



Fertility Desires and Fertility Control:

Young Women's Contraceptive decision-making in Khayelitsha, South Africa

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Dedication

To my loving husband, Justice. Thank you for holding my hand and walking this journey with me. You have been a source of immense and constant support, encouragement and inspiration having walked this road before with flying colours. Your words of wisdom kept me going at the times I required them the most. You went to great lengths to ensure that I successfully finished this chapter of my journey. From sitting with me during those long nights, to taking me away to go and write. At times I could see from your selfless actions how much you wanted this achievement for me. Thank you for being God's expression of love towards me.

Thesis Abstract

Early fertility remains a public health concern in South Africa, with teenage pregnancy rates remaining high, and more significantly among black adolescent girls of low socioeconomic status. This indicates the unmet need of contraception for adolescent girls. Contraceptive use and non-use by young women of low socioeconomic status is a complex issue that reveals a range of political and socio-economic injustices. Barriers to contraceptive access and use have been identified to include: health care access, interaction with healthcare providers, genders norms, knowledge gaps, reproductive choices, socio-cultural attitudes and policing, intimate partner relationship dynamics, parental judgement, and side effects. To address this public health concern there has been an increase in the provision of contraceptives through the introduction of long-acting reversible contraceptive (LARC) methods. However, young women's response to LARC methods has been characterized by low and declining uptake and early removals. A tension exists between the way public health practitioners imagine meeting the contraceptive needs of young women of low-socio economic status and what it is acceptable as contraception by young women.

This mini-dissertation aims to examine young women's perceptions of long-term contraception and LARC methods; specifically, the implant and intrauterine device (IUD) contraceptive methods in how they reveal young women's fertility attitudes and how it shapes their contraceptive decision-making. This examination foregrounds the individual, interpersonal relationships and social contexts that shape sexual and reproductive choices of young women. The mini dissertation is structured in two parts: the research protocol (Part A) and a manuscript for a journal article prepared for publication (Part B). Part A explores the factors that influence young women's contraceptive decision-making at three different levels, namely: the individual level, interpersonal relationship level and social and structural context level. For the aim of further understanding young women's contraceptive decision-making, PART B focusses on examining the tensions in the acceptability and uptake of LARC methods and long-term contraception use to explain low and ineffective contraceptive use by young women, which often result in unwanted pregnancies.

The findings from this mini dissertation can add to the existing literature that examines why current contraceptive provision has been inadequate in meeting the contraceptive needs of young women of low socioeconomic status and significantly curbing early fertility. Additionally, they can provide valuable information to public health practitioners on how particular factors influence the acceptability of contraceptive methods and as well as the root causes of behaviors that result in ineffective contraceptive use resulting in early fertility. Therefore, providing clear points for public health intervention.

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PART A: PROTOCOL

Fertility Desires and Fertility Control: Young Women's Contraceptive decision-making in Khayelitsha, South Africa

This proposal aims to address a data analysis of a completed qualitative study. This proposal intends to form part of the body of work that seeks to examine the unmet need of contraception in young women that results in unwanted pregnancy by adolescent girls of low socioeconomic status in South Africa. More specifically, it intends to examine the perceptions of long-acting reversible contraceptives (LARC) methods and long-term contraception use by young women of low socioeconomic status in Khayelitsha, and how it shapes young women's contraceptive decision-making.

1. Background and context

Over the years there has been a steady decline of teenage pregnancy rates in South Africa, however teenage pregnancy rates remain high, more significantly among black adolescent girls and young women of low socioeconomic status. As such, early fertility remains a public health concern (Jonas, 2016; Garenne et al., 2000; Swartz et al., 2018; Mkhwanazi, 2010, Odimegwu et al., 2018, Cooper et al., 2016). The impact of early childbearing on young women of low socioeconomic status has been evidently negative, further widening socioeconomic inequalities and making young women more vulnerable to poor health and life outcomes (Mkhwanazi, 2010, Swartz et al, 2018). As such, effective contraceptive provision and access is critical in shaping the life trajectories of adolescent girls and young women of low socioeconomic status.

To address this public health concern there has been an increase in the provision of contraceptives through the introduction of long-acting reversible contraceptive (LARC) methods (Jacobstein, 2018; Crankshaw et al. 2016, Pleaner et al., 2017). With the contraceptive prevalence rate in South Africa at approximately 60%, it arguably indicates a disguise that the contraceptive need has indeed been met (Harries et al., 2019; Cherisich et al., 2017; (SADHS, National Department of Health, 2019). However, with the high contraceptive uptake rate and high early fertility rate, there is a correlation mismatch. Alarming, in the South African Demographic and Health Survey of 2016, 59% of women who have never used contraceptives before indicated that they had no intention of using contraception in the future (National Department of Health, 2019). Furthermore, the continuing rise in the number of termination of pregnancies in South Africa leads to the question of whether contraception is a met need (Cherisich et al., 2017). The Demographic and Health (SADHS) report of 2016 revealed that among sexually active women between the ages of 15 - 19, 31% indicated that contraception was an unmet need (National Department of Health, 2019). Research has shown that contraceptive use and non-use by young women of low socioeconomic status is a complex issue that reveals a range of political and socio-economic injustices. Barriers to

contraceptive access and use have been identified to include: health care access and resource, interaction with healthcare providers in particular nurses, genders norms, knowledge gaps, reproductive choices, interaction with health care facilities, socio-cultural attitudes and policing, and side effects (Hayer et al., 2020; Swartz et al., 2018; Cherisich et al., 2017, Mkhwanazi, 2010; Odimegwu et al., 2018).

The dominant narrative on early fertility is unwanted pregnancies which is supported by the recent Demographic and Health Survey (DHS), reporting that in South Africa's 54% of all pregnancies were unwanted, which places adolescent pregnancy as a consequence of an unmet need of contraception (National Department of Health, 2019; Cleland et al., 2014). However, approximately 30% of teenage pregnancies in SA are reported to have been planned, and that is a high enough percentage to raise concern (Odimegwu et al., 2018). While some young people want to get pregnant, for most it does happen unintended due a number of reasons such as ineffective contraception use (Mkhwanazi, 2010; Mkhwanazi, 2014). There is a growing scholarship that examines the causes behind the significant number of planned adolescent pregnancies from the perspective of young women and adolescent girls (Mkhwanazi, 2010; Mkhwanazi, 2014; Hayer et al., 2020; Swartz et al., 2018). This discourse invites scholarship to closely look at young women's attitudes towards fertility and challenge how the current contraception provision and access reveals inadequacies in the current public solutions to early fertility reduction. From the recent literature, it is becoming more evident that the discourse on young women's contraceptive use (the prevention of pregnancy) is a discourse on fertility (the ability to get pregnant). It is an oxymoron between fertility control and fertility desires (Mkhwanazi, 2010, Swartz et al., 2018, Santelli et al., 2003; Sedge & Hussain, 2014). The contraceptive narrative is now expanding to include young women's fertility desires and fertility considerations when it comes to contraceptive decisions. This is the backdrop of this study.

There is a societal silence in talking about young women's fertility because it is often conservatively and culturally considered something that should not be a concern for teenage girls outside its prevention (Mkhwanazi, 2014). Contrary to the need to maintain silence on early fertility desires as a social preventative strategy, adolescent girls are getting pregnant and as such conversations on fertility become relevant. Mkhwanazi (2014) argues that the silence is part of the cause for the consistent high rates of teenage pregnancy. The introduction of long-acting reversible contraceptive (LARC) methods based on an assumption that it would reduce early fertility, has been met with very low uptake by young women and this invites an examination of what constitutes as effective contraception provision for adolescent girls (Crankshaw et al. 2016; Jacobstein, 2018). On the other hand, injectable contraception has the highest uptake by young women of low socioeconomic status (National Department of Health, 2019). The issue that has been identified is ineffective use of injectable contraception, as sustained and continuous use of the

injectables will yield to successful contraception and the prevention of early fertility (National Department of Health, 2019). This study intends to examine how perceptions of LARC methods and long-term contraception use explain low uptake rates of LARC methods and ineffective contraceptive patterns of use and non-use that result in early fertility.

2. Literature Review

During the review of current existing literature, several key themes emerged. Namely: Uptake of LARC methods and contraceptive use, shifting cultural values, Gender dynamics and the implications of masculinity on young women childbearing; Fertility desires and fertility as marker of femininity, Side effects and Fear of infertility, and Knowledge gaps.

2.1. Uptake of LARC methods and contraceptive use

Contraceptive use has risen significantly worldwide, however contraceptive use in sub-Saharan Africa has been much slower in contrast (Chersich et al. 2017). Over the past decade there have been efforts to promote long-acting reversible contraceptive (LARC) methods in sub-Saharan Africa, especially the implant and the intrauterine device (IUD) (Pleaner, 2017). The addition of LARC methods have been argued to strengthen contraceptive provision through the expansion of the range of contraceptive choices (Chersich et al., 2017). In South Africa the contraceptive implant was introduced into the public health sector in 2014 (Mullick et al., 2017; Pleaner, 2017). However, women's response to the contraceptive implant has been characterized with low and declining uptake and early implant removals (Pleaner et al., 2017). Injectables remain the most used contraceptive choice (Pleaner et al., 2017). In general, contraception use has been found to be lowest in young black women in South Africa (Cherisch et al, 2017).

Injectables are the most used contraceptive among sexually active women between the ages of 15 to 24 at 25% (National Department of Health, 2019). There are two injectable progestogens only contraceptives commonly used in public clinics, delivered by two- or three-monthly injections, the Nur-Isterate and Depo Provera (Wood & Jewkes, 2006; National Department of Health, 2019). As of 2016, the uptake of long-lasting contraceptives, the Intrauterine Device (IUD) and the implant among sexually active women between the ages of 15 to 19 was 0.1% and 2.2% respectively (National Department of Health, 2019). For women between the ages of 20 to 24, the uptake of the IUD and implant was 1.3% and 4.8% respectively (National Department of Health, 2019). Contrary to the South African response to the contraceptive implant, there has been a notable bloom of the contraceptive implant uptake in other sub-Saharan countries (Jacobstein, 2018).

A study found that over the years there was an increase in implant use in women across all socio-demographic categories, however with significant variations (Jacobstein, 2018). The variations he found was that there was higher implant use with increase in age with women aged 15 to 19 having the lowest uptake across all countries (Jacobstein, 2018). Another significant pattern was that the wealthier the women, the higher the uptake of contraceptive implants (Jacobstein, 2018). These socio demographic findings correlate with fertility rates which demonstrate fertility attitudes, behaviours and contraceptive use in South Africa in the South Africa Demographic Health Survey of 2016 (National Department of Health, 2019). Therefore, it supports how low socioeconomic young women have the lowest implant uptake.

Where the Intrauterine Device (IUD) uptake was found to be low; the low rates of uptake were argued to be due to spreading myths and the failure of the uptake of the contraceptive implant has been argued to have been undermined by unsupported negative user experiences which have resulted in negative widespread publicity (Jacobstein, 2018; Pleaner, 2017). The SADHS report of 2016 found that the two most common reasons for discontinuation of contraceptive methods are one health concern and the second side effects (National Department of Health, 2019). 74% of women that discontinued the implant indicated that it was due to health concerns and side effects (National Department of Health, 2019). In addition to the side effects, young women have been found to also fear getting robbed by drug users who physically remove the implant device for smoking as drugs (Krogstad et al., 2020). The concern is that even these reasons for low uptake are myths, wide enough spread and belief influences young women's contraceptive choices (Krogstad et al., 2020).

2.2. Shifting cultural values

Preston-Whyte (1988:13) states that “while fertility is fundamentally biological, its manifestations are arguably entirely social and cultural”. The author explores how the value of fertility and childbearing are shaped by the social circumstances and cultural values (Preston-Whyte, 1988). Fertility desires do not take shape in a vacuum but are influenced by culture and social conditions (Mkhwanazi, 2011). Dating over 30 years, Preston-Wythes (1988) work is helpful in examining how cultural values around fertility have shifted or remained the same and its current impact on young women’s contraception decision-making. While there is still a social pressure among young people to have children within marriage, there has been a noticeable shift of marriage as the condition for childbearing among African women (Preston-Whyte & Zondi, 1989; Udjo, 2001; Palamuleni et al., 2007, Swartz et al. 2018). While women still aspire to marriage, there is an increased acceptability of unmarried women having children, which has been argued to provides ground for young women to be able to prove their fertility before marriage (Wood & Jewkes, 2006; Mkhwanazi,

2009). Fertility has an impact in legitimizing marriages as it has been found that in certain African communities a marriage which does not produce children is not thought to be a proper family, without having children (Udjo, 2001; Palamuleni et al., 2007). Black parents and community leaders' wider attitudes to fertility and the value placed on children is not separate in its influence to the problem of teenage pregnancy (Mkhwanazi, 2010). In particular, the family plays a role in undermining young women's capacity for making autonomous decisions about controlling their fertility (Wood & Jewkes, 2006).

In African families, the birth of a child, despite the circumstances, would be met with rejoicing and the child welcomed and cared for the child when it arrives as if it was their own (Mkhwanazi, 2010). Mkhwanazi (2010) argues that particular social and cultural circumstances provided fertile ground for the occurrence of teenage pregnancy. Community response of a teenage pregnancy plays a functional and role in maintaining and reproducing social norms and ideals regarding intergenerational relationships, which ultimately ensures that the rates of early childbearing remain high. Mkhwanazi (2010), also argues that one of the significant factors for the persistent occurrence of teenage pregnancy is intergenerational relationships as once the teenage girl gives birth, the child is likely to be raised by the grandmother as their own, while the teenage girl can return to school.

2.3. Fertility desires and Fertility as marker of femininity

Teenage fertility desire is complex, being influence by a range of factors and largely considered as inappropriate as the understanding of adolescence being a transition from childhood to adulthood where sexual and reproductive desires do not take place (Mkhwanazi, 2011; Coleman et al., 2021, Adler et al., 2017). Swartz et al. (2018) found that young women use their fertility to navigate the transition from childhood to adulthood. It has been found that in addition to immediate fertility desires, young people's contraceptive decision-making was significantly shaped by gender norms and ideals (Swartz et. al, 2018). Young women who are known to have had a boyfriend for a long time and have not become pregnant begin to experience public shame, being called names and stigmatized for being thought to be infertile (Wood and Jewkes, 2006). For young women in such circumstances early fertility becomes a solution to the social circumstances, this results in deliberately getting off contraception to prove to intimate partners and friends that they are fertile (Mkhwanazi, 2010). Therefore, there is an importance to many teenage girls to displaying their fertility early (Wood & Jewkes, 2006).

2.4. Gender dynamics: Implications of masculinity on young women childbearing

Society regulates acceptable sex and sexuality behaviours different for girls and boys and] such examining the impact of sexual prowess for young men on young women is critical (Varga, 2003). Gender ideals are grounded in behaviors that reinforce poor sexual negotiation dynamics and place adolescents at risk for early pregnancy (Varga, 2003). Young people's sexual relationships are characterized by gender inequality, unequal decision-making and poor communication and peer pressure is a significant factor in the decisions young people make in relation to their sexual behaviour and reproductive health (Wood and Jewkes 1997, 1998; Mkhwanazi, 2010).

Odimegwu et al. (2018) argues that teenage pregnancy is often spoken about as being a female adolescent problem. A consequence of a gender skewed analysis ignores how young men are an underlying factor in teenage pregnancy (Swartz et al., 2018; Odimegwu et al., 2018). Teenage pregnancies are also because of young men proving their fertility, which is tied to forms of hegemonic masculinity in the township context (Swartz et al., 2018). Fathers have been found to encourage sons to pursue girls, as having girlfriends is proof of manhood (Preston-Whyte, 1988). Certain young men do not want their girlfriend to be on contraceptives so they can prove that they can have children and prove their masculinity (Preston-Whyte, 1988). For young women seeking contraception amounted to a form of public admission of sexual activity, while for young men it was key to be known that they are sexually active to prove their manhood and to ensure that the female partner can be considered for marriage should she be fertile (Mkhwanazi, 2010; Swartz et al., 2018; Odimegwu et al., 2018). In certain cases, young people believed that a child would make their relationship bond stronger and cement their relationships and in certain cases young women were blamed to have tricked their partners into a long-term relationship by getting pregnant (Swartz et al., 2018). Therefore, young women's fertility can be seen to operate as both a desired goal and a threat within relationships (Swartz et al., 2018).

2.5. Side effects: Fear of infertility and Concerns over the bodily effects of contraceptives

Mkhwanazi (2010) found that many young women conceived when they had stopped using the contraceptive injection believing what their peers said that it was good to take breaks between the injections to give the body a rest. Swartz et al. (2018) shares how bodily markers are said to indicate if a young woman is using contraception, these markers include "shaky bums" and weight gain. The perception that contraception does have effects on your body, and this is pointed out by partners, males, elders in the community and family is a challenge to adolescent girls who do not want to be known to be sexually active

or using contraceptives (Swartz et al., 2018). The extent of the concerns over bodily side effects is that it results in some adolescent girls taking contraceptives only when visiting their sexual partner, to reduce the chances of gaining weight and other bodily side effects which can make the contraceptive ineffective due to the lack of continuous use (Wood & Jewkes, 2006).

In young women irregular menstrual flows are indicative of infertility and often result in stopping contraceptive use (Wood & Jewkes, 2006). In their study, Wood and Jewkes (2006) found that the majority of their participants described the state of 'blockage' as a dangerous condition and infertility was related to blood blockages which is irregular menstrual flow. One of the greatest fears voiced by a wide range of women about using contraception is that it will lead to infertility (Jacobstein, 2018; Wood & Jewkes, 2006).

2.6. Knowledge gaps

Knowledge has been identified by public health practitioners to be a health determiner. It has been found that a correlating association exists between knowledge of ovulation and unintended pregnancy among young women (NDoH, 2019, Iyanda et al., 2017). Adolescent girls between the ages of 15 to 19 have been found to have generally poor knowledge of ovulation and are more likely to report an unintended pregnancy (Iyanda et al., 2017). Therefore, to reduce early fertility; fertility knowledge needs to be improved (Iyanda et al., 2017). Harries et al. (2019) study highlighted the need to address communication and knowledge gaps around the female reproductive anatomy, different contraceptive methods and how contraception works to prevent a pregnancy. Younger women identified sexual and reproductive health knowledge gaps themselves and identified these gaps as important factors that influenced uptake and effective contraceptive use (Harries et al., 2019). These knowledge gaps were overwhelmingly linked to poor or absent communication and counseling provided by health care providers (Harries et al., 2019). The lack of confidence in health workers, particularly nurses in providing sexual and reproductive care to young women is overwhelming in the literature. It is reported that fears about the effects of contraception on fertility and menstruation, have not been taken seriously by nurses (Wood & Jewkes, 2006). Through their scolding and judgement, nurses have been identified to be one of the key barriers to young women going to the healthcare facility to access contraceptives (Wood & Jewkes, 2006; Jonas et al., 2020; Chilinda et al., 2014; Muller et al., 2016). There is good evidence that high quality care in contraception services results in continued use of contraception (Wood & Jewkes, 2006).

It has been found that women who are given more information and better counselling on side effects are less likely to discontinue use and young women need better information on contraception (Wood & Jewkes, 2006). Contrary to the common mythical knowledge of infertility concerns caused by the IUD and implant

in comparison to the injectables, the IUD and implant after removal have immediate fertility, there is no delay to pregnancy in their effect. While on the other hand, the commonly used injectables can delay fertility up to 18 months after the last shot (National Department of Health, 2019; Jacobstein, 2018). There is a clear disinformation on side effects. What is missing in the literature is an exploration of all the different sexual and reproductive knowledge sources and spaces available to young women, their perceived value and their influence in shaping young women's contraceptive perceptions and fertility attitudes. Through examining young women's perception of LARC methods and contraception patterns, this study aims to provide insight into the knowledge sources and spaces that inform young women's contraceptive decision making.

3. Purpose of this study

The purpose of this study is to examine the perceptions of long acting reversible contraceptives (LARC) methods and long-term use of contraception, on the contraceptive decisions among young women of low socioeconomic status in Khayelitsha.

3.1. Rationale

Long-acting reversible contraceptives (LARC) were introduced to fuel contraception use through the expansion of contraceptive choices and by effective long-term prevention of early pregnancy in adolescent girls (Crankshaw et al, 2016). However, LARC methods have been met with very low uptake by adolescent girls (Pleaner et al., 2017; Jacobstein, 2018). Fertility is a central theme in this discourse in both the considerations in young women's fertility desires and the control of adolescent girls' fertility by contraception. The thesis addresses the issue of the unmet need of contraception for adolescent girls by an analysis of what adolescent girls perceive to be acceptable contraception. The analysis is achieved in examining how fertility desires shape the perceptions toward LARC methods and long-term injectable contraceptive use among young women, as well as how this influences their decision-making regarding contraceptive use. In the present study, we aim to fill a knowledge gap in understanding how young women of low socioeconomic status make decisions about contraception that influence the prevalence of early fertility.

3.2. Aims, objectives and research questions

3.2.1. Aim of study

The aim of this study is to understand how young women's perceptions of LARC methods reveal young women's attitudes towards early fertility and how it then shapes their contraception decisions (use and non-

use), using 13 qualitative interviews with young women from Khayelitsha enrolled in a study for “Understanding lived experiences of Reproduction: Exploring Patterns of Contraceptive Use and Non-Use among Young Women in Cape Town, South Africa” (HREC REF: 328/2018). The data collection occurred between June and August 2018.

3.2.2. The objectives of the study

- 1) To examine how young women's perceptions of long-lasting contraceptives (specifically the implant and intrauterine device (IUD)) and long-term contraceptive injectable use, on how it reveals young women's fertility attitudes and shapes their contraceptive decision-making.
- 2) To explore patterns of contraceptive use and non-use among young women living in Khayelitsha.
- 3) To explore what it means to meet the contraceptive needs of young women of low socioeconomic status.
- 4) To explore what informs young women’s contraception knowledge and what influence it has in their contraceptive decision-making.

4. Research Questions

4.1. Primary Research question

How do the perceptions of LARC methods and long-term injectable contraceptive use by young women in Khayelitsha shape their contraceptive decision making for fertility considerations?

4.2. Secondary research questions:

- a) How do young women in Khayelitsha judge the effectiveness of different contraceptive methods?
- b) What are the key considerations in contraceptive choices for young women in Khayelitsha?
- c) What are young women’s attitudes towards long-term contraceptive use?
- d) What role do sexual partners play in young women’s contraceptive patterns of use and non-use?
- e) What are young women’s sexual and reproductive health knowledge sources?

5. Methodology

5.1. Study design

This study used a semi-structured in-depth interview and will be making use of qualitative thematic analysis study design. A qualitative research study design is most appropriate as it has the potential to address the

gap in knowledge through the analysis of nuances in the micro-level life histories containing in-depth data (Devers & Frankel, 2000) .

5.2. Study Site, Population and Sampling, & Recruitment

5.2.1. Study site

Khayelitsha is Cape Town's largest township, approximately 35 km from the City Centre. It was originally developed as a dormitory town to house the increasing influx of African migrant workers in the 1980s during the apartheid period (City of Cape Town, 2013; Stellenbosch, 2004). It has an estimated population of 400 000 as of the 2011 census and has been estimated to have doubled (City of Cape Town, 2013). The population is 90% black African, 96% from the Xhosa ethnic group and of the total population, population density is high with 45% live in formal low-cost housing with only 72% having access to a flush toilet and 62% of households have access to piped water in their dwelling or inside their yard (City of Cape Town, 2013). Only 36% of those aged 20 years and older have completed Grade 12 or higher and only 62% of the labour force (aged 15 to 64) is employed (City of Cape Town, 2013). Khayelitsha has a young population, with more than half the population being less than 24 years old (City of Cape Town, 2013; Stellenbosch, 2004). Khayelitsha has the highest HIV prevalence in the Western Cape Province, with 34.3% of pregnant women being HIV-positive in 2012 (increasing from 19.3% in 2000) compared with 29.5% nationally (National Department of Health, 2014; Swartz et al., 2018; Shaikh et al., 2006).

5.2.2. Population and Sampling

The research population are young women of Xhosa ethnicity between the ages of 18 and 25 who were at the time of the study living in Khayelitsha. Khayelitsha's population is over 90% isiXhosa speakers. Therefore, the data collection was also conducted in isiXhosa. Purposeful sampling was used as there is need for the deliberate choice of participants that have specific characteristics that are needed in order to speak to the research question and study aims (Etikan et al., 2016). The original study (HREC REF: 328/2018) to which I fulfilled the role of research assistant, interviewed young women who have used some form of contraception so as to examine contraceptive patterns and decisions. The reason for the specificity in the age is that the study sought to understand young women's experiences, which is the age that has been identified as having the lowest contraceptive uptake and use (National Department of Health, 2019; Cherisich et al., 2017). As the sample, the study conducted 13 semi-structured interviews with 14 participants, 10 were conducted in English and 3 conducted in isiXhosa. The sample size is sufficient as the study design is an in-depth interview whose richness in data is not determined by numerous interviews (Malterud et al., 2015).

5.2.3. Recruitment

Participants were recruited through personal and research networks. The principal investigator (PI) already had familiarity in conducting research in Khayelitsha as a result of previous studies conducted in Town-Two Khayelitsha which made way for the establishing of relationships for future research. Participants were reached through several social networks. One being the social network with primary study site contact and their role in the community as a Pastor and community leader. Secondly, as the research Assistant and being a resident of Khayelitsha, I used my own personal social networks to recruit participants. Some participants were recruited through referrals by participants which is a snowballing strategy that can be highly effective (Biernacki, 1981). The impact of having previous experience in doing research in the community was advantageous due to the rapport and trust that had been previously established with the community.

5.3. Data collection

A semi-structured interview guide was developed, to guide the interview within the key topics of discussion in order to explore specific thoughts, attitudes and feelings of participants while still allowing for flexibility in the conversation between the interviewer and participants (DeJonckheere & Vaughn, 2019). I was involved in the review and editing of the study guide to its finalization. As a research assistant, I was involved in the recruitment of participants and during the recruitment of participants, the study purpose, aims and objectives were explained to all participants. Before the interview was conducted, it was reiterated again to ensure that participants have a good understanding of the study, its purpose and their voluntary involvement and participation. Interviews were conducted in English and IsiXhosa at the preference and comfort of the participant. The interviews were prearranged at the convenient time for the participant and held in a community venue or at the home of participant, according to their comfortability and preference.

The interviews were audio recorded after the participants were notified of the recording's purpose and gave verbal consent for the interview to be recorded and transcribed. During the interviews there was brief note taking by the interviewer after the participant was informed of the purpose and communicated their comfort with notes taken during their interview. The interviews were conducted by an isiXhosa speaker, which is myself and a United States-English speaker, both women. The participants who were recruited through my own social networks were interviewed by the US researcher. This was n=2 participants out of the 14 sum participants in the study. This was done to mitigate the influence of personal relationships on the data collected which if conducted by myself had the potential to be advantageous in making participants more comfortable and thus willing to share more on their experiences. On the other hand, disadvantageous by making participants uncomfortable with concerns of being judged, more risk of a lack of confidentiality, or participants providing less information of their experiences by making the assumption of researchers own

knowledge of some of the experiences. It was in these considerations that it was decided that I do not conduct the interviews with participants who I had prior social connections with. In all the interviews that I directly conducted, the US researcher was present and had opportunity to also engage with participants and therefore I did not have sole influence in the data collected. Where interviews were conducted in isiXhosa, the audio was transcribed and potential biases or lack of interrogation influenced by my dual position as both researcher and community could be picked up by the larger research team of (HREC REF: 328/2018). The study used female researchers for the purpose of aiding participants to be more comfortable to share their personal experiences especially due to the nature of the conversation involving intimate and potentially sensitive details. Which is critical in its impact on the data quality. All interviews were transcribed and those conducted in isiXhosa I accurately translated into English. Protecting their identity, all participants were given a pseudonym which will be kept throughout this study and prospective studies.

5.4. Data management: Use and protection of research data

Audio recordings and transcriptions were uploaded onto password protected computers. There is restricted access to the data files, whose access has only been granted to the research team of (HREC REF: 328/2018). All recordings and transcripts have been appropriately labelled, after the removal of all the identifying information.

5.5. Data analysis

For this study, the data analysis process will be an iterative process between myself as the researcher and principal investigator for increased reflexivity to also interrogate theoretical assumptions. With regard to data analysis, there is no foreseeable harm to the participants. The student will periodically meet with her supervisor to discuss the outcomes of analysis and to reflect her observations and understanding and the supervisor's insights integrated into the analyses which will be key as the supervisors familiar with the study site and as a principal investigator of the qualitative research study maximizing validity and reliability. There will be memo-making and note taking throughout the research process. Thematic analysis will be used and will emerge from the data (De Vos et al., 2011). Thematic coding will be employed on the transcribed interviews. Data analysis will be based on initial thematic coding of transcripts through a systematic organization of the data according to the themes. The findings will reflect a highly inductive and iterative process. The Lessons from this study may be transferable to young women of lower socioeconomic status living in other settings in South Africa.

5.1. Ethical Considerations

During recruitment, all participants were fully informed about the study and before the interview the interviewers went through the consent again and gave opportunity to answer any questions from participants. At this point informed written consent in appropriate language either isiXhosa or English was read and explained with participants. There was emphasis that all interview participation is voluntary, and that participants may decline to answer any question or to leave an interview at any time. Confidentiality and anonymity were maintained through using a pseudonym for each participant. For an interview to be recorded, the participants consent needed to be obtained, as well as consent to make notes during the interview. Participants were offered to get their own transcribed interview script and as well as offered to be sent a final study paper for their feedback or consumption.

5.2. Knowledge translation

As this study is concerned about knowledge gaps when it comes to meeting young women contraception need, it takes the knowledge translation of research findings seriously. Efforts will be made to share the findings with key populations; young women in Khayelitsha and other similar townships and as well as health professionals in clinics located in the low-socioeconomic communities through the provision of the study article and opportunities to hold discussion meetings and present the study findings. This is for the purpose that study findings can help young women, health care professionals and communities have better understanding on how to meet young women's contraceptive needs and in turn result in improved health and life outcomes for young women.

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PART B: Journal “Ready” Manuscript

Tensions in Acceptability and Uptake: Young women's perceptions of long-acting reversible contraceptives (LARC) and long-term contraception use in Khayelitsha, South Africa

Abstract

Early fertility remains a public health concern. In this article, we examine young women's perceptions of long-term contraception and long-lasting reversible contraceptive (LARC) methods; specifically, the implant and intrauterine device (IUD) contraceptive methods. The examination is on how perceptions on contraceptives reveal young women's fertility attitudes and how it shapes their contraceptive decision-making. This is achieved by foregrounding the individual, interpersonal relationships and social contexts that shape sexual and reproductive health outcomes of young women in Khayelitsha. This article reports findings from a qualitative study consisting of 11 in-depth semi structured interviews with 12 young women between the ages of 18 and 25 about contraceptive use and non-use among young women living in Khayelitsha. This article is by two researchers, which is the principal investigator and myself as the first author. From the thematic analysis, we argue that effective contraceptive provision and uptake in the address of early fertility rates requires understanding of the constructions around adolescent girls' fertility desires which influences what they perceive as acceptable contraception. There is a knowledge gap in young women of their own sexual and reproductive bodies. This knowledge gap is further challenged by misinformation on contraceptive use and side effects as threats to fertility. The lack and incorrect knowledge results in fear, non-contraceptive use or ineffective contraception that often result in unwanted pregnancy. Emanating from the reluctance to acknowledge and adequately address fertility desires of adolescent girls; a tension exists between the way public health practitioners imagine meeting the contraceptive needs of young women of low-socio economic status and what it is acceptable as contraception by young women.

Keywords: Fertility, teenage pregnancy, contraception, decision-making, LARC methods, knowledge gaps, South Africa

1. Introduction

Over the years there has been a steady decline of teenage pregnancy rates in South Africa (Mkhwanzi, 2012). Teenage pregnancy rates, however, remain high, most significantly among black adolescent girls of low socioeconomic status (Jonas, 2016). As such, early fertility remains a public health concern (Garenne et al., 2000; Swartz et al., 2018; Mkhwanazi, 2010, Odimegwu et al., 2018, Cooper et al., 2016). In the township of Khayelitsha teenage pregnancy rates are high, and the socioeconomic conditions are dominated by high levels of poverty, poor education outcomes, high youth unemployment rate, high gender-based violence incidence and high rates of HIV infection with a disproportionate increased vulnerability in adolescent girls in comparison to the male counterparts (National Department of Health, 2014; Smit et al., 2016; Harrison et al., 2015). The impact of early childbearing on young women of low socioeconomic status has been evidently negative, further widening socioeconomic inequalities and making young women more vulnerable to poor health and life outcomes (Mkhwanazi, 2010, Swartz et al, 2018, Ahinkorah et al., 2020). As such, effective contraception provision and uptake is critical in shaping the life trajectories of adolescent girls and young women of low socioeconomic status.

To address this public health concern, in South Africa there has been an increase in the provision of contraceptives through the introduction of long-acting reversible contraceptive (LARC) methods (National Department of Health, 2016; Jacobstein, 2018; Crankshaw et al. 2016, Pleaner et al., 2017). In South Africa the contraceptive implant was introduced into the public health sector in 2014 (Mullick et al., 2017; Pleaner, 2017). The addition of LARC methods have been argued to strengthen contraceptive provision through the expansion of the range of contraceptive choices (Chersich et al., 2017). However, young women's response to the contraceptive implant has been characterized with low and declining uptake, and there has also been a tendency in early implant removals with 74% of women reporting side effects as the reason for their early removal (Pleaner et al., 2017; NDoH, 2019, Cohen et al., 2019). The Intrauterine device (IUD) and implant uptake were found to be low because of negative experiences by users which are largely unwanted side effects that impact health and produce fertility concerns and this has resulted in widespread negative publicity on the contraceptives (Pleaner, 2017, Jacobstein, 2018).

In South Africa, injectables are the most used contraceptive among sexually active women between the ages of 15 to 24 at 25% (National Department of Health, 2019). There are two injectable progestogen only contraceptives commonly used in public clinics, delivered by two or three-monthly injections, which are namely; the Nur-Isterate and Depo Provera (Wood & Jewkes, 2006; SADHS, National Department of Health, 2019). Most women want to prevent pregnancy, but this is complicated, and shaped by a range of factors at individual, interpersonal and social and structural levels. There are certain limits to other

contraceptive methods such as injectables, these limits include shorter-term effectiveness and the need for frequent use which are gaps that LARC methods are aimed to fill (Kungu et al., 2020). The first gap is that LARC methods have an immediate return to fertility. This is significant as one of young women's perceived 'evidence' of contraception causing infertility is what is known as the 'return to fertility' which is the delay to pregnancy at the cessation of contraceptive use. The IUD and implant after removal have immediate fertility, there is no delay to pregnancy in their effect in comparison to the injectables that average between 4-6 months "return to fertility" delay (National Department of Health, 2019). The second gap filled by LARC methods is providing patient convenience and health worker capacity support in the long-acting characteristic of LARC methods as they are only administered once every 3 to 5 years in comparison to the injection that needs to be administered every 2-3 months (National Department of Health, 2019). This then decreases the demand of care in public health facilities and adolescent girls do not need to frequent clinics amidst schooling priorities. LARC methods appear to address some of the challenges associated with alternatives such as injectables but are still unacceptable for reasons that will be discussed below.

With the contraceptive prevalence rate in South Africa at approximately 60%, it indicates that the contraceptive need has been met (National Department of Health, 2019). But this statistic does not reveal the common behavior patterns of ineffective contraceptive use by young women, characterized by discontinuation rates which impact use (Harries et al., 2019; Cherisich et al., 2017; SADHS, National Department of Health, 2019). Furthermore, with the high contraceptive uptake rate and high early fertility rate, there is a correlation mismatch. The prevalence rate does not explain the complexities involved in meeting young women's contraceptive need. Additionally, the continuing rise in the number of termination of pregnancies in South Africa makes it clear of how contraception remains a need (Cherisich et al., 2017). The SADHS report of 2016 revealed that according to sexually active women between the ages of 15 - 19, 31% indicated that contraception was an unmet need (National Department of Health, 2019).

Research has shown that contraceptive use and non-use by young women of low socioeconomic status reveals a range of political and socio-economic injustices (Swartz et al., 2018; Cherisich et al., 2017). Barriers to contraceptive access and use have been identified to include interaction with health services, gender norms, intimate partner relationship dynamics and knowledge gaps (Hayer et al., 2020; Swartz et al., 2018; Cherisich et al., 2017, Mkhwanazi, 2010; Odimegwu et al., 2018; Ahinkorah, 2020). The varying uptake rates can provide us insight on potential knowledge gaps around how various methods work. A correlation was found to exist between knowledge of ovulation and the outcome of unintended pregnancy among young women (NDoH, 2019, Iyanda et al., 2017, Harries et al, 2019). Adolescent girls between the ages of 15 to 19 have been found to have generally poor knowledge of ovulation and are more likely to

report an unintended pregnancy (Iyanda et al., 2017). Therefore, to reduce early fertility; fertility knowledge needs to be improved among adolescent girls (Iyanda et al., 2017).

Gender norms are rooted in qualities that support poor sexual negotiation dynamics and gendered double standards that place adolescent girls at risk for early pregnancy (Varga, 2003; Govender et al., 2020). Young people's sexual relationships are characterized by gender inequality, unequal decision-making and poor communication, and peer pressure is a significant factor in the decisions young people make in relation to their sexual behaviour and reproductive health (Govender et al., 2020, Wood & Jewkes 1997; Mkhwanazi, 2010). When we examine teenage pregnancy only in the observation of adolescent girls, it is a skewed gender analysis that ignores the underlying fundamental factor which is the involvement of young men (Jonas et al., 2020; Govender et al., 2020; Swartz et al., 2018; Odimegwu et al., 2018). Teenage pregnancies are also as a result of young men proving their fertility, which is tied to forms of hegemonic masculinity in the township sociocultural context (Odimegwu et al., 2018; Swartz et al., 2018). There has been sufficient evidence that support how social and cultural circumstances provide fertile ground for the occurrence of teenage pregnancy (Mkhwanazi, 2017; Mkhwanazi, 2011). The cultural value placed on childbearing as central to hegemonic femininity has been found to position childbearing as a way for adolescent girls to prove their fertility and thus demonstrate 'successful womanhood' (Mkhwanazi, 2014, Wood and Jewkes 2006). Young women who are known to have had a boyfriend for a long time and have not become pregnant begin to experience public shame, being called names, and stigmatized for being believed to be infertile (Wood and Jewkes, 2006, Mkhwanazi, 2011).

In the examination of LARC methods and long-term contraception use by young women of low socioeconomic status there are three key points on inquiry that need to be considered. The first is to fully understand young women's contraceptive use behaviors; there is need to understand what constitutes acceptable contraceptive methods by young women. Secondly, what young women perceive as effective contraception and thirdly, what influences young women's perceptions of what constitutes acceptable contraception. Using a thematic analysis of 11 interviews with young women ages 18 to 25 in Khayelitsha, this article will examine young women's contraception perceptions at the individual level, within interpersonal relationship level and at the social and structural level. The article ultimately seeks to reveal the misalignment between what young women perceive as acceptable contraception and what public health practitioners perceive as meeting the contraception needs of young women.

2. Methodology

2.1. Study Settings

The study site is Khayelitsha, which is Cape Town's largest township, approximately 35 km from the City Centre (Smit et al., 2016). It was originally developed to house the increasing influx of African migrant workers in the 1980s during the apartheid period (City of Cape Town, 2013; World Population Review, 2020). The population is 90% black African, and 96% from the Xhosa ethnic group. Of the total population, 55% live in informal housing with only 72% having access to a flush toilet and 62% of households have access to piped water in their dwelling. Only 36% of those aged 20 years and older have completed Grade 12 or higher (City of Cape Town, 2013). Only 62% of the labour force (aged 15 to 64) is employed and youth unemployment is higher than the national rate. Khayelitsha has the highest HIV prevalence in the Western Cape Province, with 34.3% of pregnant women being HIV-positive in 2012 compared with 29.5% nationally in the same year (National Department of Health, 2014; Swartz et al., 2018; Ardington et al., 2012; Smit et al., 2016).

2.2. Population and Sampling

The research population are young women of Xhosa ethnicity, which beyond sharing a common language is a social group with cultural traditions. The population being between the ages of 18 and 25 currently living in Khayelitsha. Purposive sampling was used as there was need for the deliberate choice of participants that have specific characteristics that were needed in order to speak to the research question and study aims (Etikan et al., 2016). The sample were young women who have used some form of contraception so as to examine contraceptive patterns and decisions. The reason for the specificity in the age is that the study sought to understand young women's experiences, which is the age that has been identified as having the lowest contraceptive uptake and use (NDoH, 2016; Cherisich et al., 2017). The commonly shared characteristics within the sample was that the overwhelming number of participants already had at least one child, were unemployed, did not complete high school and were in an intimate relationship. As the sample, the study (HREC REF: 328/2018) conducted 13 semi-structured interviews with 14 participants, 10 were conducted in English and 3 conducted in isiXhosa. For this study only 11 transcripts were used and n=2 transcripts omitted due to the participant age being over the age limit of 25 for this study. The age limit was 28 for HREC REF: 328/2018) study population.

2.3. Recruitment

Participants were recruited through personal and research networks. The principal already had familiarity in conducting research in Town Two, Khayelitsha which made way for the establishing of relationships for

future research. As a researcher living in Khayelitsha, I also used my personal networks of family and childhood friends for inclusion in the study. Some participants were recruited through referrals by participants which is a snowballing strategy that can be highly effective (Biernacki, 1981).

2.4. Data collection

Data was collected through semi-structured in-depth interviews. A semi-structured interview guide was developed, to guide the interview within the key topics of discussion in order to explore specific thoughts, attitudes and feelings of participants while still allowing for flexibility in the conversation between the interviewer and participants (DeJonckheere & Vaughn, 2019). The interviews were prearranged at a convenient time for the participant and held in a community venue or at their home according to the participant's comfort and preference. The interviews conducted by two female researchers were audio recorded and there was brief note taking by the interviewer during the interviews. Participants who had close connection to the researcher, were interviewed by the other researcher, to ensure that the data was not compromised by comfortabilities because of personal relationships. All interviews were transcribed and those conducted in isiXhosa were translated into the English language.

2.5. Data analysis

The thematic data analysis was an iterative process which involved a cyclical flow of data analysis between the author and principal investigator for increased reflexivity and to interrogate theoretical assumptions. The author and PI periodically met to discuss the outcomes of analysis and to reflect the data observations and both insights were integrated into the analyses, maximizing validity and reliability. Memo-making as done throughout the research process, where the author recorded reflective notes on the findings from the data. Thematic analysis was used, and themes emerged from the data. After the familiarization with the transcribed interviews data, thematic coding was employed on the transcribed interviews (Braun and Clarke, 2006). Data analysis was based on initial thematic coding of transcripts through a systematic organization of the data according to the codes which were grouped according to themes developed. This was done by the identification of subthemes from the data, followed by grouping similar subthemes under each main theme (Braun and Clarke, 2006). The findings reflect a highly inductive process as observations were first made from the data before a theory was developed from the findings.

2.6. Ethical Considerations

Ethical clearance for this study was granted by the Human Research Ethics Council (HREC) at the University of Cape Town. During recruitment, all participants were fully informed about the study and

before the interview, the interviewers gave opportunity to answer any questions from participants before proceeding with the interview. At this point informed written consent in the language preferred by participant of either isiXhosa or English was read and explained with all participants. There was emphasis that all study participation was voluntary, and that participants may decline to answer any question or to leave an interview at any time. Confidentiality and anonymity were maintained through using a pseudonym for each participant. All recordings and transcripts were appropriately labelled, after the removal of all the identifying information. With regards to data management in the protection of research data, audio recordings and transcriptions were uploaded onto password protected computers with restricted access to the data files, whose access has only been granted to the research team. Participants were offered to get their own transcribed interview script and as well as offered to be sent a final study paper for their feedback or consumption. This also formed part of our knowledge dissemination efforts with key populations in the study.

3. Results

The findings largely reveal that young women do not dispute the effectiveness of long-term contraception in the prevention of pregnancy, however, perceive LARC methods to be an unacceptable contraceptive method largely because of the perceived side effects. Representative to the wider population, the findings support that there is very low uptake of LARC methods, particularly the implant and IUD, with only one participant who once used the implant. Continual uninterrupted long-term contraception is rare in young women. A tension exists between the way public health practitioners imagine meeting the contraceptive needs of young women of low-socio economic status and what it is acceptable as contraception by young women. The following sections will unpack how this tension manifests at the individual level (young women's perceptions and experiences), interpersonal relationship level (how peers and intimate partners influence and shape young women's attitudes and contraceptive choices) and also how it manifests in the social and structural level (young women's position in society and their interaction with institutions).

3.1. Individual barriers to acceptability

There are personal factors that are linked to young women's embodied experiences that can be understood only at the individual level. These reveal the extent of young women's agency and autonomy in their contraceptive decision-making. Examining the individual level is critical as one should not assume that young women within contexts of disempowerment have no agency and take no autonomous decisions though they might be relatively limited and constrained by several factors.

In this section below, I will begin to share on the different barriers to the acceptability of LARC methods and long-term contraception as a result of young women's perceptions and experiences, including fears around the use of the implant and IUD, lack of knowledge and myths surrounding the use of contraceptives, bodily side effects and young women's understandings of fertility.

3.2. Disruption of menstrual flow as physical evidence of perceived infertility

Young women understood the physical evidence of fertility as regular menstrual flow that occurs every month. What the young women understood contraception to be the impact of contraception on reproductive bodies is 'blocking' their blood to prevent pregnancy. The understanding was that months without menstrual flow because of long-term contraception use indicated a 'blood blockage' that could lead to possible permanent infertility. Although amenorrhea is common while using particular contraceptives, young women perceived this as sign of infertility. As Thembakazi explained:

People say you must go to your period each and every month. If you don't go to your period, you will see—you will be blocked, all those things. So I've decided, I am going to start again. When I get normally to my periods then I will go back again. (Thembakazi, 25 years old)

In sharing about her reason of deciding to get off contraception as a result of the irregular menstrual flow, she expressed a desire to regulate her menses and thus interrupt contraceptive use.

Another participant mentioned that a couple of months was the duration in which she considered necessary to stop using the injection to prevent infertility.

Yeah it is a need cause it does help you sometimes but now, what's been said now, most of the time, some people now are not able to have children because of the needle [contraceptive injectable]. That's why you need to regularly stop it for a couple of months while not using it. Because it can make you not have children, it can block you. (Nokuthula, 20 years old)

Another participant shared similar concerns on infertility as Nokuthula, Asanda explained how her knowledge of how long-term contraceptive use made it difficult to get pregnant, therefore made it permissible to have unprotected sex. She shared that even if she intentionally missed her contraceptive dose, she knows she would not get pregnant:

Sometimes I have this belief of when you are using it for a long time then its not easy to fall pregnant so even if I skip the date [for the next injection], skip my contraception, so ahh, there is nothing going to happen. (Asanda, 25 years old)

The participants concern over long-term contraception causing infertility frames contraception as unsafe in its threat to fertility and poses a challenge to its effective use when adolescent girls require to use it long-term from adolescent to adulthood because of early sexual debut. This means that at a point a young woman will feel she needs to get off contraception, therefore there will be a period with increased risk of pregnancy. The risk of unwanted pregnancy is further demonstrated in participant's belief that even if she does not go in time for the contraception, she will not get pregnant.

3.3. Knowledge gaps

Majority of the participants had used or were currently using the injectable contraceptive. When participants were asked if they knew how the injection worked in their bodies, the response was overwhelmingly "no", they did not understand how the injectable contraceptive method worked to prevent pregnancy. In addition to the knowledge gap on the contraceptive methods, participants revealed that they did not have fully and accurately understand how their reproductive system works. As an example, Cebisa explained how her menstrual cycle can be regulated by the sight of menstrual blood of another woman or knowledge of someone else experiencing menstrual cramps. Cebisa explained:

So with me, what happens is that if I see someone's panty with blood when I am not on my period, I just get my period. Or if someone is having menstrual cramps, I will get my period as well.
(Cebisa, 22 years old)

The participant revealed a lack of understanding of how the menstrual cycle works. This knowledge gap of basic reproductive knowledge in adult women reveal that knowledge gaps are not met much earlier on during adolescence. Cebisa explained her experience of the Life Orientation class:

In high school we were being told a little in Life Orientation about the issue of preventing (Cebisa, 22 years old)

The participants shared how while there was information that was shared, it was not adequate. This also shows participants understanding of the existence of knowledge gaps and where they have taken place.

Thabangs's narration is another example of how the school curriculum was not meeting the sexual and reproductive knowledge needs of the young women. In response to a question about whether what was learnt at school was adequate, Thabang explained how she sought information from the textbook but still required more information. Thabang explains:

Not really but I consulted myself with the textbook. It didn't give me enough information. And I was so scared to ask my teacher about such. (Thabang, 18 year old)

What Thabang also lets us know is that she did not feel comfortable to speak to the teacher having had further questions she wanted to ask, which presented as a knowledge barrier.

3.4. Fears of LARC methods

The fear of LARC methods stemmed from the spread of mythical beliefs around how the contraceptive devices can move in a woman's body. The second cause of the fear is linked to how young women know very little about the implant and IUD and therefore it manifests as a fear of the unknown. In responding to a follow-up question regarding why she was not interested in using the implant as a contraceptive method, Kuhle explained:

People are saying that, that thing sometimes just don't stick to where it was, and then you would get pregnant. (Kuhle, 24 years old)

Kuhle's fears of the implant, comes not from what she has experienced but what she has heard from others which has resulted in her lack of acceptance of the implant. This shows the power of widespread mythical beliefs in influencing contraceptive choices. Furthermore, the fear is about how she believes that because the contraceptive device will move in one's body will result in being ineffective in preventing pregnancy.

Another participant, Cebisa explains her fears on the IUD contraceptive which is also based on a myth. Her belief is that the IUD will bring her infertility or cause cancer because the IUD gives off a flickering light while inside the womb.

The loop will damage my womb, or I will get cervical cancer if I get the loop [IUD] because it has flashing things [light flickering] inside (Cebisa, 22 years old)

The myths are on life threatening future negative health effects such as cancer, and so the fear of cancer and infertility become imposed on the unacceptability of LARC methods.

The fear is not limited to LARC methods but also some participants expressed fear of the injectable contraception and believed that it would cause infertility by being harmful to women's reproductive egg cells. Thabang explained:

For me I was so scared because I am so scared of injections. So it had to take for me too long time to think, do I want this? If I had this appointment, when you prevent, the injection, it somehow, it damages your eggs. Somehow, I don't know. So I had to think. (Thabang, 18 years old)

Young women's decisions about contraceptive options do not happen in a vacuum but are influenced by various factors such as interpersonal relationships. Therefore, it is critical to examine the extent to which relationships shape their contraceptive decisions and behaviors. This is explored in the proceeding section.

4. Influence of Relationships Dynamics

Beyond the individual, there are key relationships that have an influence on what young women perceive to be acceptable contraception. These relationships include: parents, peers (other young women on contraception) and intimate male partners. This is shaped by the value placed on the relationships by the young women and the power dynamics within relationships that determine extent of influence on young women's contraceptive decisions.

4.1. Parental Relationships Dynamics

Most of the participants expressed that the relationship with their parents around contraception use was characterized by parental judgement as contraception use revealed having boyfriends and engaging in sexual intercourse. Most participants found it difficult to speak to their parents about contraception as their parents still considered them "too young" to be engaging in sexual intercourse therefore found it inappropriate. There is also a generational and cultural barrier that makes it taboo for parents to talk to their daughters about sex. This was the case for Kuhle, as she explained:

It was my first time in my class because even at home, my mother was not telling us about sex and dating and so on because we were still young. Until today she doesn't open up to that discussion. Because if she was open maybe I wouldn't be with a daughter now. (Kuhle, 24 years old)

The participant blamed her parent for having gotten pregnant because of not speaking to her about sex and contraception. This revealed how there is an expectation by young women for parents to be a source of knowledge and support and it not being the case has particular consequences such as unwanted pregnancy.

Young women who use contraception without their parents' knowledge and support have to go to extra lengths to keep it secret. This has possible impact on how young women are able to be consistent with their contraception which is critical for its effectiveness. Asanda explained what she did to hide that she was on contraception to her parents:

Umm [laughs] Uhh, I was starting to get noticed, then I decided, no, I must go for it. I used to hide my book--my clinic book--under the bed so that my mom couldn't find it. (Asanda, 25 years old)

For young women whose parents are knowledgeable about their contraceptive use, parents have power to not only determine contraceptive use but also contraceptive choices. This was the case for the participant Cebisa. When asked if she was interested in using the IUD contraceptive method, Cebisa explained:

I did want it but my family said that I am still too young for the loop [IUD]. (Cebisa, 22 years old)

Her family's opinion was able to override her own contraceptive choice of the IUD. This reveals the influential power that parents have in young women's contraceptive decision-making and what they perceive to be an acceptable contraceptive method.

The impact of the parental judgement is that most adolescent girls first learn about contraception at school and lean on their peers for advice.

4.2. Peer relationships

Adolescent girls are at the stage that they receive most counsel from the peer groups as discussions of interest such as sex become inappropriate and unacceptable with parents. Peers have great influence in shaping the attitudes and perceptions held by young women. The challenge is that peers hold similar amounts of knowledge, therefore knowledge maybe insufficient and likely inaccurate.

The contraceptive experiences of peers have significant weight in the impact of young women's decision making. Khosi explained how her contraceptive choice was influenced by her peers' contraceptive experiences:

I think I did some kind of research about the contraceptive method and then since I also had friends who were using the other methods, so, like the injection method, yo [sigh], I've seen a lot of bad things about it. Like some people get fat and yo [sigh], some people can also get sick, so ah ah [sigh], I didn't even want to go there so. That's why I decided to choose the pill method. (Khosi, 22 years old)

The participant shared how as part of her research that informed her contraception decision, she sought advice from friends. While power dynamics within peer is somewhat equal, power dynamic within intimate partner relationship is commonly unequal with male partner having more power which has a consequence in young women contraceptive decision-making (Odimegwu et al., 2018; Mkhwanazi, 2010). This is the different between the extent of influence between peer and intimate partner relationship

4.3. Relationship with intimate partners

There is a conflict between contraceptive options that might reduce some of the undesired side effects and perceived dangers of infertility, such as the condom as a non-hormonal approach, and its acceptability in intimate relationships. Condom use is not accepted by most male partners and therefore young women have difficulty in successfully using condoms as a contraceptive method. Zintle explained how she came to her decision to start using hormonal contraception because of her boyfriend's complaints:

Yes, my boyfriend started complaining about condom you know. Condom yo [sigh], condom always. Yeah. So I decided to go to the clinic. (Zintle, 19 years old)

The relationship dynamics between young women and their male intimate partners are characterized by power imbalances in negotiating sexual and reproductive decisions as young women are often forced to make decisions according to the wants of the intimate partner. Kuhle shared her experience of abuse when negotiating condom use:

Yoo [sigh], the one that I was dating, oh he was so abusive. That guy. Yoo [sigh], you don't talk to him. Yoo [sigh], he is gonna beat you up. Because my ex-boyfriend--the father of the baby would say--why you want to use a condom? Are you cheating on me? I'm the one who's sleeping with you and you are the one sleeping with me, why must we use the condom? Then I would end up not using it. (Kuhle, 24 years old)

Kuhle shared how she would end up of not using the condom after not being able to negotiate condom use with her partner and so without using hormonal contraception she would be at high risk of pregnancy.

Side effects are common for contraception, however side effects that affect physical appearance and impact desirability to intimate partner become an unacceptable contraceptive choice. Zizipho shared how the only contraceptive deterrent she had were the unwanted changes to her body. Zizipho explained:

I had one problem with it, that it changes shapes--the body shape, your body changes. And it depends how it affects you. I think its wrong. (Zizipho, 23 years old)

The side effect of the 'body losing shape' was one of the most mentioned concerns over side effects by participants to the extent that it has become synonymous with contraception and has become a deciding factor of consideration for contraception uptake. An example, Cebisa explained:

But for me I told myself that once I was on contraception my body would lose shape. (Cebisa, 22 years old)

The concerns over bodily side effects must be understood as the importance of desirability to intimate partner in order to appreciate how it influences young women's perceptions of contraception.

Relationships occur within broader social settings such as political and sociocultural norms. As part of social setting lie institutions who are also influenced by societal factors. Adolescent girls exist within these bigger and broader institutions who are responsible in meeting the contraceptive needs of adolescent girls. There however exist barriers to meeting this need. This will be explored in the section to follow.

5. The Social and structural contexts

There are institutional structures such as health care institutions, and social factors such as high levels of crime that present barriers to contraception access and the acceptability of LARC methods by young women. This reveals a range of issues that have either been missed or overlooked by public health practitioners. Young women in Khayelitsha face a plethora of socio-economic issues by the intersectionality of race, gender, age and class. Therefore, they are vulnerable to injustice, making this examination critical.

5.1. Access of local health care facility

The main issue explored here is access. The first concern is how school going adolescent girls receive contraception within the issue of health care facility service delivery in the township. One participant shared how she struggled going to the clinic when she had to be at school. The clinic operating hours presented a barrier to access for adolescent girls who needed to go to school. Nokuthula explained:

I go to school, I come back, and it's [clinic] closed, (Nokuthula, 20 years old)

Young women need to either choose between going to school or missing school to go to the clinic, which is an injustice as these are both rights to education and health. With most adolescent girls seeking contraceptive without their parent's knowledge, it is most likely that this will result in discontinuation of contraception while still having intercourse.

Another access barriers to continued contraceptive use is explained by the participant Thembakazi:

And the other thing, people who have HIV, they were not supposed to have their own room, they would have to stay with other people." Because the reason why people don't go to the clinic—if my community people see me on that side they say, yo, she's having HIV so, I won't do what I want to do in the clinic because of that person who sees me. I will decide no no no, I'm going so, I'm not getting any help. Thembakazi, 25 years old

The participant explained that she fears stigmatization due to poor unethical administration at the clinic, which would cause her to be perceived as HIV positive should she be asked to sit in the waiting room designated for HIV positive people. She shared that she would rather not get her contraceptive than risk getting stigmatized in her community. Unethical and poor institutional administration at health care facilities can lead to contraceptive discontinuation.

In addressing access for adolescents, there has been the development of youth clinic for better access. Cebisa shared how the youth clinic has been beneficial:

I was taught about contraception at workshops and also at the youth clinic. (Cebisa, 22 years old)
This demonstrates that there has been a positive public health response in addressing some of the barriers that impact young women's contraceptive use. However the access remains limited. Cebisa explained:

No I have not gone this year because it's not here now, it's in Site C. (Cebisa, 22 years old)
Cebisa shared how she has not been to the youth clinic in a year since it moved to another area far from where she stays.

One other barrier to accessing health care facilities is the judgement by elders and older community members present at the clinic. The health system structure is that one must go to the clinic nearest to their place of residence. As such, the people you would see at the clinic would be your community members. Participant Zintle, narrated her experience in speaking to a nurse on the first time she sought for contraception and to do an HIV test:

Then she said, why why do come here, why do you prefer to come here, why don't you go to Town Two. Then I told her I'm not comfortable going to Town Two because many, you see, many people, they know my family. I don't want them you know, to speak to my grandmother and all the other people. That's why I decide to go there you know. And I also wanted to do HIV check you know so that's why I decided to go there, yeah. (Zintle, 19 years old)

For public health practitioners, close proximity to a clinic is thought as undoubtedly addressing barriers to health care access by eliminating transport challenges; however, for adolescent girls going to the clinic for contraception in your community presents as a structural barrier to health care access. Seeking contraceptives is an admission of having sexual intercourse which they hide from their parents. When the neighbors' and family members all go to the same clinic, they risk their parents finding out. This prevents many adolescents from using contraception.

Adolescents who go to the clinic have to employ strategies in order to access their community clinic for contraception. This was the case for Asanda. Asanda explained

It wasn't easy, because you went, maybe your neighbor there and then you will tell your mom, I saw her in clinic, I don't know what she was doing so I have to go some group of friends so that I can, they can cover for myself. Well that my mother asks, what were you doing, then I will say, ah, I was going with someone or with a friend. (Asanda, 25 years old)

Contraceptive access being difficult for adolescent girls, it is likely that not many adolescent girls will be successful in employing such strategies to be able to effectively continue contraceptive use.

5.2. Nurses engagement with adolescent girls

In addition to parental judgement, adolescent girls also experience judgement from the nurses when they go to the clinic to get contraceptives. The interaction with nurses presents a barrier for continued contraceptive use by adolescent girls.

In sharing her reason to delay contraceptive use while already sexually active, the participant shared on the common response from nurses when adolescent girls seek contraceptives. Khosi explained:

Because I'm still young the nurses are going to, they yell at you, you are thinking of taking contraceptives, that means that you are having sex (Khosi, 22 years old)

The response from the health care workers was similar to that of older community members, shaped by the cultural and societal norms of acceptable behaviors by adolescent girls.

Many adolescent girls miss their clinic appointments which are key for effective contraception. The frustration from nurses results in reproductive injustice when adolescent girls are not provided their health care service that they need. Thembakazi shared how young women do not receive adequate health care as they are punished by the nurses for not coming to the clinic on the prescribed clinic appointment date. Thembakazi explained:

A lot of shouting, hey. Even if you didn't go on that day, you were supposed to go there, they don't do pregnancy test to check even if you are not pregnant, all those things, they only say if you are pregnant you will see yourself. (Thembakazi, 25 years old)

Another participant also narrated a similar unkind response by nurses for missed contraceptive appointments. Kuhle explained:

Why didn't you come yesterday? Come back tomorrow. When sometimes you didn't go there, neh? They would say, they would say, you must go and buy yourself a pregnancy test then come with it, but government is providing that there, I don't know why. (Kuhle, 24 years old)

Not only will such negative response from health care workers result in adolescent girls stopping contraception in avoiding the abuse, but can also cause serious health risk to pregnant girls who have no access to a pregnancy test and are wrongly administered contraceptive. This response by nurses takes no consideration of the possible barriers to effective and continual clinic access by adolescent girls which cause the missing of clinic appointments.

Despite increase in contraceptive method choices, with the availability of LARC methods, another challenge that adolescent girls experience is the strong bias towards injectables offered to them at clinics.

5.3. Limited contraceptive choices

The use of the word 'injection' (stemming from injectable contraceptive) when young women refer to contraception in general is a red flag on how this has become the case when there are other contraceptive methods available. Injectables are indeed the most used method by young women (National Department of Health, 2019). The evidence from this study suggests that young women are not being offered other contraceptive choices through the bias of the information provided while there is availability of LARC methods at the clinics.

The participant Lindokuhle described her first visit to the clinic for contraception. She shared how she was only informed about the injectables and not any the other available methods. Lindokuhle explained:

When you go to the clinic, they first tell you what is Nari [Nur-Isterate] and what is Petogen [Depo Provera]. Petogen [Depo Provera] is used by the people who have babies, neh? And then Nari [Nur-Isterate] is used by the teenagers that have not been pregnant. (Lindokuhle, 18 years old)

The contraceptive debut for many of the participants was after the first child. The experience was that they felt forced by the health workers and not given the opportunity to choose their own preferred contraceptive methods. Kuhle shared how her first experience with contraception she was automatically given the injection after she gave birth.

In 2013, that's when I started using contraceptives. By the time I gave birth, thats--you see when you are there, in the hospital and you are giving birth, after they given you baby, they already give you the injection for the contraceptive. (Khule, 24 years old)

If the participant never made the personal decision to start contraception, there is no confidence that she would not discontinue, having had no autonomy in the process of contraceptive uptake. Literature has identified female empowerment through autonomy in sexual and reproductive health decision-making as a predictor of positive health behavior such as continued contraceptive use (Alabi et al., 2019).

The township context in its socio-economic characteristics presents as a barrier to the acceptability of LARC methods, which shape uptake levels.

5.4. Crime in Khayelitsha

Khayelitsha is a township with high levels of crime and it has infiltrated to influence young women's contraceptive choices. Some participants believe that having the implant puts them in danger of being attacked by robbers who use the implant for drugs. As an unforeseen consequence, the implant becomes an unacceptable choice for contraception as it makes young women in the township more at risk to being violently attacked. While this could be found to be a myth, it is significant as a wide enough spread and belief influences young women's contraceptive decision-making. Thabang explained:

And its so dangerous for us, here at the community because there are criminals. And usually like-- they feel it in you. They will stab you, to get it out Thabang, 18 years old

Another participant also attributed crime as her reason for not using the implant. Asanda explained:

Okay, the reason that I didn't use the implant. You know here in Cape Town there are a lot of skollies [thieves] and they smoke that thing [use the implant as a drug through inhaling the smoke]. Sometimes they feel you if you do have it. They will cut you and take it off. (Asanda, 25 years old)

Differently to drug thieves, another participant considers the occurrence of sexual violence in her consideration for the use of contraception. She explained how contraception can help you in preventing pregnancy from rape. Sara explained:

Yes. You never know what could happen you know. You don't have to have like consensual sex with someone, it might be rape, I don't know, you could get HIV or get pregnant, I don't know, you know, what I am saying? (Sara, 23 years old)

According to the participants, the high levels of rape of women, makes it an unfortunate appropriate factor in contraception decision-making. These reveals how social factors shape young women's personal sexual and reproductive choices.

6. Discussion

From the findings, we see that contraceptive decision making is complex, and shaped by factors at multiple levels. Most participants at the time of getting pregnant had either never used contraception before or were using it inconsistently. Participants attributed this to varying factors such as lack of knowledge, parental judgement, intimate partner's refusal of condom use while not on any other contraceptive. The majority of participants shared that their first pregnancies were unwanted. Prior to getting pregnant, participants vocalized their knowledge of the clinic as a means to access contraception but shared how the limited contraceptive choices was currently shaping their contraceptive use. Overwhelmingly, participants experience with getting pregnancy unplanned was a key factor in their decision to currently be on a contraceptive.

Young women do not dispute that long-term contraception is effective in the prevention of pregnancy but find LARC methods unacceptable in the prevention of pregnancy. The challenge with long-term contraception is that young women believe it will cause infertility when the 'blood is blocked', having irregular menstrual flow for too long, leading to discontinuation of LARC use. The challenge with this is that it is in these periods when many young women are off contraception that they get pregnant, and the public health challenge of teenage pregnancy remains. What public health practitioners advocate as effective contraception in long-term use, young women perceive as cause to infertility. The very characteristic of LARC methods in being long-term in the prevention of pregnancy for periods of up to 5 years, sustaining irregular menstrual flow for such long periods is what makes LARC methods unacceptable to young women in how they understand the impact to their fertility. However, non-hormonal contraception such as condoms that do not have side effects on menstrual flow are unacceptable to male intimate partners and cannot be effectively used by young women due to negative power imbalances in negotiating condom use (Govender et al., 2020). In existing literature, discussing the unmet need for contraception, barriers are largely framed within relationships and social structures which this article also did (Hayer et al., 2020; Mkhwanazi, 2010; Odimegwu et al., 2018). Gender dynamics in the implications of masculinity on young women childbearing are evident (Mkhwanazi, 2014, Odimegwu et al., 2018).

A key finding is that the fear and tensions around the unacceptability of LARC methods is because of widespread mythical knowledge (Jacobstein, 2018; Pleaner et al., 2017). The knowledge gaps reveal a challenge in public health practice in ensuring that young women are sexually and reproductively literate. The theme of knowledge ran through the individual tensions, relationships and the social institutional factors that shape young women's perceptions and ultimately their decisions. Revealing how when public health knowledge spaces such as the clinics do not meet with young women's contraceptive knowledge needs young women lean on other young women's experiential knowledge which is often incorrectly

informed and furthers widespread myths. The first and most common knowledge source for contraception for adolescent girls is school in the Life Orientation class which however been shown to be inadequate and ineffective (Ngabaza et al., 2016). Young women lack knowledge not just about the different types of contraceptives that are available to them but show that they do not fully understand how their sexual and reproductive anatomy work. Knowledge gaps influence uptake and effective contraceptive use (Harries et al., 2019).

In comparison to the injectable methods, there is very little knowledge about the IUD implant among young women of low socioeconomic status. There is a clear disinformation on side effects that positions LARC methods to be far worse in contrast to injectable contraception (Jacobstein, 2018). There is a lot of fear and distrust of contraception by young women and this is a result of the lack of knowledge by young women and is exacerbated by the negative experiences that young women have with nurses at clinics. The lack of confidence in health workers, particularly nurses in providing sexual and reproductive care to young women is evident and overwhelming in the literature (Harries et al., 2019). Adolescent girls fears about the perceived effects of contraception on fertility have not been taken seriously by nurses which is seen in the lack of address in the matter (Ahinkorah, 2020; Wood & Jewkes, 2006).

Similarly, to other literature, this article also foregrounds fertility concerns in discussing effective contraception (Ahinkorah, 2020, Wood & Jewkes, 2006). What is important to young women is being able to prove their fertility when they choose to (Ahinkorah, 2020; Wood & Jewkes, 2006). The lack of a public health address comes from what seems to be a refusal to acknowledge that adolescent girls prioritize and consider the need for short term conception/immediate fertility in their decisions. Public health practitioners need to consider the fertility desires of young women in their efforts of the fertility control of adolescent girls. For many women of low socioeconomic status, fertility, the ability to conceive is at the core of womanhood, linked to identity and the purpose of being a wife and a mother (Wood & Jewkes, 2006; Mkhwanazi, 2009). When contraception is positioned as a threat to the essence of identity as a woman, the consequential response is very low uptake and high rates of discontinuation of LARC methods by young women which results in unintended pregnancy (Pleaner, 2017; Wood & Jewkes, 2006).

Findings suggest that there are some changes that could benefit young women in accessing contraception. The first public health administrative recommendation is that clinics opening times align with times when adolescent girls go and come back from school, and with dedicated time slots in prioritizing serving adolescent girls. The second recommendation is that adolescent girls be easily permitted to go to the clinic of their choice for their sexual and reproductive needs should they not feel comfortable to use their community clinic. The third recommendation is capacity building in the training of nurses in delivering

youth friendly service to overcome being guided by cultural norms in rationalizing adolescent girls sexual and reproductive behaviour.

The contribution of this article from the findings can inform fertility control intervention programs. With regards to practice, the recommendation is that public health practitioners need to openly and directly speak to adolescent girls to alleviate concerns of infertility perceived to be caused by long term contraception and LARC methods. This should be done at the onset of contraceptive use as part of the consultation. Secondly, there needs to be a public campaign to encourage uptake of the IUD and implant and start to demystify LARC methods and eliminate the fear. An example of a successful public health campaign was the 'Bringing services to the doorstep' project in Ethiopia (Africa Bureau USAID, 2012). The outcome was that the prevalence of implant use by sexually active unmarried women was one in every 7, a drastic increase in uptake (Jacobstein, 2018, Africa bureau USAID, 2012). This was achieved through the extension of health essential services targeting women and part of the work included communicating to the entire community (including men, women, adolescents, and religious leaders), which contributed to changing attitudes around contraception (Sedlamder et al., 2018; Africa bureau USAID, 2012).

Great effort needs to be spent on education, which begins at the school level in teaching girls about their bodies through the further development of Life Orientation curriculum and the empowerment of the teachers through training for carrying out the education. Additionally, there needs to be an assessment on how the school classroom space can be a conducive space that enables adolescent girls to freely converse with teachers. For examples, exploring the impact of the presence and absence of male adolescent boys or male teachers in the classroom. When young women are empowered with adequate knowledge, they can be more likely to better negotiate sexual and reproductive health decisions with their intimate partners. It has been found that women who are given more information and better counselling on side effects are less likely to discontinue use (Wood & Jewkes, 2006).

7. Limitations and suggestions for future research

Regarding the study design, qualitative research is not always plausible for the generalizability of findings to larger populations. Therefore, additional quantitative research could further enrich findings. Another limitation is that the study was cross-sectional, as interviews were conducted at one time in the experience of young women and as such longitudinal data would be helpful. Purposive sampling was used and as such the sample was from the township of Khayelitsha with young women from the Xhosa ethnic group.

In examining social cultural factors, there could be unique influence of the social setting that has shaped the findings in a particular way. Conducting similar studies elsewhere within South Africa could be

beneficial in seeing possible variations in the findings from the impact of social factors. Interviews with nurses at the township-based clinics who provide contraceptive services would be useful, as interaction with health workers proved to be one of the key barriers to contraception access for adolescent girls (Ahinkorah, 2020). Additionally, it would be helpful to interview the intimate partners of young women to provide insight on their perceptions of unacceptable contraceptive methods. Areas for future research include examining factors that successfully influence change in perceptions of how young women who had fears towards LARC methods shift to ended up effectively using LARC methods. This research would aid in understanding how to increase uptake of LARC methods and prevent their early removals and discontinuation.

8. Conclusion

Young women's contraceptive decision-making is complex and shaped by a range of factors, at various levels; individual, interpersonal and at the social or structural levels. Young women use contraceptives whose side effects are acceptable to them, and acceptability is largely shaped by perceived effects to fertility. It is highly alarming when the premise of what makes contraceptives acceptable or unacceptable are based on myths and incorrect knowledge. Widening the contraceptive choices available to young women at the clinic care level through unbiased information and contraceptive provision will arguably improve acceptability of LARC methods as fear causing myths are demystified through experiential knowledge. Public health practitioners should not take for granted that the high contraception uptake means that young women are knowledgeable, it is the ineffective contraceptive use that results in unwanted pregnancy that indicates holes in meeting young women contraception need. Educating young women on the side effects and what they mean, as well as fundamentally educating young women on their bodies so that they can be empowered to have the opportunity of making informed decisions for their health is part key to reducing early fertility.

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APPENDICES



Appendix A: Informed Consent Form

Title: Understanding Lived Experiences of Reproduction: Exploring Patterns of Contraceptive Use and Non-Use among Young Women in Cape Town, South Africa

Researchers: Alison Swartz, Abigail Harrison, Sarena Hayer, & Zipho Falakhe

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Contact: Human Research Ethics Committee (HREC) at the Faculty of Health Sciences at the University of Cape Town (021 406 6338)

Purpose of the Research: We are inviting you to be a part of a study that asks about the experiences of young women with contraception and their reasons for choosing whether or not to use different types of contraception.

What will happen if you choose to participate? It is your choice if you want to be in the study and if you want to answer our questions, it is okay if you decide you do not want to be in the study. If you do choose to be in the study, we will ask you about your experiences with contraception and your feelings toward different types of contraception options. The interview will last for about one hour.

The interview should not create any risks for you. If you do not feel comfortable at any point in time during the interview, you can stop the interview without explaining and without us asking you any questions. It is also your choice if you do not want to answer any question. We can move on to a different question if you feel uncomfortable or do not want to answer the question at any time. If you have questions during the interview, please ask me to stop the interview and we can answer them. After the interview, you can also remove your interview from our study at any time.

This is a non-paid study. However, your answers and personal experiences are very important to us and will help us understand how having different types of contraception available might meet the needs of young women, such as preventing pregnancies and protecting against infections. We will also try to share with you the results of this study if you would like us to.

Confidentiality and disclosure of information: Any information we receive from your interview will only be shared if that is okay with you and you allow it. In our research we might use your exact words from your interview and we might also explain your answers in our research in our words, but the information from your interview will be shown in a way that makes sure that people will not know who you are. We will not share your answers with any other person without asking you first. The only time when we would share who you are and the information you gave us is if we are legally required to give that information, for example, if your own safety or the safety of someone else is at risk.

If you are comfortable with this conversation being recorded, we will tape the interview and personally we will type-up our conversation later so that we can review use it for the study. We will refer to you with use a false name for you when we type up the conversation, and will save that record the type-up of the interview on a password-protected computer that only we can see with a password. In publications of this research, we will use a false name when we write about your comments answers. We will only use your real name if you tell us to do so.

Appendix B: In-Depth Interview Guide

Understanding Lived Experiences of Reproduction: Exploring Patterns of Contraceptive Use and Non-Use among Young Women in Cape Town, South Africa

1. Introduction and Orientation

The intention of this portion of the agenda is to welcome the participant and make them as comfortable as possible by explaining the interview, letting them know what to expect from the experience, and familiarizing them with the facility (e.g., restrooms).

The purpose of the interview today is to explore impressions, attitudes, and knowledge of contraceptives. We will only use the false name that you provided, and never your name. I respect your opinions, and your participation today is completely voluntary. There are no wrong answers! If you are not comfortable with any questions, you do not need to answer them. You can also stop the interview at any time. We will keep recordings safe, and only quotes that do not identify you may be reported. All information you provide today will not be connected to your name. Let me know if you need to use the restroom or if you need to take a break at any time.

2. Demographic Information

This portion of the agenda is intended to collect basic demographic information about the participant.

2.1 Please tell me a little bit about yourself

- a) What is your name?
- b) How old are you?
- c) Where are you from?
- d) Where do you live now?
- c) Are you working?

2.2 Can you tell me a little bit about your family?

- a) Who do you live with? How many people live in your household?
- b) Are you in a relationship?
- c) Do you have any children? If so, how many?

3. Initial Encounters and Impressions

This portion of the agenda is focused on how, when and where participants first learned about contraception. Also in this section, we intend to learn about initial attitudes towards and first-ever usage of contraceptives in addition to current access of contraceptive methods.

3.1 Can you describe contraception to me?

- a) What do you know about contraception?
- b) What are the different methods that you know of?
- c) How do these methods work?

3.2 How did you first learn about contraception?

- a) Who taught you about it?
- b) Where were you?
- c) Was this after you had already learned about sexuality or at the same time?

- 3.3 What were your initial impressions of contraception?
- When you first heard about it, did it sound like something you would be interested in?
 - What kinds of questions did you have? Have those questions been answered?
- 3.4 Have you ever used contraceptives? If yes, when did you first start using contraception?
- What type of contraceptives did you first use? How did you choose that method?
 - What was that like?
 - Where did you get them?
 - Did anyone know you were using contraceptives?
- 3.5 If yes to above, were you comfortable with your decision to use contraception?
- What was that decision like, to begin using contraception?
 - What did you consider in making your decision?

4. Attitudes & Current Use / Non-use Patterns

This portion of the agenda is directed towards learning about current use or non-use of contraceptives. This section is also meant to assess current attitudes towards contraceptives, including personal attitudes and attitudes of participants' partners.

- 4.1 Are you currently using any form of contraception?*
- If yes, *what* methods do you use?
 - How often do you use *each of these methods*?

**If yes to 4.1:*

- 4.2 Right now, why are you using contraception?
- Do you use contraception to prevent pregnancy? To protect against sexually transmitted infections (STIs)? To protect against HIV?
 - Do you believe that the contraception you are using is working? (e.g., in preventing pregnancy)
 - Can you explain any benefits in using contraceptives? Can you explain any risks?
 - Have your reasons for using contraceptives changed over time? If so, how?

- 4.3 Tell me about the different methods you have used.
- In the past year, how many different methods have you used?
 - If more than one, when did you switch methods most recently? Why did you switch?
 - What method do you think is best? Why is that method the best for you?

- 4.4 How do you feel that using contraception has affected your life?
- Do you feel it has affected your health?
 - Do you feel it has affected your life course?
 - Do contraceptives influence the way think about pregnancy or STIs?

**If no to 4.1:*

- 4.5 Right now, why are you not using contraception?
- Do you think you might someday use contraception?
 - Why might you start? When might you start?

- c) Do you believe that contraception works effectively? (e.g., to prevent pregnancy, protect against STIs)
- d) Can you explain any benefits in using contraceptives? Can you explain any risks?

For everyone:

- 4.6 Have you talked to your partner about contraception?
- a) If so, what are your partner's views on contraception?
 - b) Has your relationship influenced your use or non-use of contraception?
 - c) Have you ever felt pressure to use or not use contraception from your partner? What about from anyone else in your life?
 - d) Has your relationship influenced which method you use? If yes, how so?
 - e) Has your use or non use of contraception influenced anything about your current or past relationships? If yes, how so?

- 4.7 Now I'd like to specifically talk about condoms. Do you use condoms? If yes, how often do you use condoms (e.g., always, sometimes, never)?
- a) Have there been times that you have used condoms less frequently than others?
 - b) Have you ever wanted to use a condom but your partner did not want to? What happened? What did you do? How did you feel?
 - c) Are you familiar with the idea of 'dual protection'?

- 4.8 What emotions come to mind when you think about contraception and as we discuss it?
- a) What about when you think about which method you use? Or how often you use it? Or how your partner feels about it?

5. What about pregnancy – (if no children: have you ever fallen pregnant?)

- a) if no: when do you think is a good time to fall pregnant?
- b) if yes: what was your experience of pregnancy – were you expecting to fall pregnant at that time?
- c) For someone like yourself, what is the best way to balance the desire for pregnancy or having a child with protection against STIs or HIV?

6. Access and Current Knowledge Acquisition

This portion of the agenda is focused on how participants currently access contraception and how their knowledge of contraceptives has evolved.

- 6.1 Where do you currently get your contraceptives?
- a) What goes into getting and using your contraceptives?
 - b) How often do you need to acquire them?
 - c) Is there anything that has made using or acquiring them easy? Or difficult?
- 6.2. Do you feel you have adequate access to contraceptives?
- a) What methods do you have access to?
 - b) Are there any methods that you do not have access to?
 - c) Are you interested in any of the methods that you do not have access to?
- 6.3 What have you learned about contraception since the very first time you heard about it?
- a) How have you learned these new things? Where?

- b) Do you discuss what you know about contraception with anyone? (e.g., friends, family)
- c) What sources of information about contraception do you find most reliable?
- d) Has a healthcare provider ever discussed contraception with you? If yes, can you describe anything memorable from that encounter?

6.4 How have your attitudes changed about contraception over time?

- a) Have you learned anything new about contraception that has affected how you feel about it?
- b) Do you have any questions about contraception?

6.5 Lastly, can you tell me what you think it means to not meet women's need for contraception?

6.6 That's my last question for you today. Is there anything you would like to add before we finish up?

7. Closing procedures

The intention of this portion of the agenda is to thank the participant and to conclude the study.

7.1 Do you have any questions for me?

7.2 Thank you

- a. Your input is very important in helping us understand the experiences of young women with contraception. We appreciate your contributions and the time you have taken to speak with us today.