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RESEARCH ARTICLE

Professional Nurses' Perceptions of Providing Contraceptives to Adolescents at Primary Healthcare Facilities in Lesotho

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Abstract:

Background:

High adolescent pregnancy rates are evident in most countries, especially low- and middle-income countries like Lesotho, where contraceptive services are available at public facilities at no cost, yet adolescents still have a significant unmet need for contraception. In Lesotho, professional nurses are at the forefront of primary healthcare, including the provision of contraceptive services.

Objectives:

The objective of this study is to explore and describe professional nurses' perceptions of providing contraceptives to adolescents at Primary Health Care facilities in Lesotho.

Methods:

A qualitative research strategy with exploratory and descriptive approaches was used. Purposive sampling of four primary healthcare facilities and an all-inclusive sampling of professional nurses employed at these primary healthcare facilities in the Mafeteng district of Lesotho were employed. Semi-structured open-ended interviews were done with 12 participants using an interview schedule. Data were analysed using qualitative content analysis.

Results:

Six categories with their respective themes emerged. The categories included: perceptions of contraception use, perceptions of consulting adolescents at primary healthcare facilities, perceptions of adolescent pregnancy, advice to adolescents using contraception, challenges to effective service provision, and improvement of service provision.

Conclusion:

Professional nurses were aware of the adolescents' unmet need for contraception and their hesitancy when seeking contraceptive services. However, professional nurses support and encourage contraception use during adolescence because the early onset of sexual activity and adolescent pregnancy cannot be denied. Professional Nurses are faced with challenges in the Primary Health Care facility that have hindered their service provision, which needs to be addressed to improve service provision.

Keywords: Adolescents, Adolescent pregnancy, Contraceptives, Primary healthcare, Professional nurses, Lesotho.

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1. INTRODUCTION

Adolescents account for a sixth of the entire global population, with around 90 percent living in low- and middle-income countries [1], many of them in families that are unemployed and in poverty [2]. Of these, approximately 20 percent live in sub-saharan Africa (SSA), and these numbers are still rising [3], with almost half of the population being below 15 years of age [4]. Despite their early sexual onset, most adolescents continue to engage in unsafe sexual activities [5]. They are vulnerable and prone to unintended pregnancies, which continue to rise due to a possible lack of information about contraceptives and hesitancy to use them [6, 7]. Adolescents who become pregnant often opt for unsafe abortions, the number of which is estimated to be close to 4 million annually worldwide [8]. Adolescent pregnancy is

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usually used to describe pregnancy that occurs between the ages of 10 and 19 years [9]. It is more prevalent in rural regions than urban areas and mostly perpetuated by poverty, low education levels, and unemployment [10, 11] because people from rural areas are less likely to use contraception [12]. Although adolescent pregnancy has been a cause for concern worldwide since the 1970s [13], it is especially so in low- and middle-income countries where over 12 million births to adolescent girls aged between 15 and 19 years were reported by the World Health Organisation (WHO) in 2018 – eight times higher than those reported in high-income countries [14].

Adolescent pregnancy is usually unwanted, requiring specialised care, but often accompanied by delayed or poor attendance of antenatal clinics [15] despite the dire need for attentive health care. Antenatal care is especially warranted because adolescents' bodies are still developing and too immature for pregnancy [16]; as a result, complications may arise. In addition, pregnancy- and childbirth-related complications and unsafe abortions are estimated as the primary causes of morbidity and mortality in adolescent girls [17, 18]. These complications include hypertensive pregnancy disorders, anaemia, gestational diabetes, co-morbidities, low birth weight, premature or difficult childbirth, infant respiratory diseases, and infant mortality [19].

The high rates of adolescent pregnancy and childbirths in SSA, including Lesotho, have led to a rapid increase and comparably young population, further burdening the economy and contributing to unending poverty [20]. Adolescent pregnancy and childbirth affect the young mother's transition into adulthood and disrupt her education, thereby threatening her future [21]. Some lifestyle choices can be detrimental when faced with different temptations and the experimentation phase that comes with the adolescent stage. For instance, alcohol intake increases the chances of falling pregnant as it lessens self-control, which may result in unsafe sexual practices [22]. Additionally, a study in Uganda further outlined other factors that may contribute to the rise in adolescent pregnancy, such as unsafe sexual practices, peer pressure, child marriages, low level of education, lack of support from family, financial constraints, and the unmet need for contraception [23].

Some of the prevention approaches that several countries around the globe have undertaken include health education initiatives, skills-building exercises, and expanding easier access to contraceptive services [24]. The WHO (2011) guidelines state that prevention of adolescent pregnancies can be achieved through improved accessibility of contraceptives, promotion of education on adolescent pregnancy prevention, and prevention of child marriages and coerced sexual activity [25]. According to the literature, contraceptives are effective against pregnancy and childbirth, even among adolescents [26], thus avoiding consequences that may follow [27]. Unlike low- and middle-income countries, higher-income countries like the Netherlands and Scandinavia have high rates of modern contraception use, such as hormonal contraceptives [28]. However, there is still an unmet need for contraception in Africa as it accounts for the highest adolescent pregnancy rates [29]. The reasons behind the high adolescent fertility rates in SSA include insufficient knowledge regarding sexual reproductive health (SRH), poor or inaccessible contraceptive services, gender inequality (which leads to coerced sexual activity), and cultural beliefs which allow adolescent marriages [30].

Moreover, adolescents require confidential healthcare services because of the embarrassment of seeking services, which is further worsened by the fear of healthcare providers' attitudes [31]. The lack of adolescent-friendly services is a major contributing factor to adolescents' unsatisfactory use of contraception [32]. There are various kinds of contraceptives available, such as hormonal (pills, implants, injectables, patches), intrauterine devices, vaginal rings, condoms (the only method that protects against sexually transmitted infections [STIs] and Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome [HIV/AIDS]), emergency contraception, and more traditional methods such as lactational amenorrhoea and coitus interruptus [33]. Of all these methods, African women and girls have shown a preference for condoms, pills, and implants [34].

With a total population of over 2 million, adolescents make up about a quarter of Lesotho's population, with three-quarters of them situated in the rural areas of the country [35]. Like other low- and middle-income countries, adolescent pregnancy is significantly higher, as almost 80% of sexually active adolescent girls between the ages of 15 and 19 reported non-use of contraception [36]. The Coronavirus-2019 (COVID-19) pandemic further worsened the situation as adolescent girls from as young as 13 years of age made up 90% of the childbirths at one of Lesotho's hospitals in 2021 [37]. Due to cultural practices, child marriages are very common, especially in the rural parts of the country, perpetuated by poverty and unintended pregnancies [38]. Most communities in the country regard pregnancy outside of marriage as unwelcome [39]. This contributes to the high rates of unsafe abortions that have become the main reason women and girls are admitted to hospitals all over the country [40]. In Lesotho, 280 000 women were on some form of modern contraception in 2021, the most utilised methods being pills, injectables, and condoms [41]. However, adolescents have hesitated to seek contraceptive services at primary healthcare (PHC) facilities because of their unpleasant experiences with professional nurses (PNs). According to the literature, the healthcare providers' negative attitudes when dealing with adolescents discourage the latter from seeking contraceptive services [42], also resulting in high discontinuation rates.

2. MATERIALS AND METHODS

2.1. Design

A qualitative research strategy was followed with exploratory and descriptive approaches [43].

2.2. Population and Sampling

The population included four (N=7, n=4) public PHC facilities in the Mafeteng district, Lesotho, purposively sampled because they were in the nearest proximity to schools. All-inclusive sampling was conducted on PNs willing to participate in the study. Twelve (N=22, n=12) PNs were

willing to participate in the study, resulting in a 55% response rate. Data saturation was reached.

2.3. Data Collection

During 2021, data collection commenced in four public PHC facilities in the Mafeteng district, Lesotho. Data were collected using semi-structured open-ended individual interviews aided by an interview schedule. The interviews were audio-recorded, and short observational notes were taken. The interviews lasted approximately 45 minutes or shorter, and all the participants opted to be interviewed in Sesotho. The questions that guided the interviews were as follows: (1) Generally, what are your views about the use of contraceptives? (2) What are your views on unintended pregnancy and the use of contraceptives during adolescence? (3) How do you feel about the provision of contraceptive services to adolescents? Please elaborate. (4) Throughout your experience as a PN, what kind of treatment have you observed regarding the provision of contraceptives to adolescents by other PNs? (5) As a PN, what are some of your own experiences with adolescents who have presented at the PHC facility for contraception services? Please elaborate. (6) What concerns or complaints from adolescents have you come across as they come to the PHC facility for contraception services? (7) What advice do you usually give adolescents about the use of contraception? (8) Do you think your PHC facility is supportive of adolescents using contraception? Please elaborate. (9) In your opinion, what could your PHC facility do to improve the use of contraception by adolescents?

2.4. Data Analysis

Qualitative content analysis steps were used, described as follows: Step 1: familiarising self with the data and the hermeneutic spiral; Step 2: dividing up the text into meaning units and condensing meaning units; Step 3: formulating codes; and Step 4: developing categories and themes. After the completion of data analysis, a consensus discussion was held with the co-coder to ensure that the categories and themes that emerged during the semi-structured open-ended interviews were a true reflection of the data [44].

2.5. Measures to Ensure Trustworthiness

Data is considered trustworthy only if it is credible, consistent, applicable, and neutral [45]. The study conformed to these principles by developing trusting relationships with participants before the interview sessions, verifying findings by use of a transcriber and co-coder, and describing the study design and method in depth.

2.6. Ethical Considerations

The study was granted approval with ethics number (NWU-00360-20-A1). Throughout the study, the following principles were maintained: beneficence and non-maleficence by ensuring the protection of participants from unjustifiable harm, whether physical, emotional, or psychological; distributive justice by treating participants in an equal and fair manner; respect for persons by protecting the participants' dignity and autonomy (informed consent form which was voluntary signed before data collection); anonymity and confidentiality through the use of codes instead of participants' names, and signed confidentiality agreements [46, 43].

3. RESULTS

The study's population was made up entirely of Basotho (100%) people, with Sesotho as their mother tongue. Most of them were women (n=8; 67%), and the rest were men (n=4; 33%). Over half of the participants (75%) were aged 30 years and above, while the rest were below the age of 30 (25%). Ninety-two percent (n=11; 92%) had work experience over one year, and n=1; 8% had one year or less of work experience.

From the results of the study, six categories with their respective themes emerged (Table **1**). The participants' quotes are represented by their participant number, age, and years of nursing work experience, respectively.

Table 1. Categories and themes of PNs' perceptions of providing contraceptives to adolescents at PHC facilities.

Categories	Themes
1. Perceptions of contraception use	1.1 Beneficial in family planning
	1.2 Contraception is important in preventing unplanned pregnancies
	1.3 Alleviates poverty
	1.4 Gives body time to heal between childbirths
	1.5 Physiological changes, including a disruption in the menstrual cycle
	1.6 Lack of seeking contraception
2. Perceptions of consulting adolescents at PHC facilities	2.1 Adolescents seek voluntary services
	2.2 Adolescents prefer younger-generation PNs
	2.3 Adolescents prefer intramuscular contraceptive methods
	2.4 Adolescents prefer after-hour consultations
3. Perceptions of adolescent pregnancy	3.1 Impose mental and emotional burden on adolescent's family
	3.2 Consequences of unplanned adolescent pregnancy
	3.3 Complications during pregnancy and childbirth
	3.4 Increased adolescent pregnancy during the COVID-19 pandemic
	3.5 Socio-economic implications to adolescents
	3.6 Fear of abortion complications among adolescents

(Table 1) contd.....

Categories	Themes
4. Advice to adolescents using contraception	4.1 Encourage dual methods to prevent pregnancy, HIV/AIDS and STIs
	4.2 Encourage contraception services among one another
	4.3 Proper use, side-effects and misconceptions of contraceptives
	4.4 Encourage long-term contraceptive methods
5. Challenges to effective service provision	5.1 Fear of judgment by PNs
	5.2 Absence of adolescent consulting rooms
	5.3 PNs impose their beliefs on adolescents
	5.4 Cultural barriers
	5.5 Misconceptions
	5.6 Lack of staff and physical resources
	5.7 Lack of contraception services during the COVID-19 pandemic
	5.8 Impolite older generation PNs
6. Improvement of service provision	6.1 Supportive, cooperative, and welcoming PNs
	6.2 Encourage contraception provision and use amongst adolescent friends
	6.3 Recruitment of additional staff and consultation hours
	6.4 Establish adolescent support groups and outreach programmes
	6.5 PNs should adopt a non-judgemental attitude
	6.6 Supportive parents

3.1. Category 1: Perceptions of Contraceptive Use

Six themes cited by the respondents included: beneficial in family planning, contraception is important in preventing unplanned pregnancies, alleviates poverty, gives the body time to heal between child births, physiological changes including a disruption in the menstrual cycle, and lack of seeking contraception.

3.1.1. Theme 1.1: Beneficial in Family Planning

Most respondents perceived contraception as beneficial to family planning, meaning that it controls the childbearing process through the prevention of pregnancy and assists individuals in achieving their desired number and spacing of children.

"It is especially so on females as it helps them manage their childbearing rate also considering the state of the economy… it all depends on the number of children" (Participant 1, 37, 9 years of experience).

*"Personally, I think it is very important considering we have a lot of women who benefit from it, especially during family planning" (*Participant 2, 32, 7 years of experience).

"In general… I think contraceptives assist mothers to manage the gap between childbirths" (Participant 4, 30, 4 years of experience).

3.1.2. Theme 1.2: Contraception is Important in Preventing Unplanned Pregnancies

The main reason for contraception use is pregnancy prevention. As such, the second theme, as stated by the PNs, is its importance not only for preventing pregnancy but also for its role in the prevention of STIs and HIV/AIDS.

"Okay, I love contraceptives, and I would encourage others to use them because they help prevent unplanned pregnancy" (Participant 5, 40, 14 years of experience).

"I feel that… I think it is very important and will help prevent adolescent unplanned pregnancy" (Participant 8, 33, 7 years of experience).

3.1.3. Theme 1.3: Alleviates Poverty

Unplanned pregnancy, especially during adolescence, comes with unforeseen financial constraints, which enhance poverty. By using contraception and preventing unplanned pregnancies, poverty can be alleviated.

"Contraceptives are some of the essential services in the health sector as they help alleviate poverty (Participant 1, 37, 9 years of experience).

3.1.4. Theme 1.4: Gives Body time to Heal Between Childbirths

The process of pregnancy and childbirth is a strenuous ordeal that takes a toll on the body, and the use of contraception affords enough time between pregnancies to allow the body to recover.

"In general… I think contraceptives assist mothers to manage the gap between childbirths, and that gives them time for their bodies to heal" (Participant 4, 30, 4 years of experience).

3.1.5. Theme 1.5: Physiological Changes, Including a Disruption in the Menstrual Cycle

Despite their benefits, contraceptives come with some side effects, and sometimes that can be discouraging to those interested in their use. Among all the negative effects, the respondents mentioned the disruption of the menstrual cycle as a common complaint by adolescents.

"Not really… Their only concern is that those contraceptives stop their menstruation cycle; they are worried of the damage it may cause" (Participant 1, 37, 9 years of experience).

"Sometimes they complain that the use of contraceptives

interferes with their menstrual cycle, so they believe that could be dangerous to their bodies" (Participant 6, 36, 14 years of experience).

3.1.6. Theme 1.6: Lack of Seeking Contraception

Despite the availability of a variety of contraceptive methods at no cost at public PHC facilities, the respondents stated that most adolescents still do not come for these services.

"Again, you will notice that the very same adolescents do not fully comprehend the consequences of not using contraceptives. They only realise once they have fallen pregnant" (Participant 1, 37, 9 years of experience).

"The only probable reason for all of this to be happening is the lack of knowledge for some of them, and maybe fear that prohibits them from seeking contraception services or maybe discouragement from their friends who are not on them… There are still more adolescent pregnancies than adolescents who come for contraception" (Participant 11, 26, 1 year of experience).

3.2. Category 2: Perceptions of Consulting Adolescents at PHC Facilities

In this category, four themes emerged from the data, namely: adolescents seek voluntary services, adolescents prefer younger generation PNs, adolescents prefer intramuscular contraceptive methods, and adolescents prefer after-hour consultations.

3.2.1. Theme 2.1: Adolescents Seek Voluntary Services

Most of the respondents stated that although some adolescents are brought by their parents for contraceptive services, they must come of their own volition without parental accompaniment.

"They [adolescents] come voluntarily. Very few are brought by parents" (Participant 9, 30, 6 years of experience).

"Most times the [adolescents] come voluntarily, alone or they come with their friends" (Participant 11, 26, 1 year of experience).

"Most of those who come voluntarily are adolescents who have had a child before" (Participant 12, 34, 11 years of experience).

3.2.2. Theme 2.2: Adolescents Prefer Younger Generation PNs

Adolescents are more likely to be free and open around service providers who are around their age as opposed to those much older than them. The participants have identified that adolescents have shown a preference for service provision from a younger generation of PNs.

"I think they prefer a younger looking nurse. If not, they prefer one who seems to be flexible. I think they are okay if the person is not that young but is flexible and accommodating" (Participant 2, 32, 7 years of experience).

"They prefer younger looking nurses. Probably because they believe they will understand them better" (Participant 6, 36, 14 years of experience).

"They prefer younger nurses. They are the ones they are most comfortable with" (Participant 9, 30, 6 years of experience).

3.2.3. Theme 2.3: Adolescents Prefer Intramuscular Contraceptive Methods

Contraceptives can be administered in different ways, including intramuscular injectables, which may be given at intervals of two to three months, depending on the type of injection. The injectable that appeared several times, as stated by the PNs, is Nur-Istrate, a progestin-only injection that lasts for two months.

"We usually give the adolescents Nur-Istrate. It is also their favourite since they believe it is mainly for students" (Participant 5, 40, 5 years of experience).

"Most of them prefer the two-month injection, and we also recommend it because their concern with the pill is that they tend to forget it, so we encourage that they take Nur-Istrate" (Participant 7, 27, 3 years of experience).

"They mostly prefer the two-month injection, so the side effects vary from one person to the next" (Participant 8, 33, 7 years of experience).

3.2.4. Theme 2.4: Adolescents Prefer After-hour Consultations

Most services at the PHC facilities, including contraceptive services, are only available during regular working hours. However, adolescents have shown preference and may benefit from after-hour consultations based on the PNs' statements.

"Hesitantly, yes. But they do come because some of them prefer not to come during working hours; they make arrangements with the nurses to consult after working hours when all the other patients have left. That's when they usually come" (Participant 2, 32, 7 years of experience).

"I think another thing is that we really consider increasing working hours because sometimes they are at school during our working hours, so the little chance they get, we have to accommodate them even after working hours" (Participant 3, 28, 5 years of experience).

3.3. Category 3: Perceptions of Adolescent Pregnancy

This category included the following themes: imposing mental and emotional burdens on adolescents' families, consequences of unplanned adolescent pregnancy, complications during pregnancy and childbirth, increased adolescent pregnancy during the COVID-19 pandemic, socio-economic implications to adolescents, and fear of abortion complications among adolescents.

3.3.1. Theme 3.1: Impose Mental and Emotional Burden on Adolescent's Family

Since adolescents are still children themselves and still reliant on their families for survival, adolescent pregnancy also affects the wellbeing of the family.

"Unplanned pregnancy causes strain on families because these adolescents have babies with no plan whatsoever. They are young, unemployed, and they are still kids themselves and under the care of their parents" (Participant 5, 40, 14 years of experience).

"Because then they would have to leave school to become mothers. That also burdens the parents because if they decide to take the adolescent back to school, they would have to take care of the adolescent's baby and ensure all the baby's needs are met" (Participant 6, 36, 14 years of experience).

"Some of these adolescents come from destitute families, and they become a huge burden when they fall pregnant at that young age" (Participant 8, 33, 7 years of experience).

3.3.2. Theme 3.2: Consequences of Unplanned Adolescent Pregnancy

Adolescents' dreams and plans for the future become derailed by falling pregnant without intention, which leads to a bleak future.

"Unplanned pregnancy has a lot of negative consequences such as premature birth due to maybe the mothers' complications; it could be hunger and poverty etc." (Participant 11, 26, 1 year of experience).

"It jeopardises the adolescents' future. They become frustrated and are unable to fulfill all their plans because they don't know how they will take care of the baby" (Participant 9, 30, 6 years of experience).

3.3.3. Theme 3.3: Complications during Pregnancy and Childbirth

Due to their immature bodies, among other things, the respondents indicated that adolescents tend to experience complications during pregnancy or childbirth, which sometimes leads to a Caesarean section.

"Sometimes for such children, it becomes a struggle having to deliver a baby" (Participant 2, 32, 7 years of experience).

"I think there is one lady who is around 14 years of age; she used to come here for the antenatal clinic but had to be transferred to another hospital for her C-section" (Participant 3, 28, 5 years of experience).

"They become single mothers who can't even take care of their children properly. Again, adolescent pregnancy causes complications during birth because maybe their bodies haven't fully developed and are not strong enough to withstand childbirth" (Participant 4, 30, 4 years of experience).

3.3.4. Theme 3.4: Increased Adolescent Pregnancy during the COVID-19 Pandemic

As schools and other activities were shut down during the COVID-19 pandemic, adolescents engaged in unprotected sexual activity at a higher rate, as evidenced by the reported alarming rise in adolescent pregnancies.

"Lately, I think since this COVID-19 pandemic, we are experiencing a huge increase in the number of pregnancies below the age of 18 who are still students. It is indeed a challenge" (Participant 4, 30, 4 years of experience).

"Their [pregnant adolescents] *numbers keep increasing. They came in large numbers since schools closed due to COVID-19"* (Participant 9, 30, 6 years of experience).

3.3.5. Theme 3.5: Socio-economic Implications to Adolescents

The respondents also indicated that unplanned adolescent pregnancies enhance financial difficulties because the adolescents' livelihoods are already dependent on their families as they are likely to leave school and are then unable to provide for and sustain a baby.

"I think unplanned adolescent pregnancy is harmful to the adolescents because, for instance, when an adolescent falls pregnant, they end up as school dropouts which then jeopardises their chance at a brighter future" (Participant 8, 33, 7 years of experience).

"Most of the adolescents who are pregnant come from destitute families. Others are in child-headed families because their parents left them to seek jobs out of the country" (Participant 9, 30, 6 years of experience).

"She had a baby in December last year after she finished her Form 5... she wasn't even employed. She was going to be dependent on the parents to provide the child with basic needs" (Participant 12, 34, 11 years of experience).

3.3.6. Theme 3.6: Fear of Abortion Complications among Adolescents

Complications may arise following unsafe termination of pregnancy practices by adolescents who report at the PHC facilities and may even require care at a tertiary centre.

"I think there is somewhat a huge impact, especially because most of these adolescents perform backstreet abortions, so they come to the clinic with complications which then requires us to refer them to a hospital for higher care" (Participant 10, 40, 14 years of experience).

3.4. Category 4: Advice to Adolescents using Contraception

This category included: encouraging dual methods to prevent pregnancy, HIV/AIDS, and STIs; encouraging contraception services among one another; proper use, side-effects, and misconceptions of contraceptives; and encouraging long-term contraceptive methods.

3.4.1. Theme 4.1: Encourage Dual Methods to Prevent Pregnancy, HIV/AIDS, and STIs

Most contraceptives do not provide protection against HIV/AIDS and other STIs, which is why the use of condoms is advantageous when combined with other modes of contraception.

"I always advise the use of condoms because all the other methods, be it the pill or the injection, do not exempt them from contracting Sexually Transmitted Diseases [STIs], *HIV/AIDS included. I always encourage them to use the dual method of contraception, that whatever their choice of contraceptive, they must couple it with condoms"* (Participant 5, 40, 14 years of experience).

"We usually emphasise the fact that at the end of the day, the decision to engage in sexual activities is theirs, but we recommend that they opt for dual contraception such that they use their preferred method of contraception together with condoms so as to protect themselves against HIV/AIDS" (Participant 10, 40, 14 years of experience).

3.4.2. Theme 4.2: Encourage Contraception Services among one another

More adolescents are likely to be reached if they can encourage each other after receiving contraception services to be exemplary to their peers.

"Actually, we used to conduct school visits to teach them about contraceptives so that they learn, but when they come, they do so individually. However, we encourage them to also inform others to come and seek such services" (Participant 1, 37, 9 years of experience*).*

"I think the advice I would give or that we give to the adolescents at all times is that they should continue coming for contraception services and encourage their friends to also come and not be afraid" (Participant 11, 26, 1 year of experience).

3.4.3. Theme 4.3: Proper Use, Side-effects, and Misconceptions of Contraceptives

Retention of those initiated on contraception can be achieved if they are counselled on proper use, possible side-effects, and by ruling out any misconceptions.

"I think most of the time, adolescents who come here already have some insight when they come here. However, when they are here, we educate them on the importance and use of contraceptives, what they can expect, and how often they should come for follow-up visits" (Participant 1, 37, 9 years of experience).

"What I do is inform them on the side effects of contraceptives and what they must do should they have them" (Participant 9, 30, 6 years of experience).

"I think the most important thing is that we rule out all the misconceptions about contraceptives because most of these adolescents are on social media, and they come across a lot of wrong information, which could also discourage them" (Participant 3, 28, 5 years of experience).

3.4.4. Theme 4.4: Encourage Long-term Contraceptive Methods

With the use of long-term contraceptives, fewer follow-up visits are required, which would be ideal for adolescents.

"I think since all these others are short term, we plan on providing long term contraceptives so that they don't impact negatively especially on their education so that they don't miss school for clinic appointments (Participant 10, 40, 14 years of experience).

3.5. Category 5: Challenges to Effective Service Provision

This category elicited eight themes, which included fear of judgement by PNs, absence of adolescent consulting rooms, PNs impose their beliefs on adolescents, cultural barriers, misconceptions, lack of staff and physical resources, lack of contraception services during the COVID-19 pandemic, and impolite older-generation PNs.

3.5.1. Theme 5.1: Fear of Judgement by PNs

One of the inhibitors of adolescents seeking contraception services is the fear of the kind of reception they will get from the PNs.

"I think they are afraid of being judged. One adolescent was brought in by the parent, and on her return date when she came alone, she was very nervous and uncomfortable" (Participant 4, 30, 4 years of experience).

"Yes, they do come. They come to the clinic once they are pregnant, so I always assume it's because they are afraid of being judged" (Participant 7, 27, 3 years of experience).

3.5.2. Theme 5.2: Absence of Adolescent Consulting Rooms

Most respondents were concerned that adolescents are still hesitant to come for contraception services because of the lack of adolescent consulting rooms, where they would be served exclusively, ensuring their comfort.

"We need to have an adolescent corner which will focus solely on the provision of services for the teenagers [adolescents]. *I'm not sure if it's possible or who has the decision-making power to assist us on that, but I think it is necessary"* (Participant 3, 28, 5 years of experience).

"Apart from that, we do not have a secluded adolescent corner yet. When they come here for such services, they still queue with all the other patients. I think if we had an adolescent corner, where they are served by young nurses who understand them and their challenges, they would be more comfortable to express themselves" (Participant 4, 30, 4 years of experience).

"In this clinic, they get the same reception as everybody else because we don't have an adolescent corner. Everybody has equal access to the services, regardless of whether they are adolescents or adults. I think if we had an adolescent corner, they would be more comfortable" (Participant 7, 27, 3 years of experience).

3.5.3. Theme 5.3: PNs impose their Beliefs on Adolescents

Some of the PNs cannot remain objective regarding their own personal perspectives as they treat the adolescents, and in the process, end up imposing their own values onto the adolescents, making them uncomfortable.

"They assume that providing the adolescents with contraceptives is similar to giving them permission to engage in sexual activities, so when the adolescents come for services, the nurses are very rude and judgemental towards them. They tell them they must abstain and not be seeking contraception services" (Participant 6, 36, 14 years of experience).

"Some of them impose their religious beliefs on the adolescents who come for contraception" (Participant 8, 33, 7 years of experience).

"I wouldn't say they have a problem, but sometimes the things they say discourage adolescents from coming to the clinic… 'As young as you are, you are already engaging in sexual activities?' Such things" (Participant 9, 30, 9 years of experience).

3.5.4. Theme 5.4: Cultural Barriers

One of the challenges to overcome is the cultural barriers against the use of contraception by adolescents, as sexual activity outside of marriage is frowned upon in Basotho culture. This can even be regarded as the greatest challenge of all.

"However, sometimes they are still uneasy when they get here since from a young age, they are made to believe [cultural belief] *that only adults are eligible for contraception services"* (Participant 3, 28, 5 years of experience).

I think it's because, in our culture, contraceptives are only for adults with families, and if an adolescent initiate them, they are deemed to be somehow promiscuous. That is the biggest challenge, in my opinion" (Participant 4, 30, 4 years of experience).

"There is nothing specific except that they are reluctant to come… so reluctant, you know. I think it's the issue of culture. At the end of the day, we are Basotho" (Participant 10, 40, 14 years of experience).

3.5.5. Theme 5.5: Misconceptions

There are many misconceptions that surround contraception and its use, which can be discouraging. In the era of social media influence, it becomes difficult for adolescents to distinguish between factual information and myths or misconceptions.

"I think the most important thing is that we rule out all the misconceptions about contraceptives because most of these adolescents are on social media, and they come across a lot of wrong information, which could also discourage them" (Participant 3, 28, 5 years of experience).

"I think they still lack knowledge due to all these misconceptions about contraceptives" (Participant 5, 40, 14 years of experience).

3.5.6. Theme 5.6: Lack of Staff and Physical Resources

Due to a lack of resources, the PNs asserted that they are unable to provide ideal adolescent services. Shortages in human resources and lack of working space inhibit the service providers from retaining adolescents seeking services due to service delays.

"Another thing is that we are short-staffed, and that is a huge challenge for us... I don't know if maybe there is a way around it" (Participant 3, 28, 5 years of experience).

"And the enhancement of adolescent corners because we cannot reach all of them due to the lack of infrastructure [physical resources]" (Participant 10, 40, 14 years of experience).

"Infrastructure [physical resources] *is a bit of a challenge… we are short staffed, and I think that is actually another challenge that since we are short staffed, there are service delays because* the *one nurse who is serving the general OPD has to also serve the contraception patients too so as you can tell, there will be service delays"* (Participant 12, 34, 11 years of experience).

3.5.7. Theme 5.7: Lack of Contraception Services during the COVID-19 Pandemic

The COVID-19 pandemic further impounded on the poor rate at which adolescents attend contraception services because of the travel restrictions that were put in place. Accessibility of such services was compromised.

"Lately, there has been a huge challenge as we no longer conduct them, we no longer have workshops on adolescent issues may be because of late all the attention is focused on COVID-19" (Participant 1, 37, 9 years of experience).

"We used to have such activities, but I think they were suspended due to COVID-19 protocols; decreased movement and others have hindered us from providing education to the adolescents since schools were closed" (Participant 4, 30, 4 years of experience).

3.5.8. Theme 5.8: Impolite Older-generation PNs

Whether from personal fears or actual encounters, adolescents have shown hesitancy to be consulted by older nurses, as they possibly fear being ridiculed and shamed by them.

"They also avoid older nurses; I think due to the fear of being judged for their use of contraceptives at such a young age. I think they prefer and are comfortable around younger nurses" (Participant 8, 33, 7 years of experience).

"They sometimes complain that older nurses are rude towards them" (Participant 9, 30, 6 years of experience).

3.6. Category 6: Improvement of Service Provision

Six themes emerged from this category, namely: supportive, cooperative, and welcoming PNs; encourage contraception provision and use among adolescent friends; recruitment of additional staff and consultation hours; establish adolescent support groups and outreach programmes; PNs should adopt a non-judgemental attitude; and supportive parents.

3.6.1. Theme 6.1: Supportive, Cooperative, and Welcoming PNs

All participants were keen and expressed their support towards providing adolescents with contraception services at their facilities, as they, too, are concerned about the high rate of adolescent pregnancy within the country.

"The nurses do not have a problem, but the adolescents themselves seem to have a preference of nurses they would like to consult with. If their preferred nurse is not on duty, they would then leave, but the nurses are generally okay with providing contraception services" (Participant 2, 32, 7 years of experience).

"We are very keen to helping adolescents with such services. We do our best to educate them about contraceptives every chance we get. We also try to find out their stance on them" (Participant 5, 40, 14 years of experience).

"I'm comfortable with providing contraception services to the adolescents because, as I said, we can't deny that they are sexually active, so if they are willing, I think they should be provided with contraceptives to avoid unplanned pregnancy" (Participant 7, 27, 3 years of experience).

3.6.2. Theme 6.2: Encourage Contraception Provision and Use Among Adolescent Friends

All participants strongly encourage the provision of contraception to adolescents and their peers. They urge adolescents who show up for contraception to also recruit their friends to come for these services.

"Those who have accessed the services must also encourage others to do the same so that they also come because the services are available, and they are extremely important. They must be educated such that they understand" (Participant 1, 37, 9 years of experience).

"I think contraceptives are good for them, so I encourage all adolescents to use them" (Participant 5, 40, 14 years of experience).

"I think they should be provided with contraceptives, and they should be educated in schools. They should be provided with contraceptives without any discrimination so that they don't feel like they are being promiscuous. I think it's really good that the adolescents be provided with family planning services" (Participant 12, 34, 11 years of experience).

3.6.3. Theme 6.3: Recruitment of Additional Staff and Consultation Hours

For the improvement of adolescent services, there's a need for additional staff members and extended consultation hours because most adolescents attend school during the PHC facilities' working hours.

"We would need additional staff members" (Participant 10, 40, 14 years of experience).

"I feel it is important to have certain days designated for the adolescents to come for consultation" (Participant 5, 40, 14 years of experience).

"The top reason is usually that they are at school. It is mostly just that our working hours interfere with their school hours. We are, however, working on increasing working hours to accommodate them when they finish at school" (Participant 3, 28, 5 years of experience).

3.6.4. Theme 6.4: Establish Adolescent Support Groups and Outreach Programme

Several respondents also recommended the establishment of adolescent support groups as well as outreach/school programmes to enhance adolescent services through an educational platform.

"I think we should encourage it [contraception] *more, and we should include it, especially during school visits. It would be important to educate them because they are quite a liberated generation that can also be easily influenced"* (Participant 4, 30, 4 years of experience).

"They should be separated. Maybe, for instance, we could say every first Saturday of the month we meet with the adolescent support group to discuss issues of contraception. Those who need services will also be provided with such" (Participant 11, 26, 1 year of experience).

"I think we should... we should conduct school visits, especially to nearby high schools because clearly, the adolescents who are sexually active do not come for contraception services. I believe the school health education would play a huge role" (Participant 5, 40, 14 years of experience).

3.6.5. Theme 6.5: PNs should Adopt a Non-judgemental Attitude

Adolescents are hesitant to come for services because of the fear of judgement from PNs in particular. If they were to develop a non-judgmental attitude, more adolescents would be comfortable enough to seek contraceptive services freely.

"I think before anything else, we have to be welcoming and non-judgemental when they [adolescents] come here for services" (Participant 3, 28, 5 years of experience).

"I think we need a refresher training to remind us of our roles as nurses. To remind us of the ethical conduct and that we must always strive to do our job without any judgement of discrimination" (Participant 6, 36, 14 years of experience).

3.6.6. Theme 6.6: Supportive Parents

Educating parents on the importance of adolescent contraceptive use will enhance the retention of those who have been initiated, as they will have parental approval and encouragement.

"They are treated so well that we are even considering providing contraception education to their parents so that they also encourage them to come" (Participant 3, 28, 5 years of experience).

"We also include parents, making them aware that adolescents are also entitled to the use of contraceptives, and that contraceptives are not only for women with families" (Participant 4, 30, 4 years of experience).

4. DISCUSSION

Contraception usage is perceived by PNs as positive. Most PNs believe that despite the physiological changes that occur with contraceptives, such as disrupted menstrual cycles when using injectables, it is still beneficial in family planning to prevent unplanned pregnancies [47]. Modern contraceptives offer benefits and could aid in the reduction of adolescent pregnancy [48]. In agreement, the PNs generally viewed contraceptives as beneficial even to adolescents as they aid in child spacing and afford the mothers' bodies enough time to heal between childbirths. They also prevent unintended pregnancies [49], which may potentially alleviate poverty

because the adolescents will be able to continue their education, thus ensuring better outcomes. However, despite the availability of contraceptive services at their facilities, there is still a lack of adolescents who attend contraceptive services [50].

The PNs also voiced their perceptions on consulting adolescents at the PHC facilities. Adolescents have the right to access contraceptive services without parental or guardian permission [51]. In line with this fact, through their past experiences, the PNs noted that most adolescents that seek contraceptive services usually came voluntarily, often without their parent's knowledge or approval, which is well within their rights. Adolescents preferred contraception from the younger generation of PNs, which other authors also found; the younger healthcare providers offered contraceptive services to adolescents more easily than the older generation [52]. Based on a family planning report, condoms, implants, and hormonal contraception such as pills were the contraceptive methods mostly favoured by African women and girls [34]; however, in this study, the adolescents were said to have shown a preference for intramuscular methods over other methods. Considering that most adolescents are in school, they also seem to prefer after-hour consultations.

PNs' perceptions of adolescent pregnancy included adolescent pregnancy as a cause for concern within their communities, especially due to the rise following the COVID-19 pandemic. World Vision confirmed that adolescent pregnancy rates in SSA significantly increased during the pandemic [53]. Among the themes that emerged is the mental and emotional burden that it puts on the adolescents' families, which are already poverty-stricken and unprepared for the needs of a baby [54]. The consequences that come with an unplanned adolescent pregnancy include the disruption of the adolescent's future goals, abandoning their studies, thereby reducing their chances of employment and leading to long-term financial struggles [55]. Complications from pregnancy and childbirth at times lead to difficult birth or delivery by caesarean section. The socio-economic implications of the adolescent having to provide for the child, yet being unemployed, set forth the unending cycle of poverty. When faced with such difficulties, adolescents sometimes make a choice to terminate the pregnancy, putting themselves at risk of unsafe abortion complications. The rates of unsafe abortions escalated even more during the COVID-19 pandemic [56].

Advice the PNs give to adolescents using contraceptives includes encouragement of dual protection. When compared to other methods, the condom is the least effective form of contraception; however, it is the only method that provides protection against HIV/AIDS and STIs [57], so for the prevention of unintended pregnancies, HIV/AIDS, and STIs, the use of the dual method of contraception should be advised [58]. During the adolescent years, peer influence is significant [59]. Hearing negative statements from their friends discourages adolescents from seeking contraceptive services from PHC facilities [60], hence the notion of adolescents who have received contraception services also encouraging their peers to come for contraceptive services. When it comes to contraception and its use, adolescents have the least knowledge [61]. Therefore, the PNs are on the right track as they also reported giving counselling on the proper use and possible side effects, as well as ruling out any misconceptions that may arise. In terms of the encouragement of long-term contraceptive methods, long-acting reversible contraceptive methods such as intrauterine devices and implants are the safest and most effective forms of contraception, even for use by adolescents [62].

PNs felt that a challenge to effective service provision was that adolescents expressed dissatisfaction with the treatment they received at the PHC facilities when seeking contraceptive services [63]. This has instilled a fear of judgement from PNs, and the absence of adolescent consulting rooms resulted in the hesitation of adolescents to seek such services. Since adolescents are already uncomfortable when seeking contraceptive services, they require specific spaces or areas within the facility where they can be free to express themselves. Furthermore, based on their observations, the PNs revealed that their colleagues tended to impose their beliefs on adolescents. Some healthcare workers, which include PNs, withhold contraception services and discourage adolescents from engaging in early sexual activity.

Like some African countries, cultural barriers in Lesotho also influence adolescents' effective uptake of contraception services [64]. Proper health education on SRH should be given to adolescents to dispel any misconceptions they may have [65]. The participants also considered misconceptions, lack of staff and physical resources, and impolite older-generation PNs as additional barriers to adolescent-friendly contraceptive services. The lack of contraception services during the COVID-19 lockdowns also compounded the poor numbers of adolescents who have received contraceptives [66].

Furthermore, the PNs made recommendations for improving service provision based on the identified challenges. To achieve adolescent-friendly contraceptive services [67], they emphasised the need for supportive, cooperative, and welcoming PNs who put aside their personal beliefs that may stigmatise adolescents who require reproductive health services [68]. In addition, SRH is unlikely to be a topic of discussion between adolescents and their families due to religious and cultural barriers, and they ultimately rely on information received from their friends [69]. Therefore, the PNs encourage adolescents receiving contraceptive services to recommend these services to their peers. The PNs also expressed the need for the recruitment of additional staff and consulting rooms to ensure exclusive and effective adolescent services [70]. They suggested the extension of regular working hours; for example, working shifts to better suit adolescents' school schedules [71]. Moreover, they proposed establishing adolescent support groups and outreach programmes where they can be educated effectively about contraceptive services [72]. Among the reasons that have discouraged adolescents from seeking contraceptive services, several studies identified healthcare workers' attitudes as a contributing factor [73], and the PNs also recommended the adoption of non-judgemental attitudes by the service providers [74] and educating parents on the importance of supporting and encouraging their children regarding contraception use [75].

CONCLUSION

The study explored the PNs' perceptions of the provision of contraceptives to adolescents. Contraceptive services are provided and supported by the PHC facilities. However, reproductive services should have a specific focus on adolescents, as adolescent pregnancy is an issue of concern within the community. Contraception is effective and beneficial for the adolescent population as it will ultimately prevent unwanted pregnancies that seem to be on the rise, especially following the COVID-19 pandemic. However, concerns were raised on challenges to effective service delivery, such as staff shortages and lack of adolescent consultation rooms. PNs reiterated the advice they usually give to adolescents who present at their facilities for contraception, and there were also suggestions for service improvement, like outreach programmes and adolescent support groups that will aid in the education and recruitment of adolescents in need of contraceptive services.

AUTHORS' CONTRIBUTION

Study design: NEM, TR, VN, ADP; data collection: NEM; data analysis: NEM, TR, VN; manuscript writing: NEM, TR; critical revision of important intellectual content: NEM, TR, VN, ADP.

LIST OF ABBREVIATIONS

COVID-19	=	Coronavirus-2019
HIV/AIDS	=	Human Immunovirus/Acquired Immunodeficiency Syndrome
PHC	=	Primary healthcare
PNs	=	Professional nurse/s
SRH	=	Sexual reproductive health
SSA	=	Sub-Saharan Africa
STIs	=	Sexually transmitted infections
WHO	=	World Health Organization

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study was granted approval with ethics number (NWU-00360-20-A1), Faculty of Health Sciences, North-West University, North West Province, South Africa.

HUMAN AND ANIMAL RIGHTS

No animals were used in this research. All procedures performed in studies involving human participants were in accordance with the ethical standards of institutional and/or research committee and with the 1975 Declaration of Helsinki, as revised in 2013.

CONSENT FOR PUBLICATION

Informed consent was obtained from all participants.

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.

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CONFLICT OF INTEREST

The authors declare no conflict of interest financial or otherwise.

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