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# **RESEARCH ARTICLE**

# Teenagers' Perceptions of Contraception Use and Support Requirements to Prevent Teenage Pregnancies: A South African Study

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# Abstract:

# Background:

Teenage pregnancy continues to be a concern. Complications during pregnancy and childbirth are the leading causes of death among pregnant teenagers. The use of contraception and support to prevent teenage pregnancies is of utmost importance to help address this concern.

# **Objectives:**

The study aimed to explore and describe perceptions of teenagers regarding the use of contraception (1) and what support is required in assisting teenagers to prevent teenage pregnancies (2) in Limpopo Province, South Africa.

#### Methods:

A qualitative research strategy employing exploratory and descriptive approaches was used in this study. Purposive sampling of teenagers in a public secondary school with the highest pregnancy rate in a district of the Limpopo Province was used. Data were collected from 23 participants using naïve sketch booklets with 12 questions. Data were analysed using content analysis with the assistance of a co-coder.

#### Results:

Three categories emerged from the data, namely opinion of contraception (1), factors preventing the usage of contraception (2), and help and support (3).

#### Conclusion:

Teenagers were knowledgeable about contraception methods, which included condoms, oral contraceptives and injectables, and the usage thereof. Advantages, disadvantages, and areas to access contraception were also known by the participants. However, there were different opinions with regards to contraception, factors preventing its usage, and help and support needed.

Keywords: Contraception, Perceptions, School health nursing, Support, Teenagers, Teenage pregnancy.

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# **1. INTRODUCTION**

Teenage pregnancy is a global challenge that affects high, middle, and low-income countries. According to a worldwide study, 190 million out of 1.1 billion women of childbearing age (15-49 years) do not use contraception [1]. Findings from a study conducted in Brazil found that many parents do not provide sexual reproductive health information to their teenagers at home; thus, teenagers resort to peers, the internet, and social media [2] for advice. Another study, also conducted in Brazil, showed more than 80% of teenagers to not use contraception and having no knowledge of long-acting reversible contraception methods that could assist in the prevention of teenage pregnancies [3]. A study conducted in South Africa also indicated that low uptake of long-acting reversible contraception seems to be the norm [4]. In other low- and middle-income countries, the low uptake is explained by gender roles and power differences embedded in cultural beliefs, among other reasons [5]. When it comes to contraception methods, preferences differ across contexts; for example, a study conducted in Saudi Arabia found the most used methods of contraception to be oral contraception pills and intrauterine devices [6]. In sub-Saharan Africa, a

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preference for short-acting methods over long-acting ones was noted [7], while in South Africa, injectable administration was deemed the preferred method of contraception. The challenges related to providing health education on contraception also differ across contexts. While the Saudi Arabia study identified a gap in contraception knowledge [6], the South Africa study determined that health education on long-acting contraception should be strengthened [8]. Another study conducted in Greece found that addressing teenage pregnancy required the incorporation of ante-natal care services in both education and policy development [9].

Long-standing myths and misconceptions that family planning affects future fertility still dominate the sub-Saharan and West African populations [10]. Some of these include the fact that contraception usage causes infertility at a later stage when a child is needed [11]. For this reason, some cultures require that women ask permission from their husbands to use contraception [12]. A study on sub-Saharan African countries found that 80% of teenagers resort to traditional methods to prevent pregnancies instead of using contraception [13]. Another study, this time in Rwanda and Zambia, indicated that although 88% of teenagers had knowledge of contraception types, uptake thereof was very low despite innovative advertising through social networks, newspapers, magazines, the internet, and the mass media. Barriers to greater uptake beyond myths and misconceptions included health systembased challenges, side effects of contraception, and nurses' attitudes [14, 15], as well as a lack of parental guidance [16].

In South Africa, teenage pregnancies remain a great concern despite the wide distribution of various types of contraception by the South African departments of health, education, and social development [17]. During 2017-2021, a South African study revealed an increase in teenage pregnancies that affected all provinces [18].

The number of births to teenagers aged 15-19 years increased by 17.9% (from a baseline of 114 329) and the birth rate per 1000 girls in this age category increased from 49.6 to 55.6 between 2017-2021 [18]. Studies revealed poor contraception usage, carelessness, and peer pressure as among the major causes of teenage pregnancies in the province where this study was conducted [19]. Even though efforts have been made to introduce a subject named life orientation in South African schools, a staggering 90 037 teenagers aged 10-19 years have given birth in the past year [20]. Even policies that allow pregnant teenagers and teenage mothers to continue with their studies were ineffective because they eventually become weak too [21]. The demand for national strategies to curb teenage pregnancies is continually rising [22].

#### 2. MATERIALS AND METHODS

# 2.1. Design

A qualitative, exploratory, and descriptive design was used in this study [23].

#### 2.2. Population and Sampling

The population included the secondary school with the highest teenage pregnancy rate in a district of Limpopo

Province, South Africa. Purposive sampling of twenty-three (n=23) participants was carried out. The inclusion criteria included teenagers above 18 years and who were enrolled in grades 11 or 12. They had to be fluent in English and/or Sepedi, interested and willing to participate in the study, as well as having private time to complete the naïve sketch booklet and access to cell phones for communication. The exclusion criteria included participants who were younger than 18 years, not in grade 11 or 12, and not responding to the recruitment flyer after a week.

#### 2.3. Data Collection

Data were collected during 2022. Participants were recruited by handing out flyers that provided them with information, such as the aim, objectives, expectations, and benefits of the study. The method of data collection involved a naïve sketch booklet format. Naïve sketches ask questions in a story format and require participants to provide their answers in a story format. This allows a participant the opportunity to reflect [23 - 25] and provide personal description of the participant's everyday life along with specific aspects of their experience [26]. In this study, the participants were actively involved in critically answering questions without being assisted and they had the opportunity to apply their knowledge and understanding to the questions provided.

The first page of the naïve sketch booklet contained a copy of the study's participant information letter. The first author explained the informed consent *via* a short WhatsApp video before data collection commenced. Participants signed the informed consent forms with witnesses and were then handed naïve sketch booklets. The naive sketch booklets contained a section for capturing demographic data and a section with questions. Section A would capture the participant's demographic information, including the date of birth, age, home language, grade, race, the participant's birth order in the family, and their access to healthcare facilities. Section B contained a letter into which 12 questions were embedded.

The naive sketch letter read: "Hallo friends, I am sister Annah. I would like to know from you about your perceptions of contraception use and support requirements to prevent teenage pregnancies. I am a professional nurse working at a large hospital near your school for the past 26 years and have noticed many teenagers coming to the hospital to deliver babies almost daily. I, therefore, wanted to ask you the following questions to understand why there were so many teenage mothers and how professional nurses can assist teenagers in the use of contraception and the type of help that is required by teenagers to prevent teenage pregnancies. To assist me in finding more about this, I kindly request you to write me a letter addressing each aspect as follows. When writing the letter, you should answer the following 12 questions: What is your opinion about the usage of condoms, pills, and injectables to prevent teenage pregnancies? (1); What are the different types of condoms, pills, and injectables, and how do they work? (2); What do you think prevents teenagers from using condoms, pills, and injectables in order to prevent teenage pregnancies? (3); What type of help is currently available to you as a teenager to use condoms, pills, and injectables? tell

me more about it (4); What other type of support can you think that will help you to use condoms, pills, and injectables, in addition to the following examples (clinics, family, media, friends, primary health care nurses, schools, any other)? tell me more about it (5); Where did you hear about condoms, pills, and injectables the first time? please tell me more (6); Where can you get condoms, pills, and injectable? tell me more (7); What could healthcare workers, such as nurses, do to help you and other teenagers to improve on using condoms, pills, and injectables? (8); What do you think is the best manner to obtain information about condoms, pills, and injectables? (9); How do you see teenage pregnancy? (10); Do you know any person who fell pregnant as a teenager? If yes, tell me more about that person and what her age was? Do not write her name (11); What do you think makes teenagers have babies? (12)". After the school holidays, the completed naïve sketches were collected, and data analysis was commenced.

### 2.4. Data Analysis

Data analysis was done using content analysis steps with the assistance of a co-coder [23]: managing and organizing data (step 1); finding patterns and producing explanations (step 2); describing and identifying themes (step 3); representing findings (step 4); and interpreting data (step 5). A consensus discussion was then held to ensure that the categories and themes that emerged were a true reflection of the naïve sketches.

#### 2.5. Measures to Ensure Trustworthiness

Trustworthiness, defined as a way of ensuring data quality in qualitative research [27], was obtained by adhering to credibility, dependability, confirmability, and transferability. Trustworthiness was established by using co-coder assistance to analyse the data. An in-depth description of the research design and method was recorded to ensure that the study is replicable within other contexts.

# 2.6. Ethical Considerations

The study commenced after it was approved by the North-West University (NWU) Health Research Ethics Committee (Number: NWU–00168–21–A1) (Potchefstroom campus). Subsequently, approval letters were obtained from the Department of Education in the Limpopo Province, the circuit manager Capricorn North District, and the school principal of

the public secondary school where the study was undertaken. The following ethical principles were adhered to throughout the study: respect for people, beneficence, and justice. All the naïve sketch booklets were coded with numbers to ensure anonymity. The participants completed the naïve sketches during their school holiday in their own private homes, thereby ensuring confidentiality.

# **3. RESULTS**

All participants (100%) were African, with Sepedi as their mother tongue. The majority (53%) were in grade 11, while the rest (47%) were in grade 12. More than half of the participants (70%) were 18 years old, 22% of them were 19 years old, and 8% of them were 20 years old. Most of the participants were number four in their families (35%), first-born (22%), second-born (30%), whilst the third-borns comprised indicated that they had access to healthcare services, while 35% indicated a lack of access to healthcare services.

From the results of the perceptions of the teenagers on the use and support requirements to prevent teenage pregnancies, three categories with their respective themes emerged (Table 1).

# 3.1. Category 1: Opinion of Contraception

In category 1, the teenagers' opinion on contraception revealed four themes, namely benefits, knowledge types of contraceptives, myths regarding the use of contraception, and availability of contraception.

# 3.1.1. Theme 1.1: Benefits

Participants suggested that benefits included the provision of dual-method contraception (hormones and condoms). They emphasized that this method is the most popular manner to prevent teenage pregnancy and provide protection against sexually transmitted infections (STIs).

"Condoms may help to prevent cervical cancer; they may decrease premature ejaculation and prolong intercourse. The birth control pill is a safe, simple, and convenient way to prevent pregnancy. It also has other benefits, like reducing acne, making your periods lighter and more regular, and easing menstrual cramps. Contraception also reduces the need for unsafe abortion and reduces HIV transmission from mother to newborn" (Participant B, 18 years, grade 12).

Table 1. Teenagers' perceptions of contraception use and support requirements to prevent teenage pregnancies.

Categories	Themes
1. Opinion of contraception	<ol> <li>Benefits</li> <li>Knowledge of types of contraception</li> <li>Myths regarding the use of contraception</li> <li>Availability of contraception</li> </ol>
2. Factors preventing the usage of contraception	<ul><li>2.1 Peer pressure</li><li>2.2 Influence of boyfriends</li><li>2.3 Financial gain</li><li>2.4 Lack of parental dialogue on sexuality</li></ul>

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(Table 1) contd.....

Categories	Themes
3. Help and support	<ul> <li>3.1 Source of information on contraception</li> <li>3.2 Need for nurses to frequently visit schools</li> <li>3.3 Need for parental advice on sexuality</li> <li>3.4 Life orientation teachers to talk freely about the use of contraception</li> <li>3.5 Improvement of support for pregnant teenagers from school and peers</li> </ul>

"Condoms are a reliable method of preventing pregnancy. You are preventing your partner from sexually transmitted infections (STIs). There are no medical side effects from using condoms. They are easy to get hold of and come in a variety of shapes, sizes, and flavours. The male condom is placed on the penis when it becomes erect. It is unrolled all the way to the end. Depo-Provera typically suppresses ovulation, keeping your ovaries from releasing an egg. It also thickens cervical mucus to keep sperm from reaching the egg" (Participant H, 18 years, grade 12).

"The birth control pills are a type of contraception that is 99% effective at preventing pregnancy when taken consistently every day. The pill contains hormones that regulate menstruation, lower the risk of ovarian and uterine cancer, improve acne, and treat endometriosis. Besides preventing pregnancy, abstinence and condoms provide some protection against STIs. Most other birth control methods do not provide much protection against STIs, so condoms should also be used" (Participant J, 20 years, grade 12).

#### 3.1.2. Theme 1.2: Knowledge of types of Contraception

Teenagers' knowledge of types of contraception extended to understanding their advantages and disadvantages.

"The use of the pills does not affect our menstruation cycle or cause any kind of complication in our bodies. The usage of injectables to prevent teenage pregnancy somehow has an advantage. Sometimes you can miss a month or two of menstruation if you use an injectable" (Participant E, 18 years, grade 12).

"A condom is a thin tube worn over the penis during sex (male condom) or inserted into the vagina (female condom). They create a barrier that keeps semen and other body fluids out of the vagina, rectum, or mouth. They are used to prevent STIs" (Participant D, 18 years, grade 12).

# 3.1.3. Theme 1.3: Myths regarding the use of Contraception

The findings also revealed myths around contraception usage to remain a continuous problem despite the attention teenage pregnancy is receiving through ongoing research studies. The following myths were cited by the participants:

"Our friends are telling us that if we use pills and injectable contraception, we may not give birth in the future. You as a lady can end up not falling pregnant because of the damage the injectable ad the pill has caused in your women system. Pleasure is of course a very important part of sex, so anything that is perceived to interfere with it is bound to be viewed negatively" (Participant A, 20 years, grade 12).

"Condoms are unnecessary; some women underestimate their risk of getting STIs and assume that certain STIs, like HIV, are associated with other groups (such as gays and bisexual men). They may also believe that pulling before ejaculation is enough. Condoms are uncomfortable. Some women don't like condoms because they make sex uncomfortable or even painful. Condom ruins sex. To some teenagers, the act of putting on a condom ruins the spontaneity of sex. Condoms reduce sensitivity. Compared to skin-on-skin contact, some teenagers complain that condoms (especially female condoms) reduce sensitivity. Male condoms can also taste bad if used for oral sex. The use of condoms says bad things about you. Some teenagers believe that asking a person to use a condom is judging them for previous sexual behaviour. On the flip side, some teenagers fear that using condoms brands them as being unfaithful, having diseases, or being promiscuous" (Participant B, 18 years, grade 12).

#### 3.1.4. Theme 1.4: Availability of Contraception

Participants reported contraception (condoms, injectables, and pills) to be available at hospitals, pharmacies, shops, taverns, clinics, healthcare centers, private doctors, and sometimes private cost, parenthood health centers, community health centers, convenience stores, and online. Condoms have also been reported to be available at tuck shops.

"You can find condoms at the hospitals, shops, taverns, and clinics. Condoms are not supposed to be sold. Condoms differ in terms of name and price. Pills are also found at the hospital. Injectables found at the hospital are for free" (Participant I, 18 years, grade 12).

*"The pills, we can find them at the pharmacy"* (Participant J, 20 years, grade 12).

"You can get pills from doctors or nurses at a doctor's office, health clinics, and local health centers" (Participant H, 18 years, grade 12).

"You can get condoms from planned parenthood health centers, community health centers, doctors' offices, supermarkets, convenient stores, and online" (Participant G, 18 years, grade 12).

# **3.2.** Category 2: Factors Preventing the usage of Contraception

Category 2 revealed several factors that impacted the usage of contraception to prevent teenage pregnancies, including peer pressure, the influence of boyfriends, financial gain, and lack of parental dialogue on sexuality.

# 3.2.1. Theme 2.1: Peer Pressure

Participants emphasized that peer pressure among teenagers sees them as competing to fall pregnant in order to impress their friends, thus increasing the rate of teenage pregnancy and school dropout.

"Teenagers should stop competing with each other about

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making babies, stop thinking that my friend is ahead of me and that she can't do better than me. Teenage pregnancy is not a good thing. Teenagers are still learners, and they are not working. A child demands a lot of things that need money. You will lack behind with your studies because when the child is sick, you will have to stay at home" (Participant O, 18 years, grade 12).

"I think is peer pressure, sometimes doing what their friends say and not deciding for themselves. Some of the teenagers like to impress their friends" (Participant T, 18 years, grade 12).

#### 3.2.2. Theme 2.2: Influence of Boyfriends

Participants revealed that boyfriends influence girls by forcing them to engage in unprotected sexual intercourse, which leads to teenage pregnancies.

"Teenagers are misled by boyfriends who, after meeting them, promise that they will take care of their babies. Other teenagers fall pregnant to trap their boyfriends so that they do not leave them. Some teenagers are looking at the fact that the boyfriend is from a better family and can take care of the baby" (Participant J, 20 years, grade 12).

"Some teenagers are being forced by their boyfriends to have unprotected sex. Others attend unprotected sex because of impressing their boyfriends and even promised money" (Participant W, 18 years, grade 11).

"Sometimes is their boyfriends' pressure to become pregnant or they will dump them and replace them, that's how they become pregnant" (Participant N, 18 years, grade 12).

#### 3.2.3. Theme 2.3: Financial Gain

Participants suggest others fall pregnant to qualify for government social support grants. They also hope that financial gain will come because of dating adult men who pay them and persuade them that their love is strengthened by doing so.

"I think teenagers are looking at child support grants that they use to buy their own things" (Participant O, 18 years, grade 12).

"Teenagers want social grants from the Government and they think that's how they will help themselves" Participant T, 18 years, grade 12).

"Teenagers sleep with adult men without contraception for the sake of money and to strengthen their love" (Participant I, 18 years, grade 12).

#### 3.2.4. Theme 2.4: Lack of Parental Dialogue on Sexuality

Findings from this study showed a lack of parental dialogue on sexuality, indicating that sufficient communication between parents and teenagers about contraception use to prevent pregnancies is still a challenge.

"You stay with a parent who does not advise their children in the proper way even when they know that their teenagers have started being sexually active. Parents should have time to advise teenagers about reproductive health. Parents lack responsibility when their children start engaging in sexual intercourse. Some parents shout at their teenagers in front of other people instead of communicating well, thus pushing teenagers to fall pregnant" (Participant M, 19 years, grade 12).

"Some teenagers become pressured at home and cannot handle the pressure they are receiving from their parents about boys. The teenagers believe that the best way to handle this is move with their boyfriends, which leads to teenage pregnancy" (Participant E, 18 years, grade 12).

### 3.3. Category 3: Help and Support

In category 3, help and support, five themes have emerged, including sources of information on contraception, the need for nurses to frequently visit schools, need for parental advice on sexuality, the need for life orientation teachers who talk freely about the use of contraception, and the improvement of support for pregnant teenagers from school and peers, which have been regarded as of utmost importance for preventing teenage pregnancy.

#### 3.3.1. Theme 3.1: Sources of Information on Contraception

Results from the study elicited sources of information on contraception. Even though different contraception methods are known, it takes time for teenagers to get the relevant knowledge from nurses.

"The first time I saw them at the hospital, and I first asked myself what is this for? Someone explained, and the nurses then came to our school and told us what they are and what they are used for" (Participant E, 18 years, grade 12).

"I heard about contraception at school and at the hospital. Also, our parents are warning us about them at home" (Participant U, 19 years, grade 11).

"I heard about contraception from my sister at home explaining the importance of being responsible with contraception" (Participant P, 18 years, grade 12).

# 3.3.2. Theme 3.2: Need for Nurses to Frequently Visit Schools

The participants mentioned that the need for nurses to frequently visit schools is important. The integration of various services at schools, including frequent visits to schools of professional nurses to distribute contraception, is necessary to prevent teenage pregnancies.

"The help we are currently getting is from healthcare workers who visit our schools over a period of 2 or 3 years to advise us about the use of condoms, pills, and injectables. There was a group of nurses sent to our school since we were at the doorstep on entering secondary school" (Participant A, 20 years, grade 12).

"The healthcare workers need to visit each school each month to talk with the teenagers so that they educate them about condoms, pills, and injectables. They need to tell teenagers about their safety and the advantages and disadvantages of those contraceptives. The healthcare workers must be free in talking about condoms, pills, and injectables everywhere they go because some teenagers are ashamed to talk about them" (Participant X, 18 years, grade 11). "At least once a week/month if they can go to schools and community centers to clarify to teens who do not understand the negative effect of teenage pregnancy" (Participant Y, 18 years, grade 11).

#### 3.3.3. Theme 3.3: Need for Parental Advice on Sexuality

Participants added the need for parents to give advice and be open about sexuality, which can assist in the usage of contraception to prevent teenage pregnancy.

"Parents also do not talk to their teenagers about the use of pills or condoms or on how to prevent themselves from getting pregnant. Parents refuse to allow their teenagers to use contraception because they fear to talk about such things" (Participant A, 20 years, grade 12).

"Teenage pregnancy can lead to a teenager being chased out of her own home by her parents because they cannot afford to take care of her and also take care of the baby" (Participant E, 18 years, grade 12).

"The family member should support you when using pills and injectables. There was a certain man who abused her child sexually and when she told her mother, she said the child was lying and that she does not want to hear people talking about that" (Participant J, 20 years, grade 12).

# 3.3.4. Theme 3.4: Life Orientation Teachers to Talk Freely about the use of Contraception

In addition, the results revealed that life orientation teachers need to talk freely about the use of contraception in school. This also includes being open about sexual and reproductive health issues.

"Life sciences and life orientation teachers teach about the reproductive health chapters at school, but fear talking about them" (Participant A, 20 years, grade 12).

# **3.4. Improvement of Support to Pregnant Teenagers from School and Peers**

The participants identified the need for improvement in support to pregnant teenagers from school and peers to also be important. They added that pregnant teenagers are treated differently, and insisted that positive support from school and peers would be necessary to prevent humiliation and embarrassment to them.

"Teenage pregnancy is dragging us down as South Africans. Amongst other countries, we are the highest to have teenage pregnancies. Pregnant teenagers should not be allowed to come to school because we are no longer able to listen. We slumber when educators teach us. When a teenager is pregnant, the parent has to wait for her at the school gate so that she can assist her when emergency help is needed regarding the pregnant teenager" (Participant I, 18 years, grade 12).

"I see teenage pregnancy as one of our country's problems because most of our youth are getting pregnant at a younger age, some are even pregnant while they are in primary school" (Participant W, 18 years, grade 11).

"The girl was 17 years. She was allowed to come and sit in

the school admin block where she must wait for her friends to give her notes from class, but she was not allowed to be in contact with other students at school. Students/learners at school teased her. She was humiliated and made to feel embarrassed about being pregnant" (Participant H, 18 years, grade 12).

# 4. DISCUSSION

Considering the results obtained, teenagers were knowledgeable about the types of contraception. However, myths about contraception regardless of their knowledge exist. Studies done in South Africa present the benefits of contraception, which include protection of teenagers against pregnancy, STIs, and HIV [28], and facilitating pain management of endometriosis when combined with oral contraception [29]. The findings of this study find resonance with others also done in South Africa, where researchers have established most teenage mothers to not use condom during their first unplanned sexual intercourse, nor have they found to adhere to their consistent use despite having knowledge of various contraception methods [30 - 33]. Female condom use has been observed to remain low despite the health promotions conducted [34, 35], and females have found it difficult to insist on condom use when being financially dependent on their partners [36]. Teenagers were never convinced to use implants despite campaigns that focused on the benefits of implant contraceptives [37] and they also did not know a lot about Implanon as a contraception method [38], including the use of the emergency contraceptive pill to prevent teenage pregnancies [39].

It is a well-documented fact that cultural and religious norms inhibit contraception use in South Africa and elsewhere [40]. A study revealed teenagers refusing contraception use to be pre-occupied with myths, rumors, and misperceptions embedded in the socio-cultural norms [41]. Increases in teenage pregnancies often go hand in hand with the proliferation of myths and misconceptions, but side effects and nurses' attitudes toward teenagers also have an effect. Findings from a study conducted in Nigeria revealed increased teenage pregnancies to be due to low condom use in childbearing women and teenagers [42]. In Ghana, teenage pregnancies remained prevalent despite a high level of knowledge about contraception [43]. Contrary to the above, the findings from a study conducted in Uganda showed the consistent use of condoms during sexual intercourse in order to prevent teenage pregnancies, thus increasing the demands for them to be delivered to health facilities [44]. Studies done elsewhere in the world reveal similar findings. In Australia, for example, condoms were found beneficial in preventing pregnancies and STIs, but it was revealed that health education ought to be channeled to female condom use [45]. Studies done in Brazil revealed the increased prevalence of risky sexual behaviour and teenage pregnancy to be due to a low level of knowledge on contraception methods, a lack of knowledge regarding longacting reversible contraceptives, and poor attitudes towards contraception [46 - 48]. Transparency about sexual reproductive health was revealed as a key factor for positive outcomes among teenagers in France, Germany, and Netherlands, as compared to those in the United States of

# America [49].

While this study revealed that peer pressure and the influence of boyfriends were factors that prevented the use of contraception, another study conducted in South Africa revealed that positive pressure could encourage abstinence from sexual intercourse if well-supported by parents [50]. Researchers have also found poor socio-economic circumstances and inadequate sex education to contribute to the increased numbers of teenage pregnancies in South Africa, and that these issues need to be addressed as early as the primary school stage [51]. Findings from studies conducted in Nigeria have indicated teenage pregnancy as prevalent because it is viewed as a common occurrence in communities and because contraception usage is not accepted by teenagers [52]; they have also revealed peer pressure and the influence of the media to be major contributors towards the increase in teenage pregnancy [53], and a lack of parental dialogue and poor socioeconomic circumstances to encourage sex for financial gain, together in an increase in teenage pregnancies [54].

The high prevalence of teenage pregnancy (48%) in Zambia was attributed to child marriage (13%) and lack of contraception use [55], whereas in Ghana, the likelihood of teenage pregnancy in girls aged 13-19 years was linked to peer pressure and law enforcement was called upon to strengthen their measures [56]. Bad peer groups and a lack of knowledge about reproductive health were credited for the prevalence of teenage pregnancy in Uganda [57], while teenagers in Tanzania bemoaned a lack of parental counselling and guidance about reproductive health measures [58]. Studies conducted in sub-Saharan Africa found teenage pregnancies to be affected by pressure from the boyfriend [59], the need to use sexual intercourse for financial gain [59], and cultural and religious norms that inhibited parents from talking about sexual and reproductive health issues [54].

As it relates to the kind of help and support needed to prevent teenage pregnancies, this study focused on the need for sources of information on contraception and frequent school visits by nurses. The need for parental advice on sexuality, an improvement in the support offered to pregnant teenagers by the school and peers, and life orientation teachers talking freely about the use of contraception during life orientation lessons, was also expressed. Other studies that resonate with these findings include one done in South Africa, where it was established that social media could be a strong motivator when educating teenagers about contraception [60]. Another study elaborated on these findings by revealing that in South Africa, socially available information about sexual reproductive health matters was limited to radio, television, and friends in certain areas [61]. The media and friends [62], and teachers and family members [63], were credited as the most important sources of information on reproductive health in sub-Saharan Africa and common source of information on contraception to prevent teenage pregnancies [63]. Another study conducted in India depicted internet as the common source of information on contraception usage, where the emergency contraception pill was negatively perceived over cultural and religious practices [64]. An international study [65] emphasized the significance of health schools in providing relevant information about contraception. They have been regarded as the best trained to provide comprehensive sexual reproductive health services to effectively prevent teenage pregnancies [65]. However, these health services have not been reported to be adequately provided at school because other sources of information have been reported to be consulted more often than the school nurse. Some teenagers in this study revealed that they have been receiving help from the healthcare workers visiting the school every two or three years, while other teenagers declared that they only consulted the school nurse upon entering secondary school [65].

The findings of a study conducted in Rwanda indicated that parents ought to be empowered and supported with information on contraception use so that they can better guide teenagers regarding pregnancy prevention [66]. Contrastingly, parents in Ghana found it difficult to talk freely with teenagers about sex education because they wanted experts in those fields to assist instead [67]. Another study conducted in Ghana showed that teenagers who were taught about sexuality earlier tended to make more informed choices, which assisted in preventing teenage pregnancies [68]. In terms of support offered within the school environment, a Botswana study revealed that teenage mothers were stigmatized, discriminated against, expelled from school during pregnancy, and not supported by their families, peers, teachers, and teenage boyfriends [69]. Studies done in South Africa found teachers to be negatively impacted due to the repeated absenteeism of pregnant learners who had to attend to their health during pregnancy [70]; the presence of pregnant learners in class, affecting teacher's coping mechanisms [70]; and support from professional nurses being most needed to help teenagers prevent pregnancies [71]. The Department of Basic Education Policy on teenage pregnancy management uses various programs to support life orientation curriculum and the right of pregnant teenagers to continue learning without stigma and discrimination until they complete their studies [72]. Chapter two of the Constitution of the Republic of South Africa Act 108 of 1996 mentions the rights of parents of teenage pregnant girls to have their human dignity respected and protected [73]. The above-mentioned rights might be compromised in that parents are supposed to wait for their pregnant teenagers at the Botswana, respectively. In Botswana, this finding led to the school gate to help in case of an emergency. Support from recommendation that school health services be extended in secondary schools. The internet was also considered the most common source of information on contraception in India, where the emergency contraception pill was perceived negatively due to cultural and religious practices [64]. In addition, a study conducted in Botswana indicated teachers and family members as important sources of information, and this necessitated the need to extend school health services in secondary schools [62]. Findings from a study conducted in sub-Saharan Africa indicated media and peers as the most family members, friends, and parents has been suggested to benefit pregnant teenagers physically, psychologically, educationally, and socially [74]. Studies conducted in South Africa have found the following aspects: (1) adolescent youthfriendly services should be used to address teenage pregnancies [75], (2) the Adolescent and Youth Policy 2018-2019 may expose teenagers to more knowledge and involved in further policy development to address issues related to teenage pregnancy [76], (3) teenage mothers should be engaged when developing strategies that are intended to support them in their path to complete their studies and prevent teenage pregnancies [77].

# CONCLUSION

Teenagers are knowledgeable about contraception benefits, types, and myths about the use and availability, such as condoms, pills, and injectables. Some factors have been reported to prevent them from the usage of contraception, which include peer pressure, the influence of boyfriends, financial gain, and lack of parental dialogue on sexuality. Help and support to assist teenagers in preventing teenage pregnancies include sources of information, specifically on contraception, frequent visits of nurses to schools, parental advice on sexuality, and life orientation teachers talking freely about the use of contraception in class. Another point highlighted in this study is the improvement of support for teenagers that are already pregnant from both the school and their peers. The authors recommend that the Department of Education should consider evaluating the implementation of context-specific strategies for schools. This could be done by first assessing and evaluating the current prevention and management policies/guidelines at schools for teenage pregnancies, and then comparing them with the current policy of the department of basic education and implementing it contextually. A standardized contextual collaborative preamble step-by-step policy, indicating how to accommodate pregnant teenagers at schools, could then be drawn and implemented to address shortcomings.

#### **AUTHORS' CONTRIBUTION**

AN, TR, KF, and AS contributed to the study design; AN collected the data and performed data analysis; AN and TR wrote the manuscript; and AN, TR, KF, and AS critically revised the manuscript.

# LIST OF ABBREVIATIONS

- NWU = North-West University
- **STIs** = Sexually Transmitted Infections

# ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study commenced after it was approved by the North-West University (NWU) Health Research Ethics Committee (Number: NWU–00168–21–A1) (Potchefstroom campus).

# HUMAN AND ANIMAL RIGHTS

No animals were used for studies that are the basis of this research. All human procedures followed were in accordance with the guidelines of the Helsinki Declaration of 1975.

# CONSENT FOR PUBLICATION

Participants signed the informed consent forms with witnesses and were then handed naïve sketch booklets.

#### STANDARDS OF REPORTING

COREQ guidelines were followed.

#### AVAILABILITY OF DATA AND MATERIALS

The authors confirm that the data supporting the findings of this study are available within the article.

### FUNDING

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#### **CONFLICT OF INTEREST**

The authors declare no conflict of interest, financial or otherwise.

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