

Coping mechanisms used by pregnant teenagers in Mafikeng Sub-district clinics, North West Province

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DECLARATION

I, Cindy Nthene, declare that this dissertation titled, "Coping mechanisms used by pregnant teenagers in Mafikeng Sub-district clinics, North West Province", is my own work in design and execution. I further declare that this study has not been submitted before for any examination or degree. All the sources used in the study have been correctly referenced, using the Harvard referencing style.

Cindy Nthene

December 2021

Signature

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DEDICATION

I dedicate this study to my parents, siblings and children (Botle and Bohlale) for their support during this journey.

ABSTRACT

Background: Teenage pregnancy among adolescents is a global concern. Studies have revealed that teenage pregnancy negatively affects the health of teenagers as it interrupts their education and reduces their chances of a good future, such as job opportunities. Most teenagers who get pregnant, come from impoverished social backgrounds, have minimal hope and expectation of improvement of their current social economic situation, and hope that pregnancy will revive and establish self-identity, self-esteem lost due to poverty. The ability of young women to cope with their pregnancy and young motherhood seems then to depend on the generosity of members of the family by accepting the teenagers' pregnancy and supporting them during pregnancy and motherhood. However, information regarding how teenagers cope in the Mafikeng sub-district, which is the second largest province with high levels of teenage pregnancy, is unknown. Thus, the need for this study.

Aim: The aim of this study was to explore and describe coping mechanisms used by pregnant teenagers in clinics in Mafikeng Sub-district, North West Province, South Africa.

Setting: The study was conducted in three Sub-district clinics, Mafikeng, North West Province, South Africa.

Methods: A qualitative-exploratory-descriptive and contextual research design was used to answer the research questions. A non-probability purposive sampling technique was used to select pregnant teenagers. Semi-structured individual interviews were used to collect data, through WhatsApp video calls, and the data analysed following Tesch's method of qualitative content analysis.

Results: Eight themes emerged in the study as follows: (1) negative feelings due to teenage pregnancy; (2) negative parental reaction; (3) effects of teenage pregnancy at school; (4) societal challenges; (5) lack of spousal support; (6) effects of pregnancy on teenagers; (7) coping mechanisms used by pregnant teenagers; and (8) recommendations to improve coping mechanisms of pregnant teenagers.

Conclusion: The findings suggest that pregnant teenagers tend to experience a stressful pregnancy journey, which affects their personal lives physically, psychologically, educationally and socially. The findings also suggest that pregnant teenagers cope better with challenges of pregnancy, with the support of friends, partners, parents and members of the family.

Keywords: Coping; coping mechanisms; pregnancy; teenage pregnancy

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LIST OF ACRONYMS AND ABBREVIATIONS

DOE	: Department of education
DOH	: Department of health
MNSc	: Master of Nursing Science
NMM	: Ngaka Modiri Molema
NW	: North West
NWP	: North West Province
NWU	: North-West University
SA	: South Africa
WHO	: World Health Organisation

SECTION ONE: OVERVIEW OF THE STUDY

1. Introduction

This study focuses on coping mechanisms used by pregnant teenagers attending clinic visits in Mafikeng Sub-district, North West Province, South Africa. This section provides the background to the study, problem statement, research questions, aim and objectives of the study, significance of the research and brief description of the research methodology used in conducting the study.

2. Background to the study

Teenage pregnancy among adolescents is a global concern. For instance, approximately 7.3 million teenagers become mothers before reaching 18 years each year, while 2.5 million girls between 15 or below, give birth each year (Bezuidenhout, 2013:80). These statistics clearly show that teenage pregnancy is a serious problem worldwide, including South Africa (SA), and affects both developed and developing countries.

The World Health Organisation (WHO) (2018) classifies provinces in South Africa according to number of cases of teenage pregnancy as follows: Northern Cape (20.3%); North West (20.1%); Kwa Zulu Natal (17.9%); Eastern Cape (17.9%); Free State (12.1%); Mpumalanga (18.2%); Gauteng (14.1%); Limpopo (12.1%); and Western Cape (8.1%). Qambatha and Mayeye (2013:51-59) state that most teenagers aged 13 to 19 years, got pregnant during their teenage years. This shows that all girls within this age bracket are most likely to get pregnant in their lifetime. Additionally, Branson *et al.* (2014:55) argue that many teenagers are still at school when they get pregnant while others would have already started university. Although the law in South Africa allows learners to stay in school while pregnant and return to school after childbirth, many girls drop out because they fail to cope with the demands of parenthood, while integral development tasks, which are psychological and physical, have not yet been accomplished (van Zyl, Van der Merwe & Chigeza, 2015: 51). A study by Ntsoane and Mamogobo

(2015:8) as well as WHO (2008) revealed that teenage pregnancy negatively affects the health of the pregnant teenager. Teenage pregnancy interrupts the education of the teenage mother and reduces chances of a good future, such as job opportunities (Van Zyl, Van der Merwe & Chigeza, 2015: 51). Education is important for girls as it could decrease the poverty trap that most girls from low socio-economic backgrounds find themselves (Ntsoane & Mamogobo, 2015:7).

In order to deal with teenage pregnancy, it has been reported that strategies, such as sex education on the use of contraceptives can be used to prevent teenage pregnancy. However, these strategies seem not to work due to high rates of teenage pregnancies worldwide. Ramathuba, Netsikweta and Khoza (2012:1-9) posit that instead of maternal education, women's employment opportunities, family structure and marital status affect teenagers' attitudes, knowledge and practices with regard to the use of contraceptives. There are, however, other factors that can lead to teenage pregnancy, such as insufficient access to ways of preventing teenage pregnancy, little or no information about sexual and reproductive health, lack of education, certain traditions and customs and adolescent behaviour (Sulaiman, Othman & Razali, 2013:542). Most teenagers who get pregnant are commonly from impoverished social backgrounds, have minimal hope and expectation of improvement of their current social and economic situation, and hope that pregnancy will revive and establish self-identity, as well as self-esteem lost due to poverty (Ntsoane & Mamogobo, 2015:10). How young women cope with their pregnancy and young motherhood, seems then to depend on the generosity of the family by accepting the teenager's pregnancy and supporting her during the journey and motherhood (Bercum, 2013:6).

This clearly shows that teenage pregnancy is still a challenge in South Africa, particularly in Mahikeng sub-district. Deave and Johnson (2008:30) add that pregnancy alone is a major life adjustment and having to cope with pregnancy, on its own, and the sudden change from a teenager to a mother, leads to psychological stressors that may trigger the coping abilities of a teenager. Furthermore, Rabia (2017:191) posits that pregnant teenagers use adaptive and maladaptive coping mechanisms to mediate a stressful situation. The adaptive

coping mechanisms include emotional support, acceptance, planning, religion and positive reframing, while maladaptive coping mechanisms include denial, self-blame, behavioural disengagement and substance abuse (Gurdino & Schetter, 2014:94; George *et al.*, 2013:233).

There is need to use effective coping mechanisms to deal with the negative circumstances attached to pregnancy. The coping mechanisms used by teenagers to deal with the situation have been reported worldwide. A study by Ncongwane (2018:4) in Mpumalanga revealed that support from members of the teenage mother's family who accept the pregnancy and provide financial support for the teenager to adapt to motherhood with safety and ease, enables the teenager to cope with the pregnancy. However, information on how teenagers cope with pregnancy in the Mafikeng Sub-District, which the second highest in terms of teenage pregnancy, is unknown. Thus, the need for this study.

3. Problem statement

In South Africa, the North West is the second leading province with high rates of teenage pregnancy (20.1%) (WHO, 2018). The rate of teenage pregnancy has been a great concern in clinics in Mafikeng Sub-District, North West Province. According to the researcher's personal experience as a professional nurse, these concerns include increased medical complications for teenage mothers and their unborn babies, poor academic performance and difficulty in successful completion of teenage developmental tasks. However, such teenagers go through numerous challenges as they try to fit back into the social system and coping with all the consequences faced by a teenage mother and coping mechanisms. The importance of the different strategies used by teenagers to cope with stress during pregnancy, is unclear (Christine, Gurdino & Schetter, 2014:70-94), including Mafikeng Sub-District, North West Province. Thus, Deave and Johnson (2008:30) emphasise the need to understand the relationship between stressful issues that pregnant teenagers go through during pregnancy and their coping mechanisms. As a midwife, the researcher has come across pregnant teenagers exposed to high levels of stress thus, a motivation to conduct

this study, despite the challenges indicated above. Very few studies have been conducted on coping mechanisms used by pregnant teenagers, as revealed in the literature, particularly in Mafikeng Sub-District. Thus, the above concerns prompted the researcher to conduct this study with the aim of exploring and describing the different coping mechanisms used by pregnant teenagers in clinics within Mafikeng Sub-District, North West Province, South Africa.

4. Research questions

From the above background and problem statement, the following research question were asked:

- What are the coping mechanisms of pregnant teenagers in Mafikeng sub-district? and
- What can be done to improve the coping mechanisms of pregnant teenagers in Mafikeng Sub-district?

5. Aim and objectives of the study

5.1 The aim of this study was to explore and describe the coping mechanisms used by pregnant teenagers in clinics within Mafikeng Sub-district, North West Province, South Africa.

5.2 Objectives of the study

The objectives of the study were to:

- Explore and describe the coping mechanisms used by pregnant teenagers in Mafikeng; and
- Propose ways to improve coping mechanisms used by pregnant teenagers in clinics within Mafikeng Sub-district.

6. Significance of the study

This study is the first of its kind to be conducted on coping mechanisms used by pregnant teenagers in clinics within Mafikeng Sub-district, North West Province, South Africa. Thus, the findings of the study will add important knowledge to the field of health, nursing and midwifery. The findings and recommendations of the study will also help the Departments of Health (DOH) and Social Development (DSD) to develop effective policies and guidelines that can be used to assist pregnant teenagers to cope with their condition. The findings will also assist all health care workers, including nursing students, to apply these policies in practice when they interact with pregnant teenagers. Furthermore, this study will provide the necessary information on different coping mechanisms that pregnant teenagers can use to equip themselves to a successful and healthy pregnancy, regardless of the outcome. The findings of the study will provide baseline information to future researchers on the status of teenage pregnancy and how teenagers cope with pregnancy.

7. Definition of key concepts

The key concepts defined in this study are teenager, teenage pregnancy, coping mechanism and termination of pregnancy (TOP). These key concepts are defined below.

7.1 Teenager refers to a transition from childhood to adulthood between the age of 13 to 19 years (Morin, 2018:9). Teenager in this study, refers to transition of girls from childhood to adulthood, between the ages of 13 and 19 years in clinics within Mafikeng Sub-district, North West Province, South Africa.

7.2 Teenage pregnancy refers to pregnancy in young girls, who are below 19 years; a teenager may get pregnant from being sexually active when ovulation has begun (WHO, 2017). In this study, teenage pregnancy is defined as pregnancy in young girls between the ages of 13 and 19, which is neither planned nor desired by the adolescent in clinics around Mafikeng Sub-district, North West Province, South Africa.

7.3 Coping mechanisms refer to some of the behavioural and cognitive efforts, which constantly change and aim to handle some demands, whether external or internal (Sincero, 2012:1). In this study, coping mechanisms refer to the ways that teenage girls between the ages of 13 and 19 years, utilise in stressful situations to deal with painful and difficult emotions, such as teenage pregnancy in Mafikeng Sub-district, North West Province, South Africa.

7.4 Termination of Pregnancy (TOP) refers to a spontaneous or deliberate expulsion of a human foetus during the first trimester (12 weeks of pregnancy) (DOH, 2015). In this study, termination of pregnancy is defined as pregnancy that is removed or ended by a pregnant teenager, who is between the ages of 13 and 19 years in Mafikeng Sub-district, North West Province, South Africa.

8. Research design and methods

The research design and methods used in this study are briefly described below. The detailed research methodology is provided in the manuscript submitted to Health South Africa Gesondheid (HSAG).

8.1 Research approach

A qualitative research approach was used since the aim of the study was to explore and describe coping mechanisms used by pregnant teenagers in Mafikeng Sub-district, Northwest Province, South Africa. A qualitative research approach allows the researcher to explore, describe, interpret or make sense of a certain phenomenon, through the meanings people have and bring to them, and this helps to formulate an understanding of coping mechanisms of teenage pregnancy among teenagers (Brink, Van der Walt & Van Rensburg, 2012:55).

8.2 Research design

A qualitative-explorative-descriptive and contextual research design was used in this study. This design was considered the most appropriate as it allowed the researcher to explore and describe coping mechanisms used by pregnant teenagers in Mahikeng Sub-district, North West Province, South Africa.

8.3. Study setting

This study was conducted in clinics within Mafikeng Sub-district, located in Ngaka Modiri Molema District, North West Province, South Africa. Mafikeng Sub-district has 18 clinics, including eight health centres. These clinics provide Antenatal Care (ANC) to pregnant teenagers, thus, only a few were used to collect and analyse data for the study. This was determined by data saturation.

8.4 Population

A population is defined as a set of elements that the researcher focuses on, usually referred to as the population the researcher targets for his or her research (Bless, Smith & Sithole, 2013:164). The population for the study consisted of all pregnant teenagers aged between 13 and 19 years, attending antenatal services in clinics within Mafikeng Sub-district, North West Province, South Africa.

8.5 Sampling approach

Sampling refers to a researcher's process of selecting the sample from the population in order to obtain information regarding a phenomenon in a way that represents the population of interest (Brink *et al.*, 2012:132). A non-probability sampling technique was used in this study. An independent person selected participants who had knowledge about the phenomenon and who were able to explain their coping mechanisms (Maree, 2016:197). In this study, the researcher's focus was on pregnant teenagers, who were able to share their

coping mechanisms during pregnancy in clinics within Mafikeng Sub-district, North West Province, South Africa.

8.6 Sampling technique

A purposive sampling technique was used by an independent person to select teenagers to participate in the study. Purposive sampling is based on participants who are knowledgeable about the question at hand, the researcher's judgement of the participants on who will represent the study (Brink, Van der Walt & Van Rensburg: 2012; 139). In this study, an independent person was requested to choose pregnant teenagers since he/she could provide the information by virtue of knowledge and experience on coping mechanisms at their disposal or information obtained during their pregnancy.

8.7 Sampling criteria

Participants met the following sampling criteria thus, they were included in the study: all potential participants were pregnant and aged between 13 and 19 years; and participants were in possession of a cell phone that could allow for WhatsApp video calls. In other words, participants who did not have cell phones or internet access, were not considered in the study. These teenage girls were attending Antenatal Care (ANC) at clinics within Mafikeng Sub-district, North West Province, South Africa. For teenagers aged between 13 and 17 years, their parents were requested to sign consent forms to give permission to their children to participate in the study. Thus, parental permission was given for children to participate in the study. Participants aged 18 and 19 years, signed their own consent forms without permission from their parents. An independent person did not need permission of their parents to approach them for data collection. After an independent person received approval from the parents to approach the teenagers, he/she approached them for assent to confirm their participation in the study. However, for participants aged 18 and 19 years, an independent person approached them directly without involving their parents. This is in line with the Department of Health (2015:30), that permission in writing is required from parents or legal guardians for minors to be approached and invited to participate (in accordance with Section 10 of the Children's Act 38 of 2005); and assent from

minors in writing (i.e., agreement to participate) if she or he chooses to participate. Adults and non-pregnant teenagers below the age of 13 or above the age of 19 were excluded from the study.

8.8 Sampling size

The sample size was determined through data saturation, which was reached after interviewing 12 participants. Data was collected by the researcher until enough data was obtained from participants, that is, until data saturation was reached (Brink, Van der Walt & Van Rensburg, 2012:198).

9. Data collection

Semi-structured individual interviews were used to collect data, through WhatsApp video calls, to explore the coping mechanisms used by pregnant teenagers in Mafikeng Sub-district, Northwest Province, South Africa. No face-to-face meeting took place between the researcher and participants during data collection. WhatsApp video calls were used to protect the researcher and participants from the COVID-19 pandemic. All participants were given one gigabyte of data for the interview. It was emphasised to participants that the data was for their acceptance to participate in the study and nothing else. This was not payment or a bribe for participants to participate in the study.

An interview is a conversation between two individuals whereby, the researcher asks participants questions to collect data and gets views, opinions and ideas from participants about a phenomenon (Maree, 2016:92). This method of collecting data is best used when the researcher is interested in gathering more information from participants (Maree, 2016: 94). Field notes were taken by the researcher during and after data collection. WhatsApp video calls assisted the researcher to observe non-verbal cues displayed by participants during data collection. After data collection, the researcher summarised all non-verbal cues of participants and analysed them to see if they meant something to the study. Audio tapes were used after obtaining permission from participants to record the interviews.

9.1 Data collection tool

Semi-structured individual interviews were used to collect data, through WhatsApp video calls, in accordance with the interview guide (See Appendix A for interview schedule). Semi-structured interviews, also known as in-depth interviews, are defined as interviews that involve a particular questions of interest (Sekhoetsane, 2012:10). Thus, this form of interview is beneficial because the researcher is able to interact with participants through conversations, allowing the researcher to build a rapport with participants and the ability to probe, when necessary.

9.2 Data analysis

Data analysis is defined as a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Stemler, 2001:137). Data collection and analysis occurred at the same time. An independent co-coder was used for data analysis. This also increased trustworthiness of the study. Content analysis was used in this study, following the eight steps of Tesch to analyse data.

Creswell (1992:142–145) provides detailed guidelines to develop an organising system for unstructured or semi-structured qualitative data as follows:

1. The researcher gets the sense of the data by reading it carefully and understanding it so that she/he can get the necessary background information;
2. The researcher identifies the most interesting transcript with rich information and gets an understanding of the meanings;
3. After completing the task with participants, the researcher lists all the topics and groups all similar topics together, written in columns with the headings on top;

4. Topics are abbreviated as codes and returned to the data to write the codes next to the segment of each text. The themes are turned into categories;
5. The categories are reduced using the most descriptive words by grouping them together to those that relate to each other, interrelationships are shown by drawing lines between sub themes;
6. The researcher decides on the abbreviations of each category and puts the codes in alphabetic order to avoid duplication;
7. Data is grouped together in each theme for preliminary analysis; and
8. Themes referred back to the data in order to remove data that is not relevant and ensure that no important information is left behind that was supposed to be added as one of the themes.

10. Trustworthiness

Trustworthiness refers to a way of ensuring quality of data in qualitative research studies (Brink *et al.*, 2012:172). Trustworthiness in the current study was ensured through credibility, dependability, transferability and confirmability (Brink *et al.*, 2012:172-173). These criteria are briefly explained in this study and a detailed description provided in the manuscript.

10.1 Credibility

Credibility is defined as the researcher's confidence with the findings it seeks to convince that the findings depict the truth of the reality under study or that they make sense (Brink *et al.* 2012:172). In this study, an independent person met with the participants, prior the interviews and informed them of what was expected of them, to build a good relationship between the researcher and the participants; thus, teenagers were ready to share more sensitive and personal information (Maree, 2016:123). During this period, all COVID-19 stringent safety prevention protocols were observed. For example, all potential participants and

an independent person were screened at the gate before entering the clinic. Their temperature was checked and if above 37.5 degrees, they were not allowed to enter the clinic. They were all requested to wear a cloth or surgical face mask, which covered the nose and mouth. They were also sanitised before entering and after leaving the clinics. The following triangulation and member checking involved credibility as well.

Member checking is the process of confirmation of results from participants. This can be done after the data has been collected; the researcher can go back to the participants to verify what they said (Brink *et al.*, 2012:172). Data was taken back to participants to check the credibility of the results (Scott, Cavers, Walter & Cambell, 2016: 1802-1811). Due to the COVID-19 pandemic, the researcher did not go to the participants physically, she conducted WhatsApp video calls with all participants and shared the findings of the study with them.

10.2 Dependability

Dependability refers to the provision of evidence, such that if it were to be repeated with the same participants in a similar context, the findings will also be similar (Brink *et al.*, 2012:172). The researcher ensured that each step of the study was completed thoroughly and carefully (Bless, Smith & Sithole, and 2016:237). In this study, the researcher described exactly how data was collected, recorded, coded and analysed to help readers to follow the path of the research and demonstrate how the conclusion was reached with enough information provided in the study.

10.3 Transferability

Transferability is defined as the degree to which the findings of the study can be transferred to other contexts in a similar study conducted by someone else (Brink *et al.*, 2012:173). In this study, the researcher described clearly, that indeed, the

research findings of coping mechanisms used by pregnant teenagers in Mafikeng Sub-district were maybe applicable to other situations and contexts.

10.4 Confirmability

Confirmability is described as the degree to which the results of the study could be confirmed by other researchers (Maree, 2016: 125). In this study, the researcher used a voice recorder to record participants' voices. This was done to confirm what participants said in the interview. Data was also analysed by the researcher and the co-coder. This was done to confirm what participants shared with the researcher during data collection.

11. Ethical considerations

Participants in this study were considered vulnerable as they were teenagers and pregnant. DOH (2015:25-30) states that teenagers are people under the age of 18 years, however, the age of consent is 18 years. Therefore, persons under the age of 18 years, could not choose for themselves to participate in the study and needed approval from their parents or guardians before participating in this study. Thus, teenagers between 18 and 19 years did not need consent from their parents or care-givers to participate in the study. The parent or legal guardian gave permission in writing for the pregnant teenager to be approached to participate in the study (Section 10 of the Children's Act 38 of 2005).

11.1 Legal authorisation

This study was approved by the School of Nursing Science. Ethical clearance was requested and obtained from the North-West University, Faculty of Health Sciences Health Research Ethics Committee (NWU-HREC). A written approval to conduct the study was requested and obtained from the North West Provincial Department of Health (DoH). Parents/guardians gave written approval for teenagers to be approached to participate in the study, while teenagers gave

assent to participate. Those aged 18 and 19 years which were seven of them did not need approval from their parents to participate in the study. In line with DOH (2015:31), an independent person responsible for the recruitment of participants, ensured that parental permission and teenagers' decision were consistent. That is, if the teenager decided not to participate, the parent may not override such decision. Teenagers were not penalised for refusing to participate in the study.

11.2 Participant recruitment

The researcher was not involved in the recruitment of participants for the study. Recruitment was done by an independent person, a part time Master of Nursing Science student and holder of a Bachelor's degree in Nursing Science (BSc). The independent person attended ethics training at the North-West University and TRREE (Online ethics course). Thus, he was qualified to recruit participants for the study. After obtaining all written approvals from SONS, HREC and DOH, sites where data had to be collected, the independent person met the operational managers of the clinics, identified by the Sub-district manager for recruitment. During this period, the independent person observed all COVID-19 regulations and protocols. For example, screening at the clinic gate before entering the premises, checking the temperature, wearing a face cloth or surgical mask that covered the nose and mouth and using alcohol sanitiser or washing hands with soap. Sub-district managers were also screened before allowing them access to government buildings. They were thus, assumed to be free from COVID-19 unless they were asymptomatic. The independent person put on the pamphlets or recruitment material on the clinic notice board. After pasting the recruitment material on the clinic notice board, the independent person met pregnant teenagers at the clinic who were interested in participating in the study. The pregnant teenagers were screened for COVID-19 before allowing them access into the clinic and encouraged to properly wear face masks to cover the mouth and nose. During recruitment, the independent person used English, or any language understood by participants. At this stage, the researcher or independent person knew which language potential participants could speak; this was established during the first meeting with the independent person. During the meeting, the independent person recruited participants and explained the

recruitment material, which contained information such as the title, aim and objectives of the study, risks and benefits involved as well as contact details of the researcher, supervisors and the independent person (See Appendix F). After explaining the recruitment material and other information related to the research, teenagers aged 18 and above were given seven days to respectively to decide whether they wanted to participate in the study and their parents also to indicate whether they wished to grant permission to their children to partake in the study or not. After receiving permission from the parents, adolescents were given 24 hours to decide. Those who were interested in the study, were requested to call the researcher or the independent person. Participants were informed by the independent person that the researcher will collect and analyse data, with the co-coder.

All teenagers who agreed to participate in the study were given a consent form (couriered to them) and collected after completion. The researcher was responsible for the payment of the courier and all COVID 19 regulations taken into consideration. For example, the informed consent form was put in a zip lock plastic bag, sanitised prior handing over and both the participant and researcher were advised to open the documents after three days to ensure that the package is properly sanitised to prevent any contact of covid19. During the recruitment process, the independent person requested permission from participants to publish the findings of this study in an accredited journal, without mentioning their real names anywhere in the article. Lastly, during recruitment, potential participants were informed that they will not be paid for participating in the study, however, those who agreed to participate were given one gigabyte of data to use during the semi-structured individual interviews conducted through WhatsApp video calls. The one gigabyte of data was given to participants only after they had completed and signed the consent forms. The researcher requested participants to provide a date for the interview and also requested the adolescents to be in a private or quiet place for the interview. Participants with babies were requested to ask their parents or guardians to look after the children during the interview in order to avoid distractions. Potential participants were

reimbursed for their time and inconvenience. Thus, all participants were given R30 worth of airtime as a token of appreciation.

11.3 Permission/consent /assent

Permission or consent for participating in the study was facilitated by the researcher. However, since the study involved minors, participants aged 13 and 17 years which were three of them, parents granted permission for their children to be approached by the independent person to participate in the study, and were required to sign the informed consent form. Parental permission and teenagers' decision to participate in the study were consistent as highlighted in DOH (2015:31). Pregnant teenagers aged 18 and 19 did not need permission from their parents to participate in the study. Thus, if a teenager decided not to participate in the study, the parent could not override such decision. The consent form was written in simple plain English and translated into Setswana for all participants. The researcher did not know in advance other languages used by potential participants. The consent form had adequate information, such as the title, benefits, risks, selection criteria and contact details of the researcher, independent person and study supervisors. No pressure was applied to convince teenagers to participate in the study.

A copy of the informed consent form was sent to potential participants on WhatsApp or email seven working days before the actual date set for data collection. Thereafter, an appointment was set between the researcher and potential participants on WhatsApp video call, and the research process discussed. Potential participants were requested to have their forms co-signed by a witness and the researcher did same. Thus, four people were present during the signing process of the consent forms but at different places. The researcher and participants agreed to confirm the informed consent process by signing the form together when both parties were allowed to be present. After signing the informed consent form, participants were requested to take a photograph of the informed consent form with their cell phones and send it through WhatsApp to

the researcher. During the semi-structured WhatsApp video calls, the process of obtaining informed consent remotely was repeated and the informed consent confirmed verbally by participants and recorded. The advantage of two witnesses present on both sides at different places ensured that the informed consent was obtained in a fair and safe manner.

Participants were given ample time to ask questions regarding the study, in order to establish whether they understood the aim and purpose of the study. Potential participants were given a maximum of seven working days to indicate their position and their decision was respected.

11.4 Anticipated benefits

Pregnant teenagers gained knowledge about themselves or their pregnancy when participating in the study. They had the opportunity to do self-introspection, through interaction with the researcher during data collection or when the findings of the study were shared after data analysis. Data collection and sharing of the findings of this study were done through WhatsApp video calls. Participants were satisfied or found satisfaction that the information they provided could assist other pregnant teenagers with similar conditions or problems. It also helped participants to escape from normal day-to-day activities and the excitement of being part of the study. Pregnant teenagers also found the comfort of being able to discuss their problems or situation with a non-judgmental and friendly person, the researcher.

11.5 Indirect benefits

The purpose of this study will benefit teenagers who wish to get pregnant in future as there are planned and unplanned teenage pregnancy. The findings of this study will be published in an accredited journal. Future researchers can also use the findings of this study to strengthen their research in similar fields. The Department of Health and Education can also use the findings of this study to help pregnant teenagers to cope with their condition.

11.6 Risk and precautions

The risk and precautions involve any physical or emotional harm that may affect pregnant teenagers and the researcher. These risks include psychological, social, physical and financial risks discussed below.

Risk/benefits ratio

Risks (involve social, psychological and financial factors)	Precautions (when describing these precautions, be clear on how they will mitigate all the identified risks)
Psychological	Pregnant teenagers who had emotional distress that might have resulted in them being unable to disclose certain concerns to the researcher. Those who experienced emotional distress, were referred to a psychologist for debriefing and counselling by the researcher.
Social	Participants who had other commitments, such as chores and schoolwork that interfered with this study, a suitable venue, date and time convenient for both was arranged by the researcher.
Financial	The researcher provided one Gigabyte of data for all participants for the WhatsApp video calls. No participant was compensated for participating in the study, however, they were reimbursed for inconveniences caused in participating in the study and other expenses.

11.7 Probable experience of participants

Purposive sampling was used by the independent person to select for participants who had knowledge about the phenomenon. In this study, pregnant teenagers had sufficient knowledge and experience regarding the topic, and how they were coping, thus, they were relevant for the study.

11.8 Experience, skills and competency of the researcher

The researcher graduated with a Bachelor of Nursing Science (BNSc) in 2012, from the North-West University, Mahikeng Campus, and assigned to work in Joe Moro long Memorial Hospital, for her community service, where she served 12 months in 2013. The researcher did an introductory course in research during her undergraduate studies and focused on the following topic with her group members: "Perceptions of undergraduate Nursing students regarding problem-based learning on the Mafikeng Campus". In addition, the researcher has attended research ethics training and has the relevant qualification, experience and skills to conduct such qualitative study. Both supervisors are lecturers in the School of Nursing Science; the main supervisor has a PhD with more than 40 publications, while the co-supervisor has a Master's degree in the field of studies.

11.9 Measures to ensure privacy/confidentiality

Confidentiality means that the identity of research participants is known only to the study investigators (Brink *et al.*, 2012:209). All participants were assured confidentiality by means of anonymity. Participants were provided with pseudonyms to protect their identities and ensure confidentiality at all times. Pregnant teenagers were informed that should they wish to withdraw from the study or not be free to answer certain questions, they may do so. During publication of the article, participants' real names were also not used.

11.10 Data management

Data collected was kept safe due to issues of confidentiality and anonymity. In this study, data collected was stored by the researcher on her memory sticks, emails and computer. Hardcopies were kept in protected and locked storage at the North-West University. Audio tapes, papers and portable data, such as memory sticks, were stored in locked fireproof cabinets of the supervisor. All information obtained in this study will be stored for a period of five years and destroyed by the researcher, by deleting it from the memory sticks, emails and computers, all hardcopies will be shredded.

11.11 Dissemination of research findings

The findings of this study will be shared with participants once the examination process is concluded. The researcher will call participants, meet with them and share the findings of the study with them, by providing them with hard copies of the report. An article format was followed in this study. An article was envisioned, which will be shared with other researchers in the field of nursing and midwifery. The findings will also be presented at the Provincial Department of Health Conference in 2022.

11.12 Conflict of interest

The researcher and the supervisors declare that they have no conflict of interest in conducting this study.

14. Conclusion

This section has provided an overview of the study on coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics, North West, the introduction, background, problem statement, research questions, aim and objectives,

significance of the study and brief research methodology. The detailed methodology is given in the manuscript, in accordance with HSAG author guidelines.

15. Structure of the study

The study is divided in three sections as follows:

Section one provides an overview of the study;

Section two is the manuscript submitted to HSAG Journal; and

Section three focuses on the conclusion, limitations of the study and recommendations.

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SECTION TWO: MANUSCRIPT SUBMITTED TO HEALTH SOUTH AFRICA GESONDHEID JOURNAL (HSAG)

2.1 Submitted Manuscript

**Title: Coping mechanisms used by pregnant teenagers in clinics within
Mafikeng Sub-district, North West Province, South Africa**

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ABSTRACT

Background: The rate of teenage pregnancy dropped from 2,197 in 2012 to 2,157 in 2013 in the North West Province, South Africa. However, there is need for further studies to investigate these statistics and assist teenagers to cope with pregnancy.

Aim: The aim of this study was to explore and describe the coping mechanisms used by pregnant teenagers in clinics within Mafikeng Sub-district, North West Province, South Africa.

Setting: The study was conducted in three clinics in the Mafikeng Sub-district, North West Province, South Africa.

Methods: A qualitative-exploratory-descriptive and contextual research design was used to answer the research question. A non-probability purposive sampling technique was used to select pregnant teenagers. Semi-structured individual interviews, through WhatsApp video calls, were used to collect data from participants and the data analysed following Tesch's method of qualitative content analysis.

Results: Eight themes emerged from the findings of the study as follows: negative feelings due to teenage pregnancy; negative parental reaction; effects of teenage pregnancy at school; societal challenges; lack of spousal support; effects of pregnancy on teenagers; coping mechanisms used by pregnant teenagers; and recommendations to improve coping mechanisms of pregnant teenagers.

Conclusion: The findings suggest that pregnant teenagers tend to experience a stressful pregnancy journey, which affects their personal lives physically, psychologically, educationally and socially. The findings also reveal that teenagers cope better with the challenges of pregnancy with the support of friends, partners, parents and members of their families.

Contribution: The findings of the study will provide information to help other pregnant teenagers to cope with pregnancy and improve their coping mechanisms **Keywords:** Coping; coping mechanisms; pregnancy; teenage pregnancy

Introduction and background

Pregnancy is a stressful process that impacts on both adults and teenagers (Leone, 2018:75). Teenage pregnancy is described as pregnancy at which the adolescent's age is between 13 and 19 (Subhanie & Azlina, 2020:2). Teenage pregnancy is a major problem globally. For instance, the global population of teenage pregnancy is growing significantly, and is projected to rise by 2030 (UNFPA, 2013 & WHO, 2018). Developing countries are experiencing an increase in teenage pregnancy in schools, although preventative measures are emphasised in different dimensions (Makuna, 2019: 104). For instance, a study conducted by Darrach et al. (2016:3) revealed that approximately 21 million girls aged 15 to 19 years, get pregnant in developing countries.

Mlambo (2018:66) conducted a study in Bushbuckridge District, Limpopo Province and found that 119645 young girls between the ages of 15 to 19 years gave birth in 2017. The study also showed that more than 3000 adolescents between the ages 13 and 15 years became pregnant in South Africa the same year. These statistics in South Africa include teenagers from Mafikeng Sub-district, North West Province (NWP). The rate of teenage pregnancy in the North West Province dropped from 2,197 in 2012 to 2,157 in 2013 (Mhele & Natal, 2014:637). However, there is need for further studies to investigate these statistics by providing information to non-pregnant teenagers and strategies to future pregnant teenagers on coping mechanisms used to cope with pregnancy. These statistics show that the level of teenage pregnancy is a great concern that should be investigated and addressed. Simelane (2019:15) states that by hearing the views of teenage mothers or pregnant teenagers, one ought to understand the challenges and coping mechanisms that teenage girls go through as this mostly affects them socially and psychologically. Thus, it is important to allow them to share their stories, lifestyles, experiences and challenges they face.

Teenage pregnancy is usually unplanned and most adolescent girls react to it differently (Njuki, 2019:12). Throughout pregnancy, teenage mothers experience health, emotional, social and economic challenges (Medupe, Sehularo & Meno, 2020:3) and having to cope with these challenges, the pregnant teenager finds ways to deal with them using resources that may help them. Coping mechanisms, such as

emotional, social and physical support from family and friends, could be a resource (Abotsi, 2020:7). However, coping mechanisms used by pregnant teenagers in Mafikeng Sub-district, in NWP, South Africa, are not known.

The former Member of the Executive Council (MEC) of the Department of Education in the North West Province, Ms Wendy Matsemela, stated that between 2012 and 2013, statistics of teenage pregnancy across all districts were 17925 (Masilo, 2018:3). According to research conducted by Mosima (2019:2) in NWP, teenage girls are becoming pregnant meanwhile contraceptives are available at clinics for free. However, it seems adolescent girls do not use available free contraceptives to prevent teenage pregnancy. A study conducted in Zambia on coping of pregnant teenagers and teenage mothers, using 27 participants, revealed that for them to cope, they were getting help from their families, friends and relatives. Participants mentioned that they would resist and avoid depression signs, rely on prayer, and concentrate on their pregnancy journey and baby (Subhanie & Azlina, 2020:3). A study conducted by Katowa-Mukwato *et al.* (2017:64) revealed coping mechanisms, such as support from parents, friends and family, acceptance, depending on God, self-focus and denial. Avoidance was also used as a coping mechanism, whereby the teenage mother isolates herself from negative situations and people (Njuki, 2019:25).

In spite of the above discussion, there are few studies on coping mechanisms used by pregnant teenagers in Mafikeng Sub-district, NWP. Thus, the researcher deemed it relevant to explore and describe coping mechanisms used by pregnant teenagers in the District.

Research methodology

Research design

A qualitative-exploratory-descriptive and contextual research design was used to answer the research question. The research design was considered appropriate for this study because it allowed the researcher to gain a better understanding of underlying opinions, reasons and motivations to provide insights to the phenomenon (Brink, Van der Walt & Van Rensburg, 2018:55).

Study setting

This study was conducted in clinics within Mafikeng Sub-district, North West Province, South Africa. Mafikeng Sub-district has 18 clinics, including eight health centres. All these clinics provide antenatal (ANC) for pregnant teenagers. The district manager assisted the researcher in selecting the clinics for data collection and analysis. Data saturation was reached after collecting data from three clinics in Mafikeng Sub-district.

Population and sampling

The study population consisted of all pregnant teenagers aged 13 and 19 years who attended ANC at clinics in Mafikeng Sub-district. Non-probability purposive sampling technique was used to select 12 study participants from three clinics in Mafikeng Sub-district.

Data collection

Semi-structured individual interviews, through WhatsApp video calls, were used to collect data. WhatsApp video calls were used to protect the researcher and potential participants from the COVID-19 pandemic. WhatsApp video calls assisted the researcher to observe all non-verbal cues displayed by participants during data collection. The following research questions were asked: Can you tell me how you felt after finding out about this pregnancy? How do you feel about motherhood? Who did you first tell about your pregnancy? What are the challenges you have experienced in this pregnancy thus far? How do you deal with these challenges? and what is your support system since you became pregnant?

Data analysis

Data collection and analysis occurred at the same time. Both the researcher and co-coder analysed data independently. Tesch's method of qualitative content analysis

was used to analyse data (Creswell, 1992:142-145). The researcher carefully went through the data in order to understanding it and get the necessary background information. The most interesting transcript was identified, which had rich information in order to understand the meanings. After completing the task with the participants, all the topics were listed and similar topics grouped together. Topics were abbreviated as codes and written next to the segment of each text. The themes were then turned into sub-themes. The sub-themes were reduced using the most descriptive words by grouping them together; interrelationships were shown by drawing lines between sub-themes. An abbreviation was given to each sub-theme and the codes arranged in alphabetic order to avoid duplication. Data was grouped together in each theme for preliminary analysis. The themes were referred back to the data in order to remove irrelevant data and ensure that all relevant and important information considered and added to the themes.

Trustworthiness

Trustworthiness was ensured through credibility, dependability, transferability and confirmability (Brink *et al.*, 2018:172-173). To ensure credibility, the study was explained to potential participants by the independent person. This was done to build a good relationship between the independent person, researcher and participants, prepare them for the study and encourage them to share their experiences and personal information with the researcher (Maree, 2016:123). The researcher described exactly how data was collected, recorded, coded and analysed in order to assist readers to follow the path of the study and show how conclusions were reached with enough information provided in the study. This was a way of ensuring dependability of the study. To ensure transferability of the study, the researcher described clearly, the research findings with regard to coping mechanisms used by pregnant teenagers in clinics around Mafikeng sub-district for them to be applicable to other situations and contexts. Confirmability was ensured by using an audio recorder during data collection in order to accurately present responses provided by participants.

Ethical considerations

The study was approved by the School of Nursing Science, North-West University (NWU). Ethical clearance was requested and obtained from the NWU, Faculty of Health Sciences (FHS) Health Research Ethics Committee [NWU-HREC] (NWU-00961-19-A1). Conditional approval to conduct the study was obtained from the North West provincial Department of Health (DoH). Parents or guardians gave written approvals for teenagers to participate in the study, while teenagers gave assent to participate.

Results

Twelve pregnant teenagers aged 16 and 19 participated in the study. The gestational age of participants ranged between 21 and 36 weeks. Table 1 shows the demographic characteristics of the participants.

Table 1: Demographic characteristics of participants

Participant number	Age years	Sex	Gestational age	Level of education
Participant A	19 years	Female	26 weeks	Grade 10
Participant B	16 years	Female	32 weeks	Grade 10
Participant C	18 years	Female	22 weeks	Grade 11
Participant D	19 years	Female	32 weeks	Grade 10
Participant E	19 years	Female	36bweeks	College
Participant F	17 years	Female	27 weeks	University
Participant G	17 years	Female	38 weeks	Grade11
Participant H	19 years	Female	28 weeks	Grade11
Participant I	19 years	Female	36 weeks	Unemployed/ Upgrading the National Senior Certificate
Participant J	18 years	Female	32 weeks	Grade 10
Participant K	16 years	Female	21 weeks	Grade 10
Participant L	16 years	Female	24 weeks	Grade 10

Table 2: Themes and sub-themes

Themes	Sub-themes
Theme 1: Negative feelings due to teenage pregnancy	1.1 Anxiety 1.2 Feelings of despair 1.3 Suicidal ideation and attempt 1.4 Shameful/disappointment
Theme 2: Negative parental reaction	2.1 Parental disappointment 2.2 Threats from parents 2.3 Chasing pregnant teenagers away
Theme 3: Effects of teenage pregnancy at school	3.1 Dropping out of school 3.2 Poor school performance
Theme 4: Societal challenges	4.1 Lack of income to raise a child 4.2 Shortage of medication at clinics 4.3 Stigmatisation from friends
Theme 5: Lack of spousal support	5.1 Boyfriends denying the pregnancy 5.2 Lack of financial capacity 5.3 Empty promises 5.4 Boyfriends unprepared for fatherhood
Theme 6: Effects of pregnancy on teenagers	6.1 Laziness/ fatigue 6.2 Short concentration span 6.3 Gaining weight 6.4 Cravings and morning sicknesses 6.5 Shock of being HIV positive
Theme 7: Coping mechanisms used by pregnant teenagers	7.1 Income generation 7.2 Government support grants 7.3 Spiritual support 7.4 Support groups 7.5 Spousal support 7.6 Peer support 7.7 Parental and family support
Theme 8: Recommendations to improve coping mechanisms of pregnant teenagers	8.1 Government support 8.2 Social support

Themes

Eight themes emerged from the data as follows: (1) negative feelings due to teenage pregnancy; (2) negative parental reaction; (3) effects of teenage pregnancy at school; (4) societal challenges; (5) lack of spousal support; (6) effects of pregnancy on teenagers; (7) coping mechanisms used by pregnant teenagers; and (8) recommendations to improve coping mechanisms of pregnant teenagers.

Theme 1: Negative feelings due to teenage pregnancy

The following sub-themes emerged from the negative feelings due to teenage pregnancy: anxiety; feelings of anger; feelings of despair; suicidal ideations; and being shameful/disappointed.

Anxiety

The transcripts revealed that most pregnant teenagers became anxious after finding out about their pregnancy. Participants were anxious about how they would disclose the pregnancy to their parents and members of the family. Participants maintained they were uncertain of their future after finding out that they were pregnant as indicated in the excerpts below.

“I was scared, scared to tell my parents and my family” (Participant I).

“I was scared because I am still young and had a future that is bright” (Participant G)

“I am scared to be a mother but also looking forward to it” (Participant E).

Feelings of despair

Participant maintained they felt like the world had come to an end and had no hope for the future as captured in the excerpts below.

"I feel hopeless for the future... there is high possibility I will not be able to go to university next year" (Participant C).

"I felt like it is the end of the world" (Participant F).

Suicidal ideation/attempt

Some participants indicated that they had suicidal ideas and attempts after finding out about their pregnancy. They felt that taking their own lives was the best decision as indicated the excerpts below.

"After I tried to kill myself, my parents then decided to forgive me" (Participant B).

"Teenage pregnancy is not a child's play; sometimes, you feel like committing suicide" (Participant J).

Shameful/disappointment

Participants maintained that it took time for them to own up and disclose they were pregnant. Thus, they felt embarrassed, ashamed and disappointed in themselves. Most participants lost confidence in themselves at school and at church as indicated in the excerpt below.

"The embarrassment at school got me really bad, especially when it started showing" (Participant B).

"I stopped going to church to avoid embarrassing my mother" (Participant G).

"School caused a lot of embarrassment for me" (Participant L).

Theme 2: Negative parental reaction

The following three sub-themes emerged from the negative parental reaction: parental disappointment, threats from parents and being chased away by parents.

Parental disappointment

Participants indicated they were disappointed with their parents. Most parents were not happy that their children were pregnant and had negative opinions and attitudes towards them as indicated below.

“My parents are disappointed as they say they are taking me to school to study and now this” (Participant E).
“They told me how angry and disappointed they were when they found out about the pregnancy” (Participant B).

Threats from parents

Participants maintained the threats from their parents became a challenge as they were scared to be kicked out from home and have nowhere to go with their unborn babies as indicated in the excerpts below.

“My mom used to threaten me and say “if you dare become pregnant, I promise you I will kick you out of the house” (Participant A).

“She always takes my siblings side and threatens me to leave her house” (Participant J).

Chasing pregnant teenagers away

Participants maintained they were chased away after disclosing their pregnancy. They were rejected by their parents and treated them as outsiders as indicated below.

“I went to stay with my boyfriend because my mother kicked me out of the house” (Participant L).

“My father hit me with a belt so hard and told me to leave his house saying “se ke le mosadi yanong [I am a woman now] I will see to finish” (Participant B).

Theme 3: Effects of pregnancy at school

Two sub-themes emerged from the effects of pregnancy at school as follows: Dropping out of school; and poor performance.

Dropping out of school

Participants maintained they did not have the desire to go back to school during their pregnancy as they experienced a lot of stigma and negativity from their peers. Thus, they decide to drop out of school as indicated below.

“I then decided to quit school; the shame was just too much for me” (Participant J).

“I am going to become a mother; won't be able to go to school. This means I am going to have to quit school and take care of this baby” (Participant A).

Poor performance

Most participants indicated that getting pregnant while still a teenager was very difficult for them as it interfered with their school performance. They obtained low marks due to the pregnancy as captured in the following excerpt:

“My marks at school are dropping, this was also due to less of concentration in class and always being lazy” (Participant A).

Theme 4: Societal challenges

The following sub-themes emerged from societal challenges: Lack of income to raise a child; shortage of medication at clinics; and stigmatisation from friends.

Lack of income to raise a child

Some teenage mothers maintained they lacked money to raise their children. This might be due to the fact that most of them were school children as indicated below.

“The other challenge is finances; I am not working, I am still a scholar, I do not have money to buy nappies, formula also clothes. So, this is stressing me so much” (Participant A).

“I had no hope, I had many dark thoughts because I do not have money to take care of this baby” (Participant B).

Shortage of medication at clinics

Participants maintained they experienced a challenge with shortage of medication at clinics, especially pre-natal vitamins, very important during pregnancy. With the shortage, the teenagers had to ask for financial assistance from members of the family or friends as captured in the excerpts below.

“My mother buys me pre-natal vitamins when the ones at the clinic are out of stock” (Participant F).

“The sister at the clinic told me I have low blood so I have to buy tablets for the low blood as they were out of stock at the clinic” (Participant C).

Stigmatisation from friends

Most participants indicated that relationship with their friends changed after they learned they were pregnant. Participants who reported changes in their relations with friends, maintained it went from good to bad, with some losing their friends completely as indicated below.

“My roommate used to pass rumours about me; she was talking bad stuff about me and started to change towards me. We used to share groceries together but now, we do not; she is saying I eat a lot since I am pregnant and that I finish the grocery” (Participant F).

“My classmates started complaining that I make them sleepy as I am pregnant. The teachers started giving me funny looks and gossiping about me with other teachers” (Participant G).

Theme 5: Lack of spousal support

Four sub-themes emerged from lack of spousal support as follows: boyfriends denying the pregnancy; lack of financial capacity; empty promises; and boyfriend being unprepared for fatherhood.

Boyfriends denying the pregnancy

Most participants maintained they had no relationship with the child’s father, as some of them denied the pregnancy as captured in the excerpts below.

“My boyfriend questioned if this baby is really his and he knew I had sex only with him. He also told me his grandmother will not be happy about this and will not accept the pregnancy” (Participant D).

“I told my boyfriend and he denied the pregnancy, he said I told him I was on injection when we became intimate and that it is a lie” (Participant B).

Lack of financial capacity

Some participants maintained they had no financial support from their partners. This might be a serious problem for them as they are not working as indicated below.

“He always says work is so scarce but according to me, he does not even hustle or put an effort” (Participant A)

“My boyfriend also does not have money for us to raise the child together” (Participant L).

Empty promises

Participants maintained the relationship with the child’s father was a challenge, making them feel lonely and helpless.

Participant A maintained her partner did not keep his promises, thus making her stresses considering the fact that she was due for delivery soon. She indicated that the boyfriend was not making any effort to get a job to support her as indicated below.

“My boyfriend does not work; also, he always makes empty promises” (Participant A).

Boyfriend unprepared for fatherhood

Participants indicated that their boyfriends were not prepared to be fathers thus causing a lot of anxiety in them as captured below.

“Every time we spoke, he told me how he is not ready to be a dad, as he is focusing on school and he did not take the news well” (Participant C).

“I told my partner and he was happy and scared at the same time, scared that he is going to be a dad” (Participant L).

Theme 6: Effects of pregnancy on teenagers

The following five sub-themes emerged from the effects of pregnancy on the teenagers: mother laziness/fatigue; short concentration span; gaining weight; cravings and morning sicknesses; and shock of being HIV infected.

Laziness and fatigue

Pregnant teenagers maintained their pregnancy made them tired, leading to disruptions in their daily activities as indicated in the comments below.

“I am always lazy and tired” (Participant A).

“Even with homework, I cannot do it. Once I get home from school, all I want is my bed to sleep (deep sigh)” (Participant A).

Short concentration span

Pregnant teenagers also face a number of academic challenges at school, such as finding time to study, maintaining a high degree of motivation and understanding course content, which then leads to poor performance at school. Participant A maintained the pregnancy disrupted her level of concentration, leading to a drop in her school marks, “I cannot concentrate for long” (Participant A).

Gaining weight

Some participants complained weight gain due to pregnancy was a challenge as most clothes could no longer fit them and they had no money to buy new clothes, especially school uniforms as indicated in the comments below.

“My uniform started not to fit anymore and I had no money to buy a bigger uniform so had to wear it tight like that” (Participant B).

Participant A indicated that the little money that she had, she sacrificed it to buy a new uniform and bigger clothes: “Last month, I bought a uniform with it as my uniform was getting small” (Participant A).

Cravings and morning sickness

Participants indicated that the pregnancy contributed negatively to their diet and health, they experienced hyperemesis gravidarum, which made not to eat well and, sometimes, not eat at all as indicated below.

“In the first trimester, I had terrible morning sicknesses; I used to vomit and always had nausea. There were certain foods I could not eat” (Participant G).

“I also have terrible morning sicknesses, I vomit a lot, especially at night and that stresses me so bad because I cannot eat” (Participant K).

Another participant expressed the challenge she had with cravings as follows:

“Affordability to buy the food that they craved for was a challenge as well. I also have so many cravings; I crave nice food but could not afford to buy them and that really frustrates me” (Participant C).

Shock of being HIV infected

The major challenge among all participants was finding out about their HIV status. They were shocked after finding out that they were HIV positive as captured in the excerpts below.

“Finding out that I am HIV positive was the biggest challenge amongst all (sobs). I found out on my first booking as I had to test” (Participant L).

“When I was told, I was in disbelief. I went to the extent to ask the counsellor to kindly repeat the test as there is no way I could be HIV positive. She then repeated it and it came out positive again” (Participant H).

“I recently found out that I am HIV positive as I booked late at the clinic. After finding out I was so shocked” (Participant B).

Theme 7: Coping mechanisms used by pregnant teenagers

Seven sub-themes emerged from the coping mechanisms used by pregnant teenagers as follows: income generation; government support grant; spiritual support; support group; spousal support; peer support; as well as parental and family support.

Income generation

Some pregnant teenagers maintained they were coping financially as they received financial assistance from their partners, which assisted them in their needs as indicated in the comment below.

“I am coping because I have money that I get from my boyfriend every month; it is like an income for me. So, for now, I think I am fine, I can cope very well” (Participant I).

“I am planning of opening a small business, such as selling chips, muffins, ice cream. I think the money might help me buy nappies and formula” (Participant A).

Government support grants

Financial support is an important factor for pregnant teenagers, considering that they are at school and will not have money to help with basic needs of the baby. Thus, participants indicated the following as their source of income: Some participants reported that they rely on SASSA (Government grants) to survive: “I will register the baby on the SASSA (child support) grant that will also help look after the baby (Participant A). The participant also indicated that she received the COVID-19 unemployment money: “I also rely on the R350 unemployment money we get every month” (Participant A), while Participant G maintained “We survive through grant money.” However, some participants expressed concerns as follows: “I will no longer receive grant money as I am going to be cut off and I will have to assign my baby for it, this will put a lot of strain on my family (Participant G).

Spiritual support

Some participants maintained they were using spirituality as a coping mechanism for their teenage pregnancy. These participants revealed they resorted to prayer to cope with pregnancy and indicated below.

“I have hope that all will be well; my relationship with God has been amazing and my spirituality has been uplifted” (Participant B).

Participant I indicated that using positive religious coping mechanisms, such as prayer, improved her mental and physical health as well as improved health outcomes as follows:

“My pastor is my motivator; she gives me hope in every situation. My pastor makes life easy for me. Now, I can just say that I am coping by the Grace of God” (Participant I).

Support groups

Participants also maintained support groups helped them cope with pregnancy. These groups provided them with emotion support and enhanced their emotional strength. Participants indicated as follows:

“When I visited the clinic, I interacted with a few pregnant teenagers who went through similar problems as mine and as we were waiting in the line, we usually talked and shared our experiences together, which helped a lot. We would also like to form a group where we support each other as expectant teenage mothers to help other teenagers in future” (Participant D).

“I think our clinic is helping us a lot by allowing us to talk to other girls who are also pregnant like us, these support groups are very helpful. I do not regret attending my visits” (Participant H).

Spousal support

Some participants indicated that support provided by their partners lightened their burden. The participants also indicated that their partners played a big role in supporting them as captured in the excerpts below.

“The baby’s daddy is my support system; he accompanies me to the scans, and supports me emotionally and financially. He gives me the little money he has and says I must save it for the baby” (Participant F).

“My boyfriend gives me money at times when he has to buy the things I need” (Participant J).

“But [he] promised to be there, he will hustle for the baby” (Participant C).

Peer support

Most pregnant teenagers maintained they received great support from their friends during pregnancy. They indicated that their relationship with friends never changed instead, they became stronger as indicated below.

“I honestly thought she would judge me instead, she encouraged me and gave me good advice, she told me not to stress as this is not the end of the world” (Participant A).

“You know, my friends are doing very well to assist me, if it wasn’t because of them, I do not know where I would be” (Participant C).

Parental and family support

Some participants indicated that they still felt loved and supported by both their parents and family even after finding out about the pregnancy. Participants maintained without their families, they would not have been where they are today as indicated below.

“My boyfriend and the family promised to help me take care of the baby financially and I am happy they are willing to help” (Participant B).

Some participants maintained when their parents found out about the pregnancy, they were furious, however, with time, they accepted the pregnancy as captured below.

“But they then forgave me and decided to go to my boyfriend’s place to report the pregnancy. When they got there, the parents accepted the pregnancy though my boyfriend still denied the pregnancy” (Participant B).

“I spoke to the baby’s daddy about who will look after the child after she is born, he then promised to speak to his family maybe they can look after the child” (Participant A).

Theme 8: Two sub-themes emerged from the recommendations with regard to improve coping mechanisms of pregnant teenagers as follows: government support; and social support.

Government support

Almost all participants indicated that they needed government to support them during pregnancy. Some participants maintained they needed government to support them with SASSA (government grant). Participants maintained the money will assist them to buy basic needs as follows:

“I think we need support from government, they should actually give us child support grant or SASSA when we are pregnant so that we can take care of the baby very well” (Participant H).

“If prisoners can get food, clothes and everything, including bursaries to study with universities like UNISA, it means government can also support us. If they can support prisoners, that means they can also support us, we also need those grants” (Participant B).

Social support

Participants indicated the need to receive support from parents, families and boyfriends to improve their coping mechanisms during pregnancy as indicated below.

“For us to cope, we need support from our own families, our own boyfriends and everyone we live with. We need to be supported because we are not the same and we are not coming from the same backgrounds. Other teenagers are worse than others, they go through a lot. So, we need support from everyone who can do something for us” (Participant D).

“Some pregnant teenagers still attend school. Teachers must also play their role; they must support us the same way they are supporting their pregnant children” (Participant F).

“Our boyfriends must support us; we are carrying their children. Pregnancy is not a child’s play. Our boyfriends must be there at all times because the child belongs to two people” (Participant G).

Discussion

The aim of this study was to explore and describe coping mechanisms used by pregnant teenagers in clinics in Mafikeng Sub-district, North West Province, South

Africa. The findings revealed eight themes as follows: negative feelings due to teenage pregnancy; negative parental reaction; effects of pregnancy at school; societal challenges; lack of spousal support; effects of pregnancy on teenagers; coping mechanisms used by teenagers; and recommendations to improve coping mechanisms of pregnant teenagers.

Most teenagers experienced negative feelings on realising that they were pregnant. Most pregnant teenagers were not psychologically and emotionally ready to become mothers after finding out about the pregnancy thus, putting them in a state of despair and shock (Abotsi, 2020:63).

Participants experienced negative parental reactions due to teenage pregnancy as follows: parental disappointment; threats from parents; and chasing away children. According to Katowa-Mukwato, Maimbolwa, Mwape and Mutinta (2017: 60), parents of pregnant teenagers react differently after finding out about their children's pregnancy. Matjene (2017:22) states that the relationship between pregnant teenagers and their parents after realising that they are pregnant, is usually one of anger towards them and favouritism. Participants maintained parents always supported their siblings even when they were wrong.

The study revealed the effects of pregnancy at school, such as dropping out of school and poor school performance. The findings are in line with those of Simulant (2019:58) who found that pregnant teenagers are persistently absent from school, perform badly and drop out as indicated by a participant in the study.

Participants indicated some societal challenges faced by pregnant teenagers. A study by Simelane (2019:67) revealed that pregnant teenagers experience social problems, such as deterioration in family and friendships.

Lack of spousal support was also mentioned as a challenge faced by pregnant teenagers. Pregnant teenagers become disappointed with their partners since they are not supportive and do not own up to the pregnancy (Mashala et al2015:46). According to Clear *et al.* (2018:71), support from the pregnant teenager's partner, commitment to the relationship and opinion with regard to the pregnancy influence the pregnant teenager in considering whether the pregnancy was intended or unintended.

The findings show that participants experienced extreme laziness and fatigue during pregnancy resulting in short concentration. According to Simelane (2018:58), this is a contributing factor to poor performance at school. This shows that pregnant teenagers should be assisted to deal with the effects of pregnancy.

In spite of the above challengers, there are coping mechanisms that are used by pregnant teenagers. This involves income generation, government support grants, spiritual support, support groups, spousal support, peer support, parental support or family support. The findings also revealed that some teenagers were supported during pregnancy while others were not. A study conducted by Ngum Chi Watts *et al.* (2015:11) revealed that the baby's father rarely supports the teenage mother, as pregnant teenagers indicated that they would receive good support from their mothers, siblings and close friends, but rarely from the father of the baby. Simelane (2019:63) states that support provides protection and facilitates coping with problems and adjustments that come with pregnancy.

The last theme that emerged from the findings of the study was recommendations to improve coping mechanisms of pregnant teenagers. According to Matjene (2017:53), pregnant teenagers tend to cope better with challenges of their pregnancy when they receive assistance and support from their families. School teachers should be subjected to professional counselling to support pregnant teenagers at school instead of judging and gossiping about them. This shows that different stakeholders should join the fight to combat teenage pregnancy and support teenagers who are already pregnant.

Limitations of the study

Due to the qualitative nature of the study, a small sample size of twelve (12) participants was a serious limitation. However, this was informed by data saturation. Thus, the findings of this study cannot be generalised to other districts or provinces in the country. Due to the emotional nature of the topic, some participants were not relaxed during data collection even though the researcher tried to make them comfortable and informed them that they were free to withdraw from the study at any time.

Recommendations

There is need to conduct further research on strategies to improve coping mechanisms used by pregnant teenagers in clinics around Mafikeng sub-district North West Province, South Africa. There is need for partners of pregnant teenagers to be involved in future studies. Different methodologies and a larger sample size should be considered in future studies. This will increase generalisability of the study. There is need to involve full time school psychologists or professional school counsellors in every school to accommodate pregnant teenagers. This will also build a platform for them to speak with a professional if needed. There is need to revive school health programmes (mobile clinics) to offer health care services to pregnant teenagers as well as other non-pregnant teenagers to assist in advocating programmes on ANC. This will also prevent pregnant teenagers in being absent from school to attend clinic visits.

Conclusion

The findings of this study revealed that coping with teenage pregnancy is challenging. In most cases, disapproval and rejection from the family and society makes teenage pregnancy difficult and stressful thus, coping mechanisms are needed to manage these challenges. Most pregnant teenagers had negative feelings on realising they were pregnant; they became stressed, frightened, shocked, disappointed and ashamed. Some families, partners and friends reacted negatively by expressing anger, disappointment, denial of the pregnancy. Some families went to the extent of chasing the pregnant teenagers out of their homes.

Some pregnant teenagers received support from their families, friends and partners thus, helping them to cope and manage all the demands of teenage pregnancy. Participants indicated that with the support from their families and friends, they were able to adapt to some activities as coping mechanisms, such as child support grants, small businesses to generate income, building a relationship with God by praying for spiritual upliftment in order to deal with challenges of teenage pregnancy.

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SECTION 3: CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

3.1 Introduction

Section two focused on the manuscript submitted to Health South Africa Gesondheid (HSAG) Journal. A qualitative research approach was used to explore and describe coping mechanisms used by pregnant teenagers in clinics around Mafikeng Sub-district, North West Province, South Africa. Eight themes emerged from the findings of the study. Participants indicated their experiences with regard to coping mechanisms used during pregnancy. This section focuses on the conclusion, limitations of the study and recommendations with regard to coping mechanisms used by pregnant teenagers in Mafikeng Sub-district, North West Province, South Africa.

3.2 Conclusion

Eight themes emerged from the study as follows: (1) negative feelings due to teenage pregnancy; (2) negative parental reaction; (3) effects of pregnancy at school; (4) societal challenges; (5) lack of spousal support; (6) effects of pregnancy on teenagers; (7) coping mechanisms used by teenagers; and (8) recommendations to improve coping mechanisms used by pregnant teenagers. Challenges faced by pregnant teenagers and their coping mechanisms are discussed below.

3.2.1 Negative feelings due to teenage pregnancy

Negative feelings due to teenage pregnancy emerged as the first theme in this study. Most participants experienced negative feelings on realising they were pregnant as indicated in the following sub-themes: anxiety; feelings of anger; feelings of despair; suicidal ideation/attempt; and feeling ashamed and disappointed. Most pregnant teenagers were not psychologically and emotionally ready to become mothers after finding out about the pregnancy, they were despaired and shocked. Pregnant teenagers were anxious and scared of how members of their families will receive the news. The anxiety was largely due to the thought of becoming a mother and having to look after a child when they were still children themselves.

Most pregnant teenagers who participated in the study strongly agreed education was important and could change their lives and future. Some pregnant teenagers had no hope, had negative thoughts and felt hopeless about their future and studies. Furthermore, it was difficult for members of their families to accept the pregnancy. Participants indicated that their parents expressed severe feelings of anger towards their pregnancy.

Most pregnant teenagers had a positive journey during pregnancy while others had challenges, resulting in disruptions in their daily activities. Participants were ashamed of themselves, felt they had let themselves down and were even ashamed to go to church. The findings revealed that pregnant teenagers faced several challenges during their pregnancy and had negative feelings towards the pregnancy.

3.2.2 Negative parental reaction

Negative parental reaction emerged as the second theme and included parental disappointment, threats from parents and chasing away children. Parental disappointment was the first sub-theme that emerged under this theme. Participants maintained their parents were angry and disappointed on finding out about the pregnancy as they were expecting a bright future for the children. They were hopeful that their children will complete school and go to university. Parents of pregnant teenagers reacted differently after finding out about the pregnancy; they had negative reactions on finding out about the pregnancy and were not happy.

Fathers of the pregnant teenagers were deeply hurt and troubled about the news of the pregnancy. Participants indicated that they received threats of being chased away by their parents while some were actually chased away. The findings also revealed that the relationship between the pregnant teenagers and their parents deteriorated on finding out about the pregnancy; parents expressed a lot of anger and disappointment towards the children.

3.3.3 Effects of pregnancy at school

The effects of pregnancy at school emerged as the third theme. Sub-themes under this theme were as follows: dropping out of school; falling behind at school; and poor

school performance. Participants faced many challenges during their pregnancy, such as disturbance in their school performance. Pregnant teenagers who participated in the study agreed that becoming pregnant has had a negative impact on their educational opportunities. The pregnancy disrupted their schooling, most of them had to drop out of school to take care of their babies.

In addition, the decision of participants to drop out of school was based on, fear of being provoked and not having anyone to look after their babies. The findings revealed that the academic performance of most participants dropped due to the pregnancy as they could not concentrate in school. Motherhood was considered a burden by participants. This is an indication that participants were overwhelmed by the dual role of being a mother and a learner.

3.3.4 Societal challenges

Participants experienced challenges within their communities. The sub-themes that emerged under this theme were: lack of income to raise a child; shortage of medication at clinics; and stigmatisation from friends. According to participants, lack of finance was a major challenge that affected their lives as teenagers. Most participants involved in the study were from poor homes thus, were unable to meet their most basic needs and those of the baby. Parents of the pregnant teenagers did not have enough money to provide basic needs for their children, such as clothing, toiletries and uniform and relied on their pension and grant money, which is not enough for the whole family.

Teenage pregnancy leads to a drop in social contacts and withdrawal from friends. Pregnancy can also be stressful to teenagers especially when they are still attending school. Participants maintained it was challenging at school, as learners would gossip about them, give them funny looks. Disapproval of friends and peers major concern to pregnant teenagers. A participant narrated how her peers lowered her self-esteem, as she was humiliated by people in her environment.

3.3.4 Lack of spousal support

Challenges experienced by pregnant teenagers emerged as the fifth theme in this study. The sub-themes were: boyfriends denying the pregnancy; lack of financial capacity; empty promises; and boyfriends unprepared for fatherhood. Pregnant

teenagers involved in the study lacked support from their partners and commitment from their boyfriends. Thus, most pregnant teenagers felt embarrassed and disappointed about their partners' reaction after finding out about the pregnancy. One participant maintained her partner denied the pregnancy. Although some participants indicated that they still had a relationship with the fathers of the babies, most maintained they had no relationship with them. Some participants had no communication with their boyfriends as they were tired of empty promises. It was revealed that pregnant teenagers in the study were disappointed in their partners, as they were not supportive and failed to take responsibility for their actions.

3.3.5 Effects of pregnancy on teenagers

The effects of pregnancy on teenagers involved, laziness / fatigue, short concentration span, gaining weight, cravings and morning sickness, as well as shock of being HIV infected. Participants experienced extreme laziness and fatigue during their pregnancy, leading to short concentration span and contributing to poor performance at school. Most pregnant teenagers had diverse physical needs, ranging from health care and health care information. Finding out about their HIV status was the biggest challenge thus, the need for more knowledge and health education to get treatment and prevent mother-to-child transmission. It emerged from the study that most participants had a challenge with weight gain, as their school uniform could no longer fit them. Thus, they needed new school uniform but could not afford. Participants further maintained another challenge was morning sickness and cravings for particular a food, which negatively affected them as they were always feeling weak due to persistent vomiting and cravings they could not afford.

3.3.6 Coping mechanisms used by pregnant teenagers

Coping mechanisms used by pregnant teenagers emerged as the seventh theme. This involved income generation, government support grants, spiritual support, support groups, spousal support, peer support and parental / family support. The findings revealed that participants were supported during their pregnancy while some were not. Those who were supported, received financial support from members of their families and partners and child support grants. Participants indicated that prayer and spiritual growth was one of their coping mechanisms. The findings revealed that positive

religious techniques improve physical and mental growth. Participants indicated that social support helped them to cope with their pregnancy, through interactions with other pregnant teenagers who were going through the same problems as theirs. Spousal support was also indicated as a coping mechanism for pregnant teenagers. Some participants maintained their partners were always there to support and motivate them, while others indicated that their partners accompanied them to the clinic. Friends also played a role in assisting pregnant teenagers to cope with their pregnancy; they were their support system when they needed someone to talk to. Participants revealed that their friends were non-judgmental and that they had a good relationship with them. Pregnant teenagers also received support from their parents, through acceptance and forgiveness. Although parents were initially not happy about the pregnancy, they later accepted and promised to help with caring for the babies after birth. The findings also revealed that several coping techniques assisted pregnant teenagers to deal with their challenges during pregnancy.

3.3.7 Recommendations to improve coping mechanisms of pregnant teenagers

There is need for increased access of government and social grants in order to improve coping mechanisms of pregnant teenagers. Participants maintained they would like the child grants to be paid out during their last trimester of pregnancy to use the money to plan and budget for all the needs of their babies. School funding or bursaries could improve their education after giving birth. There is need for professional counselling programmes provided by schools to help pregnant teenagers to cope with their challenges during pregnancy and interventions or referrals to be made, where necessary.

3.2 Limitations of the study

Limitations of the study involved the small sample size of 12 participants aged 13 and 19 years. This small sample size was influenced by data saturation. Data was collected through WhatsApp video calls due to the COVID-19 pandemic. Thus, connectivity was a challenge due to poor network in some rural areas and interruptions. In two of the interviews, participants asked to be excused to use the bathroom.

Only pregnant teenagers were included in the study. Teenage mothers were excluded from the study. Their involvement could have yielded different outcomes in the study. Another limitation was the fact that some participants did not understand some of the questions asked and needed the researcher to clarify before responding.

3.3 Recommendations

The following recommendations are made based on the findings of the study: nursing practice; teaching and learning; and research.

3.3.1 Nursing practice

- There is need for the Department of Health and other stakeholders to be involved in ensuring that pre-natal vitamins are always available at clinics;
- There is need to revive school health programmes (mobile clinics) to offer health care services to pregnant teenagers as well as other non-pregnant teenagers to assist in advocating programmes on Antenatal Care (ANC). This will also prevent pregnant teenagers from being absent at school to attend clinic visits. There is also the need for programmes, such as abstinence and use of contraceptives;
- There is need for the Department of Health to implement policies that focus on the coping mechanisms of pregnant teenagers; and
- There is need for the Department of Education to collaborate with the Department of Health to assist teenagers who get pregnant to return to school, for example, nurses could adopt schools and regularly visit these schools to educate learners about teenage pregnancy and motherhood.

3.3.2 Teaching and learning

- There is need to implement teaching in empowering teenagers and to develop responsible attitudes with regard to sexual behaviour. Such practices will reduce casual sexual activities, repeated pregnancy and ensure contraceptive compliance and continuation of education.

- There is need to develop programmes that promote abstinence. These programmes should also aim at building skills and disseminating information to all teenagers.
- There is need for the Department of Education to develop a training programme for pregnant teenagers to help cope with their challenges.
- There is also the need for schools to develop counsellors, who will adopt a cognitive behavioural therapy approach for pregnant teenagers to help develop strong internal coping mechanisms.
- There is need for school counsellors to develop a programme in collaboration with role-models of pregnant teenagers, to empower them on their school activities and motherhood adjustment roles.
- There is need for the Department of Education to roll out programmes to offer in-service training to teachers to help improve their understanding of challenges faced by pregnant teenagers. This can address the negative attitudes of teachers towards pregnant teenagers.

3.3.3 Nursing research

- There is need to replicate this study with a larger group of teenage mothers for the findings can be verified.
- There is also a need for a similar study on the coping mechanisms of parents and /or partners of pregnant teenagers.
- There is need for research to understand how teenagers can be empowered to abstain or practise safe sex.
- The findings revealed pertinent issues that drastically affect teenagers, such as HIV and sexual abuse. Thus, further studies are needed to unravel the magnitude and effect of these issues on health and wellbeing of pregnant teenagers in this area.
- There is also a need to develop a psychosocial support programme for pregnant teenagers in the North West Province, South Africa.

3.4 Conclusion

The focus of this study was on coping mechanisms used by pregnant teenagers in clinics around Mafikeng Sub-district, North West Province, South Africa. The aim of the study was to explore and describe the coping mechanisms used by pregnant teenagers in order to make recommendations to improve their coping mechanisms in Mafikeng. The study revealed eight themes as follows: (1) negative feelings due to teenage pregnancy; (2) negative parental reaction; (3) effects of pregnancy at school; (4) societal challenges; (5) lack of spousal support; (6) effects of pregnancy on teenagers; (7) coping mechanisms used by teenagers; and (8) recommendations to improve coping mechanisms of pregnant teenagers. The study was divided into three sections as follows: overview of the study; a manuscript as well as conclusion, limitations and recommendations

APPENDICES

Appendix A: Proof of submitted manuscript

Appendix B: Manuscript guidelines

Appendix C: NWU- HREC approval certificate

Appendix D: Department of Health permission letter

Appendix E: Sub-district permission letters

Appendix F: Permission request letter

Appendix G: Informed consents

Appendix H: Interview schedule

Appendix I: Information sheet

Appendix J: Participants example of interview

Appendix K: Ministerial consent

Appendix L: Confidentiality Form

Appendix M: Language editor certificate

Appendix M: Co-coder certificate

Appendix A: Proof of submitted manuscript



Fwd: HSAG Submission 1873 - Confirmation and acknowledgement of receipt

1 message

Leepile Sehularo <Leepile.Sehularo@nwu.ac.za>

Tue, Dec 7, 2021 at 4:41 AM

To: nthenec083@gmail.com

Best Regards,

No health without mental health (WHO)

Prof Leepile A. Sehularo (PhD, RN)

Associate Professor: Mental Health Nursing Science

North-West University (Mahikeng)

Faculty of Health Sciences

School of Nursing Science

Tel/Cell: 0183892642 / 0603470183

Fax: 086 621 4308

Email: Leepile.Sehularo@nwu.ac.za

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09:22 >>>

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Manuscript title: Coping mechanisms used by pregnant teenagers in clinics within Mafikeng Sub-district, North West Province, South Africa

Journal: Health SA Gesondheid

***** Dear Prof. Sehularo

Your submission has been received by the journal and will now be processed in accordance with published timelines.

Processing time guidelines are available under the journal's 'About' section, however, please note that each submission is assessed on its individual merit and in certain circumstances processing times may differ.

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Appendix B: Manuscript guidelines

HEALTH SA GESONDHEID MANUSCRIPT GUIDE

Original Research Article full structure

Title: The article's full title should contain a maximum of 95 characters (including spaces).

Abstract: The abstract, written in English, should be no longer than 250 words and must be written in the past tense. The abstract should give a succinct account of the objectives, methods, results and significance of the matter. The structured abstract for an Original Research article should consist of six paragraphs labelled Background, Aim, Setting, Methods, Results and Conclusion.

- **Background:** Summarise the social value (importance, relevance) and scientific value (knowledge gap) that your study addresses.
- **Aim:** State the overall aim of the study.
- **Setting:** State the setting for the study.
- **Methods:** Clearly express the basic design of the study, and name or briefly describe the methods used without going into excessive detail.
- **Results:** State the main findings.
- **Conclusion:** State your conclusion and any key implications or recommendations.
- **Contribution:** Concise statement of the primary contribution of your manuscript. Do not cite references and do not use abbreviations excessively in the abstract.

Introduction: The introduction must contain your argument for the social and scientific value of the study, as well as the aim and objectives:

- **Social value:** The first part of the introduction should make a clear and logical argument for the importance or relevance of the study. Your argument should be supported by use of evidence from the literature.
- **Scientific value:** The second part of the introduction should make a clear and logical argument for the originality of the study. This should include a summary of what is already known about the research question or specific topic, and should clarify the knowledge gap that this study will address. Your argument should be supported by use of evidence from the literature.
- **Conceptual framework:** In some research articles it will also be important to describe the underlying theoretical basis for the research and how these theories are linked

together in a conceptual framework. The theoretical evidence used to construct the conceptual framework should be referenced from the literature.

- Aim and objectives: The introduction should conclude with a clear summary of the aim and objectives of this study.

Research methods and design: This must address the following:

- **Study design:** An outline of the type of study design.
- **Setting:** A description of the setting for the study; for example, the type of community from which the participants came or the nature of the health system and services in which the study is conducted.
- **Study population and sampling strategy:** Describe the study population and any inclusion or exclusion criteria. Describe the intended sample size and your sample size calculation or justification. Describe the sampling strategy used. Describe in practical terms how this was implemented.
- **Intervention (if appropriate):** If there were intervention and comparison groups, describe the intervention in detail and what happened to the comparison groups.
- **Data collection:** Define the data collection tools that were used and their validity. Describe in practical terms how data were collected and any key issues involved, e.g. language barriers.
- **Data analysis:** Describe how data were captured, checked and cleaned. Describe the analysis process, for example, the statistical tests used or steps followed in qualitative data analysis.
- **Ethical considerations:** Approval must have been obtained for all studies from the author's institution or other relevant ethics committee and the institution's name and permit numbers should be stated here.

Results: Present the results of your study in a logical sequence that addresses the aim and objectives of your study. Use tables and figures as required to present your findings. Use quotations as required to establish your interpretation of qualitative data. All units should conform to the **SI convention** and be abbreviated accordingly. Metric units and their international symbols are used throughout, as is the decimal point (not the decimal comma).

[For Qualitative Research - Measures of Trustworthiness]

Measures of Trustworthiness: This refers to the findings of the study being based on the discovery of human experience as it was experienced and observed by the participants. The following are the criteria of trustworthiness, credibility, transferability, dependability and confirmability to be discussed.

[For Quantitative Research - Reliability and Validity]

Reliability: Reliability is the extent to which an experiment, test, or any measuring

procedure yields the same result with repeated trials. Without the agreement of independent observers able to replicate research procedures or the ability to use research tools and procedures that yield consistent measurements, researchers would be unable to satisfactorily draw conclusions, formulate theories or make claims about the ability to generalize their research.

Validity: Validity refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. While reliability is concerned with the accuracy of the actual measuring instrument or procedure, validity is concerned with the study's success at measuring what the researchers set out to measure. Researchers should be concerned with both external and internal validity. External validity refers to the extent to which the results of a study are generalisable or transferable. Internal validity refers to:

- The rigor with which the study was conducted (e.g. the study's design, the care taken to conduct measurements and decisions concerning what was and was not measured).
- The extent to which the designers of a study have taken into account alternative explanations for any causal relationships they explore.

Discussion: The discussion section should address the following four elements:

- Key findings: Summarise the key findings without reiterating details of the results.
- Discussion of key findings: Explain how the key findings relate to previous research or to existing knowledge, practice or policy.
- Strengths and limitations: Describe the strengths and limitations of your methods and what the reader should take into account when interpreting your results.
- Implications or recommendations: State the implications of your study or recommendations for future research (questions that remain unanswered), policy or practice. Make sure that the recommendations flow directly from your findings.

Conclusion: Provide a brief conclusion that summarises the results and their meaning or significance in relation to each objective of the study.

Acknowledgements: Those who contributed to the work but do not meet our authorship criteria should be listed in the Acknowledgments with a description of the contribution. Authors are responsible for ensuring that anyone named in the Acknowledgments agrees to be named. Refer to the acknowledgement structure guide on our *Formatting Requirements* page.

Also provide the following, each under their own heading:

- Competing interests: This section should list specific competing interests associated with any of the authors. If authors declare that no competing interests exist, the article will include a statement to this effect: *The authors declare that they have no financial*

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- Disclaimer: A statement that the views expressed in the submitted article are his or her own and not an official position of the institution or funder.

References: Authors should provide direct references to original research sources whenever possible. References should not be used by authors, editors, or peer reviewers to promote self-interests. Refer to the journal referencing style downloadable on our *Formatting Requirements* page.

Style and format

File format

- Manuscript files can be in the following formats: DOC, DOCX, or RTF. Microsoft Word documents should not be locked or protected.
- LaTeX documents (.tex) should be converted into Microsoft Word (.doc) before submission online.
- Rich Text Format (RTF): Users of other word processing packages should save or convert their files to RTF before uploading. Many free tools are available that will make this process easier.

Length

Manuscripts should adhere to the author guidelines of the journal. There are restrictions on word count, number of figures, or amount of supporting information.

Font

Use a standard font size and any standard font family.

Special characters

Do not use the font named 'Symbol'. To add symbols to the manuscript, use the Insert → Symbol function in your word processor or paste in the appropriate Unicode character. Refer to our AOSIS house style guide on mathematical and Unicode font guidelines.

Headings

Ensure that formatting for headings is consistent in the manuscript. Limit manuscript sections and sub-sections to four heading levels. To avoid confusion during the review and production process, ensure that the different heading levels used in your work are visually distinct from one another. The simplest way to achieve this is to use different font sizes and/or a combination of bold/italics for different heading levels.

Keywords

Identify eight keywords that represent the content of your manuscript and are specific to your field or sub-field, ensure to separate each keyword with a semi-colon. Test your keywords: when you enter your keywords into the various journal and academic databases like Google Scholar, do the results include papers similar to your topic? If not, revise the terms until they do.

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Manuscript text should have a 1.5 line spacing.

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Include page numbers and line numbers in the manuscript file. Use continuous line numbers (do not restart the numbering on each page).

Footnotes

Footnotes are not ideal. If your manuscript contains footnotes, move the information into the main text or the reference list, depending on the content.

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Abbreviations

Define abbreviations upon first appearance in the text. Do not use non-standard abbreviations unless they appear at least three times in the text. Keep abbreviations to a minimum.

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Illustrations fall into two categories:

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Use the original figure as first published where appropriate. However:

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- No clearance is required if, after you have created a single figure or table using data from two or more figures or tables, no single source comprises more than 75% of the new figure or table.

- No clearance is required if, after you have created a new figure or table by adding your own data to an existing figure or table, your data comprises more than 25% of the new figure or table.
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For prose, permission is required for single quotations of over 400 words or multiple quotations from the same source that cumulatively total more than 800 words. But note that, even if below these limits, permissions must be cleared for quotations that represent the 'heart of the work' or a substantial portion of the overall original source material.

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Permissions must be cleared before the final version of your manuscript is submitted for publication. If permission cannot be obtained, you should find an alternative or remove the material. Provide electronic copies of all consent forms obtained when you submit your final manuscript, numbered and named accordingly.

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This section should include the statements of compliance with standards of research involving either animal or human involvement. If your study involves human subjects and/or animals, and if your manuscript includes case reports/case series, you need to provide the following:

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- Authors should specifically mention if a waiver was obtained for the study and the reason for the waiver. They should confirm that the study was conducted in accordance with Helsinki Declaration as revised in 2013.
- Authors must state that written informed consent was obtained from the participants of the study (and the relevant document(s) must be provided when requested by the journal). If verbal informed consent was obtained, the reason(s) for the absence of written consent must be provided.
- For case reports/case series involving minor subjects/children/infants, authors should confirm that the statements of written informed consent from legally authorized representatives/parents/guardians are available; if verbal informed consent was obtained, reasons for this must be mentioned.
- Since patients have a right to privacy, identifying information (including patients' images, names, initials, or hospital numbers) should not be included in recordings, written descriptions, or photographs unless the information is essential for scientific purposes. In any case, written informed consent from the patient must be obtained for publication of these graphics in print and electronic form. If such consent has not been obtained, personal details of patients in any part of the paper and in any supplementary materials (including illustrations) must be removed before submission.

Subject	Scenario	Suggested statement of compliance
Animals: Include the statement of compliance with standards of research involving animals.	If your work includes animals, it is necessary to have a statement of compliance with research standards involving animals.	All procedures performed in studies involving animals followed all international, national, and/or institutional guidelines for the care and use of animals.
	If you publish an article and there	This article does not contain any studies

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Humans: Include the statement of compliance with standards of research involving humans.	If your work does not include humans as subjects, you may finish the ethical statement to include.	This article does not contain any studies involving human participants performed by any of the authors.
	If your work involves humans as a subject, you had to receive ethics approval.	An application for full ethical approval was made to the [committee/Institutional Review Board] and ethics consent was received on [date]. The ethics approval number is [full ethics approval number].
	If your work involves humans as a subject, but you received an ethics waiver.	An application for full ethical approval was made to the [committee/Institutional Review Board] and ethics consent was received on [date]. The ethics waiver number is [full number]. The [committee/Institutional Review Board] issued an ethics waiver for the study because [reason for the ethics waiver].
	Additional statements: If your work involves humans, it is	All procedures performed in studies involving human participants were in accordance with the

	<p>necessary to <u>include one of the above and the following two additional statements.</u></p>	<p>ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.^a</p> <p>Informed Consent: [Written/Verbal] informed consent was obtained from all individual participants involved in the study. [If verbal informed consent was obtained, the reason(s) for the absence of written consent must be provided.]</p>
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^a, Do keep in mind: The necessary and sufficient condition is to conduct research in accordance with the [1964 Helsinki Declaration](#). If your institution has no department that deals with ethics, then you should not mention institutional standards. If your country has no committee that deals with ethics, then you should not mention national standards.

Acknowledgements structure

Acknowledgements

The acknowledgement section follows the conclusions section and addresses formal, required statements of gratitude and required disclosures. It includes listing those who contributed to the work but did not meet authorship criteria, with the corresponding description of the contribution. Acknowledge anyone who provided intellectual assistance, technical help (including with writing and editing), or special equipment and/or materials. Authors are responsible for ensuring that anyone named in the Acknowledgements agrees to be named.

Also provide the following, each under their own subheading:

- Competing interests
- Author contributions
- Funding information
- Data availability statement
- Disclaimer

Competing interests

This section should list specific competing interests associated with any of the authors. If authors declare that no competing interests exist, the article will include a statement to this effect. Read our [policy on competing interests](#).

The following are examples of competing interest statements. If you use one of the examples, you should modify it to fit your specific relationship.

Scenario	Suggested competing interest statements
Example 1	The author(s) declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.
Example 2	The author reported that they [have a financial and/or business interests in] [are a consultant to] [received funding from] a company that may be affected by the research reported in the enclosed publication. They have disclosed those interests fully and have in place an approved plan for managing any potential conflicts arising from [that involvement].
Example 3	A.B. developed the theoretical formalism, performed the analytic calculations and performed the numerical simulations. Both A.B and B.C. contributed to the final version of the manuscript. B.C. supervised the project.
Example 4	A.B., B.C., C.D., D.E., E.F., F.G., and G.H. conceived and planned the experiments. A.B., B.C., C.D. and D.E. carried out the experiments. A.B., F.G. and E.F. planned and carried out the simulations. J.K., K.L., A.B., B.C., D.E., C.D., F.J., and F.G. contributed to sample preparation. A.B., B.C., C.D., D.E., FJ, E.F., F.G. and G.H. contributed to the interpretation of the results. A.B. took the lead in writing the manuscript. All authors provided critical feedback and helped shape the research, analysis and manuscript.
Example 5	A.B. and B.C. designed the model and the computational framework and analysed the data. A.B. and C.D. carried out the implementation. A.B. performed the calculations. A.B. and B.C. wrote the manuscript with input from all authors. D.E. and E.F. conceived the study and were in charge of overall direction and planning.
Example 6	A.B. designed and performed the experiments, derived the models and analysed the data. B.C. assisted with XYZ measurements and C.D. helped carry out the XYZ simulations. A.B. and D.E. wrote the manuscript in consultation with C.D., B.C. and E.F.
Example 7	A.B. devised the project, the main conceptual ideas and proof outline. B.C. worked out almost all of the technical details, and performed the numerical calculations for the suggested experiment. C.D. worked out the bound for

	quantum mechanics, with help from D. E.F. verified the numerical results of the XYZ by an independent implementation. F.G. and G.H. proposed the XYZ experiment in discussions with A.B.. B.C., C.D., G.H. and A.B. wrote the manuscript.
Example 8	A.B., B.C. and C.D. designed the study. A.B., D.E. and E.F. performed the XYZ experiments. F.G. and G.H. performed XYZ simulations. I.H. and M.C. expressed and purified all proteins. A.B., H.J., B.C. and C.D. analysed the data. A.B., B.C. and C.D. wrote the paper with input from all authors.
Example 9	A.B. and B.C. designed and directed the project; C.D., D.E., A.B. and B.C. performed the experiments; C.D. and B.C. analysed spectra; A.B. and E.F. made the simulations; B.C. developed the theoretical framework; C.D., A.B. and B.C. wrote the article.
Example 10	The author of this publication receives research funding from [Entity], which is developing products related to the research described in this publication. In addition, the author serves as a consultant to [Entity] and receives compensation for these services. The terms of this arrangement have been reviewed and approved by the [University name; Institution name] in accordance with its policy on objectivity in research.
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The following are examples of an author contribution statement. If you use one of the examples, you should modify it to fit your specific relationship.

Scenario	Suggested author contribution statements
Example 1	A.B. and B.C. conceived of the presented idea. A.B. developed the theory and performed the computations. C.D. and D.E. verified the analytical methods. B.C.

	encouraged A.B. to investigate [a specific aspect] and supervised the findings of this work. All authors discussed the results and contributed to the final manuscript.
Example 2	A.B. and B.C. carried out the experiment. A.B. wrote the manuscript with support from C.D.. D.E. and E.F. fabricated the XYZ sample. F.G. and G.H. helped supervise the project. G.H. and H.I. conceived the original idea. H.I. supervised the project.
Example 3	A.B. developed the theoretical formalism, performed the analytic calculations and performed the numerical simulations. Both A.B and B.C. authors contributed to the final version of the manuscript. B.C. supervised the project.
Example 4	A.B., B.C., C.D., D.E., E.F., F.G., and G.H. conceived and planned the experiments. A.B., B.C., C.D. and D.E. carried out the experiments. A.B., F.G. and E.F. planned and carried out the simulations. J.K., K.L., A.B., B.C., D.E., C.D., F.J., and F.G. contributed to sample preparation. A.B., B.C., C.D., D.E., FJ, E.F., F.G. and G.H. contributed to the interpretation of the results. A.B. took the lead in writing the manuscript. All authors provided critical feedback and helped shape the research, analysis and manuscript.
Example 5	A.B. and B.C. designed the model and the computational framework and analysed the data. A.B. and C.D. carried out the implementation. A.B. performed the calculations. A.B. and B.C. wrote the manuscript with input from all authors. D.E. and E.F. conceived the study and were in charge of overall direction and planning.
Example 6	A.B. designed and performed the experiments, derived the models and analysed the data. B.C. assisted with XYZ measurements and C.D. helped carry out the XYZ simulations. A.B. and D.E. wrote the manuscript in consultation with C.D., B.C. and E.F..
Example 7	A.B. devised the project, the main conceptual ideas and proof outline. B.C. worked out almost all of the technical details, and performed the numerical calculations for the suggested experiment. C.D. worked out the bound for quantum mechanics, with help from D.E.. E.F. verified the numerical results of the xyz by an independent

	implementation. F.G. and G.H. proposed the xyz experiment in discussions with A.B., B.C., C.D., G.H. and A.B. wrote the manuscript.
Example 8	A.B., B.C. and C.D. designed the study. A.B., D.E. and E.F. performed the xyz experiments. F.G. and G.H. performed XYZ simulations. I.H. and M.C. expressed and purified all proteins. A.B., H.J., B.C. and C.D. analysed the data. A.B., B.C. and C.D. wrote the paper with input from all authors.
Example 9	A.B. and B.C. designed and directed the project; C.D., D.E., A.B. and B.C. performed the experiments; C.D. and B.C. analysed spectra; A.B. and E.F. made the simulations; B.C. developed the theoretical framework; C.D., A.B. and B.C. wrote the article.
Example 10	A.B., B.C. and C.D. performed the measurements, D.E. and E.F. were involved in planning and supervised the work, A.B. and B.C. processed the experimental data, performed the analysis, drafted the manuscript and designed the figures. F.G., and G.H. performed the xyz calculations. H.I., and I.J. manufactured the samples and characterized them with xyz spectroscopy, J.K. performed the xyz characterization. K.L. aided in interpreting the results and worked on the manuscript. All authors discussed the results and commented on the manuscript.
Example 11	A.B., B.C., C.D. and D.E. contributed to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

Funding information

All research articles should have a funding acknowledgement statement included in the manuscript in the form of a sentence under a separate heading entitled 'Funding information'. The funding agency should be written out in full, followed by the grant number in square brackets.

The following are examples of a funding statement. If you use one of the examples, you should modify it to fit your specific relationship.

Scenario	Suggested funding statements
Example 1	The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Medical Research Council [grant number xxx].
Example 2	This work was supported by the Trust [grant numbers xxxx, yyyy]; the Natural Environment Research Council

	[grant number zzzz]; and the Economic and Social Research Council [grant number aaaa].
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Data availability statement

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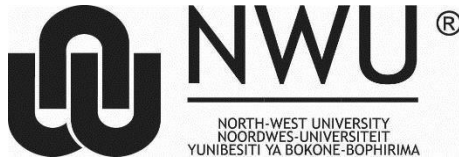
Availability of data	Suggested data availability statements
Data openly available in a public repository that issues datasets with DOIs	The data that support the findings of this study are openly available in [repository name e.g. 'figshare'] at http://doi.org/[doi] , reference number [reference number].
Data openly available in a public repository that does not issue DOIs	The data that support the findings of this study are openly available in [repository name] at [URL], reference number [reference number].
Data derived from public domain resources	The data that support the findings of this study are available in [repository name] at [URL/DOI], reference number [reference number]. These data were derived from the following resources available in the public domain: [list resources and URLs]
Data available within the article or its supplementary materials	The authors confirm that the data supporting the findings of this study are available within the article [and/or] its supplementary materials.
Data generated at a central, large-scale facility, available upon request	Raw data were generated at [facility name]. Derived data supporting the findings of this study are available from the corresponding author [initials] on request.

Embargo on data due to commercial restrictions	The data that support the findings will be available in [repository name] at [URL / DOI link] following a [6 month] embargo from the date of publication to allow for the commercialisation of research findings.
Data available on request due to privacy/ethical restrictions	The data that support the findings of this study are available on request from the corresponding author, [initials]. The data are not publicly available due to [restrictions, e.g. their containing information that could compromise the privacy of research participants].
Data subject to third party restrictions	The data that support the findings of this study are available [from] [third party]. Restrictions apply to the availability of these data, which were used under license for this study. Data are available [from the authors / at URL] with the permission of [third party].
Data available on request from the authors	The data that support the findings of this study are not openly available due to [reasons of sensitivity, e.g. human data] and are available from the corresponding author, [author initials], upon reasonable request [include information on the data's location, e.g. in a controlled access repository where relevant].
Data sharing not applicable – no new data generated	Data sharing is not applicable to this article, as no new data were created or analysed in this study.

Disclaimer

A statement that the views expressed in the submitted article are his or her own and not an official position of the institution or funder.

Appendix C: NWU- HREC approval certificate



South Africa 2520

Private Bag X6001, Potchefstroom

Tel: 018 299-1111/2222

Web: <http://www.nwu.ac.za>

**Health Sciences Ethics Office for
Research, Training and Support**

**North-West University Health Research
Ethics Committee (NWU-HREC)**

Tel: 018 299-1206

Email: Ethics-HRECAppl@nwu.ac.za

28 June 2021

To whom it may concern

APPROVAL OF THE RESEARCH STUDY FROM THE NORTH-WEST UNIVERSITY HEALTH RESEARCH ETHICS COMMITTEE (NWU- HREC) OF THE FACULTY OF HEALTH SCIENCES

Ethics number: NWU-00961-19-S1

Kindly use the ethics reference number provided above in all future correspondence or documents submitted to the administrative assistant of the North-West University Health Research Ethics Committee (NWU-HREC).

Study title: Coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics, North West Province

Study leader/supervisor: Prof LA Sehularo

Student: C Nthene - 21990492

Application type: Single study

Risk level: Adults: Medium

Children: Category 3 – Greater than minimal risk with no prospect of direct benefit

You are kindly informed that this application was reviewed at the meeting of the North-West University Health Research Ethics Committee (NWU-HREC), Faculty of Health Sciences, North-West University, held on 13/11/2019. Following review of the application, it has been decided that the study is approved. Approval in this letter means that **final ethics approval** was indeed granted for the **research methodology and the ethical aspects** of this study and that the NWU-HREC has **no further ethical concerns** relating to the research ethics process, except for the outstanding documentation indicated below, which must be provided to the NWU-HREC by the researcher. It is important to mention that this letter indicates that there are no further ethical concerns that exist, regarding the execution of the research. A final ethics letter will be issued upon the receipt of the following documentation:

- a. A copy of the permission letter from you as the representative of provincial Department of Health, indicating that the study can proceed.

The mentioned document, as indicated above, should be submitted to Ethics-HRECProcess@nwu.ac.za by the researcher, for review before the ethics approval certificate can be provided. This approval is provided *for a year*, after which continuation of the study is dependent on receipt of an annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation for another year.

Please note: Due to the nature of the study i.e. (online collection of qualitative data using semi-structured interviews with minors), this study will be able to proceed during the current alert level, following receipt of the approval letter. No additional COVID-19 restrictions have been placed on the study except that the researcher must ensure that before proceeding with the study that all research

team members have reviewed the North-West University COVID-19 Occupational Health and Safety Standard Operating Procedure.

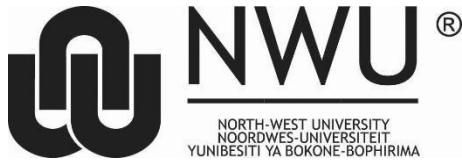
1

If you have any questions or need further assistance, please contact the Faculty of Health Sciences Ethics Office for Research, Training and Support at Ethics-HRECAppl@nwu.ac.za. Yours sincerely

Chairperson: NWU-HREC

Current details: (23239522) G:\My Drive\9. Research and Postgraduate Education\9.1.5.3 Letters Templates\9.1.5.3.6_Gatekeepers_Letter_HREC.docm 30 April 2018

File reference: 9.1.5.3.6



South Africa 2520

Private Bag X1290, Potchefstroom

Tel: 086 016 9698

Web: <http://www.nwu.ac.za/>

North-West University Health Research Ethics Committee (NWU-HREC)

Tel: 018 299-1206

Email: Ethics-HRECAppl@nwu.ac.za (for human studies)

26 August 2021

ETHICS APPROVAL LETTER OF STUDY

Based on approval by the North-West University Health Research Ethics Committee (NWU-HREC) on 26/08/2021, the NWU-HREC hereby approves your study as indicated below. This implies that the NWU-HREC grants its permission that, provided the general and specific conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: Coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics, North West Province

Principal Investigator/Study Supervisor/Researcher: Prof LA Sehularo

Student: C Nthene-21990492

Ethics number:

N	W	U	-	0	0	9	6	1	-	1	9	-	A	1
Institution			Study Number					Year		Status				

Status: S = Submission; R = Re-Submission; P = Provisional Authorisation;
A = Authorisation

Application Type: Single study

Commencement date: 26/08/2021

Expiry date: 31/08/2022

Risk:

**Adults: Medium
Children: Category 3 – Greater than minimal risk with no prospect of direct benefit**

Approval of the study is provided for a year, after which continuation of the study is dependent on receipt and review of a six-monthly monitoring report and the concomitant issuing of a letter of continuation. Monitoring reports are due at the end of February and August annually until completion of the study.

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, the following general terms and conditions will apply:

- *The principal investigator/study supervisor/researcher must report in the prescribed format to the NWU-HREC:*
 - *six-monthly on the monitoring of the study, whereby a letter of continuation will be provided annually, and upon completion of the study; and*
 - *without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study.*
- *The approval applies strictly to the proposal as stipulated in the application form. Should any amendments to the proposal be deemed necessary during the course of the study, the principal investigator/study supervisor/researcher must apply for approval of these amendments at the NWU-HREC, prior to implementation. Should there be any deviations from the study proposal without the necessary approval of such amendments, the ethics approval is immediately and automatically forfeited.*
- *Annually a number of studies may be randomly selected for active monitoring.*
- *The date of approval indicates the first date that the study may be started.*
- *In the interest of ethical responsibility, the NWU-HREC reserves the right to:*
 - *request access to any information or data at any time during the course or after completion of the study;*

– 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 study are revealed or suspected;*
- *it becomes apparent that any relevant information was withheld from the NWU-HREC or that information has been false or misrepresented;*
- *submission of the six-monthly monitoring report, the required amendments, or reporting of adverse events or incidents was not done in a timely manner and accurately; and/or*
- *new institutional rules, national legislation or international conventions deem it necessary.*

□ *NWU-HREC can be contacted for further information via Ethics-HRECApply@nwu.ac.za or 018 299 1206*

Special conditions of the research approval due to the COVID-19 pandemic:

Please note: Due to the nature of the study i.e. (online collection of qualitative data via semi-structured interviews with minors), this study will be able to proceed during the current alert level, following receipt of the approval letter. No additional COVID-19 restrictions have been placed on the study except that the researcher must ensure that before proceeding with the study that all research team members have reviewed the North-West University COVID-19 Occupational Health and Safety Standard Operating Procedure.

Special in process conditions of the research for approval (if applicable):

- a. Please provide the NWU-HREC with copies of the goodwill permission letters from the district office of the Department of Health.
- b. Please provide the NWU-HREC with copies of the goodwill permission letters from the clinics to be included in the study.

As the study progresses the aforementioned conditions should be submitted to

Ethics-HRECProcess@nwu.ac.za with a cover letter with a specific subject title indicating "Outstanding documents for approval: NWU-XXXXX-XX-XX." The letter should include the title of the approved study, the names of the researchers involved, that the documents are being submitted as part of the conditions of the approval set by the NWU-HREC, the nature of the document i.e. which condition is being fulfilled and any further explanation to clarify the submission.

The *e-mail*, to which you attach the documents that you send, should have a *specific subject line* indicating the nature of the submission e.g. "Outstanding documents for approval: NWU-XXXXX-XX-XX". The e-mail should indicate the nature of the document being sent. This submission will be handled via the expedited process.

The NWU-HREC would like to remain at your service and wishes you well with your study. Please do not hesitate to contact the NWU-HREC for any further enquiries or requests for assistance.

Yours sincerely,

Chairperson NWU-HREC

Current details:(23239522) G:\My Drive\1. Research and Postgraduate Education\9.1.5.4 Templates\9.1.5.4.2_NWU-HREC_EAL.docm 20 August 2019
File Reference: 9.1.5.4.2

Appendix D: Department of Health permission letter



health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

3801 First Street
New Office Park
MAHIKENG, 2735

Enq: Nthabiseng Mapogo
Tel: 018 391 4504
Fax: 018 388 6202
nmapogo@nwp.gov.za
www.nwhealth.gov.za



POLICY PLANNING RESEARCH MONITORING AND EVALUATION

Name of researcher: Ms. C. Nthene
North West University

Subject: Research Conditional Approval letter: Coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics, North West Province.

This letter serves to notify the Researcher that the Review committee has recommended your proposal for approval subject to the following:

1. The Researcher submits the Ethical Clearance Certificate to the North West Department of Health.

Please note that this is not an approval letter and that the researcher can only collect data after submission of the above and once full approval is granted.

Kindest regards.


Dr. FRM Reichel

Director: PPRM&E

12/12/2019
Date



1

HealthyLivingforAll

Appendix E: Sub-district permission letters



health
Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

Cnr Sekame & First Street
New Office Park
Mafiheng, 2745
Private Bag X2068
MMABATHO, 2735

Enq: Ms. Tshiamo Mokate
Tel: 018 391 4501
TMokate@nwpg.gov.za
www.nwhealth.gov.za



RESEARCH, MONITORING AND EVALUATION DIRECTORATE

Name of researcher: Ms. C. Nthene

Physical Address
(Work/ Institution)

North West University
14820 MUSENGI STREET
TSABANE EXT 5
CLINIC BOISHALONG
PRIVATE HOSPITAL



Subject: Research Approval Letter — Coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics, North West Province.

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 must arrange in advance a meeting with the District Chief Director and District Director to introduce their research team/members on the proposed research to be undertaken. Further to the above the researcher must produce this letter to the District and chosen facilities as proof that the research was approved by the NWDoH.

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.

Below are the contact details of Office of the Chief Director and District Director of Ngaka Modiri Molema district.

Healthy Living for All

Ngaka Modiri Molema District

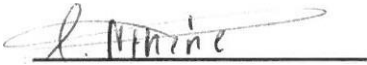
Office of the Chief Director	Office of the District Director
Ms. Mosela Kaudi Ms. Boitumelo Sethaiso (PA)	Ms. Nomvula Legobye Kealeboga Lobega (PA)
MKaudi@nwpg.gov.za BSethaiso@nwpg.gov.za	N Legobye@nwpg.gov.za LobegaK@nwpg.gov.za
018 384 0240	018 384 0240

Kindest regards.



Dr. F.R.M. Reichel
Director: RM&E

24/08/2021
Date



Researcher

30.08.2021
Date

Appendix F: Permission request letter



Private Bag X

Mmabatho

2735

Dear Sir/Madam

REQUEST TO CONDUCT A STUDY

I hereby request a research at your health centre facility; I am researcher from the North West University (Mafikeng Campus). The research will be focusing on coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics, Mafikeng.

Literature indicated that the rate of teenage pregnancy has been of stimulating concern in Mafikeng sub-district, according to the researchers personal experience as a professional nurse, these concerns include increased medical complications for the teenage mothers and unborn child, poor academic performance and difficulty in successfully completing their teenage developmental tasks. However such teenagers go through numerous challenges as they try to fit back into the social system and having to cope with all the consequences faced by a teenage mother and their coping mechanisms.

The importance of the ways that teenagers cope with stress during pregnancy is unclear There is also a shortage in literature addressing coping mechanisms of pregnant teenagers in Mafikeng sub district, hence the researcher deemed it necessary to explore and describe the coping mechanisms used by pregnant teenagers in Mafikeng sub-district clinics ,North West Province.

The purpose of the study is to explore and describe the coping mechanisms used by pregnant teenagers and the suggestions for addressing those coping mechanisms Mafikeng sub-district.

I hope my request will be taken into consideration

Yours sincerely

Miss Cindy Nthene

Professional nurse/ Mcur candidate

North West University

Appendix G: Informed consents

TEENAGERS CONSENT FORM (18 years and older)



Private Bag X1290, Potchefstroom
South Africa 2520

Tel: +2718 299-1111/2222

Fax: +2718 299-4910

Web: <http://www.nwu.ac.za>

HREC Stamp

INFORMED CONSENT DOCUMENTATION FOR PREGNANT TEENAGERS BEING INTERVIEWED

TITLE OF THE RESEARCH STUDY: **Coping mechanisms used by pregnant teenagers in Mafikeng sub-district clinics, North West Province**

ETHICS REFERENCE NUMBERS:

PRINCIPAL INVESTIGATOR: PROF LA SEHULARO

POST GRADUATE STUDENT: MS CINDY NTHENE

ADDRESS: 3084, PORTION 62, UNIT 9, MMABATHO, 2735

CONTACT NUMBER: 0183892642

You are cordially invited to take part in a **research study** that forms part of our Masters programme in Nursing Science. Please take time to read the information presented here, which explains the details of this study. Please ask the researcher or person explaining the research to you any questions about any part of this study that you do not understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you might be involved. Please be aware that your participation is **entirely voluntary** and you are free not to participate should you feel uncomfortable. Should you decline, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you initially agreed to take part.

This study has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (NWU.....) and will be conducted in accordance with the ethical guidelines and principles of Ethics in Health Research: Principles, Processes and Structures (DoH, 2015) and other applicable international ethical guidelines. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

What is this research study all about?

We plan to explore and describe coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics.

This study will be done in Mafikeng sub-district clinics and will be conducted by experienced health researchers trained in qualitative research.

15 participants will be included in this study.

Why have you been invited to participate?

You have been invited to be part of this research because you are a pregnant teenager, attend ante natal classes and between the ages of 13 and 19 years which means you meet my inclusion criteria.

You will unfortunately not be able to take part in this research if you are not a pregnant teenager, do not have a phone that enables whatsapp calls and not attending ante natal class around Mafikeng sub district clinics.

What will be expected of you?

You will be expected to ask permission from your parents or guardian and also agree to participate in the study by signing the consent form.

To be involved in a one to one semi-structured interviews via WhatsApp video calls where the researcher will be asking you about your coping mechanisms during your pregnancy.

You will be required to be present during data collection and agree to be audio recorded.

WhatsApp viideo calls will be used to collect data. This means that you should have a phone and a stable internet access in order to be able to participate in the study.

Will you gain anything from taking part in this research?

The gains for you if you take part in this study will be sharing of your perceptions with the researcher. There will be no direct gains for you in the study.

The other gains of the study is for other non-pregnant women who may be pregnant in the future. The community of Mafikeng sub-district will also benefit from results of the current study.

Are there risks involved in your taking part in this research and what will be done to prevent them?

The possible risk for you might be that you might experience some forms of anxiety due to having to open up about your personal experience to a stranger and also having to talk about sensitive issues. However the researcher will reassure you that whatever is spoken about during data collection will be strictly confidential and will endeavour to build a rapport so that you may be comfortable throughout the interview.

There would be more gains such as sharing your perceptions with the researcher and making a great contribution that may assist other pregnant teenagers in the future particularly around Mafikeng sub-district.

How will we protect your confidentiality and who will see your findings?

Anonymity of your information will be protected by not using your real name during data collection. You will be given a code as your name during data collection and analysis. Your name and contact details will not be mentioned anywhere in the study. Your privacy will be respected by conducting the study in a private room where no one will be allowed to enter. Your shared information will be kept confidential by being locked in a cupboard up to at least five years, after which they will be destroyed. Only the researchers and the study supervisor, Dr LA Sehularo will be able to look at your findings. Findings will be kept safe by locking hard copies in locked cupboards in the researcher's office and electronic data it will be password protected. (As soon as data has been transcribed it will be deleted from the recorders.) Data will be stored for five years.

What will happen with the findings or samples?

The findings of this study will only be used for this study and they will also be published at an accredited journal but your name and contact details will not be used anywhere in the study.

How will you know about the results of this research?

We will give you the results of this research after the results of the study are released by examiners. You will be informed telephonically about the availability of the results and it will be up to you to choose whether or not you would like to meet the researchers to discuss the results., The choice on whether or not you only want an individual meeting or want to involve your parents or guardian will remain yours. But this will be done before publication with an accredited journal.

You will be informed of any new relevant findings by arranging another one to one meeting with you.

You will not be paid to take part in this study

This study is funded by the Health and Welfare SETA (HWSETA).

Travel expenses will be paid for those participants who have to travel to the data collection venue however, if you have no traveling costs i.e. if you stay close to the venue where the interviews will be held, no travelling expenses will be paid.

Refreshments/a meal will be served immediately after the semi-structured interviews.

There will thus be no costs involved for you, if you do take part in this study.

Is there anything else that you should know or do?

You can contact myself (Ms C Nthene) on 0783827430 or study supervisor Prof LA Sehularo on 0183892642 or 0603470183 or an independent person Mr Tshepo Ntho (0710817745) on Mafikeng Campus of the North-West University if you have any further questions or problems.

You can also contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1206 or carolien.vanzyl@nwu.ac.za if you have any concerns that were not answered about the research or if you have complaints about the research.

You will receive a copy of this information and consent form for your own record keeping.

Declaration by participant

By signing below, I agree to take part in the research study titled:
Coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics

I declare that:

I have read this information/it was explained to me by a trusted person in a language I am fluent and comfortable with.

The research was clearly explained to me.

I have had a chance to ask questions to both the person getting the consent from me, as well as the researcher and all my questions have been answered.

I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.

I may choose to leave the study at any time and will not be penalised if I do so.

I may be asked to leave the study before it has finished, if the researcher feels it is in the best interest, or if I do not follow the study plan, as agreed to.

Signed at (*place*) On (*date*) 20....

Signature of participant Signature of witness

Declaration by person obtaining consent

I (*name*) declare that:

I clearly and in detail explained the information in this document to

.....

I did/did not use an interpreter.

I encouraged him/her to ask questions and spent time answering them.

I am satisfied that he/she adequately understands all aspects of the research, as discussed above

I gave him/her time to discuss it with others if he/she wished to do so.

Signed at (*place*) on (*date*) 20....

Signature of person obtaining consent

Declaration by researcher

I (*name*) declare that:

I explained the information in this document to **or** I had it explained by whom I trained for this purpose.

I did/did not use an interpreter

I encouraged him/her to ask questions and spent time answering them

or I was available if she wanted to ask any further questions.

The informed consent was obtained by an independent person.

I am satisfied that he/she adequately understands all aspects of the research, as described above.

I am satisfied that he/she had time to discuss it with others if he/she wished to do so.

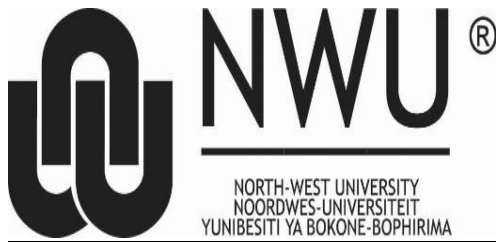
Signed at (*place*) on (*date*) 20....

Signature of researcher

Current details: (23239522) G:\My Drive\9. Research and Postgraduate Education\9.1.5.6 Forms\HREC\9.1.5.6_HREC_ICF_Template_Apr2018.docm
25 April 2018

File reference: 9.1.5.6

**FOROMO YA TUMELELO YA BANA BA DINGWAGA TSA 18 GO YA KWA
GODIMO**



Private Bag X1290, Potchefstroom
South Africa 2520

Tel: +2718 299-1111/2222

Fax: +2718 299-4910

Web: <http://www.nwu.ac.za>

HREC STAMP

**PAPETLANA YA TUMELELO YA BANA BA BAIMANA BA DINGWAGA TSE DI
KWA TLASE GO TSENELA DIPOTSOTHERISANO**

SETLHOGO SA DIPATLISISO: **MEKGWA E BANA BA DINGWAGA TSE DI
KO TLASE BA E DIRISANG GO KA LEPALEPANANG LE
BOIMANA MO SEDIKENG SA MAHIKENG, POROFENSE YA
BOKONE BOPHIRIMA.**

NOMORE YA REFERENCE:

MMATLISISIMOGOLO: MOPROFESARA LA SEHULARO

MOITHUTI WA SEALOGANE: MME CINDY NTHENE

ATERESE: 3084, PORTION 62, MMABATHO, 2735

MOGALA: 0183892642

O lalediwa ka boikokobetso go tsaya karolo mo di thuto dipatlisisong tse eleng karolo ya lokwalo lwa porogorama ya masters in Nursing Sciences lopiwa ka tsweetswee go tsaya nako o buise tshedimosetso e kwadilweng fa gonne e tlhalosa ka tsenelelo maitlhommo le diteng tsa dipatlisiso tse. O ga kololwa go botsadi mmatlisisi kgotso motho mongwe le mongwe yo a go tlhalosetsang ka ga tshedimosetso e dipotso fa o sa tlhaloganyeng sentle gona. Go botlhokwa gore o tlhaloganye dipatlisiso tse sentle gore di bua ka eng, di batla eng e bile o tla amega jang. Ela tlhoko gore go tsaya karolo gwa gago mo dipatlisisong tse ke boithaopi, ka mantswe a mangwe ga o patelediwe ke ope go tsaya karolo, fa o ikutlwa o sa lokologa o dumelelwa go ikogela morago. Go ikogela morago gag ago mo dipatlisisong tse gankitla go go ama ka gope ka mokgwa o o sa siamang, e bile o letleletswe go ikogela morago nako nngwe le nngwe fela, le fa o kile wa dumela ko ntlheng.

Thuto patlisiso e e letleletswe ke ba **health Ethics Committe of the Faculty of Health of North West University**. Ka jalo di tla tsamaiswa ga mmogo le melawana e e maleba ya go tlotlana e e tswang go Ethics in Health research: Principle of Ethics in Health Research, Process And Structures (DoH, 2015) le melawana e mengwe ya boditshabatshaba e tsamaelanang le mekgwa ya setho. Go ka tlhokega gore ba komiti ya mekgwa ya setho le ba bangwe ba ba maleba ba sekaseke direkoto tsa dipatlisiso tse.

Thuto patlisiso e e akaretsa eng?

Re rulaganya go tlhalosa le go itemogela mekgwa ya go itepatepanya le boimana mo baneng ba dingwaga tse di kwa tlase mo ditlilining tsa sedika sa Mahikeng

Dipatlisiso tse di tla tshwarwa mo sedikeng sa Mahikeng

Go tlhokega batsaya karolo ba le 15

Go reng o laleditswe go tsaya karolo?

Ka gonne o moimana wa dingwaga tse di kwa tlase, mme ebile o tsamaya di thuso tsa pholo tsa baimana mo tlilining. o dingwaga tse di magareng ga 13 le 19 ka jalo seo sedira gore tshwanelwe ke go nna karolo.

Ka maswabi fa o sa tsamaye dithuso tsa pholo ya baimana mo tlilining, o sena mogalawaletheka o nang le mafaratlhatlha a whatsapp, ga nkitla o dumelelwa go tsaya karolo.

Resolofela eng go tswa mo go wena ?

O tshwanetse o kope tetla mo batsading kgotsa batlhokomedi ba gago , le go dumalana go tsaya karolo ka go saena foromo ya go itlhama gore o a dumalana go tsaya karolo (consent form)

Go tsaya karolo mo dipotsotherisanong tsa mafaratlhatlha a whatsapp ka mekgwa wa video calls, mo o mmatlisisa go botsolotsang dipotso ka ga mekgwa e o dirisang go itepatepanya le boimana jwa gago.

Ka nako ya fa go tswewa tshedimose tso , o tswanetse go nna teng ka namana, mme o dumele go rekotiwa dipuisana go tswa molomomg wa gago

Mafaratlhatlha a whatApp video call a tla dirisiwa go kgobokanay tshedimose tso, se se bolela gore o tshwanetse o nne le mogalawaletheka le motswedi wa inthanete o o gaufi, go go kgontsha go tsaya karolo

A o tla ikungwela sengwe go tswa mo dipatlisisong tse ?

O tla ikungwela go aroganya maele le mekgwa ya gago le mmatlisisi , ga gona sepe gape se o tla se newang jaaka sekao :chelete jalo jalo

Gape mekgwa ya gago e o e dirisang go ka samagana le boimana ,e ka tswela bana ba bangwe ba basetsana mosola mo nakong e e tlang , ka go dira jalo o tlabe o bolokile setshaba sa sedika sa Mahikeng .

A go nale dikotsi tse o tla di itemogelang fa o tsaya karolo mo dipatlisisong tse ?

Gongwe o ka itemogela kgatelelo ya maikutlo gonne o tlabe o buisana le motho yo osa moitseng ka tsa botshelo jwa gago, mo gongwe go nale dikgang tse di boteng thata le tse di bofitlha..Re netefatsa gore mmatlisisi o tla tshola patlisiso e tla bolokega gankitla e fitlelelwa ke ope ntle le tumalano ya gago , gore o gololosege fa lo dira dipotsotherisano .

Tota dikotsi tsona re leka ka bojotlhe go dikgapela kgakala ka go boloka kitso e o tla abelanang ka yona , e e tla thusang basetsana le batsadi ba sedika sa Mahikeng go samagana le boimana jo.

Re tla sireletsa jang tshedimose tso e ebile re e tshole e le sephiri, ebile ke mangy o o tla boning diphithlelelo tse ?

Re tla go sireletsa ka go sa dirise leina la gago ka nako ya dipatlisiso, o tla fiwa nomore e ka yona e tla dirisiwang jaaka leina la gago ka nako ya dipatlisiso. Leina la gago le nomore ya mogala ga nkitla di senolwa gotlhe gotlhe mo dipatlisisong tse .Re tla tlotla go sa batle go itsagala ga gago ka go tshwarela dipatlisiso mo kamoreng ya sephiri , e go se kitlang go dumelelwa ope go tsena mo go yona. Tshedimose tso yotlhe e o tla fanang kgotsa abelanang ka yone e tla bewa mo go bolokese gileng gona se baka sa dingwaga di le tlhano, mmatlisisi le mmatlisisimogolo eleng moporofesara Sehularo ke bona fela bat la letlelelwang go latlhela bofofu mo go yona .

Go tla diragala eng ka diphithlelelo tsa dipatlisiso tse ?

Diphithlelelo tsa dipatlisiso tse di tla dirisiwa fela mo thuto patlisisong e ,gape di tla phasaladiwa ke baphasalatsi ba ba tlhwatlhwa ba ba mo molaong, mme leina la gago le dinomore tsa mogala gankitla di tlhagisiwa gope mo thuto patlisisong tse.

O tla itse jang ka dipholo tsa thuto patlisiso e ?

Re tla go fa dipholo tsa thuto patlisiso e fa di rebolwa ke batlhatlhabi, o tla leletaw mogala o itsisewe gore dipholo di rebotswe , mme go tla tswa mo go wena gore a o batla go kopana le mmatlisiso gore le atlhaatlhe dipholo tse kana jang, ga go patelesege .

Gape o tla itsisewe Ka dipholo tse dintshwa fa nako ntse e tsamaya, mme go rulaganngwe kopana ya bongwe ka bongwe mo sephiring le wena.

Ga o kitla o duelelwa go tsaya karolo mo thuto patlisisong e

Thuto patlisiso e e dueletswe ke ba Health and Wealfare SETA (HWSETA) .

Ditshenyegelo tsa go palama gotsa kwa lefelong le lengwe go ya go le lengwe ditla duelelwa ba tsaya karolo ba ba tshwanelwang ke go tswa kwa mafelong a bona go ya kwa tshedimosetso e tseelwang gona di tla duelelwa tsotlhe.Fa o le gaufi le lefelo le tshedimosetso e tseelwang kwa go yona gankitla go duelelwa sepe .Dijo le dino o tla di fiwa morago ga dipotsotherisano,gankitla go nna le ditshenyegelo dipe tse o tla di duelelang go tsaya karolo mo thuto patlisisong e .

A go nale sengwe se o batlang go seitse kgotsa go sedira ?

O ka ikgolaganya le nna (Mme Cindy Nthene) mo nomoreng e 0783827430 kgotsa molekanyetsi moprofesara L A SEHULARO mo nomoreng e 0183892642 kana 0603470183 kgotsa motho yo o ikemetseng ka nosi e leng Rre Tshepo Ntho mo 0710817745 ko Yunibesithi ya Bokone Bophirima - Mafikeng campus,fa o nale dipotso go ya pele.

Ga pe o ka ikgolaganya le Health Research Ethics Committe ka Mme Carolien van Zyl at 0182991206 kgotsa carolien.vanzyl@nwu.ac.za fa o na le potso ka na tshwaelo ka ga thuto patlisiso e .

O tla fiwa dikopi tsa tshedimosetso e ga mmogo le foromo ya gago ya tumalano , gore o ipeele sentle.

Maikano ka motsaya karolo

Ka go saena fa, nnake dumalana gore ke tsaya karolo mo thuto patlisisong e setlhogo sa yona e leng : MEKGWA E BANA BA DINGWAGA TSE DI KO TLASE BA E DIRISANG GO KA LEPALANANG LE BOIMANA MO DITLINIKING TSA SEDIKA SA MAHIKENG.

Ke atlenegisa gore :

Ke buisitse tshedimosetso e, e bile e tlhalositswe sentle ke motho yo o tshepagalang ka puo e ke e tlhaloganyang sentle

Thuto patlisiso e e ne ese bofitlha gotlhelele fela

Ke filwe tshono ya go botsolotsa dipotso mme dipotso tsame tsotlhe di arabilwe e bile ke kgotsofetse

Ke tlhaloganya gore go tsaya karolo mo thuto patlisisong e ke **boithaopi**, e bile ga ke a patelediwa go tsaya karolo .

Ke letleletswe go ikgogela morago nako nngwe le nngwe mme gankitla ke bona kotlhao epe ka go dira jalo .

Mmatlisisi a ka nkopa go itokolola mo thuto patlisisong , fa ele gore ga ke diragatse tumalano ya rona morago, kgotsa gongwe ka mabaka mangwe a a maleba

E saenilwe kwa.....ka la20

.....

Tshaeno ya motsaya karolo.....Tshaeno ya paki

Maikano a motho yo o tsayang tumalano

Nnake atlenegisa gore

Ke tlhalositse tshedimosetso e yotlhe ka botlalo go :

.....

Ga ke a dirisa ope go toloka

Ke mo rotloeditse go botsa dipotso. mme ka di araba ka matsetseleko

Ke kgotsofetse go nne o tlhalogantse dintlha tsotlhe tsa thutopatlisiso e jaaka re di sekasekile

Ke mo file nako go sekaseka tshedimosetso e le ba bangwe ,fa ana le kgatlhego eo

E saenilwe kwaka la20.....

.....

Tshaeno ya motho yo o tsayang tumalano

Maikano a mokgobokanya tshedimosetso

Nna(leina).....ke atlenegisa gore

Ke tlhalositse tshedimosetso e mo papetlaneng e go.....

Ga ke a ditirisa tollokore

Ke mo rotloeditse go botsa dipotso. mme ka di araba ka matsetseleko

Tumalano ya motsaya karolo e tshotswe ke motho yo o ikemetseng

Ke kgotsofetse go nne o tlhalogantse dintlha tsotlhe tsa thutopatlisiso e jaaka re di sekasekile

Ke kgotsofetse go nne o nnile le sebaka sa go e sekaseka le ba bangwe jaaka a eleditse

E saenilwe kwaka la20.....

.....

Tshaeno ya mokgobokanya tshedimosetso .

Parents/Guardians Consent Form

Private Bag X1290, Potchefstroom



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INFORMED CONSENT DOCUMENTATION FOR PARENTS OF PREGNANT

TEENAGERS BEING INTERVIEWED

TITLE OF THE RESEARCH STUDY: **Coping mechanisms used by pregnant teenagers in Mafikeng sub-district clinics, North West Province**

ETHICS REFERENCE NUMBERS:

PRINCIPAL INVESTIGATOR: PROF LA SEHULARO

POST GRADUATE STUDENT: MS CINDY NTHENE

ADDRESS: 3084, PORTION 62, UNIT 9, MMABATHO, 2735

CONTACT NUMBER: 0183892642

I would like to invite your child to take part in a research study that forms part of my Masters research in Nursing Science. Please take time to read the information presented here, which will

explain the details of this study. Please ask the researcher or person explaining the research to you any questions about any part of this study that you do not understand. It is very important that you are satisfied and that you clearly understand what this research is about and how your child might be involved. Please be aware that your child's participation is **entirely voluntary**, and that she is free to decline to participate. If she declines, this will not affect her negatively in any way whatsoever. Should she feel uncomfortable during the course of the research, your child is free to withdraw from the study at any point.

This study has been approved by the **Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (NWU.....)** and will be conducted according to the ethical guidelines and principles of Ethics in Health Research: Principles, Processes and Structures (DoH, 2015) and other applicable international ethical guidelines. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

What is this research study all about?

We plan to explore and describe coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics.

This study will be conducted in Mafikeng sub-district clinics and will be done by experienced health researchers trained in qualitative research.

15 participants will be included in this study.

Why has your child been invited to participate?

We would like to invite your child to participate in this study because she is a pregnant teenager, attends ante natal classes and is between the ages of 13 and 19 years which make her eligible for my inclusion criteria.

She will unfortunately not be able to take part in this research if she is not a pregnant teenager and not attending ante natal class around Mafikeng sub district clinics.

What will be expected of her?

She will be expected to ask for permission from her parents or guardian and sign the consent form if

She agrees to participate in the study.

To be involved in a one to one semi-structured interviews via WhatsApp video calls where the researcher will be asking her about her coping mechanisms during pregnancy.

Will she gain anything from taking part in this research?

If she takes part in this study, she will gain sharing of her perceptions with the researcher. There will be no direct gains for her in the study.

The other gains of the study are for other non-pregnant women who may fall pregnant in future. The community of Mafikeng sub-district will also benefit from results of the current study.

Are there risks involved in her taking part in this research and what will be done to prevent them?

The possible risk for her might be that she might experience some forms of anxiety due to having to open about her personal experience to a stranger and also having to talk about sensitive issues. However, the researcher will reassure her that whatever is spoken about during data collection will be strictly confidential and the researcher will endeavour to build a rapport so that your daughter may be comfortable throughout the interview.

There are more gains for her in joining this study than there are risks. Some of the gains are sharing her perceptions with the researcher and making a great contribution that may assist other pregnant teenagers in the future particularly around Mafikeng sub-district.

How will we protect her confidentiality and who will see her findings?

The findings obtained from this study will be protected by not using her real name during data collection. She will be given a code as her name during data collection and analysis. Her name and contact details will not be mentioned anywhere in the research. Her privacy will be respected by conducting the study in a private room where no one will be allowed to enter. Her shared information will be kept confidential by being locked in a cupboard up to at least five years. Only the researchers and the study supervisor, Professor LA Sehularo will be able to look at her findings. Findings will be kept safely by locking hard copies in locked cupboards in the researcher's office and for electronic data it will be password protected. (As soon as data has been transcribed it will be deleted from the recorders.) Data will be stored for five years.

What will happen with the findings or samples?

The findings of this study will be used only for this study and they will also be published at an accredited journal, but her name and contact details will not be used anywhere in the study.

How will she know about the results of this research?

We will give her the results of this research after the results of the study are released by examiners. She will also be informed telephonically when the results are available and will choose whether or not she would like to meet the researcher to discuss the results. She will further decide whether or not she only wants an individual meeting or she wants to involve you the parent or guardian in the discussion. This, however, will be done before publication with an accredited journal.

We will give her the results of this research after the results of the study are released by examiners. She will also be informed telephonically when the results are available and will choose whether or not she would like to meet the researcher to discuss the results. She will further decide whether or not she only wants an individual meeting or she wants to involve you the parent or guardian in the discussion. This, however, will be done before publication with an accredited journal.

She will be informed of any new relevant findings by arranging another one-to-one meeting with her.

She will not be paid to take part in this study

This study is funded by the Health and Welfare SETA (HWSETA).

There will be no costs involved for her if she does take part in this study.

Is there anything else that you should know or do?

You can contact me (Ms C Nthene) on 0783827430 or study supervisor Prof

LA Sehularo on 0183892642 or 0603470183 or the independent person Mr Tshepo Ntho (0710817745) on Mafikeng Campus of the North-West University if you have any further questions or problems.

You can also contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1206 or carolien.vanzyl@nwu.ac.za if you have any concerns that were not addressed or if you have any complaints about the research.

You will receive a copy of this information and consent form for your own record keeping.

Declaration by parent or Guardian

By signing below, I parent/guardian of.....
permit her to take part in the research study titled: **Coping mechanisms of pregnant teenagers in Mafikeng sub district clinics.**

I declare that:

I have read this information/it was explained to me by a trusted person in a language I am fluent and comfortable with.

The research was clearly explained to me.

I have had a chance to ask questions to both the person getting the consent from me, as well as the researcher and all my questions have been answered.

I understand that if my child takes part in this study it is **voluntary**, and I have not been pressurised to take part.

She may choose to leave the study at any time and will not be penalised if she does so.

Signed at (*place*) on (*date*) 20....

.....
Signature of parent/guardian Signature of witness

Declaration by person obtaining consent

I (*name*) declare that:

I clearly and in detail explained the information in this document to

.....

I did/did not use an interpreter.

I encouraged him/her to ask questions and spent time answering them.

I am satisfied that he/she adequately understands all aspects of the research, as discussed above.

I gave him/her time to discuss it with others if he/she wished to do so.

Signed at (*place*) on (*date*) 20....

.....
Signature of person obtaining consent

Declaration by researcher

I (*name*) declare that:

I explained the information in this document to **or** I had it explained by whom I trained for this purpose.

I did/did not use an interpreter.

I encouraged him/her to ask questions and spent time answering them or I was available should he/she want to ask any further questions.

The informed consent was obtained by an independent person.

I am satisfied that he/she adequately understands all aspects of the research, as described above.

I am satisfied that he/she had time to discuss it with others if he/she wished to do so.

Signed at (*place*) on (*date*)

20.....

Signature of researcher

FOROMO YA TUMALANO YA MOTSAZI



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**PAPETLA YA TUMALANO YA MOTSAZI WA NGWANA WA MOIMANA WA DINGWAGA TSE DI KWA
TLASE GA 18**

**SETLHOGO SA THUTO PATLISO : MEKGWA E BANA BA DINGWAGA TSE
DI KO TLASE BA E DIRISANG GO KA LEPALEPANANG LE
BOIMANA MO SEDIKENG SA MAHIKENG, POROFENSE YA
BOKONE BOPHIRIMA.**

NOMORE YA REFERENCE :

MMATLISISIMOGOLO : MOPROFESARA LA SEHULARO

MOITHUTI WA SEALOGANE : MME CINDY NTHENE

ATERESE : 3084, PORTION 62, MMABATHO, 2735

MOGALA : 0183892642

Ke ka boikokobetso ke laetsa ngwana wa gago go tsaya karolo mo di thuto dipatlisong tse eleng karolo ya lokwalo lwa porogoroma ya masters in Nursing Sciences lopiwa ka tsweetswee go tsaya nako o buise tshedimosetso e kwadilweng fa gone e tlhalosa ka tsenelelo maitlomo le diteng tsa dipatlisiso tse. O ga kololwa go botsadi mmatlisisi kgotso motho mongwe le mongwe yo a go tlhalosetsang ka ga tshedimosetso e dipotso fa o sa tlhaloganyeng sentle gona. Go botlhokwa gore o tlhaloganye dipatlisiso tse sentle gore di bua ka eng, di batla eng e bile o tla amega jang .Ela tlhoko gore go tsaya karolo gwa ngwana wag ago mo dipatlisisong tse ke **boithaopi** ,ka mantswe a mangwe ga a patelediwe ke ope go tsaya karolo, fa a ikutlwa a sa lokologa a ka dumelelwa go ikogela morago. Go ikogela morago gagwe mo dipatlisisong tse gankitla go mo ama ka gope ka mokgwa o o sa siamang , e bile o letleletswe go ikogela morago nako nngwe le nngwe fela ,le fa a kile a dumela ko tshimologong.

Thuto patlisiso e e letleletswe ke ba **health Ethics Committe of the Faculty of Health of North West University** .Ka jalo di tla tsamaiswa ga mmogo le melawana e e maleba ya go tlotlana e e tswang go Ethics in Health research:Principle of Ethics in Health Research ,Process And Structures (DoH,2015) le melawana e mengwe ya boditshabatshaba e tsamaelanang le mekgwa ya setho. Go ka tlhokega gore ba komiti ya mekgwa ya setho le ba bangwe ba ba maleba ba sekaseke direkoto tsa dipatlisiso tse .

Thuto patlisiso e e akaretsa eng ?

Re rulaganya go tlhalosa le go itemogela mekgwa ya go itepatepanya le boimana mo baneng ba dingwaga tse di kwa tlase mo ditlilining tsa sedika sa Mahikeng

Dipatlisiso tse di tla tshwarwa mo sedikeng sa Mahikeng

Go tlhokega batsaya karolo ba le 15

Go reng ngwana wag ago a laleditswe go tsaya karolo?

Re ka rata fa ngwana wa gago a ka tsaya karolo mo thuto patlisisong e go nne ke moimana wa dingwaga tse di kwa tlase , mme ebile o tsamaya di thuso tsa pholo tsa baimana mo tlilining. o dingwaga tse di magareng ga 13 le 19 ka jalo seo sedira gore tshwanelwe ke go nna karolo .

Ka maswabi fa a sa tsamaye dithuso tsa pholo ya baimana mo tlilining, a sena mogalawaletheke o o nang le mafaratlhatlha a whatsapp, ga nkitla a dumelelwa go tsaya karolo.

Resolofela eng go tswa mo go wena?

O tshwanetse a kope tetla mo batsading kgotsa batlhokomedi ba gagwe , le go dumalana go tsaya karolo ka go saena foromo ya go itlhama gore o a dumalana go tsaya karolo (consent form)

Go tsaya karolo mo dipotsotherisanong tsa mafaratlhatlha a whatsapp ka mokgwa wa video calls, mo o mmatlisisa go botsolotsang dipotso ka ga mekgwa e o dirisang go itepatepanya le boimana jwa gago.

A o tla ikungwela sengwe go tswa mo dipatlisisong tse ?

Fa a dumela go tsaya karolo mo thuto patlisiso o tla ikungwela go aroganya maele le mekgwa ya gagwe ya go lepalepana le boimana le mmatlisisi , ga gona sepe gape se o tla se newang jaaka sekao :chelete jalo jalo

Gape yone mekgwa e ya gagwe e o e dirisang go ka samagana le boimana ,e ka tswela bana ba bangwe ba basetsana mosola mo nakong e e tlang , ka go dira jalo o tlabe a bolokile setshaba sa sedika sa Mahikeng .

A go nale dikotsi tse o tla di itemogelang fa o tsaya karolo mo dipatlisisong tse ?

Gongwe a ka itemogela kgatelelo ya maikutlo gonne o tlabe a buisana le motho yo osa moitseng,e bile a sa motlwaela ka tsa botshelo jwa gagwe, mo gongwe go nale dikgang tse di boteng thata le tse di bofitlha.Re netefatsa gore mmatlisisi o tla tshola patlisiso e ka matsetseleko, e tla bolokega ga nkitla e fitlhelwa ke ope ntle le tumalano ya gagwe , gore a gololosege fa lo dira dipotsottherisano .

Tota dikotsi tsona re leka ka bojotle go dikgapela kgakala ka go boloka kitso e a tla abelanang ka yona , e e tla thusang basetsana le batsadi ba sedika sa Mahikeng go samagana le boimana jo.

Re tla sireletsa jang tshedimosetso e ebile re e tshole e le sephiri, ebile ke mangy o o tla boning diphithlelelo tse ?

Re tla go sireletsa ka go sa dirise leina la gagwe la nnete ka nako ya dipatlisiso, o tla fiwa nomore e ka yona e tla dirisiwang jaaka leina la gagwe ka nako ya dipatlisiso.Leina la gagwe le nomore ya mogala ga nkitla di senolwa gotlhe gotlhe mo thuto patlisisong tse .Re tla tlotla go sa batle go itsagala ga gagwe ka go tshwarela thuto ipatlisiso mo kamoreng ya sephiri , e go se kitlang go dumelwa ope go tsena mo go yona.Tshedimosetso yotlhe e a tla fanang kgotsa abelanang ka yone e tla bewa mo go bolokesegileng gona se baka sa dingwaga di le tlhano, mmatlisis le mmatlisisimogolo eleng moporofesara Sehularo ke bona fela batla letlelelwang go latlhela bofofu mo go yona .

Go tla diragala eng ka diphithlelelo tsa dipatlisiso tse ?

Diphithlelelo tsa dipatlisiso tse di tla dirisiwa fela mo thuto patlisisong e ,gape di tla phasaladiwa ke baphasalatsi ba ba tlhwatlhwa ba ba mo molaong, mme leina la gago le dinomore tsa mogala gankitla di tlhagisiwa gope mo thuto patlisisong tse.

O tla itse jang ka dipholo tsa thuto patlisiso e ?

Ngwana o tla go fiwa dipholo tsa thuto patlisiso e fa di rebolwa ke batlhatlhabi, o tla leletswa mogala a itsisewe gore dipholo di rebotswe, mme go tla tswa mo go ena gore a o batla go kopana le mmatlisisi gore ba atlhaatlhe dipholo tse kana jang, ga go patelesege.

Gape o tla itsisewe Ka dipholo tse dintshwa kgotsa diphetogo fa nako ntse e tsamaya, mme go rulaganngwe kopana ya bongwe ka bongwe mo sephiring le ena gape.

Ngwana ga a kitla a duelelwa go tsaya karolo mo thuto patlisisong e

Thuto patlisiso e e dueletswe ke ba Health and Wealfare SETA (HWSETA) .

Ditshenyegelo tsa go palama gotswa kwa lefelong le lengwe go ya go le lengwe ditla duelelwa ba tsaya karolo ba ba tshwanelwang ke go tswa kwa mafelong a bona go ya kwa tshedimosetso e tseelwang gona di tla duelelwa tsotlhe.Fa le gaufi le lefelo le tshedimosetso e tseelwang kwa go yona gankitla go duelelwa sepe .Dijo le dino o tla di fiwa morago ga

dipotsotherisano, gankitla go nna le ditshenyegelo dipe tse o tla di duelelang go tsaya karolo mo thuto patlisisong e.

A go nale sengwe se o batlang go seitse kgotsa go sedira?

O ka ikgolaganya le nna (Mme Cindy Nthene) mo nomoreng e 0783827430 kgotsa molekanyetsi moprofesara L A SEHULARO mo nomoreng e 0183892642 kana 0603470183 kgotsa motho yo o ikemetseng ka nosi e leng Rre Tshepo Ntho mo 0710817745 ko Yunibesithi ya Bokone Bophirima - Mafikeng campus,fa o nale dipotso go ya pele.

Ga pe o ka ikgolaganya le Health Research Ethics Committe ka Mme Carolien van Zyl at 0182991206 kgotsa carolien.vanzyl@nwu.ac.za fa o na le potso ka na tshwaelo ka ga thuto patlisiso e .

O tla fiwa dikopi tsa tshedimose tso e ga mmogo le foromo ya gago ya tumalano , gore o ipee le sentle.

Maikano ka motsadi kgotsa motlhokomedi

Ka go saena fa, nnamotsadi/motlhokomedi wag ake mo letlelela go tsaya karolo mo thuto patlisisong e setlhogo sa yona e leng : **MEKGWA E BANA BA DINGWAGA TSE DI KO TLASE BA E DIRISANG GO KA LEPALEPANANG LE BOIMANA MO DITLINIKING TSA SEDIKA SA MAHIKENG.**

Ke atlenegisa gore:

Ke buisitse tshedimose tso e, e bile e tlhalositswe sentle ke motho yo o tshepagalang ka puo e ke e tlhaloganyang sentle

Thuto patlisiso e e ne ese bofitlha gotlhelele fela

Ke filwe tshono ya go botsolotsa dipotso mme dipotso tsame tsotlhe di arabilwe e bile ke kgotsofetse

Ke tlhaloganya gore go tsaya karolo ga ngwanake mo thuto patlisisong e ke **boithaopi**, e bile ga ke a patelediwa go tsaya karolo .

Ngwana o letleletswe go ikgogela morago nako nngwe le nngwe mme ga nkitla ke bona kotlhao epe ka go dira jalo .

E saenilwe kwa.....ka la20.....

Tshaeno ya motsaya karolo.....

Tshaeno ya paki.....

Maikano a motho yo o tsayang tumalano

Nnake atlenegisa gore

Ke tthalositse tshedimosetso e yotlhe ka botlalo go :

.....

Ga ke a dirisa ope go toloka

Ke mo rotloeditse go botsa dipotso. mme ka di araba ka matsetseleko

Ke kgotsofetse go nne o tthalogantse dintlha tsotlhe tsa thutopatlisiso e jaaka re di sekasekile

Ke mo file nako go sekaseka tshedimosetso e le ba bangwe ,fa ana le kgatlhego eo

E saenilwe kwaka la20.....

.....

Tshaeno ya motho yo o tsayang tumalano

Maikano a mmatlisisi

Nna (leina).....ke atlenegisa gore

Ke tthalositse tshedimosetso e mo papetlaneng e go

Ga ke a ditirisa tollokore

Ke mo rotloeditse go botsa dipotso. mme ka di araba ka matsetseleko

Tumalano ya motsaya karolo e tshotswe ke motho yo o ikemetseng

Ke kgotsofetse go nne o tthalogantse dintlha tsotlhe tsa thutopatlisiso e jaaka re di sekasekile

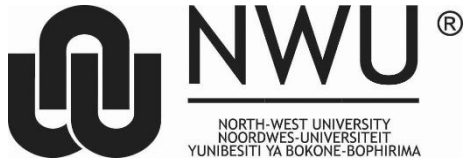
Ke kgotsofetse go nne o nnile le sebaka sa go e sekaseka le ba bangwe jaaka a eleditse

E saenilwe Kwaka la20.....

.....

Tshaeno ya mokgobokanya tshedimosetso.

TEENAGERS CONSENT FORM (13 to 17 years)

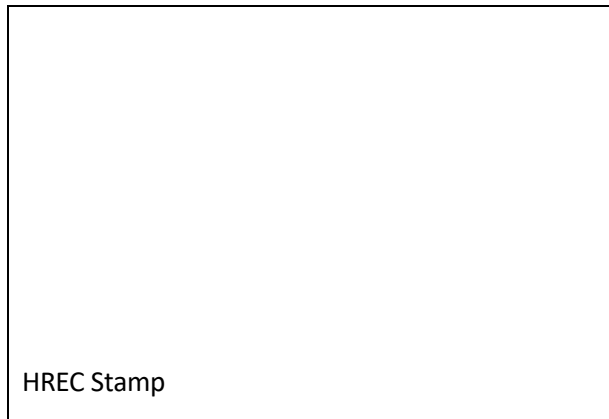


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INFORMED CONSENT DOCUMENTATION FOR PREGNANT TEENAGERS BEING INTERVIEWED

TITLE OF THE RESEARCH STUDY: **Coping mechanisms used by pregnant teenagers in Mafikeng sub-district clinics, North West Province**

ETHICS REFERENCE NUMBERS:

PRINCIPAL INVESTIGATOR: PROF LA SEHULARO

POST GRADUATE STUDENT: MS CINDY NTHENE

ADDRESS: 3084, PORTION 62, UNIT 9, MMABATHO, 2735

CONTACT NUMBER: 0183892642

You are cordially invited to take part in a **research study** that forms part of our Masters programme in Nursing Science. Please take time to read the information presented here, which explains the details of this study. Please ask the researcher or person explaining the research to you any questions about any part of this study that you do not understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you might be involved. Please be aware that your participation is **entirely voluntary** and you are free not to participate should you feel uncomfortable. Should you decline, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you initially agreed to take part.

This study has been approved by the Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (NWU.....) and will be conducted in accordance with the ethical guidelines and principles of Ethics in Health Research: Principles, Processes and Structures (DoH, 2015) and other applicable international ethical guidelines. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

What is this research study all about?

We plan to explore and describe coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics.

This study will be done in Mafikeng sub-district clinics and will be conducted by experienced health researchers trained in qualitative research.

15 participants will be included in this study.

Why have you been invited to participate?

You have been invited to be part of this research because you are a pregnant teenager, attend ante natal classes and between the ages of 13 and 19 years which means you meet my inclusion criteria.

You will unfortunately not be able to take part in this research if you are not a pregnant teenager, do not have a phone that enables WhatsApp calls and not attending ante natal class around Mafikeng sub district clinics.

What will be expected of you?

You will be expected to ask permission from your parents or guardian and also agree to participate in the study by signing the consent form.

To be involved in a one to one semi-structured interviews via WhatsApp video calls where the researcher will be asking you about your coping mechanisms during your pregnancy.

You will be required to be present during data collection and agree to be audio recorded.

WhatsApp video calls will be used to collect data. This means that you should have a phone and a stable internet access in order to be able to participate in the study.

Will you gain anything from taking part in this research?

The gains for you if you take part in this study will be sharing of your perceptions with the researcher. There will be no direct gains for you in the study.

The other gains of the study is for other non-pregnant women who may be pregnant in the future. The community of Mafikeng sub-district will also benefit from results of the current study.

Are there risks involved in your taking part in this research and what will be done to prevent them?

The possible risk for you might be that you might experience some forms of anxiety due to having to open up about your personal experience to a stranger and also having to talk about sensitive issues. However the researcher will reassure you that whatever is spoken about during data collection will be strictly confidential and will endeavour to build a rapport so that you may be comfortable throughout the interview.

There would be more gains such as sharing your perceptions with the researcher and making a great contribution that may assist other pregnant teenagers in the future particularly around Mafikeng sub-district.

How will we protect your confidentiality and who will see your findings?

Anonymity of your information will be protected by not using your real name during data collection. You will be given a code as your name during data collection and analysis. Your name and contact details will not be mentioned anywhere in the study. Your privacy will be respected by conducting the study in a private room where no one will be allowed to enter. Your shared information will be kept confidential by being locked in a cupboard up to at least five years, after which they will be destroyed. Only the researchers and the study supervisor, Dr LA Sehularo will be able to look at your findings. Findings will be kept safe by locking hard copies in locked cupboards in the researcher's office and electronic data it will be password protected. (As soon as data has been transcribed it will be deleted from the recorders.) Data will be stored for five years.

What will happen with the findings or samples?

The findings of this study will only be used for this study and they will also be published at an accredited journal but your name and contact details will not be used anywhere in the study.

How will you know about the results of this research?

We will give you the results of this research after the results of the study are released by examiners. You will be informed telephonically about the availability of the results and it will be up to you to choose whether or not you would like to meet the researchers to discuss the results. The choice on whether or not you only want an individual meeting or want to involve your parents or guardian will remain yours. But this will be done before publication with an accredited journal.

You will be informed of any new relevant findings by arranging another one to one meeting with you.

You will not be paid to take part in this study

This study is funded by the Health and Welfare SETA (HWSETA).

Travel expenses will be paid for those participants who have to travel to the data collection venue however, if you have no traveling costs i.e. if you stay close to the venue where the interviews will be held, no travelling expenses will be paid.

Refreshments/a meal will be served immediately after the semi-structured interviews.

There will thus be no costs involved for you, if you do take part in this study.

Is there anything else that you should know or do?

You can contact myself (Ms C Nthene) on 0783827430 or study supervisor Prof LA Sehularo on 0183892642 or 0603470183 or an independent person Mr Tshepo Ntho (0710817745) on Mafikeng Campus of the North-West University if you have any further questions or problems.

You can also contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1206 or carolien.vanzyl@nwu.ac.za if you have any concerns that were not answered about the research or if you have complaints about the research.

You will receive a copy of this information and consent form for your own record keeping.

Declaration by participant

By signing below, I agree to take part in the research study titled:
Coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics

I declare that:

I have read this information/it was explained to me by a trusted person in a language I am fluent and comfortable with.

The research was clearly explained to me.

I have had a chance to ask questions to both the person getting the consent from me, as well as the researcher and all my questions have been answered.

I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.

I may choose to leave the study at any time and will not be penalised if I do so.

I may be asked to leave the study before it has finished, if the researcher feels it is in the best interest, or if I do not follow the study plan, as agreed to.

Signed at (*place*) on (*date*) 20....

Signature of participant Signature of witness

Declaration by person obtaining consent

I (*name*) declare that:

I clearly and in detail explained the information in this document to

.....

I did/did not use an interpreter.

I encouraged him/her to ask questions and spent time answering them.

I am satisfied that he/she adequately understands all aspects of the research, as discussed above

I gave him/her time to discuss it with others if he/she wished to do so.

Signed at (*place*) on (*date*) 20....

.....

Signature of person obtaining consent

Declaration by researcher

I (*name*) declare that:

- I explained the information in this document to or I had it explained by whom I trained for this purpose.
- I did/did not use an interpreter
- I encouraged him/her to ask questions and spent time answering them or I was available if she wanted to ask any further questions.
- The informed consent was obtained by an independent person.
- I am satisfied that he/she adequately understands all aspects of the research, as described above.
- I am satisfied that he/she had time to discuss it with others if he/she wished to do so.

Signed at (*place*) on (*date*) 20....

.....

Signature of researcher

Current details: (23239522) G:\My Drive\9. Research and Postgraduate Education\9.1.5.6
Forms\HREC\9.1.5.6_HREC_ICF_Template_Apr2018.docm
25 April 2018
File reference: 9.1.5.6

FOROMO YA TUMELO YA NGWANA YO O DINGWAGA TSA 13-17



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HREC STAMP

**PAPETLANA YA TUMELO YA NGWANA WA MOIMANA YO O DINGWAGA TSE DI KA FA
TLASE GA 18**

**SETLHOGO SA THUTO PATLISISO : MEKGWA E BANA BA DINGWAGA TSE
DI KO TLASE BA E DIRISANG GO KA LEPALEPANANG LE
BOIMANA MO SEDIKENG SA MAHIKENG, POROFENSE YA
BOKONE BOPHIRIMA.**

NOMORE YA REFERENCE :

MMATLISISIMOGOLO : MOPROFESARA LA SEHULARO

MOITHUTI WA SEALOGANE : MME CINDY NTHENE

ATERESE : 3084, PORTION 62, MMABATHO, 2735

O lalediwa ka boikokobetso go tsaya karolo mo di thuto dipatlisisong tse eleng karolo ya lokwalo lwa porogoroma ya masters in Nursing Sciences lopiwa ka tsweetswee go tsaya nako o buise tshedimose tse e kwadilweng fa gonne e tlhalosa ka tsenelelo maitlomo le diteng tsa dipatlisiso tse. O ga kololwa go botsadi mmatlisisi kgotso motho mongwe le mongwe yo a go tlhalosetsang ka ga tshedimose tse e dipotso fa o sa tlhaloganyeng sentle gona. Go botlhokwa gore o tlhaloganye dipatlisiso tse sentle gore di bua ka eng, di batla eng e bile o tla amega jang. Ela tlhoko gore go tsaya karolo gwa gago mo dipatlisisong tse ke boithaopi, ka mantswe a mangwe ga o patelediwe ke ope go tsaya karolo, fa o ikutlwa o sa lokologa o dumelelwa go ikogela morago. Go ikogela morago gag ago mo dipatlisisong tse gankitla go go ama ka gope ka mokgwa o o sa siamang, e bile o letleletswe go ikogela morago nako nngwe le nngwe fela, le fa o kile wa dumela ko ntlheng.

Dipatlisiso tse di letleletswe ke ba **health Ethics Committe of the Faculty of Health of North West University**. Ka jalo di tla tsamaiswa ka mmogo le melawana e e maleba ya go tlotlana e e tswang go Ethics in Health research: Principle of Ethics in Health Research, Process And Structures (DoH, 2015) le melawana e mengwe ya boditshabatsaba e tsamaelanang le mekgwa ya setho. Go ka tlhokega gore ba komiti ya mekgwa ya setho le ba bangwe ba ba maleba ba sekaseke direkoto tsa dipatlisiso tse.

Dipatlisiso tse di akaretsa eng ?

- Re rulaganya go tlhalosa le go itemogela mekgwa ya go itepatepanya le boimana mo baneng ba dingwaga tse di kwa tlase mo ditlilining tsa sedika sa Mahikeng
- Dipatlisiso tse di tla tshwarwa mo sedikeng sa Mahikeng
- Go tlhokega batsaya karolo ba le 15

Go reng o laleditswe go tsaya karolo?

- Ka gonne o moimana wa dingwaga tse di kwa tlase, mme e bile o tsamaya di thuso tsa pholo tsa baimana mo tlilining. o dingwaga tse di magareng ga 13 le 19 ka jalo seo sedira gore tshwanelwe ke go nna karolo.
- Ka maswabi fa o sa tsamaye dithuso tsa pholo ya baimana mo tlilining, o sena mogalawaletheke o o nang le mafaratlhatlha a whatsapp, ga nkitla o dumelelwa go tsaya karolo.

Resolofela eng go tswa mo go wena ?

- O tshwanetse o kope tetla mo batsading kgotsa batlhokomedi ba gago, le go dumalana go tsaya karolo ka go saena foromo ya go itlhama gore o a dumalana go tsaya karolo (consent form)

- Go tsaya karolo mo dipotsotherisanong tsa mafaratlhatlha a whatsapp ka mokgwa wa video calls, mo o mmatlisisa go botsolotsang dipotso ka ga mekgwa e o dirisang go itepatepanya le boimana jwa gago.
- Ka nako ya fa go tswewa tshedimosetso , o tswanetse go nna teng ka namana, mme o dumele go rekotiwa dipuisana go tswa molomomg wa gago
- Mafaratlhatlha a whatApp video call a tla dirisiwa go kgobokanay tshedimosetso, se se bolela gore o tshwanetse o nne le mogalawaletheka le motswedi wa inthanete o o gaufi, go go kgontsha go tsaya karolo

A o tla ikungwela sengwe go tswa mo dipatlisisong tse ?

- O tla ikungwela go aroganya maele le mekgwa ya gago le mmatlisisi , ga gona sepe gape se o tla se newang jaaka sekao :chelete jalo jalo
- Gape mekgwa ya gago e o e dirisang go ka samagana le boimana ,e ka tswela bana ba bangwe ba basetsana mosola mo nakong e e tlang , ka go dira jalo o tlabe o bolokile setshaba sa sedika sa Mahikeng .

A go nale dikotsi tse o tla di itemogelang fa o tsaya karolo mo dipatlisisong tse ?

- Gongwe o ka itemogela kgatelelo ya maikutlo gonne o tlabe o buisana le motho yo osa moitseng ka tsa botshelo jwa gago, mo gongwe go nale dikgang tse di boteng thata le tse di bofitlha..Re netefatsa gore mmatlisisi o tla tshola patlisiso e tla bolokega gankitla e fitlelelwa ke ope ntle le tumalano ya gago , gore o gololosege fa lo dira dipotsotherisano .
- Tota dikotsi tsona re leka ka bojotlhe go dikgapela kgakala ka go boloka kitso e o tla abelanang ka yona , e e tla thusang basetsana le batsadi ba sedika sa Mahikeng go samagana le boimana jo.

Re tla sireletsa jang tshedimosetso e ebile re e tshole e le sephiri, ebile ke mangy o o tla boning diphithlelelo tse ?

- Re tla go sireletsa ka go sa dirise leina la gago ka nako ya dipatlisiso, o tla fiwa nomore e ka yona e tla dirisiwang jaaka leina la gago ka nako ya dipatlisiso. Leina la gago le nomore ya mogala ga nkitla di senolwa gotlhe gotlhe mo dipatlisisong tse .Re tla tlotla go sa batle go itsagala ga gago ka go tshwarela dipatlisiso mo kamoreng ya sephiri , e go se kitlang go dumelelwa ope go tsena mo go yona. Tshedimosetso yotlhe e o tla fanang kgotsa abelanang ka yone e tla bewa mo go bolokesegileng gona se baka sa dingwaga di le tlhano, mmatlisis le mmatlisisimogolo eleng moporofesara Sehularo ke bona fela bat la letlelelwang go latlhela bofofu mo go yona .

Go tla diragala eng ka diphithlelelo tsa dipatlisiso tse?

- Diphithlelelo tsa dipatlisiso tse di tla dirisiwa fela mo thuto patlisisong e ,gape di tla phasaladiwa ke baphasalatsi ba ba tlhvatlhwana ba ba mo molaong, mme leina la gago le dinomore tsa mogala gankitla di tlhagisiwa gope mo thuto patlisisong tse.

O tla itse jang ka dipholo tsa thuto patlisiso e?

- Re tla go fa dipholo tsa thuto patlisiso e fa di rebolwa ke batlhatlhabi, o tla leletaw mogala o itsisewe gore dipholo di rebotswe , mme go tla tswa mo go wena gore a o batla go kopana le mmatlisisi gore le atlhaatlhe dipholo tse kana jang, ga go patelesege .
- Gape o tla itsisewe Ka dipholo tse dintshwa fa nako ntse e tsamaya, mme go rulaganngwe kopana ya bongwe ka bongwe mo sephiring le wena.

Ga o kitla o duelelwa go tsaya karolo mo thuto patlisisong e

Thuto patlisiso e e dueletswe ke ba Health and Wealfare SETA (HWSETA) .

Ditshenyegelo tsa go palama gotswa kwa lefelong le lengwe go ya go le lengwe ditla duelelwa ba tsaya karolo ba ba tshwanelwang ke go tswa kwa mafelong a bona go ya kwa tshedimosetso e tseelwang gona di tla duelelwa tsotlhe.Fa o le gaufi le lefelo le tshedimosetso e tseelwang kwa go yona gankitla go duelelwa sepe .Dijo le dino o tla di fiwa morago ga dipotsotherisano,gankitla go nna le ditshenyegelo dipe tse o tla di duelelang go tsaya karolo mo thuto patlisisong e .

A go nale sengwe se o batlang go seitse kgotsa go sedira ?

- O ka ikgolaganya le nna (Mme Cindy Nthene) mo nomoreng e 0783827430 kgotsa molekanyetsi moporofesara L A SEHULARO mo nomoreng e 0183892642 kana 0603470183 kgotsa motho yo o ikemetseng ka nosi e leng Rre Tshepo Ntho mo 0710817745 ko Yunibesithi ya Bokone Bophirima -Mafikeng campus,fa o nale dipotso go ya pele.
- Ga pe o ka ikgolaganya le Health Research Ethics Committe ka Mme Carolien van Zyl at 0182991206 kgotsa carolien.vanzyl@nwu.ac.za fa o na le potso ka na tshwaelo ka ga thuto patlisiso e .
- O tla fiwa dikopi tsa tshedimosetso e ga mmogo le foromo ya gago ya tumalano , gore o ipeelee sentle.

Maikano a motsaya karolo

ka go saena fa, nnake dumalana gore ke tsaya karolo mo thuto patlisisong e setlhogo sa yona e leng : **MEKGWA E BANA BA DINGWAGA TSE DI KO TLASE BA E DIRISANG GO KA LEPALEPANANG LE BOIMANA MO DITLINIKING TSA SEDIKA SA MAHIKENG.**

Ke ikana gore :

- Ke buisitse tshedimosetso e, e bile e tlhalositswe sentle ke motho yo o tshepagalang ka puo e ke e tlhaloganyang sentle
- Thuto patlisiso e e ne ese bofitlha gotlhelele fela
- Ke filwe tshono ya go botsolotsa dipotso mme dipotso tsame tsotlhe di arabilwe e bile ke kgotsofetse

- Ke tihaloganya gore go tsaya karolo mo thuto patlisisong e ke **boithaopi**, e bile ga ke a patelediwa go tsaya karolo .
- Ke letleletswe go ikogela morago nako nngwe le nngwe mme gankitla ke bona kotlhao epe ka go dira jalo .
- Mmatlisisi a ka nkopa go itokolola mo thuto patlisisong , fa ele gore ga ke diragatse tumalano ya rona morago, kgotsa gongwe ka mabaka mangwe a a maleba

E saenilwe kwa.....ka la20

.....

Tshaeno ya motsaya karolo

Tshaeno ya paki

Katlenegiso ya motho yo o tsayang tumalano

Nnake atlenegisa gore

- Ke tihalositse tshedimotsetso e yotlhe ka botlalo go :

.....

- Ga ke a dirisa ope go toloka
- Ke mo rotloeditse go botsa dipotso. mme ka di araba ka matsetseleko
- Ke kgotsofetse go nne o tihalogantse dintlha tsotlhe tsa thutopatlisiso e jaaka re di sekasekile
- Ke mo file nako go sekaseka tshedimotsetso e le ba bangwe ,fa ana le kgalhego eo

E saenilwe kwaka la20.....

.....

Tshaeno ya motho yo o tsayang tumalano

Maikano a mokgobokanya tshedimosetso

Nna(leina).....ke atlenegisa gore

- Ke tlhalositse tshedimosetso e mo papetlaneng e go
- Ga ke a ditirisa tolokore
- Ke mo rotloeditse go botsa dipotso. mme ka di araba ka matseseleko
- Tumalano ya motsaya karolo e tshotswe ke motho yo o ikemetseng
- Ke kgotsofetse go nne o tlhalogantse dintlha tsotlhe tsa thutopatlisiso e jaaka re di sekasekile
- Ke kgotsofetse go nne o nnile le sebaka sa go e sekaseka le ba bangwe jaaka a eleditse

E saenilwe kwaka la20.....

.....

Tshaeno ya mokgobokanya tshedimosetso .

Appendix H: Interview Schedule



The researcher introduced herself before data collection and briefly explained the study including its aim and objectives and asked the participants whether they are ready to start with the interview. The following questions were asked:

Questions:

1. Can you tell me how you felt after finding out about this pregnancy?
2. How do you feel about motherhood?
3. Who did you first tell about your pregnancy?
4. What are the challenges you have experienced in this pregnancy thus far?
5. How do you deal with these challenges
6. Who is your support system since you have fallen pregnant?
7. What in your opinion could help you improve your coping skills with being pregnant?
8. Is there anything else that you would like to share.

Appendix I: Information sheet



Invitation
TO PARTICIPATE IN RESEARCH

INVITATION

TITLE: Coping mechanisms used by pregnant teenagers in Mafikeng sub district clinics, North West province

You are hereby invited to participate in the above mentioned study by Cindy Nthene from the North-West University Mafikeng campus. Cindy is conducting the study under Prof LA Sehularo and Ms TP Motsilanyane, both from the NWU (Mafikeng Campus).

WHY IS THE RESEARCH NEEDED?

Teenage pregnancy among adolescents constitutes a global concern. For instance, approximately 7.3 million teenagers become mothers before reaching 18 years each year, 2.5 million girls between 15 or below deliver each year (Bezuidenhout, 2013:80). In the United States of America (USA), Brazil and Turkey have almost thousands of girls falling pregnant during their teenage years (Pitsoe & Mashudu, 2013:755). Therefore, these statistics clearly shows that teenage pregnancy is a serious problem worldwide including South Africa (SA) which affects both developed and developing counties. Therefore, this clearly shows that teenage pregnancy continues to remain a challenge in SA with the hope of using coping strategies to deal with the negative circumstances attached to pregnancy. On that note, the coping mechanisms used by teenagers to deal with the teenagehood pregnancy were reported worldwide. However, the information regarding how teenagers cope in the NW which the second largest province reporting high level of teenage pregnancy is unknown in Mafikeng sub-district, NWP hence the need for the current study.

WOULD THIS STUDY BE GOOD FOR ME?

If you are a teenager aged between 13 and 19 years of age.

If you are pregnant.

You are willing to share how you are coping with your pregnancy.

WHAT WOULD HAPPEN IF I TOOK PART IN THE STUDY?

A parent/guardian will need to sign a parental permission consent form for the independent person to approach you for participating in the study if you are between 13 and 17 years old. When you are 18 and 19 years old, you do not need approval of your parents/guardians.

- The aims and objectives of the study will be clearly stated out prior participation of the study.
- You will be required to answer the research questions that will be asked
- If agree to participate interviews will take 30 minutes to an hour.
- Participation in this study is strictly voluntary and you may withdraw at any point in time.
- You will be provided with pseudonyms to protect your identity and to ensure confidentiality.

BENEFITS OF THE STUDY

NB: Please note that there is no payment for participating in the study.

- The pregnant teenagers will gain knowledge about themselves or their pregnancy when participating in the study.
- They will get an opportunity to find self-introspection through direct interaction with the researcher though semi-structured individual interviews through WhatsApp video calls.
- The participant will be satisfied or find satisfaction that the information they provide may help other pregnant teenagers with similar conditions or problems.
- It may also help the participant to escape from their normal day-to-day activities and the excitement of being part of the study.

The pregnant teenager may also find the comfort of being able to discuss their problem or situation with a non-judgmental and friendly person.

COSTS

There is no payment for participating in this study but participants will be reimbursed for their time or inconvenience because of participating in this study. Participants will be given a R30 airtime after data collection as a token of appreciation. Participants will also be given 1 gigabyte of data seven days before participating in the study.

THE RESEARCHER

The researcher graduated Bachelor of Nursing Science (BNSc in Nursing) in 2012 from the North West University Mafikeng campus and was allocated to work in Joe Morolong Memorial Hospital for her community service, which she served for 12 months in 2013. The researcher has done an introduction of research during her studies whereby the topic she researched on with her group was "The perceptions of undergraduate Nursing students regarding Problem based learning in Mafikeng

campus". In addition, the researcher has attended research ethics training therefore has experience and skills to conduct this qualitative study.

CONTACT DETAILS

Masters Student Person

Cindy Nthene (BNSC, RN)
Cell: 0783827430
Email: Nthenec083@gmail.com
Tshepontho@gmail.com

Supervisor

Prof Leepile Sehularo (PhD, RN)
(MNSc, RN)
Cell:0603470183/Tel: 0183892642
0183892534
Email: Leepile.Sehularo@nwu.ac.za
Tabea.Motsilanyane@nwu.ac.za

Research Assistant/Independent

Mr Tshepo Ntho (BNSc, RN)
Cell: 0710817745
Email:

Co-supervisor

Ms Tabea Motsilanyane
Cell: 0829434590 / Tel:
Email:

Appendix J: Participants example of interview

Video call ringing.....

Participant A: Hello

Researcher: Hello dear, How are you this morning?

Participant A: I'm good thanks and how are you?

Researcher: My name is Cindy Nthene I am a Masters student at the North West University, I am conducting a study about the Coping mechanisms of pregnant teenagers in Mafikeng Sub district clinics, therefore you have been invited to participate in this study because you are a pregnant teenager, attend ante natal classes and between the age 13 and 19 years which means you meet my inclusion criteria.

Participant A: Oh okay I'm glad I do (giggles).

Researcher: Let me start off by saying thank you so much for taking time to out of your busy schedule to partake in the study.

Participant A: Not a problem

Researcher: Please be aware that your participation is entirely voluntary and you are free to withdraw should you feel uncomfortable.

Participant A: Okay sister

Researcher: Please ensure that you are in a quite environment and that there will be no disturbance, if you need the bathroom kindly do so now before we begin with the interview.

Participant A: I think I am fine thanks we can continue.

Researcher: Please take note that the interview will take about 45 minutes, feel free to ask questions where you don't understand or if you have any additions you free to add on.

Participant A: Oryt.

Researcher: Please be informed that your privacy will be respected in the study, Anonymity of your information will be protected by not using your real name. Your name and contact details will not be mentioned anywhere in the study.

Participant A: Okay sister I understand.

Researcher: So if you are ready can we start?

Participant A: Yes we may.

Researcher: Can you tell me how you felt after finding out about this pregnancy?

Participant A: I felt like my mom will kick me out, felt like my friends will abandon me, I felt like the world is coming to an end because my mom used to threaten me and say “if you dare become pregnant I promise you I will kick you out of the house”! So when I found out about this pregnancy I remembered her words.

Researcher: mmmmmhh I understand it must have been so hard’.

Participant A: It was tlhe I was very scary.

Researcher: How do you feel about motherhood?

Participant A: I’m not happy at all because once I become a mother won’t be able to go to school, my mother is too old to take care of this baby this means I’m going to have to quit school and take care of this baby.

Researcher: Who did you first tell about your pregnancy?

Participant A: I told my close friend I honestly thought she would judge me instead she encouraged me and gave me good advice told me not to stress as this is not the end of the world she promised me that she will always be by my side no matter what. I then told my mom whom didn’t take the news so well, she was so disappointed.

Researcher: What are the challenges you have experienced in this pregnancy?

Participant A: The main challenge is worrying about who the child will be left with when I have to go back to school that is why I feel there is a possibility I will have to quit school so that I can be able to look after the baby myself.

The other challenge is finances, I’m not working I am still a scholar I don’t have money to buy nappies and formula also clothes so that is stressing me so much,

my boyfriend does not work also he always makes empty promises, he always says work is so scarce but he does not even hustle or put an effort and that makes me so angry.

Sometimes I have to miss school and come to the clinic which makes me to be behind with my school work, my marks at school are dropping I am always lazy and tired I can't concentrate for long this then causes my marks at school to drop because even with home works I can't do them once I get home from school all I want is my bed to sleep (deep sigh)

Researcher: How do you deal with these challenges?

Participant: I have spoken to the baby daddy about who will look after the child after she is born he then promised to speak to his family maybe they can look after the child because as I have mentioned that my mom is very old she will not be able to look after the child.

I am planning of opening a small business such as selling chips, muffins, ice cream I think the money might help me buy nappies and formula also I will register the baby on the sassa grant that will also help look after the baby.

My mother is a single parent and raised all three of us alone without anyone's help so I sometimes feel that on top of her problem I am going to burden her with this child.

In terms of my school work, in order for me to improve my marks I will get a study partner to help me uplift my marks because I feel if I have a study partner I will not be lazy so I am thinking if I dedicate at least 3hours on my school work every day it will really make a difference.

Researcher: Okay I see that really sounds like a great idea.

Participant A: Thank you sister.

Researcher: Okay Miss A tell me, who is your support system since you have fallen pregnant?

Participant A: My supporter is my mother, she buys me pre-natal vitamins when the ones at the clinic are out of stock, she buys me maternity clothes, she is already buying the baby clothes (smiles) she buys me fruits and makes sure I eat vegetables and fruits.

My friend supports me emotionally, she is my shoulder to cry on she always talks to me and advises me not to stress as stress can cause miscarriage.

I also rely on the R350 unemployment money we get every month last month I bought uniform with it as my uniform was getting small and the little that I have left I save it for the baby.

Researcher: Thank you so much for sharing your pregnancy journey with me, and thank you once again to take this time to participate in this study the information you just gave to me will be of good help on my accredited journal, I will give you the results of the research after the results are released by the examiners, I will inform you telephonically about the availability of the results and it will be up to you to choose whether or not you would like to meet to discuss the results. On that note is there anything you want to add on before we close off our interview?

Participant A: No thanks I just would like to wish you all the best with your masters.


Researcher: Ahhhh (smiles) thank you so much dear really appreciate and all the best with your pregnancy and being a mom.

Participant A: Thank you sister, bye bye.

Researcher: Bye.

Appendix K: Ministerial consent: Form A

Investigators Details

Name of principal investigator:	Prof Leepile Sehularo
Title of research protocol:	Coping mechanisms used by pregnant teenagers in Mafikeng sub-district clinics, North West Province
Institutional Affiliation:	North-West University
Postal Address:	P.O. Box 1416, Mahikeng, 2745
Physical Address:	Portion 3084, House Number 62, Unit 9 Mmabatho, North West Province, South Africa
E-mail:	Leepile.Sehularo@nwu.ac.za OR lasehularo@gmail.com
Phone:	Tel: 0183892642 OR 0603470183
Fax:	
Date of application:	February 2021
Signature of applicant:	

APPLICATION:

1. Condition 1: The research objectives cannot be achieved except by the participation of minors

The rate of teenage pregnancy has been a stimulating concern in Mafikeng sub-district clinics, North West Province. According to the researcher's experience as a professional nurse, these concerns include the increased medical complications for the teenage mothers and their unborn children, poor academic performance and difficulty in successful completion of teenage developmental tasks. Therefore, this study focuses on exploring and describing the coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics, North West Province.

2. Condition 2: The research is likely to lead to an improved scientific understanding of certain conditions, diseases or disorders affecting minors

Once the research is finished there will be a better understanding of how the pregnant teenagers cope in Mafikeng sub-district clinics, North West Province. The findings of the proposed study may add important knowledge to the field of health, nursing and midwifery. The findings and recommendations of the study may also help the Department of Health (DOH) and Social Development to develop effective policies and guidelines that may be used to assist pregnant teenagers with coping.

3. Condition 3: Any consent given is in line with public policy

Permission to conduct the study will be obtained from the North-West University's Health Research Ethics Committee (NWU-HREC), North West Department of Health and Mafikeng sub-district clinics. Parental permission will be obtained from the participating children's parents to approach the children. Written assent will also be obtained from children before they will be allowed to participate. Furthermore, the assent and parental permission will be informed and it will be made known to the children and their parents that a child's assent and/or a parent's permission is entirely voluntary and that it may be withdrawn at any time without any negative consequences or having to explain the reasons for the withdrawal. The above-mentioned is in line with policies on how children should be treated as research participants and also on how research should be conducted in order to be ethically sound.

4. Condition 4: The research does not pose a significant risk to minors, but the benefits of the research outweighs the risks

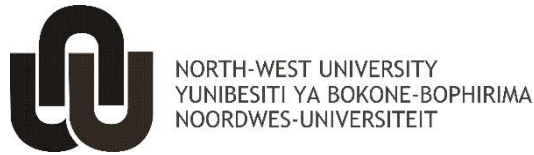
The risks/benefits ratio for participating in this study are given in the following table:

Risks (Involves social, psychological and financial factors)	Precautions (When describing these precautions be clear on how they will mitigate all the identified risks)
Psychological	The pregnant teenager might have emotional distress that may result in her being unable to disclose certain concerns to the researcher. Those who experience emotional distress, debriefing will be done by the researcher and refer to a psychologist for counselling.
Social	The participant may have other commitments such as chores, school work that this study may interfere with therefore the researcher will arrange with the participant the suitable venue, date and time that best suits them for data collection.
Financial	Monetary costs of the pregnant teenagers whom have to take a taxi to get to the venue or to go home, the researcher will provide transport fares if participants want data to be collected at the clinics. There is no payment for participating but participants will be reimbursed for transport, inconvenience and expenses.

The indirect benefits of the research are as follows:

- **To researchers:** Research provides the chance to expose and address existing vulnerabilities in learners.
- **To the school community:** Knowledge about coping mechanisms of pregnant teenagers may assist various stakeholders such as Department of Health and Education in dealing more effectively with challenges related to this issue (Teenage Pregnancy).

Appendix L: Confidentiality form for all researchers



CONFIDENTIALITY UNDERTAKING

entered into between:

I, the undersigned

Prof/ Dr / Mr / Ms _____

Identity Number _____

Address _____

hereby undertake in favor of the **NORTH-WEST UNIVERSITY**, a public higher education institution established in terms of the Higher Education Act No. 101 of 1997

Address: Office of the Institutional Registrar, Building C1, 53 Borchard Street,
Potchefstroom, 2520

(hereinafter the “NWU”)

1. Interpretation and definitions

1.1. In this undertaking, unless inconsistent with, or otherwise indicated by the context:

1.1.1. “Confidential Information” shall include all information that is confidential in its nature or marked as confidential and shall include any existing and new information obtained by me after the Commencement Date, including but not be limited in its interpretation to, research data, information concerning research participants, all secret knowledge, technical information and specifications, manufacturing techniques, designs, diagrams, instruction manuals, blueprints, electronic artwork, samples, devices, demonstrations, formulae, know-how, intellectual property, information concerning materials, marketing and business information generally, financial information that may include remuneration detail, pay slips, information relating to human capital and employment contract, employment conditions, ledgers, income and expenditures and other materials of whatever description in which the NWU has an interest in being kept confidential; and

1.1.2. Commencement Date” means the date of signature of this undertaking by myself.

1.2. The headings of clauses are intended for convenience only and shall not affect the interpretation of this undertaking.

2. Preamble

2.1. In performing certain duties requested by the NWU, I will have access to certain Confidential Information provided by the NWU in order to perform the said duties and I agree that it must be kept confidential.

2.2. The NWU has agreed to disclose certain of this Confidential Information and other information to me subject to me agreeing to the terms of confidentiality set out herein.

3. Title to the Confidential Information

I hereby acknowledge that all right, title and interest in and to the Confidential Information vests in the NWU and that I will have no claim of any nature in and to the Confidential Information.

4. Period of confidentiality

The provisions of this undertaking shall begin on the Commencement Date and remain in force indefinitely.

5. Non-disclosure and undertakings

I undertake:

- 5.1. to maintain the confidentiality of any Confidential Information to which I shall be allowed access by the NWU, whether before or after the Commencement Date of this undertaking. I will not divulge or permit to be divulged to any person any aspect of such Confidential Information otherwise than may be allowed in terms of this undertaking;
- 5.2. to take all such steps as may be necessary to prevent the Confidential Information falling into the hands of an unauthorised third party;
- 5.3. not to make use of any of the Confidential Information in the development, manufacture, marketing and/or sale of any goods;
- 5.4. not to use any research data for publication purposes;
- 5.5. not to use or disclose or attempt to use or disclose the Confidential Information for any purpose other than performing research purposes only and includes questionnaires, interviews with participants, data gathering, data analysis and personal information of participants/research subjects;
- 5.6. not to use or attempt to use the Confidential Information in any manner which will cause or be likely to cause injury or loss to a research participant or the NWU; and
- 5.7. that all documentation furnished to me by the NWU pursuant to this undertaking will remain the property of the NWU and upon the request of the NWU will be returned to the NWU. I shall not make copies of any such documentation without the prior written consent of the NWU.

6. Exception

The above undertakings by myself shall not apply to Confidential Information which I am compelled to disclose in terms of a court order.

7. Jurisdiction

This undertaking shall be governed by South African law be subject to the jurisdiction of South African courts in respect of any dispute flowing from this undertaking.

8. Whole agreement

- 8.1. This document constitutes the whole of this undertaking to the exclusion of all else.
- 8.2. No amendment, alteration, addition, variation or consensual cancellation of this undertaking will be valid unless in writing and signed by me and the NWU.

Dated at -----this _____ 20 _____

Witnesses:

1
.....

2
.....

(Signatures of witnesses)

(Signature)

Appendix M: Language editor certificate

19 Akasia Street
Golf View
Mafikeng, 2745
North West Province

3 December
2021

TO WHOM IT MAY CONCERN

CERTIFICATE OF LANGUAGE EDITING

I, Paul Nepapleh Nkamta, confirm and certify that I have read through and edited the dissertation titled, "**Coping mechanisms used by pregnant teenagers in Mafikeng Subdistrict clinics, North West Province**", by **C. Nthene**, student number: **21990492**.

C. Nthene was supervised by **Prof. LA Sehularo** and **Mrs PT Motsilanyane** of the North-west University.

I hold a PhD in English Language and I am qualified to edit academic work of such nature for cohesion and coherence.

The views and research procedures detailed and expressed in the dissertation remain those of the researcher/s.

Yours sincerely



Paul Nepapleh Nkamta (PhD; MA; PGCE; BA Hons)

Tel: 018 389 2895
Cell: 073 970 7514

Appendix N: Co-coding certificate



Office tel: 018 389 2630; e-mail:
13160966@nwu.ac.za

TO: WHOM IT MAY CONCER

RE: PROOF OF CO-CODING

This serves evidence that I have co-coded a qualitative data for Ms C Nthene. The title of her study was: **Coping mechanisms of pregnant teenagers in Mafikeng sub-district clinics, North West Province.**

For questions and queries please use the contact details provided above

Provided by:

Mr IO Mokgaola

Signature:

A handwritten signature in blue ink is shown within a light grey rectangular box. The signature is cursive and appears to read 'IO Mokgaola'.

Date

07th December 2021