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A qualitative study on contraceptive use among young female university students: What still matters?

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Abstract: In South Africa fertility rates have been steadily declining, although unplanned pregnancies among young women are high. At the same time, contraceptive prevalence rates are steadily rising. The purpose of this study was to explore the use of contraceptives among White, female university students. The study participants comprised a sample of 10 female students. An interview guide was used to explore areas in greater depth. Interviews were audiotaped and transcribed verbatim, thereafter the researchers used thematic analysis to derive emergent themes. The findings indicate that there is a high level of awareness of contraceptive use among the participants. The main reasons for contraceptive use was to prevent pregnancy and sexually transmitted infections. Participants also reported using contraceptives for other health-related reasons such as treatment of acne and regulation of menstrual cycle. The main barrier to use was the fear of contraceptive side effects. Existing initiatives should take into account the prominent barriers affecting uptake, such as misinformation, in an effort to promote use of modern contraceptives.

Keywords: contraceptive use; White university students; females; unmet need; South Africa

1. Introduction

Across the world levels of contraceptive use, availability and uptake vary, with lower rates observed among women in the lower-income bracket and in developing countries. In Africa, contraceptive use among female university students remain low [1-4]. A study conducted in Ethiopia among female students reveals that only 16.2% of respondents were currently using contraceptives [3]. While there is widespread knowledge of contraception, it does not necessarily translate into uptake among students. For instance, a study in Ghana reveals that 25% of university students believed that family planning was not useful. Contraception is heavily influenced by availability, accessibility and preference [2].

Despite the barriers to contraception, South Africa has in recent years made remarkable progress in the area of sexual and reproductive health [5]. This has been achieved partly through the renewed commitment by the South African government that has emphasised the importance of contraception and equipped the health sector to promote family planning services [6]. Contraceptives are considered important from a human rights perspective for women and families by enabling them to determine the number of children they desire as well as the opportunity to space births [7]. Contraceptives also offer a range of potential non-health benefits which include liberty and freedom of opinion and choice as well as expanded education opportunities, empowerment and economic development [7,8].

South Africa has a contraceptive prevalence rate comparable to many developed countries [5]. The contraceptive prevalence rate is above average as more than 60% of sexually active women are currently using a method of contraception [9]. The high contraceptive prevalence rate has contributed to steadily declining fertility levels over the past several decades [10]. The total fertility rate (TFR) between 2002 and 2020 declined from 2.45 to 2.33 births per woman. However, there are excessively high age-specific fertility rates (ASFRs) among young women aged 15-24 years, estimated at 350 and 190 births per 1000 among women aged 15-19 and 20-24 years, respectively. This significantly declines for women aged 25 years and older [11]. The estimates further reveal distinct racial differentials. These estimates indicate that the TFR among Black African women (2.82 children per woman) and Coloured women (2.57 children per woman) has remained the highest, while White and Indian women have a below replacement rate with a TFR of 1.70 and 1.85 births per woman, respectively [11].

While the overall TFR is declining, unintended pregnancies among young women are increasing [11, 12]. The increase in unwanted pregnancies occurred even as levels of contraceptive use has steadily risen. Approximately 12.5% of births in 1998 and 14.8% of births in 2016 to mothers younger than 20 were unwanted. This estimate peaked at 45.5% for births to mothers aged 40-44 years [12]. Other studies have also documented high levels of unwanted births in contemporary South African communities [12,13]. A study in South Africa revealed that 51.2% of young women aged 15-19 years who were currently pregnant did not desire or plan to have a child [14]. This was the highest recorded percentage in the cohort of women aged 15-49 years. This situation is exacerbated by young women, 15-19 years of age, having a higher percentage (56.3%) of non-users than those who use contraceptives. Further estimates revealed distinct racial differentials with more Black African women not using any contraception (52.8%) in comparison to any other racial group (Coloured: 47.6%; Indian: 38.9%; White: 38.1%).

High levels of unwanted pregnancies are exacerbated by low levels of contraceptive use, whereas the total demand for contraception among women of childbearing age in South Africa is high. Overall, nearly 8 in 10 (78%) sexually active women have a demand for contraception; 35% are willing to space births while 43% have an inclination to limit births [9]. The disparities in unintended pregnancies and contraceptive prevalence among women, especially young women, underscores the need for concerted efforts to better understand contraceptive dynamics. This is especially important in South Africa to reduce the high unmet need, but also to aid in the fight against HIV and AIDS. The high rate of unwanted pregnancies is important to consider especially in the context of HIV infections. Globally, South Africa has the highest levels of HIV infections, and promoting the use of contraceptives is an important step towards reducing unmet need and lowering HIV infection levels [15].

While there have been significant achievements in accessibility and availability of contraception, research suggests that uptake and use is still constrained by various factors that prevent women from making informed decisions regarding contraception as well as access to the most appropriate methods [16]. It is important for women to overcome these barriers in order to enhance their reproductive health, well-being, reduce the unmet need for family planning and prevent unintended pregnancies [16], leading to better health outcomes for individuals, families and society [17].

Our study focuses on a sample of young, White South African women who are currently students at university. The focus on young people is significant because they are more prone to risky sexual behaviours in the tertiary environment [18]. Female students within the tertiary education environment represent a group that may have an increased need for contraception. They are educated and have access to resources; both knowledge and available options of contraception. Some studies focus on young Black Africans because of the high levels of unwanted pregnancies and unmet need for contraception [19, 20]. There is, however, a paucity of qualitative research on contraceptive use of other race groups in South Africa. In order to address this knowledge gap this study attempts to explore the dynamics of contraceptive use among young, White women. In South Africa White women have the highest contraceptive prevalence rate (80.9%) in comparison to any other race group [21]. In addition, most studies focus on factors that exacerbate unintended pregnancies and the challenges associated with contraceptive use [22,23]. However, there is less emphasis on exploring the factors that promote and encourage contraceptive use among young White women. This study adds to the body of knowledge in understanding the protective factors among young women and could offer important lessons in preventing unplanned pregnancy and other challenges associated with contraception. This is important as research suggests that there is a long-term relationship between high income, high human development and low fertility and as such in developing countries, high fertility is negatively related to human development [24]. From a global perspective, Götmark, and Andersson [25] suggest that more work is needed to establish the relative importance of the factors associated with fertility. Fertility correlates negatively with education and fertility levels decrease with the increasing strength of family planning programs in Sub-Saharan Africa [25]. Race has been a prominent risk factor for higher fertility levels, especially among Black African women [26]. Thus, race is a defining and significant factor that needs to be taken into consideration.

This research has the potential to generate new findings that could be useful to policy-makers and other stakeholders by providing key insights that can be beneficial to refine and reform existing approaches towards reducing the unmet need for contraception. Revising and reinforcing policy continually is a step towards enhancing effective outcomes. From a public health perspective, policies that promote uptake of family planning should continue to be strengthened. Race differentials in fertility patterns indicate that family planning programmes need to be more targeted because women are not a homogenous group [26]. Therefore, the aim of this study was to explore contraceptive use among young women with specific focus on enablers and barriers to use. Students are often seen as agents of social change, and can serve as an indicator for uptake of contraception [27].

2. Materials and Methods

A qualitative exploratory design was used to explore the factors facilitating and inhibiting contraceptive use among young university students. Qualitative research was considered appropriate for our study as it provided an understanding of the experiences from the student's own point of view. This approach primarily allowed for in-depth interaction between the researcher and the study participants to gain a greater understanding of the topic of interest.

The study was conducted at a public university in Durban in KwaZulu-Natal that has a student population of over 47000 from various socio-economic and demographic backgrounds. KwaZulu-Natal is also one of the largest provinces in South Africa, and is situated in the southeast part of the country with a population that constitutes approximately 19.2% of the total population [28].

The study population consisted of 10 White, female students who were enrolled at the University of KwaZulu-Natal. Our study had a relatively small sample size because the aim was not to generalise the results but rather to gain greater insights into the experiences of contraceptive use among the study sample, thereby relying on information power. The inclusion criteria meant that the participants had to be White females aged 18 - 25 years and registered at the university. The focus was specifically on White women in order to understand contraceptive experiences of this community, which is reported to have higher levels of contraceptive use in comparison to other groups in South Africa [14, 29]. Further, the focus on young people was informed by literature which suggests that 80% of young people are sexually active by the age of 18 years [30]. The age limit was set to ensure homogeneity. Those that did not fit the inclusion criteria were excluded from the study.

The study employed purposive and snowball sampling methods. The purposive sampling approach ensured that individuals with specific characteristics suitable for the study were selected. Participants who were identified and met the inclusion criteria were considered eligible to participate in the study. The snowball sampling method allowed the recruited participant to refer the researcher to another eligible participant for the study. This aided in obtaining the 10 study participants.

In-depth interviews were conducted in the English language by the first author. Young, White females were approached directly and asked about their willingness to participate in the study. The semi-structured interview schedule was used to conduct the interviews and it also allowed for new topics to develop. The researcher used probing to elicit detailed information from the participants. The interviews obtained information on awareness, accessibility and use of contraception in order to understand factors facilitating and inhibiting use. Each interview was approximately 30 minutes in duration and was conducted in and around the university campus in vacant lecture venues or study rooms to ensure and maintain privacy.

Data from the interviews were audio-recorded, transcribed verbatim and analysed using a thematic approach. This involved the continuous reading and revising of the transcriptions to outline and highlight components that were meaningful and important to address the study objectives. The transcripts were coded in order to identify important data conveyed by participants and to further organise the themes that would form the basis of the findings. The researchers assigned the codes and compared them for similarities and differences to allocate them to the relevant themes.

Ethical approval was granted by the University of KwaZulu-Natal Human Social Sciences Research Ethics Committee (protocol reference number: HSS/1444/016H). Prior to the commencement of the interviews, all eligible and willing participants were presented with an informed consent form. The form provided background information of the study and its purpose, information detailing that the study was voluntary, and that if the participant chose to not participate or to discontinue at any time then this would not be held against the person in any way. Verbal and written informed consent were obtained from the participants before commencing the study. This was done to ensure that participants understood all aspects of the study before commencement of the interviews. Further, participants were assured of confidentiality and anonymity by indicating that their identity would be protected by use of pseudonyms and no identifying information would be disseminated.

3. Results

3.1. Socio-demographic characteristics of the study population

All participants were White female students and their age ranged from 20 to 25 years. At the time of the study most women were aged 20 years. Most of the women were single except one, who was married. Seven of the participants were using contraceptives at the time of the study. The most commonly used method was the contraceptive pill (30%), followed by the use of dual methods (condom and pill, 30%). Some participants (40%) started using contraceptives when they were younger than 18 years or still completing their secondary level of education. The reason for this was to regulate their menstrual cycle, and later as a means of dual-protection as they began intimate relationships. The characteristics of the participants are presented in Table 1 below.

Table 1. Socio-demographic characteristics

Characteristics	Sub-category	N	%
Current age (years)	20	4	40
	21	2	20
	22	1	10
	23	1	10
	24	0	0
	25	2	20
Total		10	100
Marital Status	Married	1	10
	Single	9	90
Total		10	100
Age when first used contraceptives	Less than 18	4	40
	18 and older	5	50
	Did not answer	1	10
Total		10	100
Currently using contraceptives	Yes	7	70
	No	3	30
Total		10	100
Current method	Pill only	3	30
	Condom only	1	10
	Pill & condom	2	20
	Injection	0	0
	IUD	1	10
	No method	3	30
Total		10	100

3.3. Awareness of contraceptives

There was a high level of awareness of contraceptives among the participants. Participants identified a range of contraceptive methods as well the different uses. Even those who were not actively using contraceptives at the time of the study were aware of contraceptives and their benefits. Some of the participants sought advice from health care providers.

"I spoke to my doctor about issues that I was having regarding my menstrual cycle and he informed me about various contraceptives which can regulate my periods" (IDI 5, 25 years).

The participants mentioned a variety of sources of information. Most had heard of contraception from their health care providers. They had spoken to their doctors about the challenges that they experienced during their menstrual cycle. The health practitioners informed them about contraceptives to regulate their menstrual cycle. Peers and family members, particularly mothers and older sisters, were identified as valuable sources of information.

"I actually did not think about going on the pill. My mom suggested I use it because it will help me with my period cramps" (IDI 9, 20 years).

"I heard my friends and my sister were on birth control and they told me about it" (IDI 7, 20 years).

"I have never used contraceptives before but I have discussed it with my friends and my sister" (IDI 2, 20 years).

For some participants, a key source of information about contraceptives was educational institutions. In school, they were exposed to sexual education programmes which made them aware of different contraceptive methods.

"We learned about it at school during the sex education programme and they taught us about different kinds and you can research more on your own for one that you are interested in" (IDI 7, 20 years).

3.4. Accessibility and availability of contraceptives

Accessibility and availability of contraceptives plays a pivotal role in reducing unmet need. All the participants said that they were able to access contraceptives. They reported obtaining their contraceptives from private health facilities, mainly pharmacies.

"I usually go to the doctor twice a year. She gives me a six month prescription for half of each year, in order to go to the pharmacy and be able to get my contraceptives pills" (IDI 5, 20 years).

"I got the script from St Augustine hospital but I collect my pills in the pharmacy in Queensburgh every month" (IDI 9, 20 years).

The participants indicated that they had medical aid cover which enabled them to access contraceptives without any difficulty. For many women in South Africa, especially those that are unemployed or living in poverty, medical aid is not affordable.

"My parents had me on medical aid before I got married so I was using my parent's medical aid. Now, since I am married, I am using my husband's medical aid to collect my pills" (IDI 5, 25 years).

3.5. Communication and information

There were a variety of sources of information that the participants identified during the interviews. Most reported that their doctor was their main source of information about the different contraceptive methods. When they needed information, they approached their doctor who did an assessment of their situation and then recommended the most suitable method for them.

"I got the information about contraceptives from my practitioner. He is the family doctor. I have been consulting him since I was a child. He recommended a gynaecologist for me to insert my IUD. His secretary booked me an appointment and I went to consult with the gynaecologist"(IDI 10, 20 years).

"The doctor told me about different contraceptives and then decided which pill I was going to use by looking in her book for symptoms and why you should or should not use it. She chose it according to me as a person" (IDI 3, 21 years).

3.6. Parent-child communication

Participants reported favourable communication about contraception with their parents, particularly their mothers. What was interesting to note was the willingness of mothers to collect contraceptives for their daughters. This indicates the supportive relationship that exists between mothers and their daughters.

“My mom is the one who collects my contraception pills every month from Dischem Pharmacy. It helps me because sometimes I forget to take them every day let alone going to get them at the pharmacy” (IDI 3, 21 years).

Most participants could easily communicate about contraceptives and sexual activity with their mothers. However, one mentioned that sex is a culturally taboo subject in her family. She explained that she found it difficult to talk to her parents about sex-related issues.

“My parents are Afrikaans and very strict. Therefore, if they knew that I am having sex I will be in trouble. It is a taboo topic; you do not talk about those things because you have to admit that you are doing it” (IDI 8, 22 years).

3.7. Partner communication

A partner can play an integral role in successfully using contraception. This can be achieved by encouraging safer intercourse and providing assistance in using contraceptive methods consistently and correctly. Greater communication about sex with sexual partners is associated with higher levels of contraceptive use among couples, as evidenced by the findings in our study. Participants who were in a relationship at the time of the study reported having discussions with their partners about contraception.

“We are very open to talking about contraception and anything related to our sex life. As I said, we are careful with things like that. We talk about it openly” (IDI 3, 21 years).

One participant mentioned that her partner was particularly concerned about preventing pregnancy and therefore he was very careful about making sure all the necessary precautions were taken.

“He is Muslim and Pakistani. He comes from a different background. His parents do not know that he is sexually active. He is very paranoid about anything happening. He was not a fan either, we were only using condoms for a long time. He wanted something else. We did have like one or two instances where the condom broke and he was the one who went and got me the emergency contraceptive. He would freak out about it and I would be a lot calmer. He wanted to know everything that was going on always” (IDI 20, 20 years).

One participant mentioned that sharing similar beliefs made communication about contraceptives easier and this allowed for joint decision-making.

“We have the same religious beliefs. We have the same goals in terms of sex and marriage. It is easier when you are on the same page because if you have different beliefs it would be a little bit awkward” (IDI 6, 23 years).

3.8. Facilitators of contraceptive use

Participants were aware of the protective benefits of contraceptives. Contraceptive methods, particularly the condom, help prevent pregnancy and sexually transmitted infections, including HIV and AIDS.

“Using contraception prevents a person from falling pregnant and not contracting infections. I think even though you are on the pill, people should use condoms in order to be more safe to prevent STIs” (IDI 3, 21 years).

“Now because I have a boyfriend I use it to prevent pregnancy and we also use condoms for STI's” (IDI 9, 20 years).

Participants mentioned that oral contraceptives have other health benefits besides family planning and in most cases, they started using it for other reasons such as regulation of menstrual cycles, minimising period cramps and to treat skin problems.

"It can help with your menstrual cycle to make it regular if you are suffering from heavy periods. That is what my sister went on it for and also the skin. It balances your hormones as well" (IDI 4, 25 years).

"I am using the contraceptive pill called Yaz. It is included in my skin medication. Apparently there are only two oral contraceptives; one can be used as a skin treatment" (IDI 1, 21 years).

"I went on it for two reasons; the first reason was for family planning purposes. Secondly, I wanted to keep track of my periods" (IDI 3, 21 years).

3.9. Barriers to contraception

The fear of side effects is a major cause of non-use and discontinuation of contraceptives. Participants who were not using any method of contraception at the time of this study explained that this was because of the fear of side effects. Some of the side effects included weight fluctuations, depression and changes in appetite.

"I got most of the side effects that they had in the booklet that explains everything; bloating, nausea, depressing moods and increasing hunger. So, I decided to stop using them and I have never tried any again" (IDI 6, 23 years).

"Hormonal contraceptives make a person depressed. You are always in depressing moods and that is not right for an everyday life. They also make it hard to control your weight and cause nausea which leads to constant throwing up" (IDI 1, 21 years).

The lack of sufficient knowledge about the consistent and proper use of contraceptives is another inhibitor. Participants also mentioned that not using contraceptives correctly and consistently led to side effects associated with the irregular use of contraceptives.

"I used to be on contraceptives when I was 17 years old. I was still in high school. I started having mood swings, because I was not taking it correctly" (IDI 7, 20 years).

Being well-informed about contraceptives is very important in order to foster effective contraceptive use. Participants mentioned that inadequate information about a range of methods of contraception may prevent informed decision-making and many resort to using what is easily available.

"In most cases people are not informed and when they have little knowledge they get into situations without knowing the consequences because they are not informed. People must know every detail about contraceptives because those details are very important" (IDI 4, 25 years).

"Lacking knowledge about contraceptives causes people to not know which type of pill to go for. Therefore, they end up not using it at all or they take the one that is not suitable for their bodies and suffer terrible side effects" (IDI 4, 20 years).

4. Discussion

The purpose of this study was to explore the use of contraceptives among White, female university students. Knowledge of at least one contraceptive method is widespread and effective information about different contraceptive methods can facilitate contraceptive use [31]. The findings from our study reveal that most participants were aware of a method of contraception, where contraceptives could be accessed as well as correct and consistent methods of administration. This finding is similar to the study by Hoque, Ntsipe and Nthabu [32] that was conducted in Botswana, which suggests that university students had good awareness of contraceptive use, with females having a clear understanding of the effectiveness of their use. In South Africa, the availability of primary health care services plays a major role in contraceptive provision [33]. The participants in this study mainly obtained their contraceptives from private facilities. This is in contrast to existing literature, which suggests that most women in South Africa rely heavily on public health facilities to access modern contraceptives which are available for free [34, 33]. However, estimates suggest that in sub-Saharan Africa the private sector serves 14% of women in need of contraception [35]. This highlights the important role of the public health sector in the provision of contraceptive use.

According to Statistics South Africa [36] there are distinct racial disparities in the use of private versus public health facilities. Approximately 81.3% of Black Africans use public health facilities in comparison to 10.5% of Whites who use

the same facilities. Conversely, 88% of Whites use private health facilities compared to 17.2% of Black Africans who use private health facilities. Further, contraceptive use was found to be lower among younger, Black African women, who used a limited range of methods [36].

In order to initiate the use of contraceptives, one would need to make an informed decision about the most appropriate method. This study found that health care providers were an important source of information. When participants needed information about the use of contraceptives, they approached their doctor who made them aware of the different and most suitable methods available. This finding is consistent with a nationally representative study conducted by the Guttmacher Institute in the United States [37], which found that information on contraceptives was received from doctors and nurses. However, other studies, for example, Holt et al. [38] and Wood and Jewkes [39], suggest a negative relationship between clients and health providers in public health facilities in South Africa as staff reportedly have negative attitudes towards young women seeking contraceptives. Thus, the findings from this study emphasise the importance of good interpersonal relationships between healthcare providers and young women in fostering contraceptive use.

Some studies [40-42] suggest that health care providers, friends and the media are the most trusted sources of contraceptive information. In this study, the findings were similar where family members, particularly females, were identified as an important source of information, which is also consistent with other studies [43, 42]. According to Colleran and Mace [44], contraceptive behaviour of significant others, including close friends and family members, have the highest and most consistent effects on the probability of the use of contraception.

Our study also found that women communicated with their partners about contraceptives. This, however, is unfamiliar in the African context as male partners are usually the ones who dominate contraceptive decision-making and fertility choices [45, 46]. In Angola, for example, male opposition to family planning and limited female decision-making power was an obstacle to contraceptive use [45]. In addition, Prata and colleagues [45] suggest that women who were not sure about their partner's opinion on contraceptives were more likely to decide not to use contraception due to the fear of partner opposition. South Africa is a country that is deeply rooted in notions of patriarchy and masculinity and gender norms are clearly defined [46,47]. Hence, the inclusion of male partners in family planning strategies may contribute to the reduction of unmet need for contraceptives.

The in-depth interviews reveal that mothers are supportive of their daughters' use of contraceptives, sometimes even collecting monthly prescriptions for them. This is not common in the South African context, especially among other racial groups, because sex is widely acknowledged as a taboo topic in many families [48]. Mjwara and Maharaj [43] reported that young Black African women did not discuss sexual matters with their parents; they preferred talking to their peers. In line with the findings of this study, Mkhwanazi [42] suggested that some mothers were aware when their daughters started to engage in sexual activity but, because this was a sensitive topic, it became difficult for some mothers to have this discussion with their daughters.

The main reasons for contraceptive use among the study sample was protection against unwanted pregnancy and sexually transmitted infections including HIV. The participants indicated that besides the contraceptive benefits associated with the pill one of the main reasons for using it was for non-contraceptive health benefits. Participants mentioned using contraception for treatment of acne, regulating their periods and minimising menstrual cramps. A study in the United States on contraceptive use found that about 58% of women using the oral contraceptive pill do so for non-contraceptive reasons [49]. Hooper [50] suggests that many hormonal contraceptives offer other important non-contraceptive health benefits. The fear of experiencing side effects is one of the major reasons for discontinuation of contraceptives [51]. The fear of side effects was similar to the study by Chebet and colleagues [51], conducted in Tanzania, which found that this was the leading cause of avoiding the future use of contraceptive methods, discontinuing use and switching methods which places women at risk of unintended pregnancy [51]. In our study, most participants obtained information about contraceptive methods from their peers. This could also explain the reason why myths about contraception exist among young people, which could lead to incorrect use and discontinuation of contraception. Mkhwanazi [42] suggests that most boys and girls get information about sex and contraceptives from their peers, and this information often influences certain ideas about sex and relationships. Lack of knowledge of a range of contraceptive measures was identified as another inhibitor to the use of contraceptives among the participants. Knowledge of the different types of contraceptive methods, by itself, is insufficient to bring about significant change in behaviour that reflects correct usage [52]. However, effective information about different contraceptive methods can enhance contraceptive use.

The strength of this study is reflected in the approach to gain deeper insights into an under-studied racial population in a tertiary institution setting. The qualitative approach generated key findings on the use of contraceptives among the White study population as well as the facilitators and inhibitors of contraceptive use. Most studies on

contraceptive use focuses on young, Black women with little emphasis on the perspectives and experiences of the White population [19, 20]. Public health interventions that focus on the Black African population may not be adequate to ensure that targets are met, hence much can be learnt from under-represented minorities. Findings from an under-studied group can reveal insights into cultural considerations that promote healthy lifestyles and inform better decision making. Consequently, the findings of this study open a platform for new insights into research, which could influence policy and interventions that focus on reduction of unmet need of contraception and unplanned pregnancies which could support the achievement of targets of the Sustainable Development Goals (SDG), specifically goals 3 and 5, which are geared towards good health and well-being and gender equality.

There were limitations in the study. Firstly, this study focused on a relatively small sample of female university students and does not fully capture the experiences of women in diverse settings. The findings, therefore, cannot be generalised to the wider South African female population or that of the entire university population. The purpose of the study was to document the experiences of a minority group and gain information to derive at undocumented and unique narratives. Despite this limitation, this study has implications for policy initiatives and programmes. The findings provide a reference point to understand the factors facilitating and inhibiting contraceptive use among young women and student populations in South Africa and possibly in other developing countries with a similar context as that of the study area.

Due to the small sample size and the selection bias in this research, it is recommended that future studies focus on a wider range of women from varying backgrounds, geographic locations, and population groups to explore the factors facilitating and inhibiting contraceptive use in-depth. Further, our study findings indicate that health providers are important gatekeepers influencing the use of contraceptives in reproductive health, therefore we recommend that more research should focus on investigating the influence of healthcare providers on contraceptive choice among young South Africa women who are predisposed to use these services. The perceived benefits of contraceptive use highlights the importance of ensuring that contraceptives are accessible to all young women that require it. Based on this study, recommendations can be formulated for action to achieve contraceptive availability and accessibility to address the unmet need for contraception in South Africa. It is recommended that contraceptive counselling be provided to all females who are considering initiation of a contraceptive method so that they can make informed decisions about use. In line with this, healthcare providers need to be equipped with adequate knowledge and training on different contraceptive methods as well as how to advise clients further according to their specific needs. The results from this study also show the importance of communication between parents, partners and peers hence, promotion of communication about contraception should be enhanced. This could influence contraceptive use among sexually active females. The inclusion of the male-partners in decision-making, communication and contraceptive use needs to be encouraged.

There is a need for contraceptive use policy and clinical guidelines to be continually revised and considerably strengthened using innovative and creative means in order to direct greater focus towards addressing emerging disparities of contraceptive use among different population groups. Further research is needed to fully capture diverse groups and their experiences of modern contraceptive use to add to the existing body of knowledge and to further fill the gaps in this study.

5. Conclusion

Levels of contraceptive use in South Africa are steadily rising although there is still low uptake of modern methods. This study identified key factors such as dual-protection against pregnancy and sexually transmitted infections and the fear of side effects that facilitate and inhibit contraceptive use among White female students. This study further highlights the role of interpersonal relationships between young women and their parents, partners and health care providers and how this affects contraceptive use. The findings of this study show that communication between White female students and parents, specifically mothers, partners and health care providers with regard to contraceptive use is associated with higher levels of awareness and uptake. Communication with parents and sexual partners should be actively encouraged as this will increase levels of awareness and reduce the risks of unprotected sex among young people. Communication about contraception may potentially encourage positive reproductive health outcomes for young people. Further, the reliance on pharmacies as supply points of contraceptives should be explored deeper in order to increase access and aid in reducing the unmet need.

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References

- Ahissou, N.C.A.; Benova, L.; Delvaux, T.; Gryseels, C.; Dossou, J.P.; Goufodji, S.; Kanhonou, L.; Boyi, C.; Vigan, A.; Peeters, K.; Sato, M. Modern contraceptive use among adolescent girls and young women in Benin: a mixed-methods study. *BMJ Open* 2022, *12*(1), e054188.
- Gbagbo, F.Y.; Nkrumah, J. Family planning among undergraduate university students: a CASE study of a public university in Ghana. *BMC Women's Health* 2019, *19*(1), 1-9.
- Simegn, A.; Tiruneh, D.; Seid, T.; Ayalew, F. Contraceptive Demand, Utilization and Associated Factors Among University Female Students in Amhara Region, Ethiopia: Institution-Based Cross-Sectional Study. *Open Access Journal of Contraception* 2020, *11*, 157-165.
- Sweya, M.N.; Msuya, S.E.; Mahande, M.J.; Manongi, R. Contraceptive knowledge, sexual behavior, and factors associated with contraceptive use among female undergraduate university students in Kilimanjaro region in Tanzania. *Adolescent Health, Medicine and Therapeutics* 2016, *7*, 109.
- Alkema, L.; Kantorova, V.; Menozzi, C.; Biddlecom, A. National, regional, and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: a systematic and comprehensive analysis. *The Lancet* 2013, *381*(9878), 1642-1652.
- Family Planning. Available online: <https://www.familyplanning2020.org/south-africa> (accessed 14 October 2020).
- World Health Organization (WHO). Available online: <https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception> on 21-10-2020 (accessed 14 October 2020).
- Kantorová, V. Unintended pregnancy and abortion: what does it tell us about reproductive health and autonomy? *Lancet Global Health* 2020, *1*(9), e1106-1107.
- National Department of Health (NDoH); Statistics South Africa; South African Medical Research Council (SAMRC); ICF. *South Africa Demographic and Health Survey 2016*; NDoH, Stats SA, SAMRC, ICF: Pretoria, South Africa, and Rockville, Maryland, USA, 2019.
- Swartz, L. Fertility transition in South Africa and its implications on the four major population groups. *ASDF* 2009, 487.
- Statistics South Africa. *Census 2011: Fertility in South Africa*, Report No. 03-01-63; Statistics South Africa: Pretoria, South Africa, 2015.
- Statistics South Africa. *Unwanted fertility in South Africa*, Report: 03-00-02; Statistics South Africa: Pretoria: South Africa, 2020.
- Adeniyi, O.V.; Ajayi, A.I.; Moyaki, M.G.; Ter Goon, D.; Avramovic, G.; Lambert, J. High rate of unplanned pregnancy in the context of integrated family planning and HIV care services in South Africa. *BMC Health Services Research* 2018, *18*(1), 1-8.
- Chersich, M.F.; Wabiri, N.; Risher, K.; Shisana, O.; Celentano, D.; Rehle, T.; Evans, M.; Rees, H. Contraception coverage and methods used among women in South Africa: A national household survey. *South African Medical Journal* 2017, *107*(4), 307-314.
- Avert. Available online: <https://www.avert.org/printpdf/node/404> (accessed 14 October 2020).
- Darteh, E.K.; Dickson, K.S.; Doku, D.T. Women's reproductive health decision-making: A multi-country analysis of demographic and health surveys in sub-Saharan Africa. *PloS One* 2019, *14*(1), e0209985.
- United States Agency for International Development (USAID). *Family planning in the Sustainable Development Goals*; United States Agency for International Development: Washington, DC, United States, 2015.
- Cherie, A.; Berhane, Y. Oral and anal sex practices among high school youth in Addis Ababa, Ethiopia. *BMC Public Health* 2012, *12* (1), 1-9.
- Haffejee, F.; O'Connor, L.; Govender, N.; Reddy, P.; Sibiyi, M.N.; Ghuman, S.; Ngxongo, T.; Borg, D. Factors associated with unintended pregnancy among women attending a public health facility in KwaZulu-Natal, South Africa. *South African Family Practice* 2018, *60*(3), 1-5.
- Oluwole, E.O.; Skaal, L. Contraceptive practices among women seeking termination of pregnancy in one public hospital in Eastern Cape, South Africa. *African Journal of Primary Health Care & Family Medicine* 2016, *8*(1): 1-6.

21. Peer, N.; Morojele, N.; London, L. Factors associated with contraceptive use in a rural area in Western Cape Province. *South African Medical Journal* 2013, 103(6), 406-412.
22. Beksinska, M.E.; Smit, J.A.; Mantell, J.E. Progress and challenges to male and female condom use in South Africa. *Sexual Health* 2012, 9(1), 51-58.
23. Jacobstein, R.; Curtis, C.; Spieler, J.; Radloff, S. Meeting the need for modern contraception: effective solutions to a pressing global challenge. *International Journal of Gynaecology Obstetrics* 2013, 121, S9-S15.
24. Hafner, K.A.; Mayer-Foulkes, D. Fertility, economic growth, and human development causal determinants of the developed lifestyle. *Journal of Macroeconomics* 2013, 38, 107-120.
25. Götmark, F.; Andersson, M. Human fertility in relation to education, economy, religion, contraception, and family planning programs. *BMC Public Health* 2020, 20(1), 1-17.
26. Biney, E.; Amoateng, A.; Ewemoje, O. Patterns of fertility in contemporary South Africa: Prevalence and associated factors. *Cogent Social Sciences* 2021, 7(1), p.1858575.
27. Gresh, A.; Maharaj, P. Termination of pregnancy: perspectives of female students in Durban, South Africa. *Etude de Population Africaine/ African Population Studies* 2014, 28, 681-690.
28. Statistics South Africa. *Mid-year population estimates*; Statistics South Africa: Pretoria, South Africa, 2019.
29. Statistics South Africa and South African Department of Health. *South Africa Demographic and Health Survey 2016: Key Indicators Report*; Statistics South Africa: Pretoria, South Africa, 2017
30. Eaton, L.; Flisher, A.J.; Aarø L.E. Unsafe sexual behaviour in South African youth. *Social Science & Medicine* 2003, 56, 149-165.
31. United Nations Development Programme (UNDP). *United Nations Development Program Annual Report 2004: Mobilizing Global Partnership*; UNDP: New York City, United States. 2004
32. Hoque, M.E.; Ntsipe, T.; Mokgatle-Nthabu, M. Awareness and practices of contraceptive use among university students in Botswana. *SAHARA-J: Journal of Social Aspects of HIV/AIDS* 2013, 10(2), 83-88.
33. Lince-Deroche, N.; Pleaner, M.; Morroni, C.; Mullick, S.; Firnhaber, C.; Harries, J.; Sinanovic, E.; Mulongo, M.; Holele, P. Achieving universal access to sexual and reproductive health services: the potential and pitfalls for contraceptive services in South Africa. *South African Health Review* 2016, 2016(1), 95-108.
34. Harries, J.; Constant, D.; Wright, V.; Morroni, C.; Müller, A.; Colvin, C.J. A multidimensional approach to inform family planning needs, preferences and behaviours amongst women in South Africa through body mapping. *Reproductive Health* 2019, 16(1), 1-11.
35. Campbell, O.M.; Benova, L.; Macleod, D.; Goodman, C.; Footman, K.; Pereira, A.L.; Lynch, C.A. Who, What, Where: an analysis of private sector family planning provision in 57 low-and middle-income countries. *Tropical Medicine & International Health* 2015, 20(12), 1639-1656.
36. Statistics South Africa. *Use of health facilities and levels of selected health conditions in South Africa: Findings from the General Household Survey, 2011*; Statistics South Africa: Pretoria, South Africa, 2013.
37. Khurana, A.; Bleakley, A. Young adults' sources of contraceptive information: variations based on demographic characteristics and sexual risk behaviors. *Contraception* 2015, 91, 157-163.
38. Holt, K.; Lince, N.; Hargey, A.; Struthers, H.; Nkala, B.; McIntyre, J.; Gray, G.; Mnyani, C.; Blanchard, K. Assessment of service availability and health care workers' opinions about young women's sexual and reproductive health in Soweto, South Africa. *African Journal of Reproductive Health* 2012, 16(2), 283-294.
39. Wood, K.; Jewkes, R. Blood blockages and scolding nurses: barriers to adolescent contraceptive use in South Africa. *Reproductive Health Matters* 2006, 14, 109-118.
40. Alege, S.G.; Matovu, J.K.; Ssensalire, S.; Nabweya, E. Knowledge, sources and use of family planning methods among women aged 15-49 years in Uganda: a cross-sectional study. *The Pan African Medical Journal*, 2016, 24, 39.
41. Howard, N.; Kollie, S.; Souare, Y.; Von Roenne, A.; Blankhart, D.; Newey, C.; Chen, M.I.; Borchert, M. Reproductive health services for refugees by refugees in Guinea I: family planning. *Conflict and Health* 2008, 2(1), 1-10.
42. Mkhwanazi, N. Understanding teenage pregnancy in a post-apartheid South African township. *Culture, Health and Sexuality* 2010, 12, 347-358.
43. Mjwara, N.; Maharaj, P. Becoming a mother: perspectives and experiences of young women in a South African Township. *Culture, Health and Sexuality* 2018, 20, 129-140.
44. Colleran, H.; Mace, R. Social network-and community-level influences on contraceptive use: evidence from rural Poland. *Proceedings of the Royal Society B: Biological Sciences* 2015, 282, 20150398.
45. Prata, N.; Bell, S.; Fraser, A.; Carvalho, A.; Neves, I.; Nieto-Andrade, B. Partner support for family planning and modern contraceptive use in Luanda, Angola. *African Journal of Reproductive Health* 2017, 21(2), 35-48.
46. Mantell, J.E.; Needham, S.L.; Smit, J.A.; Hoffman, S.; Cebekhulu, Q.; Adams-Skinner, J.; Exner, T.M.; Mabude, Z.; Beksinska, M.; Stein, Z.A.; Milford, C. Gender norms in South Africa: implications for HIV and pregnancy prevention among African and Indian women students at a South African tertiary institution. *Culture, Health & Sexuality* 2009, 11(2), 139-157.
47. Wood, H.J. Gender inequality: The problem of harmful, patriarchal, traditional and cultural gender practices in the church. *HTS Theological Studies* 2019, 75(1), 1-8.

48. Chola, L.; McGee, S.; Tugendhaft, A.; Buchmann, E.; Hofman, K. Scaling up family planning to reduce maternal and child mortality: the potential costs and benefits of modern contraceptive use in South Africa. *PLoS One* 2015, *10*(6), e0130077.
49. Jones, R.K. *Beyond birth control: the overlooked benefits of oral contraceptive pills*; Alan Guttmacher Institute: New York City, United States, 2011.
50. Hooper, D.J. Attitudes, awareness, compliance and preferences among hormonal contraception users. *Clinical Drug Investigation* 2010, *30*, 749-763.
51. Chebet, J.J.; McMahon, S.A.; Greenspan, J.A.; Mosha, I.H.; Callaghan-Koru, J.A.; Killewo, J.; Baqui, A.H.; and Winch, P.J. Every method seems to have its problems Perspectives on side effects of hormonal contraceptives in Morogoro Region, Tanzania. *BMC Women's Health* 2015, *15*(1), 1-12.
52. Naidoo, H. Factors Affecting Contraceptive use Among Young People in KwaZulu-Natal. Doctoral dissertation, University of KwaZulu-Natal, South Africa, 2005.