Survivors in the North West Province.** This study will be conducted in all Thuthuzela Care Centres, the centre that cares for rape survivors and Provincial Psychiatric Hospitals were we can find specialist that can come up with the treatment guidelines suitable for rape survivors diagnosed with PTSD in the North West Province. The development of PTSD psychological management guidelines is highly recommended for prevention of possible complications that may arise among rape survivors due to PTSD. The psychological management guidelines will also improve quality care of rape survivors and improve their service delivery. Furthermore, South Africa's is reporting high prevalence of rape particularly among women. Rape is regarded as number one predisposing factor of PTSD. However, there is little or no evidence regarding the PTSD psychological management guidelines of rape survivors. This study is conducted under the

supervision of Prof Lufuno Makhado. We will prefer to collect data starting around 27th of October 2017 to 30th January 2018.

Participants will be informed that all information will be kept confidential, their rights will be specified, such as telling them that they have the right to terminate their participation in the study at any stage and that they will not be penalised or discriminated against by the researcher for doing so. In case the participants experiences emotional disturbances. The researcher have experienced and qualified registered counsellor who will provide psychological assistance. The participants will be referred to her immediately because she stations in Thuthuzela care centre. The interviews will be coded and kept under lock and key and those questionnaires and transcripts will be accessed by the researcher only. In this manner privacy, confidentiality and anonymity will be protected

The findings of this study will inform policy makers about the development of PTSD psychological management guidelines and the possible way in which these guidelines can be implemented, maintained and promoted in the North West province. Furthermore, the findings from this study can be used to inform for future intervention research to improve nursing education especially clinical learning and nursing practice. This communiqué serve to request for permission to conduct a study.

This study had been provisionally approved, with ethics number **NWU-00477-17-A9,** Proposal is attached in the email and please contact me or my supervisor at

Your positive response will be highly appreciated.

Thanking you in advance.

Ms Nombulelo Veronica Zulwayo
Ph.D.,Candidate
Faculty of Health Sciences-School of Nursing Science
NORTH WEST UNIVERSITY: MAFIKENG SITE

Dr Lufuno Makhado
Promoter

Acting Research Manager and Post Graduate Studies

Original details: (18008240) C:\Users\18008240\Documents\Ms Zulwayo\Request for permission to conduct a Study.docm
13 October 2017

APPENDIX F: INFORMED CONSENT FORM TO PARTICIPATE IN RESEARCH

PTSD Psychological Management Guidelines for Raped Survivors in the North West Province

Rape survivors arerequested to participate in a research study conducted by Ms Nombulelo Veronica Sepeng under supervision of Professor Lufuno Makhado from the North West University-Mafikeng Campus, South Africa. They will be selected in this study because they are female over the age of 18 who will be able to communicate in English or Tswana. It will be explained that their participation in this research study is voluntary. They will be recruited by health care working in TCCs of the North West. Those who agree will be requested to sign and informed consent. The health care workers will enroll because they have an experience of two to three years working in mental health institutions and they will be recruited by the hospital CEO and head of Multi-disciplinary team of the chosen mental health care institution.

We expect to enroll at 200 or less rape survivors in four district of the North West Province as well as one psychiatrist or one doctor, one to two psychologist, one to two social worker, one to two nurse from mental health care institutions for focus group interview.

The participation for both rape survivors and health care workers will be done in one point in time unless there is a need of a follow up. Mental health care practitionerswill also be told that their participation is voluntarily and not compulsory in the study. Their decision regarding their participation will not affect them either way socially or in their employment. Questions and about anything will be welcomed in case they don't understand anything before making the decision of participating or not.

Why is this study being done?

Many women in our community have had sexual experiences against their will, which may afterwards affect their emotional and psychological well being. The study, therefore intend to obtain a greater understanding effects of rape and treatment services with the aim of developing PTSD psychological management guideline for rape survivors in North West Province.

What will happen if I take part in this research study?

If you are a rape survivors volunteer to participate in this study, the researcher will interview you using a survey of PTSD Diagnostic Scale for DSM-5 which is called (PDS-5 scale) that contains the following sets of questions:

This will include questions like which traumatic events you have experienced and how long did it happened, nightmares, emotional numbness, avoidance and flash backs

In case the participants experiences emotional disturbances. They researcher have experienced qualified registered counsellor who will provide psychological assistance. The participants will be referred to her immediately because she stations in Thuthuzela Care Centres.

Prior to data collection of PDS-5 survey you will be asked to complete the demographic information such as follows:

That will include questions about your age, marital status, where you live, your level of education, what work you do, your level of income, your religion, rape incidences, and the current rape care management or treatment performed to you after rape incidences.

Then the questions that will be asked for mental health care practitioners will be their demographic data such as their age, employment, years of service in their employment history and etc and they can be asked questions like their perceptions regarding the psychological management given to rape survivors post rape and the recommend the best psychological treatment that can be performed among rape survivors. For mental health care practitioners will be asked questions like what are your perceptions regarding the psychological management of PTSD among rape survivors. The demographic such as age, gender, years of experience working in mental health will collected prior actual data collections of their perceptions regarding PTSD psychological management.

How long will I be in the research study?

These assessment for both rape survivors and mental health care practitioners will approximately last for 60 min or more.

Are there any potential risks or discomforts that I can expect from this study?

You may experience possible discomfort or tiredness from 60 minutes in the interview for both rape survivors. Rape survivors may also experience possible distress coming from the discussion of any traumatizing or life threatening events you may have experienced. During the interview, you may disclose sensitive personal information such as personal problems that you may have or have had in the past. The researcher team has taken several steps to ensure that this information will be kept strictly confidential. There are no anticipated potential risks could be observed for mental health care experts

Are there any potential benefits if I participate?

Rape survivors could be having symptoms of trauma for which you may benefit from treatment. If this is discovered during this study, you will be referred to suitable mental health care practitioners in Thuthuzela Care Centres at the Hospital. The results of the research may also help health professionals find better ways to examine and assist people from this community who have experienced trauma.

Will I receive any payment if I participate in this study?

The participants will be told that should they agree to participate in the study will not receive any payment or any incentives if they are found in the centre unless travelled from somewhere

Will information about me and my participation be kept confidential?

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission. The researcher will keep your participation private by following these steps: The screening form and consent form will be the only documents containing your name. These two documents will therefore be kept in the locked office of the Principal Investigator, in a filing cabinet separate from the study survey.

The study survey will not have any information that can identify you as a person. It will be labeled with a code that the research team can link to your screening form and consent form. The survey will be kept in a locked cupboard in the locked office of the Principal investigator. The list of all participants and their code numbers will be kept in a locked cabinet in a different room. These steps are designed to ensure that if an unauthorized person tried to obtain any of these documents; it would still be very difficult for them to know which participant the information belongs to. The tape recorders will be listened by the researchers only and the data will be transferred to a computer where the password will be created in order to maintain privacy and confidentiality.

Withdrawal of participation by the investigator

The investigator may withdraw you from participating in this research if circumstances arise which make necessarily it becomes extremely hard for you to understand or answer the study questions, you may have to drop out, even if you would like to continue. The investigator will make the decision and let you know if it is not possible for you to continue.

What are my rights if I take part in this study?

You may change your mind about participating at any time and stop participating without penalty or loss of benefits to which you were otherwise entitled. You can choose whether or not you want to be in this study. If you volunteer to be in this study, you may leave the study at any time without consequences of any kind. You are not giving up any of your legal rights if you choose to be in this research study. You may also refuse to answer any questions that you do not want to answer and still remain in the study.

Whom I can contact if I have questions about this study

If you have questions about this study, please feel free to contact

Professor Lufuno Makhado, Ph.D., Principal investigator

North West University, School of Nursing Sciences

Corner Albert Lithuli and University Drive, Room A13-G09

Mmabatho, 2735

084 552 6260 /018 389 2236

Signature of study participant

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this studies have been given a copy of this form.

Name of Participant

Signature of Participant Date

Please indicate your wishes below

Contact for future studies

The participants will be asked to tick here -------if they agree to be contacted regarding future studies that maybe of interest to me. I understand that I do not have to participate in these future studies. I am only agreeing that I can be contacted to learn about the studies. Then I can decide if I want to participate or not

Initial here----------

The participants will be asked to tick here--------I do not wish to be contacted in the future by the Principal investigator, research team and/or other researchers

Initial here----------

Future use of data

The participants will be asked to tick here -------if they agree to have my data stored for future use by the Principal Investigator and/or research team.

Initial

The participants will be asked to tick here--------if they do not want my data stored for future use by the Principal Investigator and/or research team.

Initial

Signature of the person obtaining consent

In my judgment the participant is voluntarily and knowingly giving informed consent and possesses the legal capacity to give informed consent to participate in this research study.

Name of Person Obtaining Consent ----------Contact Number----------Consent Date

Signature of Person collecting data ----------Date of data collection ----------

APPENDIX G: CERTIFICATE OF LANGUAGE EDITING

To whom it may concern

With this letter, I, Simonete Munro, BIS Publishing Honours Degree graduate and member of the Professional Editors' Guild (membership number: MUN002), confirm that the paper titled "*PTSD Psychological Management Guidelines for Raped Survivors in the North West Province*" by Nombulelo Sepeng (NV Sepeng), was edited by myself in a professional capacity in 2019.

Brief attention was given to sentence structure matters, spelling and other minor language problems in the document. References weren't checked (neither in-text, nor on the list).

For further information, please contact me at simonete@wol.co.za.

Kind regards,

Simonete

Professional EDITORS Guild

Simonete Munro
Associate Member

Membership number: MUN002
Membership year: March 2019 to February 2020

072 609 6572
[illegible]

www.editors.org.za

APPENDIX H: INSTRUCTIONS FOR AUTHORS JPA

Thank you for choosing to submit your paper to us. These instructions will ensure we have everything required so your paper can move through peer review, production and publication smoothly. Please take the time to read and follow them as closely as possible, as doing so will ensure your paper matches the journal is requirements. For general guidance on the publication process at Taylor & Francis please visit our Author Services website. This journal uses Editorial Manager to peer review manuscript submissions. Please read the guide for Editorial Manager Authors before making a submission. Complete guidelines for preparing and submitting your manuscript to this journal are provided below.

Editorial policy

Submission of a manuscript implies that the material has not previously been published, nor is it being considered for publication elsewhere. Submission of a manuscript will be taken to imply transfer of copyright of the material to the owners, Africa Scholarship Development Enterprize. Contributions are accepted on the understanding that the authors have the authority for publication. Material accepted for publication in this journal may not be reprinted or published without due copyright permissions.

The Journal has a policy of anonymous peer review. Papers will be scrutinised and commented on by at least two independent expert referees or consulting editors as well as by an editor. A multi-layered manuscript review process is implemented to result in high quality publications: a peer review and developmental review. The peer review process addresses the primae-face merits of the manuscript's scientific contribution subject to the Editor's discretionary decision. The developmental review by the Editorial office advises the scientific writing presentation qualities of the manuscript.

The Editor reserves the right to revise the final draft of the manuscript to conform to editorial requirements. A manuscript development support charge of US$ 1575 is levied on all accepted manuscripts and payable to the journal's US Bank account. Instructions for remitting the publication levy are provided to lead or corresponding authors by the Editorial Office. Authors will receive 50 complimentary e-prints of their published article to distribute to their colleagues and promote their work.

Publishing ethics

By submitting to the Journal of Psychology in Africa for publication review, the author(s) agree to any originality checks during the peer review and production processes. A manuscript is accepted for publication review on the understanding that it contains nothing that is abusive, defamatory, fraudulent, illegal, libellous, or obscene. During manuscript submission, authors should declare any competing and/or relevant financial interest which might be potential sources of bias or constitute conflict of interest. The author who submits the manuscript accepts responsibility for notifying all co-authors and must provide contact information on the co-authors.

The Editor-in-Chief will collaborate with Taylor and Francis using the guidelines of the Committee on Publication Ethics [http://publicationethics.org] in cases of allegations of research errors; authorship complaints; multiple or concurrent (simultaneous) submission; plagiarism complaints; research results misappropriation; reviewer bias; and undisclosed conflicts of interest.

Manuscripts

Manuscripts should be written in English and conform to the publication guidelines of the latest edition of the American Psychological Association (APA) publication manual of instructions for authors. Manuscripts can be a maximum of 7 000 words.

Submission

Manuscripts should be prepared in MSWord, double spaced with wide margins and submitted via the journal's Editorial Manager system.

Before submitting a manuscript, authors should peruse and consult a recent issue of the Journal of Psychology in Africa for general layout and style.

Manuscript format

All pages must be numbered consecutively, including those containing the references, tables and figures. The typescript of a manuscript should be arranged as follows:

• Title: this should be brief, sufficiently informative for retrieval by automatic searching techniques and should contain important keywords (preferably <13).

• Author(s) and Affiliation(s) of author(s): The corresponding author must be indicated. The author's respective affiliation where the work was done must be indicated. An e-mail address for the corresponding author must be provided.

• Abstract: Articles and abstracts must be in English. Submission of abstracts translated to French, Portuguese and/ or Spanish is encouraged. For data-based contributions, the abstract should be structured as follows: Objective – the primary purpose of the paper, Method – data source, participants, design, measures, data analysis, Results – key findings, implications, future directions and Conclusions – in relation to the research questions and theory development. For all other contributions (except editorials, book reviews, special announcements) the abstract must be a concise statement of the content of the paper. Abstracts must not exceed 150 words. The statement of the abstract should summarise the information presented in the paper but should not include references.

• Text: (1) Per APA guidelines, only one space should follow any punctuation; (2) Do not insert spaces at the beginning or end of paragraphs; (3) Do not use colour in text; and (4) Do not align references using spaces or tabs, use a hanging indent.

• Tables and figures: These should contain only information directly relevant to the content of the paper. Each table and figure must include a full, stand-alone caption, and each must be sequentially mentioned in the text. Collect tables and figures together at the end of the manuscript or supply as separate files. Indicate the correct placement in the text in this form <insert Table 1 here>. Figures must conform to the journals style. Pay particular attention to line thickness, font and figure proportions, taking into account the journal's printed page size – plan around one column (82 mm) or two column width (170 mm). For digital photographs or scanned images the resolution should be at least 300 dpi for colour or greyscale artwork and a minimum of 600 dpi for black line drawings. These files can be saved (in order of preference) in PSD, PDF or JPEG format. Graphs, charts or maps can be saved in AI, PDF or EPS format. MS Office files (Word, Powerpoint, Excel) are also acceptable but DO NOT EMBED Excel graphs or Powerpoint slides in a MS Word document.

Referencing

Referencing style should follow latest edition of the APA manual of instructions for authors.

• References in text: References in running text should be quoted as follows: (Louw & Mkize, 2012), or (Louw, 2011), or Louw (2000, 2004a, 2004b). All surnames should be cited the first time the reference occurs, e.g., Louw, Mkize, and Naidoo (2009) or (Louw, Mkize, & Naidoo, 2010). Subsequent citations should use et al., e.g. Louw et al. (2004) or (Louw et al., 2004). 'Unpublished observations' and 'personal communications' may be cited in the text, but not in the reference list. Manuscripts submitted but not yet published can be included as references followed by 'in press'.

• Reference list: Full references should be given at the end of the article in alphabetical order, using double spacing. References to journals should include the author's surnames and initials, the full title of the paper, the full name of the journal, the year of publication, the volume number, and inclusive page numbers. Titles of journals must not be abbreviated. References to books should include the authors' surnames and initials, the year of publication, full title of the book, the place of publication, and the publisher's name. References should be cited as per the examples below:

Journal article

Peltzer, K. (2001). Factors at follow-up associated with adherence with adherence with directly observed therapy (DOT) for tuberculosis patients in South Africa. Journal of Psychology in Africa, 11(2), 165–185.

Book

Gore, A. (2006). An inconvenient truth: The planetary emergency of global warming and what we can do about it. Emmaus, PA: Rodale.

Edited book

Galley. K E. (Ed.). (2004). Global climate change and wildlife in North America. Bethesda, MD: Wildlife Society.

Chapter in a book

Cook, D. A., & Wiley, C. Y. (2000). Psychotherapy with members of the African American churches and spiritual traditions. In P. S. Richards & A. E. Bergin (Ed.), Handbook of

psychotherapy and religiosity diversity (pp 369–396). Washington, DC: American Psychological Association.

Magazine article

Begley, S., & Murr, A. (2007, July 2). Which of these is not causing global warming? A. Sport utility vehicles; B. Rice fields; C. Increased solar output. Newsweek, 150 (2), 48–50.

Newspaper article (signed)

Landler, M. (2007, June 2). Bush's Greenhouse Gas Plan Throws Europe Off Guard. New York Times, p. A7.

Unpublished thesis

Appoh, L. (1995). The effects of parental attitudes, beliefs and values on the nutritional status of their children in two communities in Ghana (Unpublished master's thesis). University of Trondheim, Norway.

Conference paper

Sternberg, R. J. (2001, June). Cultural approaches to intellectual and social competencies. Paper presented at the Annual Convention of the American Psychological Society, Toronto, Canada

Data Sharing Policy

This journal applies the Taylor & Francis Basic Data Sharing Policy. Authors are encouraged to share or make open the data supporting the results or analyses presented in their paper where this does not violate the protection of human subjects or other valid privacy or security concerns.

Authors are encouraged to deposit the dataset(s) in a recognized data repository that can mint a persistent digital identifier, preferably a digital object identifier (DOI) and recognizes a long-term preservation plan. If you are uncertain about where to deposit your data, please see this information regarding repositories.

Authors are further encouraged to cite any data sets referenced in the article and provide a Data Availability Statement.

At the point of submission, you will be asked if there is a data set associated with the paper. If you reply yes, you will be asked to provide the DOI, pre-registered DOI, hyperlink, or other persistent identifier associated with the data set(s). If you have selected to provide a pre-registered DOI, please be prepared to share the reviewer URL associated with your data deposit, upon request by reviewers.

Where one or multiple data sets are associated with a manuscript, these are not formally peer reviewed as a part of the journal submission process. It is the author's responsibility to ensure the soundness of data. Any errors in the data rest solely with the producers of the data set(s).

Data availability statement: If there is a data set associated with the paper, please provide information about where the data supporting the results or analyses presented in the paper can be found. Where applicable, this should include the hyperlink, DOI or other persistent identifier associated with the data set(s). Templates are also available to support authors.

Data deposition: If you choose to share or make the data underlying the study open, please deposit your data in a recognized data repository prior to or at the time of submission. You will be asked to provide the DOI, pre-reserved DOI, or other persistent identifier for the data set.

Contact us

If you have any queries, please contact us via our Author Services website here.

Should you wish to contact the editor directly, you can do so at the following address: Elias.Mpofu@unt.edu

APPENDIX I.INSTRUCTIONS TO AUTHORS: AJNM

Please adhere strictly to these instructions to facilitate the publication process of articles.

1. Guidelines for Technical Preparation of Manuscript

Layout

Submit manuscripts electronically—MSWord file.

All graphic material has to be positioned at the correct place in the text and should be of a good quality. Do not add supplementary files with graphic content.

Manuscripts must be presented as: A4 pages; normal margins; 12pt Times Roman; 1.5 line spacing.

Add a line break (enter key) between all paragraphs. Do not apply paragraph styles (hanging indents, automatic spacing after or before, etc.).

Proofing language must be set as UK English (colour—not color; travelled—not traveled; organise; organisation; organising—not -ize).

Do not type double spaces anywhere; not between words, at the end of sentences or after colons.

Type hard spaces (shift + control + space bar) when phrases are preferred to be presented as a unit, e.g.10_000; Vol. 1 (2):_22–21.

Articles should not exceed 9000 words from the first word in the title to the last word in the list of references.

Make sure you follow the guidelines for ensuring a blind peer review.

Then present an indented abstract of not more than 250 words. Abstracts should not contain any footnotes or citations. Do not type the abstract in italics.

Below the abstract, please provide 4–6 keywords for indexing (only proper nouns in capitals). Distinguish between keywords/phrases with semicolon, e.g. Pentecostal; hymnal records; migration; southern regions of Africa.

Authors should include their affiliation or ORCiD below their name, after the title of the article.

No numbers should be used in headings or in lists

Please note the format and order of information required for the presentation of **book reviews**:

Oxford Dictionary of Journalism <Book title in italics>

Tony Harcup <Book author name(s) and surname>

Oxford University Press. 2014. Oxford Quick Reference. Xiv + pp. 368. <Publisher, date, series and number of pages>

ISBN: 978-0-0000000-1
<ISBN>, https://doi.org/10.1093/acref/9780199646241.001.0001 <DOI>

Reviewed by Rod Amner <Reviewer details>

Orcid.org/0000-0000-0000-0000 **<ORCiD>**

Rhodes University, School of Journalism and Media Studies, South Africa <Affiliation: Institution, Department, and Country>

r.amner@ru.ac.za <email address>

Guidelines for writing conference reports

The editorial board of the *Africa Journal of Nursing and Midwifery* (AJNM) would like to ensure that all national and international conferences, seminars, scientific and technical as well as other important gatherings are reported on on in the AJNM, given that not all readers of the AJNM are in a position to attend conferences. Therefore, it will be beneficial for the AJNM community/readers/subscribers who cannot attend such scholarship gatherings to be informed of matters deliberated upon.

An invitation is extended to all AJNM readers to submit succinct scientific reports based on attendance of scientific meetings following the required AJNM guidelines.

The following guidelines are intended to assist authors to prepare short scientific reports on conferences/meetings/seminars for consideration by the editor of the AJNM for publication if suitable/relevant. It is important to furnish the AJNM editorial board with conference reports as soon as possible after the event to ensure that it is still topical for AJNM readers.

A short report (maximum 1000 words) should only cover the main scope of the event that is reported. The author's overall impression and experience with regards to the professional value of the event need to be conveyed and not information on individual presentations as such.

The following essential elements must be fully addressed in the scientific report:

The custodian(s) (organisation) of the event

The theme of the event

Estimated number of delegates who attended the event or countries represented

The location where the conference/event took place (country, state, city)

An indication of whether the event is recurrent (e.g. takes place annually)

An indication of whether the event is aimed at practitioners or researchers

Web-details for future occurrences of this event

Keynote speakers and acclamations such as members of government, internationally renowned speakers, honorary life members of the event and the like (Ensure correct spelling of names, designations, institutions and the like. Check with individuals)

The topics of keynote addresses

A brief statement of the major significance or highlights of presentations of keynote addresses. For instance: if a leading authority on nosocomial infections indicated that a prophylactic dose of penicillin given to every patient on admission dramatically reduced nosocomial infections over a trial period that is newsworthy

An indication of the main trends identified during the conference and the way forward mapped out.

Authors should include the following biographic details: surname, initials and designation; contact phone and or cell numbers, email address and/or fax number and the institution.

The AJNM board also welcomes information on presentations the reporter of an event considers worthy of publication in the journal— i.e. presentations with a strong focus on

nursing and midwifery in Africa. Kindly provide us with the name of the presenter and the title of his/her presentation and other information what could assist us in contacting the person.

Style

Do not use the ampersand (&) anywhere in the text or citations; use "and" instead.

In text, only sparingly emphasise words by using italics. Italicisation should otherwise be reserved for book titles and words from a language other than that of the text.

Italicised words/phrases in another language are glossed by an equivalent word/phrase in the language of the text in single inverted commas placed in brackets, e.g. *indoda* ("a man"). Words well-known in South African English are set as roman, for example, lobola, ubuntu, and indaba.

Words/terms that need to be singled out as being "borrowed" from another author/source may be placed in double inverted commas.

Titles of standalone publications must be in headline style (significant words are capitalised) and in italics when typed in the text. Titles of articles are placed between "double inverted commas." Also see citation guidelines for examples.

Acknowledgements

Acknowledgements appear at the end of the article, should be brief, and recognise sources of financial and logistical support and permission to reproduce materials from other sources. Save a copy of documentation granting such permission. Adherence to copyright rules remains each author's sole responsibility.

Footnotes

Footnotes with references in Arabic numbers (1, 2, 3—do not use i, ii, iii) are allowed on condition that these are limited to essential notes that enhance the content without impeding the fluent reading of the article.

Footnotes are typed in 10pt. font and single spacing; hanging indent.

Endnotes are not allowed.

Footnotes do not replace the alphabetical list of references at the end of the text. References in notes are regarded as text references and not bibliographic information.

Quotations

When quoting from a source, use "double inverted commas."

To quote within a quote, use 'single inverted commas.'

When quoting more than five lines, indent. Do not print indented text in italics and do not use quotation marks. A citation after the indented quote follows after a full stop, e.g.

According to the report the council will discuss the matter at the next council meeting to be held on 5 January 2017. (Smit 2002, 1)

When quoting within an indented quotation, use "double inverted commas."

Final full stops and commas are placed inside the quotation marks.

Colons and semicolons are placed outside of quotation marks.

Question and exclamation marks are only placed inside quotation marks if they form part of the quoted material.

E.g.

Do you know if she is "accredited"?

He asked: "Are you accredited?"

When adding notes to a quote or changing a quotation, use square brackets, e.g. [own translation/emphasis]/ [t]oday.

Numbers

In text, numbers one to nine are in words; numbers 10 and above are in digits.

At the start of a sentence all numbers are in words.

In brackets all numbers are in digits, as for numbers of tables, figures and chapters.

When in text, percentages (below 10) are in words—seven per cent; above 10 are digits—22 per cent/13.5 per cent.

Decimals—7.5 per cent—are always in digits (also in text).

Use the % sign in brackets and per cent in text.

Equations

Use Mathtype for display and inline equations, but not for single variables. Single variables should be inserted into the text as Unicode characters.

Abbreviations

Abbreviations that begin and end on the same letter as the word, do not get a full stop (Mr/Dr/Eds) but Ed.

Academic degrees: (Preferably without any punctuation) BA; DPhil; MSc

Ellipsis

Use the ellipsis when indicating that text has been left out in the middle of a quoted sentence—preferably not at the start or end of the sentence. It is a given that text has been left out preceding and following your quote.

Insert spaces before and after the ellipse.

Use only three full stops for an ellipse (A full stop is added *before* an ellipsis to indicate the omission of the end of a sentence, unless the sentence is deliberately incomplete. Similarly, a full stop at the end of a sentence in the original is retained before an ellipsis indicating the omission of material immediately following the full stop.)

E.g.

In May 1862, two new missionaries, Endeman and Albert Nachtigal, joined Grützner and Merensky. … It was decided that Endeman and Grützner continue working. … The latter two eventually established the mission station Botshabelo … which later would play an important role in the Ba-Kopa history.

Dashes

The unspaced em-dash (—) is used (Alt 0151).

An unspaced en-dash (–), NOT A HYPHEN (-) is used to indicate ranges (e.g. of numbers or page numbers: 15–21).

Initials

One initial: Steyn, P. 2009.

Multiple initials: Steyn, P. R. G. 2009. (Spaces between initials)

Acronyms

Give the full name when first mentioned (with acronym in brackets), thereafter use the acronym uniformly and consistently: Unisa; CSIR; HSRC; Sabinet/SABINET

et al.

et al. (not italics) Never use in the reference list.

When citing a text with four+ authors, use only the first author's name followed by et al. in text, but list all authors in the reference list.

Tables and figures

Table headings appear above the tables and are numbered.

E.g. **Table 1:** Our Table

Figure captions appear below the figures and are numbered.

Captions should include, in the following order:

Figure 1 Artist, *title* (date). Medium/support, metric dimensions. Name of collection, city of collection, other collection information such as "gift of …" accession number (copyright or credit-line information in parentheses).

Credit lines should include all elements specified in the letter of permission from the rights holder, institution and/or photographer:

Figure 1: Sandro Botticelli, *Primavera* (ca. 1482). Tempera on panel, 203 x 315 cm. Galleria degli Uffizi, Florence (photograph provided by Scala / Art Resource, New York).

Figure 2: Roman sarcophagus, *Death of Meleager* (3rd century CE). Detail. Musée du Louvre, Paris (photograph © James Smith, Rome).

Figure 3: Alfred Stieglitz, *Equivalent* (1925–1927). Gelatin silver print, 11.7 x 9.2 cm. The Museum of Modern Art, New York, anonymous gift (© 2009 Estate of Alfred Stieglitz/Artists Rights Society (ARS), New York).

If a scan is used from e.g. a catalogue, this must be indicated by means of an exact reference: Figure 4: Pieter Brueghel the Elder, *The Misanthrope* (1568). Tempura on canvas, 86 x 85 cm. Signed and dated: 'BRVEGEL 1568'. Museo e Gallerie Nazionali di Capodimonte, Naples, catalogue number 585 (reproduced from Martin 1978, figure 37).

Include cited authors in the reference list.

Supply the source below the table or figure, if material is copyrighted.

Linguistic examples in series

Series of linguistic examples should be presented neatly (as borderless tables) and individual examples should only be numbered if they are discussed with reference to that number in the article's body text. Such numbering should occur consecutively.

The example numbers should be in parentheses and placed next to the left-hand margin.

Numbered examples may be contrasted or compared to one another by using alphabetical numbering for purposes of contrast and comparison.

If numerous examples are necessary to substantiate a specific point, an appendix may appear at the end of the article.

2. Citation Guidelines: Chicago Author-Date

In Text:

Within the body of your text, citations are indicated in parentheses with the author's surname, publication date, and page number (if needed, as when quoting direct words), e.g. (Smith 2012, 45).

Citations are placed within the text where they offer the least resistance to the flow of thought, frequently just before a mark of punctuation.

Single-author citations: If the author's name appears in the text it is not necessary to repeat it, but the date should follow immediately: Malan (2014, 4) refers to this …

Single author with two or more works in the same year: (Gray 2009a; 2009b)

One publication with two+ authors: … contested by Smith and Jones (2013, 16). Also (Smith and Jones 2013, 16)

Multiple publications: … venture failed (Bergin 2009; Chance 2008, 14–17).

When citing multiple publications/authors do so alphabetically (Louw 2010a, 3; Ncube 2008, 77; Zeiss 1993, 4).

Multiple authors with the same initial surname and same year of publication—shorten titles: (Coe et al., "Media diversity," 2001) and (Coe et al., "Social media," 2001)

No page numbers are needed if citing a text on the internet, e.g. academic freedom (Smith 2014), unless page numbers are available

Avoid citing a secondary source: … greater good (Mullins as quoted in Khan 2014, 6), Mullins (as quoted in Khan 2014, 6) argues …

Blogs are only referenced in-text.

References: (See examples below)

Use the heading: References.

Only list sources actually referred to in the text.

Authors

List authors alphabetically. Use surnames, first names (if known) and initials.

NB: Although full first names are used in the examples in this document, it is also acceptable to use authors' initials only, as long as one system is used consistently.

The entries are additionally sorted by the work's date of publication (oldest to newest).

Do not use a dash to replace author names.

If no author or editor, order alphabetically by title (corresponding with text citation).

A single-author entry precedes a multi-author entry beginning with the same surname.

Successive entries by two+ authors, when the first author is the same, are alphabetised by co-authors' surnames.

Titles

Use headline-style capitalisation in titles and subtitles of works and parts of works such as articles or chapters (i.e., Biology in the Modern World: Science for Life in South Africa). Capitalise significant words and proper nouns.

Use headline-style capitalisation for titles of journals and periodicals (i.e., *Journal of Social Activism*).

Titles of stand-alone publications are typed in italics when used in text: *Evangelism and the Growth of Pentecostalism in Africa.*

Compound Sources

Source within another source: Smit, R. 2012. "Where to Now?" In *Climate Change in the Next Decade*, edited by S.Y. Tovey and T. Rosti, 200–234. Pretoria: Van Schaik.

Treat pamphlets, reports, brochures and freestanding publications (such as exhibition catalogues) as books. Give sufficient information to identify the document.

Electronic references (NB: The text reference must correspond with the alphabetical reference list):

Author's surname, name and initials (if available); title of article/publication. Website address (URL)

Macdonald, Fiona. 2017. "The Extraordinary Life of the 1920s Lady Gaga." BBC Culture, September 20. Accessed October 6, 2017. http://www.bbc.com/culture/story/20170920-the-extraordinary-life-of-the-19th-century-lady-gaga.

Personal communications, letters, conversations, emails, interviews, recordings may be listed separately in the reference list.

Omit: Inc., Co. Publishing Co. etc. from the name of the publisher.

EXAMPLES-For full list of examples see

(http://www.chicagomanualofstyle.org/tools_citationguide/citation-guide-2.html)

R: Reference list

T: Text citation

Books

One Author

R: Pollan, Michael. 2006. *The Omnivore's Dilemma: A Natural History of Four Meals*. New York: Penguin.

T: (Pollan 2006, 99–100).

Two or Three Authors

R: Ward, Geoffrey C., and Ken Burns. 2007. *The War: An Intimate History, 1941–1945*. New York: Knopf.

T: (Ward and Burns 2007, 52).

Four or More Authors, list all of the authors in the reference list; in the text from 2nd citation, list only the first author, followed by et al. ("and others"):

R: Barnes, L. A., A. M Harcombe, P. B. Rall, M. Z. Motala, and W. Grové. 2010. *Unisa Press: An Illustrated History*. Pretoria: Unisa Press.

T: (Barnes et al. 2010).

Editor, Translator, or Compiler instead of Author

R: Lattimore, Richmond, trans. 1951. *The Iliad of Homer*. Chicago: University of Chicago Press.

T: (Lattimore 1951, 91–92).

Editor, Translator, or Compiler in Addition to Author

R: García Márquez, Gabriel. 1988. *Love in the Time of Cholera*. Translated by Edith Grossman. London: Cape.

T: (García Márquez 1988, 242–55).

Chapter or Other Part of a Book

R: Kelly, John D. 2010. "Seeing Red: Mao Fetishism, Pax Americana, and the Moral Economy of War." In *Anthropology and Global Counterinsurgency*, edited by John D. Kelly, Beatrice Jauregui, Sean T. Mitchell, and Jeremy Walton, 67–83. Chicago: University of Chicago Press.

T: (Kelly 2010, 77).

Chapter of an Edited Volume Originally Published Elsewhere (as in primary sources)

R: Cicero, Quintus Tullius. 1986. "Handbook on Canvassing for the Consulship." In *Rome: Late Republic and Principate*, edited by Walter Emil Kaegi Jr. and Peter White. Vol. 2 of University of Chicago Readings in Western Civilization, edited by John Boyer and Julius Kirshner, 33–46. Chicago: University of Chicago Press. Originally published in Evelyn S. Shuckburgh, trans., *The Letters of Cicero*, vol. 1 (London: George Bell & Sons, 1908).

T: (Cicero 1986, 35)

Preface, Foreword, Introduction, or Similar Part of a Book

R: Rieger, James. 1982. Introduction to *Frankenstein, or, The Modern Prometheus*, by Mary Wollstonecraft Shelley, xi–xxxvii. Chicago: University of Chicago Press.

T: (Rieger 1982, xx–xxi)

Book Published Electronically

If a book is available in more than one format, cite the version you consulted. For books consulted online, list a URL and an access date. If no fixed page numbers are available, you can include a section title or a chapter or other number.

R: Austen, Jane. 2007. *Pride and Prejudice*. New York: Penguin Classics. Kindle edition.

T: (Austen 2007)

R: Kurland, Philip B., and Ralph Lerner, eds. 1987. *The Founders' Constitution*. Chicago: University of Chicago Press. http://press-pubs.uchicago.edu/founders/ (accessed January 1, 2012).

T: (Kurland and Lerner, chap. 10, doc. 19)

Journal Articles

Article in a Print Journal

In the text, list the specific page numbers consulted, if any. In the reference list entry, list the page range for the whole article.

R: Weinstein, Joshua I. 2009. "The Market in Plato's Republic." *Classical Philology* 104 (4): 439–58. https://doi.org/10.1086/650979.

T: (Weinstein 2009, 440)

Article in an Online Journal

Include a DOI (Digital Object Identifier) if the journal lists one. A DOI is a permanent ID that, when appended to https://doi.org/ in the address bar of an Internet browser, will lead to the source. If no DOI is available, list a URL and include an access date.

R: Kossinets, Gueorgi, and Duncan J. Watts. 2009. "Origins of Homophily in an Evolving Social Network." *American Journal of Sociology* 115: 405–50. https://doi.org/10.1086/599247.

T: (Kossinets and Watts 2009, 411)

Other Sources

Book Review

R: Kamp, David. 2006. "Deconstructing Dinner." Review of *The Omnivore's Dilemma: A Natural History of Four Meals*, by Michael Pollan. *New York Times*, April 23, Sunday Book

Review. http://www.nytimes.com/2006/04/23/books/review/23kamp.html (accessed January 1, 2012).

T: (Kamp 2006)

Thesis or Dissertation

R: Choi, Mihwa. 2008. "Contesting Imaginaires in Death Rituals during the Northern Song Dynasty." PhD dissertation, University of Chicago.

T: (Choi 2008)

Archival material/manuscript collections

When citing archival material in the author-date style, it is unnecessary to use *n.d.* (no date) in place of the date. Dates of individual items should be mentioned in the text, when applicable:

R: Egmont Manuscripts. Phillipps Collection. University of Georgia Library.

Kallen, Horace. Papers. YIVO Institute for Jewish Research, New York.

T: Oglethorpe wrote to the trustees on January 13, 1733 **(Egmont Manuscripts)**, to say…

Alvin Johnson, in a memorandum prepared sometime in 1937 **(Kallen Papers, file 36)**, observed that if only one item from a collection has been mentioned in the text, however, the entry may begin with the writer's name (if known). In such a case, the use of *n.d.* may become appropriate:

R: Dinkel, Joseph. *n.d.* Description of Louis Agassiz written at the request of Elizabeth Cary Agassiz. Agassiz Papers. Houghton Library, Harvard University.

T: (Dinkel, n.d.)

Paper Presented at a Meeting or Conference

R: Adelman, Rachel. 2009. "'Such Stuff as Dreams Are Made On': God's Footstool in the Aramaic Targumim and Midrashic Tradition." Paper presented at the annual meeting for the Society of Biblical Literature, New Orleans, Louisiana, November 21–24.

T: (Adelman 2009)

TYPES OF ARTICLES PUBLISHED

The AJNM strives to provide worthwhile information to the nurses and midwives of Africa, not necessarily nurse academics. Consequently articles should address healthcare issues faced by nurses and midwives throughout Africa. Empirical research articles are preferred. Articles based on theory only might be inappropriate, as well as articles based on textbooks' information. As AJNM is an accredited academic journal, it needs to adhere to the minimum requirements of the Department of Higher Education and Training of South Africa. This means that mostly empirical peer reviewed research articles should be published, but a limited number of pages can contain book reviews or reports of conferences. In exceptional cases one article per issue might address research issues per se. The decisions of the reviewers and the editors are final.

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APPENDIX J: AJNM LETTER OF ACCEPTANCE

[AJNM] Editor Decision

Prof. Thandisiwe Redford Mavundla, 29 November 2018

To:Nombulelo Veronica Sepeng:

We have reached a decision regarding your submission to Africa Journal of Nursing and Midwifery, "PERCEPTIONS OF MENTAL HEALTH CARE PRACTITIONERS
REGARDING PTSD PSYCHOLOGICAL MANAGEMENT FOR RAPE SURVIVORS".

Our decision is to: accept submission for publication

Please complete the electronic "Licence to Publish Form" by clicking on the link below to grant Unisa Press permission to publish your article in the Africa Journal of Nursing and Midwifery.

Prof. Thandisizwe Redford Mavundla
Department of Health Studies
University of South Africa

mavuntr@unisa.ac.za
Executive Editor: AJNM

APPENDIX K: AGREE CHECKLIST

AGREE Reporting Checklist-This checklist is intended to guide the reporting of clinical practice guidelines.

AGREE checklist items and description	Reporting criteria
Domain 1- Scope and purpose	
The overall objective(s) of the guideline is (are) specifically described	• Health intent(s) (i.e., prevention, screening, diagnosis, treatment, etc.) • Expected benefit(s) or outcome(s) • Target(s) (e.g., patient population)
The health question(s) covered by the guideline is (are) specifically described.	• Target population • Intervention(s) or exposure(s) • Comparisons (if appropriate) • Outcome(s) • Health care setting or context
The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described.	• Target population, sex and age • Clinical condition (if relevant) • Severity/stage of disease (if relevant) • Comorbidities (if relevant) • Excluded populations (if relevant)
Domain 2: Stakeholder involvement	
The guideline validationt group includes individuals from all the relevant professional groups.	• If not blind review-Name of participant • Discipline/content expertise (e.g., neurosurgeon, methodologist) • Institution (e.g., St. Peter's hospital) • Geographical location (e.g., Seattle, WA) • A description of the member's role in the guideline development group
The views and preferences of the target population (patients, public, etc.) have been sought.	• Statement of type of strategy used to capture patients'/publics' views and preferences (e.g. Participation in the guideline development group, literature review of values and preferences) • Methods by which preferences and views were sought (e.g., evidence from literature, surveys, focus groups) • Outcomes/information gathered on patient/public information • How the information gathered was used to inform the guideline development process and/or formation of the recommendations
The target users of the guideline are clearly defined.	• The intended guideline audience (e.g. Specialists, family physicians, patients, clinical or institutional leaders/administrators) • How the guideline may be used by its target audience (e.g., to inform clinical decisions, to inform policy, to inform standards of care)

Domain 3: Rigour of development	
Systematic methods were used to search for evidence.	• Named electronic database(s) or evidence source(s) where the search was performed (e.g.,MEDLINE, EMBASE, PsychINFO, CINAHL) • Time periods searched (e.g., January 1, 2008 to March 31, 2008) • Search terms used (e.g., text words, indexing terms, subheadings)
The criteria for selecting the evidence are clearly described.	• Target population (patient, public, etc.) characteristics • Study design • Comparisons (if relevant) • Outcomes • Language (if relevant) • Context (if relevant)
The strengths and limitations of the body of evidence are clearly described.	• Study design(s) included in body of evidence • Study methodology limitations (sampling, blinding, allocation concealment, analytical methods) • Appropriateness/relevance of primary and secondary outcomes considered • Consistency of results across studies • Direction of results across studies • Magnitude of benefit versus magnitude of harm • Applicability to practice context
The methods for formulating the recommendations are clearly described.	• Recommendation development process (e.g., steps used in modified Delphi technique, voting procedures that were considered) • Outcomes of the recommendation development process (e.g., extent to which consensus was reached using modified Delphi technique, outcome of voting procedures) • How the process influenced the recommendations (e.g., results of Delphi technique influence final recommendation, • alignment with recommendations and the final vote)
The health benefits, side effects and risks have been considered in formulating the recommendations.	• Supporting data and report of benefits • Supporting data and report of harms/side effects/risks • Reporting of the balance/trade-off between benefits and harms/side effects/risks • Recommendations reflect considerations of both benefits and harms/side effects/risks

There is an explicit link between the recommendations and the supporting evidence.	• How the guideline development and validation group linked and used the evidence to inform recommendations • Link between each recommendation and key evidence (text description and/or reference list) • Link between recommendations and evidence summaries and/or evidence tables in the results section of the guideline
The guideline has been externally reviewed by experts prior to its publication.	• Purpose and intent of the external review (e.g., to improve quality, gather feedback on draft recommendations, assess applicability and feasibility, disseminate evidence) • Methods taken to undertake the external review (e.g., rating scale, open-ended questions) • Description of the external reviewers (e.g., type of reviewers, affiliations) • Outcomes/information gathered from the external review (e.g., summary of key findings) • How the information gathered was used to inform the guideline development process and/or formation of the recommendations (e.g., guideline panel considered results of review informing final recommendations)
A procedure for updating the guideline is provided.	• A statement that the guideline will be updated • Explicit time interval or explicit criteria to guide decisions about when an update will occur • Methodology for the updating procedure
Domain 4: Clarity of presentation	
The recommendations are specific and unambiguous.	• A statement of the recommended action • Intent or purpose of the recommended action (e.g., to improve quality of life, to decrease side effects) • Relevant population (e.g., patients, public) • Caveats or qualifying statements, if relevant (e.g., patients or conditions for whom the recommendations would not apply) • If there is uncertainty about the best care option(s), the uncertainty should be stated in the guideline
The different options for management of the condition or health issue are clearly presented.	• Description of management options • Population or clinical situation most appropriate to each option
Key recommendations are easily identifiable.	• Recommendations in a summarized box,tables or typed in bold, or underlined,

	or or presented as flow charts or algorithms • Specific recommendations grouped together in one section
Domain 6: Editorial independence	
The views of the funding body have not influenced the content of the guideline.	• The name of the funding body or source of funding (or explicit statement of no funding) • A statement that the funding body did not influence the content of the guideline
Competing interests of members of the guideline development group have been recorded and addressed	• Types of competing interests considered • Methods by which potential competing interests were sought • A description of the competing interests • How the competing interests influenced the guideline process and development of recommendations