**UNIVERSITY OF THE WESTERN CAPE**

**FACULTY OF COMMUNITY AND HEALTH SCIENCES**

**RESEARCH REPORT**

# TITLE: WOMEN'S PERCEPTIONS OF LONG-ACTING REVERSIBLE CONTRACEPTIVES AT A PRIMARY HEALTH CARE CLINIC IN CAPE TOWN, SOUTH AFRICA

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**ABSTRACT**

Increasing numbers of unintended pregnancies are occurring due to contraceptive failure. Unsafe abortion remains one of the top five avoidable patient-related causes of maternal death in South Africa. There are much higher reported failure rates for short-acting methods of contraceptives than long-acting methods of contraceptives; the uptake of long-acting methods of contraception though remains low. The purpose of this study was to explore the perceptions of women attending a primary health care clinic regarding long-acting reversible contraceptives. The qualitative research approach was chosen in this study because the researcher received a rich and thorough understanding of the perceptions of long-acting reversible contraceptives from women currently using short-acting reversible contraceptives. Purposive sampling was used in this study. Participants were women of reproductive age 15 to 49 years, using short-acting reversible contraceptives and who attended the clinic every eight or twelve weeks for their follow up contraceptive visits. Data were gathered by conducting in-depth, face-to-face interviews with the participants. The sample size was determined by the informational needs and data saturation. Fifteen interviews were conducted. Data saturation occurred during the data collection process when no new information was being obtained. Redundancy was achieved, and the interviews were stopped at this point. Trustworthiness of the study was ensured through various means: credibility, dependability, conformability and transferability. The researcher used Creswell's (2013) steps of thematic analysis of qualitative data to analyse the data. The data collection was an interactive process and the data analysis commenced as soon as the data collection started and not at the end of the process. Ethics clearance and approval to conduct this research was obtained from the Biomedical Research Ethics Committee at the University of the Western Cape (Annexure D) and from the City of Cape Town Research Committee (Annexure E). Ethical principles of

informed consent, autonomy, beneficence and non-maleficence were also adopted and maintained.

**DECLARATION**

I declare that *Women's Perception of Long-Acting Reversible Contraceptives at a Primary Health Care Clinic in Cape Town, South Africa* is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources as I have used or quoted have been indicated and acknowledged as complete references.

Judiac Ranape

Signed……

Date: …….

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## ACRONYMS & ABBREVIATIONS

DoH –Department of Health

FAM – Fertility awareness method

FPA – Family Planning Association

ICDP– International Conference on Population Development

IUCD – Intrauterine contraceptive device

LARC – Long-acting reversible contraceptives

NDoH– National Department of Health

PRHEMIS – Patient Record and Health Management Information System

SARC – Short-acting reversible contraceptives

SINJANI - Standard information Jointly Assembled by Networked Infrastructure

UNFPA – United Nations Population Fund

WHO – World Health Organisation

# CHAPTER 1

## ORIENTATION TO THE STUDY

### 1.1 INTRODUCTION

This chapter commences with an introduction as well as a background to foster an understanding of the low use of long-acting reversible contraceptives (LARC). The problem statement, significance of the study, its aims and objectives are also outlined in this chapter. Lastly, this chapter outlines definitions of concepts and principles of ethics that were upheld.

### 1.2 BACKGROUND

Eighty-five million pregnancies, representing 40 percent of all pregnancies, were unintended in 2012. Of these, 50 percent ended in abortion, 13 percent ended in miscarriage, and 38 percent resulted in an unplanned birth (Sedgh, Singh & Hussain, 2014). According to WHO (2018), every year in the world there are an estimated 40-50 million abortions. This corresponds to approximately 125,000 abortions per day. Approximately half of unintended pregnancies were a result of contraceptive failure, incorrect use due to lack of knowledge or inconsistent use, and the remainder were from non-use of a contraceptive method (World Health Organisation, 2016). This shows a relationship between unintended pregnancy and failed contraceptive use (Sedgh et al., 2014).

Since the legalisation of abortion in South Africa in 1996, the number of abortion-related mortalities had decreased dramatically. Despite this, women continue to die from backstreet abortions due to infection and bleeding (Patel, 2014). In addition, unsafe abortions remains one of the top five avoidable patient-related causes of maternal death.

Barriers to access, negative side effects, unskilled providers and lack of knowledge among women of reproductive age are the primary obstacles to adequate contraceptive use and influences their choice for short-acting reversible contraceptives (SARC), instead of LARC ( Tibaijuka, Odongo, Welikhe, et al., 2017). Women discontinue the LARC methods when they experience negative side effects or could not attend the clinic (Sznajder, Tomaszewski, Burke, et al., 2017). As soon as the women discontinued the contraceptive method, they ended up with an unintended pregnancy (Crede, Hoke, Constant, et al., 2012). Short acting contraceptives are particularly problematic and pose unique challenges. Women can use either injectable or oral contraceptives. Injectable contraceptives require them to make regular follow-up visits to the clinic at an eight-week or twelve-week interval. In addition to their scheduled appointment dates for clinic visits, they also have to deal with the side effects of these injectable contraceptives like breakthrough irregular heavy bleeding, headaches or weight gain. Oral contraceptives (pills) were offered in small amounts because women were told by healthcare providers that they will forget to take the pills (Crede et al., 2012).



There are two main methods of contraceptives, classified as long-acting or short-acting methods. Long-acting reversible contraceptive methods (LARC) need a healthcare provider's intervention but they provide contraceptive cover for at least three to five years without provider or patient interference, and the contraceptive effects could be reversed (Higgins, Kramer & Ryder, 2016). Short-acting reversible contraceptives (SARC) provide cover for a short period and require some level of patient adherence (for example pills taken daily) (Higgins et al., 2016).

The discrepancy between the LARC methods and SARC methods is a result of perfect use and typical use. Perfect- use failure rates reflects the effectiveness of a method if the instructions for use are perfectly followed at all times (Polis, Bradley, Bankole, et al., 2016). Typical -use contraceptive failure reflects actual use of the method including inconsistent and incorrect use where women did not fully adhere to the contraceptive schedules (Polis et al., 2016). The most effective reversible methods of long-acting contraceptives are the intra uterine contraceptive device (IUCD) and the sub dermal implant. Once they were inserted their failure rate was extremely low – they only failed in 1/1000 users per year of typical use (Crede et al., 2012). Even though failure rates are low, effective use of long-acting contraceptive in South Africa is severely limited with the national prevalence of the intra- uterine device at 0.8% (Department of Health, 2016). Subdermal contraceptive implants are long-acting reversible contraceptives, which are both safe and effective. Effectiveness was 100% and good tolerability recorded for 86.5% (López Del Cerro, Serrano Diana, Castillo Cañadas, et al., 2018). It was evident that LARC prevented pregnancies and reduced abortion rates, even though the uptake of these methods was low.



## 1.3 PROBLEM STATEMENT

The literature demonstrates that unintended pregnancy remains a public health issue that leads to unsafe abortions and maternal deaths yearly because these women have discontinued their contraceptive methods due to side effects or inconvenience of use (WHO, 2019). Most women who were using long-acting reversible contraceptives, had stopped using the method due the negative side effects, couldn't access their follow-up

contraceptives, did not know about LARC and its benefits or had misconceptions about using LARC. The monitoring and evaluation report from the Standard information Jointly Assembled by Networked Infrastructure (SINJANI) has also highlighted the low uptake of LARC in the South/Western districts at the primary health care clinics as well as the district hospitals in Cape Town. It reported the following data for the 2019-2020 financial year: oral pills 78.274, Norethisterone Enantate (Nuristerate) 43.606, Medroxyprogesterone (Depo Provera) 120.338, IUCD 861 and Implanon 5002. According to the WHO (2019) Sexual and Reproductive Health guidelines most contraceptive methods can be given to women on the day of the abortion procedure yet the number of women coming for repeat abortions is increasing. Women who had an unintended pregnancy 32.1% of them were using short-acting reversible contraceptives and only 2.6 % were using long-acting reversible contraceptives (WHO, 2019). In addition, these women did not know about long-acting reversible contraception (LARC) (DoH, 2016). LARC methods are highly effective, have low failure rates, prevents unintended pregnancies and reduces abortion rates (Shoupe, 2016).



The increased failure of short-acting reversible methods in meeting the women's needs coupled with the women's limited contraceptive choice and the relative underuse of LARC make it important to understand women's perceptions about LARC.

## 1.4 SIGNIFICANCE OF THE STUDY

This study provides an understanding of the usage patterns of women of reproductive age (18-49 years) of long-acting contraceptives at a primary health care clinic in Cape Town, South Africa. This study informs policymakers so that they can institute measures to increase the uptake of LARC.

## 1.5 PURPOSE

The purpose of this study was to explore the perceptions of women attending a primary health care clinic regarding long-acting reversible contraceptives.

## 1.6 RESEARCH OBJECTIVES

The objectives of this study were to explore women's perceptions with regard to:

- Perceived challenges related to the use of long-acting reversible contraceptives.
- Perceived benefits related to the use of long-acting reversible contraceptives.

## 1.7 DEFINITION OF CONCEPTS

| Term | Definition | In this study |
|---|---|---|
| **Long-acting reversible contraceptives (LARC)** | Methods of birth control that provide effective contraception for an extended period without requiring user action (UNFPA, 2016). | Only intrauterine contraceptive devices (IUCDs) and the sub dermal contraceptive implants are classified as LARC. |
| **Perceptions** | Perception is an active process as one selectively perceives, organises and interprets what one experiences (Collins English Dictionary, 2014). Interpretations are based on the perceiver's past experiences, assumptions about human behaviour, knowledge of the others circumstances, present moods / wants / desires and expectations (Collins English Dictionary, 2014). | The participant's perceptions of their personal experience of the phenomenon or as they report it as experiences with LARC shared with them by family and friends. |

| | | |
|---|---|---|
| **Short-acting reversible contraceptives** | This is a category of contraception methods, which is highly effective, used in a short time interval (UNFPA, 2016). | SARC is defined as the oral contraceptives (Pill),emergency contraceptive (morning after pill), the progestin only contraceptive injectable Medroxyprogesterone (Depo Provera) and Norethisterone Enantate (Nuristerate). |
| **Women of reproductive age** | Adult human beings who are biologically female persons as distinguished from a girl or a man between the ages of 15 and 49 (WHO, 2016). | Females aged 18- 49 who are using short-acting contraceptives or used LARC before at a family planning clinic in Cape Town, South Africa. |

## 1.8 RESEARCH METHODOLOGY

Research methodology refers to the practices and techniques used to collect, process and analyse data. Research methods include the sampling methods, sample size, data collection methods, the choice of measuring instrument and data analysis techniques (Bowling, 2014; Polit & Beck, 2017).



### 1.8.1 Research design

A research design refers to an overall structure or plan of the research project in order to enhance the study's integrity (Bowling, 2014; Polit & Beck, 2017). It is a way in which the researcher plans and structures the research process. A qualitative exploratory descriptive research design was used in this study and this will be described in detail in Chapter 3.

### 1.8.2 Research setting

Burns &Grove (2016) explain the setting as the location where a study is being conducted. This study was conducted at a primary health care clinic in Claremont in Cape Town. The services rendered there are child health for immunisations and the integrated management of childhood illnesses, family planning services and emergency contraceptives for women, pap smears, as well as HIV testing.

### 1.8.3 Population

Population is the total number of units from which data can potentially be collected (Burns & Grove's, 2016). The population for this study is described in detail in Chapter 3.

### 1.8.4 Sampling

A sample is a proportion of the defined population who is selected to participate in a study and is intended to reflect all characteristics of that population (Burns & Grove's, 2016). Purposive sampling is a non-probability sampling method where data are collected from participants chosen because they illustrate some features of interest for a particular study (Brink, van der Walt, & van Rensburg, et al., 2018). The sampling in this study is described in detail in Chapter 3.

#### 1.8.4.1 Inclusion criteria

Inclusion criteria refer to the criteria that specify the characteristics that the people in a population have to possess. The criteria for inclusion in this study are described in detail in Chapter 3.

#### 1.8.4.2 Sample size

The sample size refers to the number of subjects, events, behaviours or situations that are examined in a study (Burns & Grove's, 2016). The sample size is largely a function of the inquiry, the quality of the informants and the type of sampling strategy used (Neuman, 2014). The sample size in this study was determined by the informational needs and data saturation.

### 1.8.5 Data collection

Data collection is a process of gathering information needed to address a research problem (Polit & Beck, 2017). Individual face-to-face in-depth interviews were conducted with all consenting participants. Data collection is described in Chapter 3.

### 1.8.6 Data analysis

Data analysis is the technique used to reduce, organise and give meaning to data (Burns & Grove's, 2016). The researcher used Creswell's (2013) steps of thematic analysis of qualitative data to analyse the data. Data analysis is described in Chapter 3.



### 1.8.7 Trustworthiness

Trustworthiness is a method of establishing validity and reliability of qualitative research, and it is achieved when it accurately represents the experience of study participants. It measures the true value of the study. It encompasses four criteria, namely credibility, dependability, conformability and transferability (Polit & Beck, 2017). Trustworthiness in this study was ensured by means of credibility, dependability, conformability and neutrality as described in Chapter 3.

### 1.8.8 Ethical considerations

Ethics are a set of moral principles, which is suggested by an individual or group, is widely accepted and offers rules and behavioural expectations about the most correct conduct towards participants, employers, other researchers, assistants and students (Polit & Beck, 2017). Ethics clearance and approval to conduct this research were obtained from the Biomedical Research Ethics Committee at the University of the Western Cape (Annexure D), and the City of Cape Town Research Committee (Annexure E).

### 1.8.9 Informed consent and autonomy

The researcher obtained informed voluntary consent from each participant. A thorough explanation was given to the participants regarding everything that took place during the study.

The participants were given enough time to review the consent forms in a language that they understood before signing it (Annexure B). The participants were informed that participation was voluntary and would not affect their access to care. Permission was obtained to audio record the individual interviews and confidentiality was assured.

The field notes and voice recordings from the interviews were kept confidential and exclusive information was only shared with the supervisor and others that were directly involved with the study. Burns & Grove's (2016) define confidentiality as the researcher's management of the information disclosed by the participant. Anonymity and confidentiality of the participants were always maintained. Voice recordings and all data that were transcribed had codes and the names of participants do not appear. This will be kept locked in a safe at the university and will be discarded after 5 years.

### 1.8.10 Beneficence and non-maleficence

By adopting sound ethical principles and scientific methods, the researcher should protect the participants from physical, psychological harm and exploitation (Polit & Beck, 2017).

## 1.9 RISKS AND BENEFITS OF THE STUDY

The researcher made the participants aware that taking part in the study was voluntary and that there were no direct benefits to anyone who participated. In addition, the participants would not be penalised in any way if they wished to withdraw from the study at any time. They were also not obliged to answer any questions that they felt were violating their rights. The participants were assured that their sexual, reproductive, and contraceptive needs would always be taken care of even if they withdrew from the study. The participants were, however, encouraged to share their thoughts and feelings in an honest manner in relation to the questions asked. In the event that the participants were traumatised by what they revealed in the interviews, the researcher demonstrated care, empathy and respected periods of silence until they were ready to continue. The researcher would have temporarily terminated the interviews in the event the participants became distressed or emotional. The researcher would have referred the participants appropriately to the mental health sister for assessment and further management and then to the psychologist at the facility.

## 1.10 CHAPTER OUTLINE

The report of this study is structured as follows:

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|---|---|
| Chapter 1 | Orientation to the study |
| Chapter 2 | Literature review |
| Chapter 3 | Research methodology |
| Chapter 4 | Findings and discussions |
| Chapter 5 | Summary, limitations, recommendations and conclusion |

## 1.11 SUMMARY

Chapter 1 provides an orientation to the study. The aims and objectives of the study were stated, and relevant concepts were defined. The research methodology in this study was introduced and aspects of trustworthiness and ethics were described. Chapter 2 will present the literature with regard to the global use of contraceptives and women's perceptions about LARC.

# CHAPTER 2

# LITERATURE REVIEW

## 2.1 INTRODUCTION

This chapter will provide the literature, which underpins the study. The literature explores an understanding of reproductive health, the history of contraceptive use, types of contraception, usage patterns, as well as a discussion of women's perceptions and the barriers to the use of LARC to provide a basic understanding of the low use of LARC.

## 2.2 REPRODUCTIVE HEALTH

Reproductive health rights are defined as the rights of people to have a responsible, satisfying and safer sex life. It allows people the capability to reproduce and the freedom to decide if, when and how often to do so, while reproductive health refers to a state of complete wellbeing of the reproductive system and not merely the absence of disease (WHO, 2016).



Both concepts are central to this study. The International Conference on Population and Development (ICPD) held in Cairo, Egypt in 1994 recognised that reproductive health, including sexual health and reproductive rights and gender equality are important to improving the quality of life for all (UNFPA, 2019). Women have a right to be informed about all contraceptive methods and have access to safe, effective and affordable health care services, including reproductive health and abortion services (WHO, 2016).It is important for women to have the appropriate healthcare services that enable them to go through pregnancy and childbirth safely. The direct medical benefits of preventing unintended pregnancies, improving maternal health and preventing, diagnosing and treating sexually transmitted infections, including HIV/Aids are well known (UNFPA,

2019). The definition of reproductive health and reproductive rights underpins the reason for this study.

## 2.3 THE HISTORY OF CONTRACEPTIVE USE

Contraception is not a modern concept and in order to fully comprehend the status of reproductive health in the modern world, it is imperative to examine the historical attempts made to prevent pregnancy as illustrated in the table below:

| | |
|---|---|
| Barrier methods (Female) | 1882 Dr C Hasse invented the diaphragm.<br>1883 Aletta Jacobs described a vulcanised rubber cap that an integral circular watch-spring and covered the upper vagina and cervix.<br><br>early 1900s Female condoms or feminine sheaths were made of rubber<br><br>1992 Polyurethane female condoms were designed<br><br>2004 The first silicone diaphragm (Milex) became available (WHO, 2016). |
| Barrier methods (Male ) | 1564 Gabriello Fallopius recommended a moistened linen sheath for protection against STIs.<br><br>18th century onwards Condoms were made from animal intestines.<br><br>1843 Vulcanisation of rubber developed by Goodyear and Hancock, and rubber condoms replaced skin condoms.1930s Crepe rubber was replaced by latex.<br><br>1997 First polyurethane condom launched: stronger, less sensitive to heat and humidity, and not damaged by oil-based lubricants.<br><br>2005 A new synthetic non-latex condom was launched (WHO, 2016). |

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|---|---|
| Chemical Contraception | 1885 The first commercial vaginal suppository using cocoa butter and quinine sulphate was developed.<br><br>1906 Friedrich Merz developed the first known commercially produced spermicidal jelly, called Patentex (WHO, 2016). |
| Hormonal contraceptives (Combined oral contraceptives) | 1945 Syntex SA was established to produce steroids from diosgenin (a plant steroid in Mexican yams) and search for compounds which could be administered orally.<br><br>1957 Norethynodrel, mestranol and norethindrone (with estrogen) were approved.<br><br>1960 FDA approved norethynodrel-Enovid as a contraceptive.<br><br>1961 Conovid, Conovid E and Anovlar oral contraceptives containing high doses of estrogen and progestogen were approved for use.<br><br>1980s onwards Pills containing new progestogens were developed: desogestrel in 1982; gestodene in 1987; norgestimate in 1991. These are commonly referred to as 'third generation'.<br><br>1981 Triphasic pills providing hormones in three phased sequences were introduced.<br><br>1982 Biphasic pills (two phases) introduced.<br><br>2002 The first combined pill (Yasmin) to contain the new progestogen, drospirenone became available.<br><br>2009 The first combined pill (Qlaira) became available.<br><br>Qlaira has a quadraphasic dosage regimen, with 26 active tablets with a sequence of reducing estrogen and increasing progestogen dose, followed by two placebo tablets (WHO, 2016). |
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|---|---|
| Hormonalcontraceptives (Progestogen only pills) | 1960s Progestogen-only contraception was developed.<br><br>1969 The first progestogen-only pill contained chlormadinone acetate, followed by pills containing norethindrone and norgestrel.<br><br>2002 The first new progestogen-only pill for 20 years became available (WHO, 2016). |
| Emergency contraceptives | 1960s The first hormonal preparations used high doses of estrogen alone, taken over five days.<br><br>1970s Combined estrogen and progestogen (called the Yuzpe regimen) replaced estrogen used alone.<br><br>1976 IUDs inserted postcoitally were found to be very effective.<br><br>1984 The first specifically licensed EC product was launched in the UK – Schering PC4.<br><br>2000 The first specifically licensed progestogen-only EC (POEC) product (Levonelle-2) was launched in the UK.<br><br>2001 POEC (Levonelle) became available to buy from pharmacies in the UK (WHO, 2016). |
| Hormonal contraceptives (injectables) | 1950s The first systemic contraceptives using short-acting progestogens were developed. These were administered orally and had to be given frequently.<br><br>1953 Dr K Junkman found that by combining a progestogen and an alcohol, an injectable drug with long-lasting contraceptive action was obtained.<br><br>1963 The first trials of Depo-Provera as a human contraceptive began.<br><br>1974 Depo-Provera was licensed in the UK.<br><br>1984 Depo-Provera was granted a licence for long-term use in cases where other methods were not suitable (WHO, 2016). |

| | |
|---|---|
| Implants | 1994 Noristerat is licensed only for short-term use.<br><br>1967 The development of contraceptive hormone-filled silastic capsules which could be implanted under the skin started in America.<br><br>1993 Norplant, consisting of six progestogen (levonorgestrel)-releasing rods, was introduced in the UK.<br><br>1999 Norplant discontinued. Introduction of single rod implant (Implanon) containing etonorgestrel.<br><br>2010 Nexplanon phased in to replace Implanon. This is the same as Implanon, except that Nexplanon is radio-opaque and the insertion procedure is different (WHO, 2016). |
| Intrauterine contraceptive devices | 1868 Cervico–uterine stems were developed.<br><br>1909 The first specifically designed IUD (a ring of silk-worm gut) was made by Dr R Richter.<br><br>1920s E Graefenberg developed a silver ring.<br><br>1934 The Ota ring was introduced, allowing for smaller and more effective IUDs.<br><br>1960s Plastic IUDs were developed (Lippes Loop, Marguilies Spiral, Saf-T-Coil).<br><br>1969 Copper IUDs were introduced.<br><br>1996 Hormonal-releasing devices (intrauterine systems) introduced.<br><br>1997 First copper frameless IUD introduced (Gynefix).<br><br>1998 to date Continuing research into IUDs with modified shapes or with more copper. Combined copper and hormonal IUDs are also being researched (WHO, 2016). |

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|---|---|
| Permanent methods (Female Sterilisation) | 1834 In the late 19th and 20th centuries, it was a major operation involving all the hazards of abdominal surgery and weeks of hospitalisation.<br><br>1961 Laparascopic sterilisation was done for postpartum sterilization. Various rings and clips are now used to occlude the fallopian tubes.<br><br>2002 Hysteroscopic sterilization is where tiny intra-tubal devices are inserted through the vagina (hysteroscopic placement) and placed at the entrance to the fallopian tubes (WHO, 2016). |
| Permanent methods (Vasectomy) | 1775 First reference to vasectomy.<br><br>1830 Sir Astley Cooper began to experiment with various vasectomy techniques.<br><br>1972 The National Health Service (Family Planning) Amendment Act allowed local health authorities to provide vasectomy services on the same basis as other contraceptive services.<br><br>1974 No-scalpel vasectomy was developed in China. This involves reaching the vasa through a tiny puncture hole rather than an incision (WHO, 2016). |



## 2.4 IMPORTANCE OF CONTRACEPTIVE USE

Contraception has many different health and non-health benefits, and this includes the prevention of high-risk pregnancies, unsafe abortion and its complications, obstetric complications, cancers of the reproductive system and deaths (WHO, 2016).

Contraception also enables women to successfully delay falling pregnant and are in a position to plan the subsequent timing and spacing of their children. They can then pursue educational and other career choices when they previously may not have been able to do so, thus contributing to the economy (WHO, 2016). Delayed family spacing and controlling family size also means an improved maternal mortality and morbidity rate as the exposure to pregnancy-related morbidity is decreased (WHO, 2016). Improved maternal health would mean fewer orphans, improved health status of women who will be contributing to economic growth therefore reducing poverty and gender inequality (WHO, 2016).

## 2.5 DEFINITION OF CONTRACEPTION

Contraception (birth control) aims to prevent pregnancy by interfering with the normal process of ovulation, fertilisation, and implantation. This could be through various mechanisms - by creating a physical barrier or interfering chemically or hormonally with the process of reproduction (WHO, 2018). This happens by blocking or keeping the egg and sperm apart by thickening the cervical mucus, stopping egg production by altering hormone levels, stopping the combined sperm and egg attaching to the lining of the womb by changing the lining of the womb making it unfavourable for implantation to occur (WHO, 2018). There are different kinds of birth control that act at different points in the process. The most common methods are the chemical methods, involving the ingestion of hormones, which result in changes to the female reproductive system, which in turn, prevent pregnancy. These methods work in a variety of ways, as can be seen in Table 1below:

**Table1: Hormonal contraceptive methods: mechanism of action**

| Method | Mechanism of Action |
|---|---|
| **Combined oral contraceptives** | Combined oral contraceptives or "the pill"<br>Contains two hormones (oestrogen and progestogen)<br>Prevents ovulation by suppressing the release of gonadotropins.<br>Oestrogen negative feedback on the anterior pituitary greatly decreases the secretion of Follicle Stimulating Hormone, which inhibits follicular development and helps prevent ovulation (WHO, 2018). |
| **Emergency contraceptives** | The pills contain Levonorgestrel 1.5mg<br>Pill taken up to 5 days after unprotected sex<br>Emergency contraceptives are used when protection was not used during sexual intercourse, a condom breaks, more than one contraceptive pill is missed, an injectable is missed by more than two weeks to a month and when being forced to have sex without contraception (WHO, 2018). |

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|---|---|
| **Implant** | Implant that lasts for three or five years<br>Implant is a small flexible rod placed under the skin of the upper arm.<br><br>It contains progestin hormones only<br><br>It thickens the cervical mucus to block the sperm and egg from meeting<br><br>Prevents ovulation by inhibiting the secretion of gonadotropins which, in turn, prevents follicular maturation and ovulation and results in endometrial thinning.<br><br>These actions produce its contraceptive effect (WHO, 2018). |
| **Intrauterine contraceptive device (IUCD)** | Intra uterine copper containing contraceptive device (IUCD) lasts for five to ten years.<br>It is a small flexible plastic device containing copper that is inserted into the uterus.<br><br>Copper acts as a spermicide within the uterus.<br>The presence of copper increases the levels of copper ions, prostaglandins, and white blood cells within the uterine and tubal fluids.<br><br>The copper damages the sperm and prevents it from meeting the egg<br><br>There are two IUCDs: one non-chemical and one chemical. Nonchemical relies on copper ions and chemical includes the progestin hormones (WHO, 2018). |

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|---|---|
| **Intrauterine contraceptive device (Mirena) Levonorgestrel** | A T-shaped plastic device inserted into the uterus that has levonorgestrel, a type of progestin.<br>The cylinder of the device is coated with a membrane that regulates the release of the hormone.<br>Mirena releases the hormone at an initial rate of 20 micrograms per day.<br>Hormone declines to a rate of 14 micrograms per day after five years.<br>It thickens the cervical mucus<br>Causes morphological changes of the endometrium including stromal pseudo-decidualization.<br>Leading to glandular atrophy, a leukocytic infiltration and a decrease in glandular and stromal mitoses.<br>Ovulation is inhibited in some women using Mirena (WHO,2018) |
| **Medroxyprogesterone Acetate (Depo provera ) Petogen injectable** | It is injected into the muscle every three months (twelve weeks)<br>Contains only progestin hormone<br>It thickens the cervical mucus to block the sperm and egg from meeting<br>It inhibits the secretion of gonadotropins which, in turn, prevents follicular maturation and ovulation and results in endometrial thinning. These actions produce its contraceptive effect (WHO, 2018). |
| **Norethisterone enantate (Nur-Isterate) injectable** | It is injected into the muscle every two months<br>It contains progestin hormone only<br>It thickens the cervical mucus to block the sperm and egg from meeting.<br>Prevents ovulation by inhibiting the secretion of gonadotropins which, in turn, prevents follicular maturation and ovulation and results in endometrial thinning. These actions produce its contraceptive effect (WHO, 2018). |

| | |
|---|---|
| **Progestin only contraceptive pills or the "mini pill"** | Contraceptive pill that must be taken daily with no breaks between packs.<br>Contains very low doses (30 micrograms) of progestin<br>It thickens the cervical mucus to block the sperm and egg from meeting.<br>Prevents ovulation by inhibiting the secretion of gonadotropins which, in turn, prevents follicular maturation and ovulation and results in endometrial thinning. These actions produce its contraceptive effect (WHO, 2018). |

Hormonal contraceptives are not suitable for use by all women. Side effects like psychosis, increased risk of embolism, weight gain, headaches and various other symptoms mean that contraceptives will not be a viable choice for these women (WHO Medical Eligibility Criteria for Contraceptive Use, 2015). Women experiencing autoimmune disease, cancer treatment, breastfeeding women and other health conditions make contraceptive use challenging due to the side effects of the medication. In addition, women who are well-informed about all forms of contraceptives choose to avoid hormones in general.



### 2.5.1 Barrier methods

Barrier contraceptives physically block the sperm's access to a woman's uterus, should only be used at the time of sexual intercourse and they do not affect a woman's or man's future fertility (WHO, 2016). As stated previously, hormonal contraceptives are not a suitable choice for all women. This has necessitated other methods of contraception, which do not rely on hormones to prevent pregnancy.

The actions of these methods are that they act as mechanical barriers to the sperm and prevent it from reaching the uterus. They are as follows:

- **Diaphragm:** The diaphragm is a shallow latex cup with a spring mechanism in its rim to hold it in place in the vagina and it comes in different sizes. It prevents pregnancy by providing a barrier to the passage of semen into the cervix effectively for 6 hours. The diaphragm should be used with a spermicide to prevent sperm migration into the cervix (WHO, 2018).

- **Cervical cap:** The cervical cap is smaller than a diaphragm and its soft cup shaped latex device fits over the base of a woman's cervix. It may be more difficult to insert and can be inserted as long as eight hours before sexual intercourse It prevents pregnancy by providing a barrier to the passage of semen into the cervix. The cervical cap should be used with a spermicide to prevent sperm migration into the cervix (WHO, 2018).

- **Male condoms:** Male condoms act as a physical barrier to prevent the passage of sperm into the vagina. Male condoms are sheaths or coverings that are unrolled over the man's erect penis and placed in the woman's vagina (WHO, 2018).

- **Female condoms:** The female condoms act as a physical barrier to prevent the passage of sperm into the vagina. Sheaths or linings that fit loosely inside a woman's vagina made of thin transparent soft plastic film and also provide some protection to the labia and the base of the penis during intercourse (WHO, 2018).

Hormonal contraceptives can cause side effects like menstrual irregularities (heavy prolonged bleeding or amenorrhoea), headaches, weight gain or loss, hair loss, acne mood changes and a decrease in sexual desire among others to some women. Some women may also be at risk for blood clots and stroke. For these women who are at risk or who are experiencing the negative side effects the natural contraceptive methods could be a safer and effective method of choice.

### 2.5.2 Natural Methods

Both hormonal and barrier methods may be unsuitable to women who have latex allergies, or experience side effects from hormonal contraceptives. Natural contraceptive methods do not need any intervention and relies on natural body rhythms in order to work. It may also just be a choice to use one of the natural methods below:

- **Fertility awareness:** In the Fertility Awareness Method (FAM) women monitor their body temperature and characteristics of cervical mucus. This is done by monitoring these three primary fertility signs: basal body (walking) temperature, cervical position and mucus. This method is not effective unless all three primary fertility signs are satisfactory. The couple prevents pregnancy by avoiding unprotected sex during the first and last estimated fertile days by abstaining or using condoms (WHO, 2018).

- **Lactation amenorrhoea:** This is a temporary contraception for new mothers whose monthly bleeding has not returned. It requires exclusive breastfeeding day and night of an infant less than 6 months old. By effectively latching and sucking the baby induces a reduction in gonadotropin releasing hormone, luteinising hormone and follicle stimulating hormone release, resulting in amenorrhea. During

this process, the beta-endorphins inhibit gonadotropin releasing hormone and dopamine secretions, which, in turn stimulates prolactin secretion and milk production (WHO, 2018).

- **Continuous abstinence:** Continuous abstinence implies completely refraining from sexual intercourse and it is 100% effective in preventing pregnancy.
- **Withdrawal method (coitus interruptus):** The withdrawal method involves withdrawal of the entire penis from the vagina before ejaculation (before the sperm is ejected from the penis) to be effective (WHO, 2018).

### 2.5.3 Permanent methods

These are permanent and irreversible methods of contraception and require a surgical procedure under local anaesthetic for men and general anaesthetic for women (DOH, 2018).

People who have decided that they will no longer reproduce may opt for one of the permanent contraceptive methods below:



- **Vasectomy (male sterilisation)**: Vasectomy involves an incision made in the scrotal sac, followed by cutting or burning of the vas deferens (tubes that carry sperm), and blocking both cut ends by keeping sperm out of ejaculated semen resulting in permanent contraception (WHO, 2018).

- **Tubal ligation (female sterilisation)**: Female sterilisation prevents fertilisation by interrupting the passage of the egg through fallopian tube and keeps the sperm from reaching the egg. The fallopian tubes may be blocked with clips, bands, segmental destruction with electro-coagulation causing a permanent form of contraception (WHO, 2018).

- **Hysterectomy:** Hysterectomy is the removal of the uterus and sometimes the ovaries (WHO, 2018).

## 2.6 PREVALENCE OF CONTRACEPTIVE USE

Contraceptive prevalence is the proportion of women who are currently using, or whose sexual partner is currently using, at least one method of contraception, regardless of the method being used. Developing countries are characterised by rapid population growth which is usually due to high fertility, high birth rates and low contraceptive prevalence (United Nations Population Fund, 2012) (UNFPA).

## 2.7 TRACING CONTRACEPTIVE USE: TYPICAL USE vs PERFECT USE

Perfect- use failure rate reflects the effectiveness of a method if the instructions for use are perfectly followed at all times (Polis et al., 2016). Typical -use contraceptive failure reflects actual use of the method including inconsistent and incorrect use where women did not fully adhere to the contraceptive schedules (Polis et al., 2016). Unintended pregnancies for some couples occur because they do not use any contraceptives to protect themselves while others become pregnant due to contraceptive failure (Patel, 2014). Measuring typical-use contraceptive failure rates among a cross-section of users is critical to informing improvements in provision of contraceptive information, supplies and services, which can assist women and couples to use contraception correctly and consistently (Polis et al., 2016). The discrepancy between the LARC and SARC methods is a result of perfect use and typical use. The lowest failure rates among long-acting reversible contraceptive methods are demonstrated with the analysis of method-specific typical-use contraceptive failure rates (Polis et al., 2016).

## 2.8 CONTRACEPTIVE USE PATTERNS INTERNATIONALLY

More than one in three married or in-union women globally use long-acting or permanent methods: namely, female and male sterilization, IUDs and implants (United Nations, 2015). These methods accounted for 56 per cent of contraceptive prevalence in 2015. In the UK, 53% of women of reproductive age use some form of reversible contraceptive method, but only 17% use LARC (WHO, 2015). In countries that had relatively high levels of contraceptive prevalence in 2015, 60 per cent or higher and representing different geographic regions married or in union, women relied on long-acting or permanent methods and in 34 of the 70 countries, the prevalence was 25 per cent or higher (United Nations, 2015). As contraceptive prevalence becomes more common, the share of all use by long-acting or permanent methods tends to increase. The global trend shows that the use of permanent contraceptive methods are high, even though the use of long-acting reversible contraceptives is steadily increasing they are still under-utilized despite their benefits to women (WHO, 2018).

## 2.9 CONTRACEPTIVE USE PATTERNS IN AFRICA



Nearly half of contraceptive users in SSA have opted for injectables, a method choice that is the result of individual, couple, community, and programmatic factors (Tsui, Brown, & Li, 2017). According to the United Nations (2015), injectables account for nearly half (47 percent) of overall modern method use (19.7 percent) in sub-Saharan Africa. High rates of discontinuation of short-term methods in SSA, however, have prompted expansion of access to longer-acting methods, most recently implants (Tsui et al., 2017). In Ethiopia, approximately four out of every ten women use modern contraceptives, with the prevalence of long-acting reversible contraceptives being low at 7.3% (Mekonnen, Enquselassie, Tesfaye et al., 2014). High maternal morbidity and mortality are partly attributed to unintended pregnancies, short birth intervals and a higher risk of obstetric

and newly born baby complications associated with low contraceptive use. The use of long-acting reversible contraceptives was proposed as a strategy to reverse the undesirable maternal health consequences in developing countries (Anguzu, Tweheyo, Sekandi, et al., 2014).

## 2.10 CONTRACEPTIVE USE PATTERNS IN SOUTH AFRICA

Family Planning is a key issue for the South African government and providing women with access to safe and effective contraception is a critical element of women's health. The revised National Contraception Clinical Guidelines of 2019 guides the implementation of an integrated Sexual and Reproductive Health and Rights programme (NDoH 2019). According to the National Department of Health (2019) all modern contraceptive methods are available free of charge at public healthcare facilities in South Africa and its use is high - an estimated 65% of sexually active women use a contraceptive method. Contraceptive prevalence was 49.1% and 41.8% women used modern non-barrier methods. About half had ever used injectable contraception (Chersich et al., 2017). Contraception was lower in resource limited settings, and younger women, who used a limited range of methods. In all settings, short-acting reversible contraceptives are more commonly used than LARC methods, despite the LARC methods being more efficacious, more cost-effective, and better tolerated than short-acting methods (Tibaijuka et al., 2017). The total number of contraceptives given in Cape Town for the period April 2015 to March 2016 were as follows: oral pills 508 938, Medroxyprogesterone acetate 788 794, Norethisterone Enantate 300 163, IUCD 3 208 and Implanon 19 972 (DoH 2016). The low use patterns for LARC are similar in Cape Town with only 6.4% of women in this area utilising LARC (Crede et al., 2012).

## 2.11 FACTORS INFLUENCING CHOICE OF METHOD: WOMEN OF REPRODUCTIVE AGE

According to the NDoH National Contraception Clinical Guidelines of 2019, the use of long-acting reversible contraceptives is poor and not well understood among women of reproductive age. Most women are using short-acting methods primarily, the three-month injectable (Depo-Provera) method (Crede et al., 2012). Convenience and healthcare provider recommendations were found to be the most common influence on method choice (Crede et al., 2012). The majority of women reported that their most recent pregnancy was unplanned. Most of these unplanned pregnancies were women who were using short-acting contraceptives (Crede et al., 2012). A small percentage of women (6.44%) are using LARC and it was found that poor knowledge regarding LARC is a contributing factor to poor uptake of methods (Crede et al., 2012).

Method choice has been found to be influenced by previous method use and the need for methods that can be started immediately after delivery (Whiteman et al., 2012). In the current study conducted in Cape Town, very few women reported that the provider had told them about LARC and sterilisation (Crede et al., 2012). It was found that 55% of injectable users stated that the reason for method choice was that a provider recommended it (Crede et al., 2012). The study revealed that knowledge gaps and biases contributed a lot to the non-use of LARC (Crede et al., 2012).

## 2.12 FACTORS INFLUENCING CHOICE OF METHOD: THE HEALTH PROVIDER

The use of long-acting reversible contraceptives is poorly understood among women of reproductive age resulting in most women using short-acting methods, primarily the injectable (Gashaye, Tsegaye, Abebe, et al., 2020). Healthcare providers' bias and ill-informing women about all methods of contraceptives decrease the women's receptiveness to long-acting reversible contraceptives (Harries et al., 2012). Negative perceptions and experiences by family and friends about the negative side effects and method failure also influence method choice (Whiteman, Cox, Tepper, et al., 2012).

Women reported that providers undervalued their own preferences when it came to contraception therefore convenience and healthcare provider recommendations were found to be the most common influence on method choice (Higgins et al., 2016). Some women reported provider minimisation of side effects such as heavy cramping and bleeding, especially if those side effects led to women requesting the LARC device to be removed (Higgins et al., 2016). Women reported that the long waiting times, negative staff attitudes and unavailability of nurses who can insert and remove LARC influenced their method choice (Crede et al., 2012). Healthcare providers who are not skilled and competent with the insertion and removal of LARC methods do not promote long-acting contraceptives and their effectiveness (Shartzer, Courtot, McMorrow, et al., 2016). The uptake of long-acting contraceptives increases when women are properly counselled, well-informed and supported with regard to the mechanism of action, side effects and benefits of LARC

(Higgins et al., 2016)

## 2.13 USER CHALLENGES TO USING LARC

In a study conducted by Bikorimana (2015) in Rwanda, women's concerns were perceived pain, bleeding disturbances, infection, discomfort with regular checking of threads and doubt about reliability. Some women in South Africa perceived IUCDs to cause infections, pain, interference with sexual intercourse cancer of the womb and perforation of the womb (MonjiBuilu & Naidoo, 2015). Women found not only the duration of bleeding problematic, but also the amount. Thirty-one percent of removers said they had experienced heavy bleeding and when using the IUCD (Pillay, Chersich, Morroni, et al., 2017). In Nigeria, women feared that the insertion and removal procedures will have an effect on their physical activities, discomfort during sex and lead to sterility (Gebremariam & Addisie, 2014). Women displayed negative attitudes and perceived the IUCD as being capable of penetrating the womb, disappearing in the abdomen and causing cancer (Tibaijuka et al., 2017). They fear that the insertion and removal procedures will have an effect on their physical activities and cause discomfort during sex (Gebremariam & Addisie, 2014). Less than 10% of women would not consider the IUCD because of their cultural and religious beliefs (Bikorimana, 2015).



According to (MonjiBuilu & Naidoo, 2015), women's perceptions about LARC are pain, fear of cancer, infertility, decreased sexual activity or pain during sex and fear of womb perforation. Approximately 40% of all participants expressed concern about pain during insertion. Some women would not consider using LARC because of fear of the unknown and lack of trust and fear of falling pregnant with the IUCD inside (MonjiBuilu & Naidoo, 2015). Women had some sort of knowledge of implants but were ill-informed about its effectiveness and long-term use (Mekonnen et al., 2014). Women also had a perception

that the sub dermal implant could get lost within the body via the bloodstream (Gebremariam & Addisie, 2014). There is a general perception that with the implant in situ they would not be able to do any hard work with the affected arm (Gebremariam & Addisie, 2014). A study conducted by Siyoum, Mulaw, Abuhay, et al., (2017) in Ethiopia found that 58, 43% of women experienced menstrual disturbances like heavy bleeding and 25.8% of women complained of pain on the arm of the implant insertion. It was also reported that most participants discontinued the Implanon due to side effects of heavy bleeding, pain on the arm, weight gain or weight loss (Mrwebi, Ter Goon, Owolabi, et al., 2018). All women deserve courteous treatment, correct information, reliable products and competent skilled healthcare providers, and this is a big barrier because the latter is lacking in public healthcare facilities (Bikorimana, 2015).

## 2.14 STRATEGIES IMPLEMENTED BY SA & WESTERN CAPE TO ENHANCE THE UPTAKE OF LARC

Contraceptive provision through the provincial department's clinics as well as the City of Cape Town Clinics to be prioritized. Making LARC methods available in post- partum and post-abortion care facilities, adolescent girls, sex workers and other vulnerable communities.

Health-workers to ask women about their fertility intensions and giving them information about LARC and other contraceptive services. Train nurses and doctors on the insertion and removal of LARC methods at all primary health care facilities so that they are within reach for all who need them. Community health care workers trained as advocates of LARC and support their ongoing use in communities once selected. Clinical management of women should be improved, and they should be actively followed up, reassured and encouraged to access help at the clinics should they

experience any LARC side effects. Responsive, quality removal of LARC services at all primary health care services to be established and performed by skilled health care providers with supportive referral for the deep Implant removals or non-visible IUCD strings according to the referral pathways. Pre- insertion counselling and ongoing support on LARC methods for women and girls seeking LARC and women should be prepared about the side effects before the LARC methods are inserted. Health care workers to intervene as soon as possible when LARC side effects occur. Values clarification workshops for all health care workers to improve women and girls access to sexual and reproductive health care services.

**2.15 SUMMARY**

Chapter 2 provided detailed information about reproductive health, the history of contraceptives, importance of contraceptive use, contraceptive methods and the literature that was reviewed on women's perceptions of long-acting reversible contraceptives and it highlighted the global trends for women worldwide. The chapter also added the strategies implemented in SA and the Western Cape to enhance the uptake of LARC. Chapter 3 describes in detail the research methodology used and its application to the study.

# CHAPTER 3

# RESEARCH METHODOLOGY

## 3.1 INTRODUCTION

Chapter 3 provides a detailed description of the methodology applied in this study. This chapter outlines the study design, research setting, population, sampling, and inclusion and exclusion criteria used. Methods of data collection as well as data analysis, and ethical considerations will also be discussed in this chapter.

## 3.2 RESEARCH APPROACH AND DESIGN

### 3.2.1 Research approach

Qualitative research describes and analyses human experience in detail and seeks to understand the interpretations and motivations of people (Burns & Grove's, 2016). The qualitative research approach was chosen in this study to enable the researcher to obtain rich data and glean a thorough understanding of perceptions about long-acting contraceptives (LARC) of women currently using SARC.



### 3.2.2 Research design

A research design refers to an overall structure or plan of the research project in order to enhance the study's integrity (Bowling, 2014; Polit & Beck, 2017). For the present qualitative, non-experimental research study, an explorative descriptive research design was applied. Exploratory studies are aimed at moving beyond description by identifying the ideas and assumptions behind a phenomenon which had been previously described

(Brink et al., 2018). The aim of descriptive research is to describe real-life situations and to identify relationships by using words rather than numbers (Polit & Beck, 2017).

The researcher allowed the participants to verbally describe their perception about LARC from their own experiences.

### 3.3 RESEARCH SETTING

Burns & Grove's (2016) describe a research setting as the location where a study is conducted. This study was conducted at a primary health care clinic in the Southern/ Western district, Cape Town. The services render includes child health for immunisations, integrated management of childhood illnesses (IMCI), family planning services and emergency contraceptives for women, pap smears, HIV testing and TB. This clinic was selected for the study because it offers the full range of family planning services and was therefore appropriate since LARC was available as an alternative method for participants on SARC. The City of Cape Town utilises the Patient Record and Health Management Information system (PRHEMIS) to capture their data which indicated that the clinic provides services to approximately 2 000 women every month. The staff complement is as follows: three registered nurses, one enrolled nurse, one enrolled nursing assistant, two administrative clerks, two community service nurses and a lay counsellor from TB/HIV Care.

### 3.4 POPULATION

The population is the total number of units from which data can potentially be collected (Burns and Grove's, 2016). The population in this study included women of reproductive age of 18 to 49 years attending the clinic for short-acting reversible contraceptives.

## 3.5 SAMPLING

A sample is a proportion of the population who is selected to participate in the study and is intended to reflect all characteristics of that population (Brink et al., 2018). It refers to a process of selecting a portion of the population to represent the entire population (Polit & Beck, 2017). Purposive sampling was used in this study. This non-probability sampling method is used where data are collected from participants who have some features of interest for a particular study (Burns & Grove's, 2016). In this study, the researcher included women who were using short-acting reversible contraceptives and accessed the clinic every eight weeks or twelve weeks for their injectables as well as their oral contraceptive pills.

These women were able to describe to the researcher how they perceive LARC.

### 3.5.1 Inclusion/ Exclusion criteria

Inclusion criterion refers to the criteria that specify the characteristics that the people in the population should possess and sometimes referred to as 'eligibility' criteria.



The inclusion criteria of the study were:

- Women of reproductive age, who were using short-acting reversible contraceptives and attend the family planning clinic every eight weeks or twelve weeks for their injectables or oral contraceptives,

Exclusion criteria refer to those characteristics in the population that disqualify the participants from taking part in the research (Polit & Beck, 2017).

The exclusion criteria of the study were:

- Women below the age of 18 years, who required special considerations in order to give consent, these special considerations were beyond the scope of the present study.
- Women above the age of 49 years, or who no longer use contraceptives.
- Population with known co-morbidities such as hypertension, diabetes and cardiovascular disease who are at number three and four of the WHO Eligibility Criteria Wheel, (2015). These women are referred to the physician at the Lady Michaeli's day hospital in Plumstead.

### 3.5.2. Sample size

The sample size refers to the number of subjects, events, behaviours or situations that are examined in the study (Burns & Grove's, 2016). The sample size is largely a function of the inquiry, the quality of the informants and the type of sampling strategy used (Neuman, 2014). The sample size was determined by the informational needs and data saturation. Initially, it was envisioned that a minimum of ten interviews would be required for this study. However, data saturation was reached only after fifteen women were interviewed.



## 3.6 DATA COLLECTION

Data collection is a process of gathering information needed to address a research problem (Polit & Beck, 2017). Data collection in this study was an interactive process and the data analysis commenced as soon as the data collection started and not at the end of the process.

### 3.6.1 Data collection method

Individual face-to-face in-depth interviews were conducted with all consenting participants. Individual interviews were conducted based on the personal nature of the topic and ensured that the participants were comfortable in sharing their views.

### 3.6.2 Data collection instrument

The introductory statement and research question were developed by examining the literature and finding out what the main issues around the use of LARC were. The literature demonstrates that there is an increased failure of short-acting methods to meet women's needs coupled with the women's limited contraceptive choice and the relative underuse of LARC. The interview guide (Annexure C) was formulated with one broad question in order to allow the participants the freedom to respond according to their own perceptions and experiences.

The broad research question posed to the participants was "What are your views about the use of long-acting reversible contraceptive methods versus short-acting reversible contraceptives such as tablets and injections"? The researcher then spontaneously generated follow-up questions and probed, paraphrased, and summarised based on their responses to that question. The probes were as follows:

- Would you be able to explain further, what you mean by…?
- Can you help me understand more about?
- Can you elaborate on that idea…?
- Could you give me an example?
- Could you explain that further…?
- Is there anything else you would like to add?

### 3.6.3 Data collection process

Data were collected from 13th March to 23rd May 2019. The interviews were conducted in a consulting room at the primary health care clinic located away from the patients' waiting area. This consulting room was situated next to the consulting room of the registered nurse. This was done purposefully to allow the participant's easy access to the sexual and reproductive health services offered by the registered nurse after the interview was completed. The researcher worked with the flow of the clinic so as not to interrupt the service. Those who consented to take part in the study were sent to the room where the researcher interviewed them.

On arrival, all participants were provided with an information sheet about the study and given an opportunity to ask questions (**Annexure A)**. All issues regarding research ethics were discussed. The researcher reassured the participants that anonymity and confidentiality were ensured throughout the interviews and after the study. Participants who agreed to participate were requested to sign the consent form **(Annexure B)** and permission to audio record the interviews was obtained.

To ensure a full account of what the participant said, the interviews were conducted in English, recorded, and field notes were taken during the interview. While conducting the interviews the researcher observed the participants non-verbal communication or gestures and noted them in the field notes. At the end of each interview, the researcher provided the participants with a summary of the interview to allow them an opportunity to clarify, add or correct the interviewer's summary in order to achieve a positive closure to the interview. Each interview took approximately 45 to 50 minutes to complete. Data saturation was reached after 15 interviews.

Data saturation occurs during the data collection process when no new information is obtained, and redundancy has been achieved (Brink et al., 2018).

## 3.7 DATA ANALYSIS

Data analysis is the technique used to reduce, organise and give meaning to data. It is a process of making sense of a participant's views and opinions of situations (Burns & Grove's, 2016). Inductive reasoning was used where the researcher manually summarised the collected data and interpreted it to obtain a specific conclusion.

The researcher used Creswell's (2013) steps of thematic analysis of qualitative data:

**Step 1**: Organise and prepare the data for analysis

The researcher carefully listened to the recorded interviews to get a sense of the discussion before transcribing them verbatim. The field notes were typed, sorted and arranged in order before the data were analysed.

**Step 2**: Read through all the data

The researcher read the transcriptions to get an understanding and a sense of the full meaning of the information gathered. The researcher used this opportunity to reflect on her observations of the participants during the interview as well as the field notes captured during the interviews. This allowed the researcher to think about the underlying meaning of the information.

**Step 3**: Coding of the data

The researcher organised the data into chunks of information and coded it. The codes were then organised to form categories. The researcher continually checked to see whether any codes were similar and whether any new codes emerged.

**Step 4**: Description of the categories and themes

The researcher grouped the categories to form themes and gave a detailed description of the categories and themes.

**Step 5**: Present the results of the analysis

The researcher used a table to illustrate the themes, categories and subthemes. The researcher discussed the different themes, categories, subthemes and quotes from the participants and supporting it with the literature review.

**Step 6**: Interpretation of the results of the analysis (Creswell, 2013).

The researcher focused on the content of each category to explain and draw meaning from it. The following themes, subthemes and categories emerged from the data collected: two themes, six subthemes, and the researcher explored the relevant literature, which was then integrated with the findings of the study.

Theme 1: Perceived challenges associated with the use of LARC, which had fifteen categories.



Theme 2: Perceived benefits associated with the use of LARC, which had two categories.

The researcher learned from this study that there were more negative than positive perceptions about LARC as reported by the women.

## 3.8 TRUSTWORTHINESS

Trustworthiness is a method of establishing validity and reliability of qualitative research, and it is achieved when it accurately represents the experience of the study participants. It

measures the true value of the study. It encompasses four criteria, namely credibility, dependability, conformability and transferability (Polit & Beck, 2017).

### 3.8.1 Credibility

Credibility refers to confidence in the truth of data. It involves carrying out the study in a way that enhances its believability and ways to demonstrate credibility (Polit & Beck, 2017). Credibility in this study was ensured by the strict selection of participants according to the inclusion and exclusion criteria, asking all participants the same initial question and verifying the data collected with the participants after the interviews were completed and transcribed. In this study, the researcher is a clinical nurse practitioner at a primary health care clinic in the same district as the family planning clinic where patients with comorbidities are referred to. This ensured familiarity with the primary health care setting from the researcher's perspective. This showed that the researcher understood the research context, setting and participants.

The researcher was at the clinic for the duration of the study and spent sufficient time there engaging with the participants and collecting data until saturation was attained. The researcher ensured the honesty of the participants by informing the participants that participation in the study is voluntary and that they could withdraw at any time. The researcher involved only the participants who volunteered, read and understood the content on the information sheet, were willing to take part in the study and had signed consent to do so. The researcher established rapport with the participants before the commencement of the interview. Participants were informed that there were no right or wrong answers and that the purpose was to explore their perceptions of LARC. The researcher also ensured interactive questioning by encouraging clarification questions when participants were

unsure of what the researcher was asking them. The researcher had a reflective summary after each interview session to engage with the data collected and to ensure that the responses of the participant were well interpreted.

### 3.8.2 Transferability

Transferability refers to the extent that the findings from the data can be transferred to other settings or groups and is similar to the concept of generalizability (Brink et al., 2018). The researcher ensured transferability by describing the research setting, the context in which the research was carried out, sample and sample size, inclusion and exclusion criteria, interview question and interview procedure richly and thoroughly. The researcher also described what transpired during the interviews in detail. The non-verbal cues of the participants as well as the activity in the consulting room were described in the study.

### 3.8.3 Dependability

Dependability refers to data stability over time and under different conditions (Brink et al., 2018). Dependability in this study was ensured by providing a dense description of research methodology and methods used, as well as the implementation of the methods utilised. The researcher conducted face-to-face in-depth interviews to improve dependability. The audio recordings and the transcripts were available to the supervisor and the co-supervisor for verification and moderation. A description of the study phenomenon and the context from which data were collected was given by the researcher to ensure dependability.

### 3.8.4 Conformability

Conformability refers to the objectivity of the data that two or more people would agree about the relevance or meaning of the data (Brink et al., 2018). The researcher ensured conformability in this study by documenting the procedures done for checking and

rechecking data throughout the study. The researcher ensured conformability conducting in-depth face-to-face interviews with the participants until data saturation was attained.

The researcher also checked the results against the literature in order to strengthen conformability and demonstrated how interpretations and conclusions were reached. An audit trail was developed which was a systematic collection of the documentation that was compiled by the researcher, which included the field notes the researcher took during the interviews, voice recordings of the proceedings during the interviews and verbatim transcripts that were done by listening to the voice recordings for the supervisors to review. The supervisor confirmed the themes and codes to ensure objectivity in the data collection and analysis. The site, sampling and other procedures are clearly explained in the study.

### 3.8.5 Neutrality

Neutrality refers to the degree to which findings are a function solely for the informants and conditions of the research and no other biases, motivations, and perspectives (Polit & Beck, 2017). Neutrality in this study was maintained as the researcher made use of quotes when the data were transcribed. The supervisor checked the data and confirmed it with the findings from the literature after data analysis was complete.



## 3.9 RESEARCH ETHICS

Ethics are a set of moral principles that is suggested by an individual or group, is widely accepted and offers rules and behavioural expectations `about the most correct conduct towards participants, employers, employees, sponsors, other researchers, assistants and students (Brink et al., 2018). The researcher ensured ethical conformity of this study by obtaining permission from the following structures:

- The Office of the Director: Research (Ethics Committee) (**Annexure D**).
- The City of Cape Town Research Committee (**Annexure E**).

According to Brink et al., (2018), adhering to ethics in research is important to promote the aims of the research to avoid error, promote the truth, prevent misrepresentation of research data and create mutual trust and accountability between the researcher and the participants. In this study, the researcher will discuss ethics under the following headings: Informed consent, the right to self- determination, privacy, beneficence, non-maleficence, justice, veracity and fidelity.

### 3.9.1 Informed consent and autonomy

The researcher obtained an informed voluntary consent from each participant. A thorough explanation was given to the participants regarding the study and everything that would take place during the study. The participants were given enough time to review the consent forms (**Annexure B**) in a language that they understood (English) before signing it. The participants were informed that participation was voluntary and would not affect their access to care. Permission was obtained to audio record the individual interviews and confidentiality was assured.



### 3.9.2 Right to self determination

The right to self-determination is based on the principle of respect for individuals and their ability to control their own destiny (Brink et al., 2018). An information sheet detailing what the study was all about, what questions the participants will be asked was read out to the participants and given to them to go through it alone. The information sheet made the participants aware that participation in the study was voluntary and that there were no direct

benefits for taking part in the study. With the right to self-determination, the participants were allowed to ask the researcher questions at any point and had the ability to avoid answering questions that made them uneasy. Participants were informed that there were no penalties if they wished to withdraw from the study.

### 3.9.3 Privacy and confidentiality

The researchers undertook to protect the identity of the participants and the nature of their contribution to the interviews. The participant's notes and voice recordings from the interviews were given codes to identify them and their anonymity was ensured.

### 3.9.4 Beneficence and non-maleficence

The principle of non- maleficence (to do no harm) states that the researcher should protect the participants from physical, psychological harm and exploitation (Polit & Beck, 2017). In this study, the participants were not exposed to physical, psychological, social or financial danger. The participants were allowed to ask questions and state their complaints or concerns after each session. The researcher explained to the participants that they were not obliged to take part in the study.



### 3.9.5 Justice

The right to fair treatment is based on the principle of justice, which states that people should be treated fairly, and receive what they deserve (Polit & Beck, 2017). The researcher ensured that the participants were not disadvantaged in any way by participating in the study.

### 3.9.6 Veracity

Veracity involves the concepts of truth about the research study and the absence of deception. Individuals have the right to be told the truth and not to be deceived about any aspect of the research (Burns & Grove's, 2016). The researcher explained to the participants that she is a student at the University of the Western Cape and that the research project was to explore the perceptions of women of reproductive age about LARC, and that this project was being done by the researcher as part of a completion of her Master's degree.

### 3.9.7 Fidelity

Fidelity involves the concept of trust, participants place trust in researchers, and this necessitates a commitment to protect them (Brink et al., 2018). The researcher must ensure that the participants understand the risks, and thus foster a trusting relationship. There were no identified risks involved in participating in this study. However, it is understood that research carries potential risks and therefore, arrangements were made for psychological support for participants should the need have arisen. This support was not necessary for the participants in this study.



## 3.10 SUMMARY

Chapter 3 presented an in-depth account of the research methodology used in the study. The methodologies were based on a qualitative research approach and an exploratory descriptive design. Purposive sampling was used, and the sample size was be determined by the informational needs and data saturation. Chapter 4 focuses on the findings and discussions.

# CHAPTER 4

# FINDINGS AND DISCUSSION

## 4.1 INTRODUCTION

In Chapter 3, a description of the research methodology and measures taken to ensure trustworthiness and ethical accountability in this study were described. Data collection was an interactive process and the researcher conducted individual face-to-face in-depth interviews with all consenting participants. The researcher used inductive reasoning where the collected data was manually summarised and interpreted to obtain a specific conclusion. The researcher used the six steps of Creswell's (2013) data analysis process to analyse the data. This chapter presents and discusses the research findings. The literature is used in conjunction with the integrated discussions, which assisted with locating the study findings within the existing body of research and highlighting new contributions to the literature in this regard. Table 2 presents the themes, subthemes and categories as generated from the analysed data. The purpose of this study was to explore the perceptions of women using short-acting reversible contraceptives about LARC, while they attended a primary health care clinic in Cape Town, South Africa.



The purpose is achieved by attaining the objectives of this study, which are to explore women's perceptions about long-acting reversible contraceptives concerning:

- Perceived challenges related to the use of long-acting reversible contraceptives
- Perceived benefits related to the use of long-acting reversible contraceptives.

## 4.2 PARTICIPANT CHARACTERISTICS

Fifteen women participated in in-depth face-to-face interviews conducted by the researcher. The interview commenced with an introductory statement followed by a broad research question with probes to gather more in-depth information (Annexure C). These women of reproductive age, 18 to 49, who attend the clinic to access their short-acting reversible contraceptives in the form of injectable and oral contraceptives, agreed to participate in the study (Annexure B). Some of the women used LARC before but were currently using short- acting reversible contraceptives.

## 4.3 THEMES, SUBTHEMES AND CATEGORIES

The researcher explored the relevant literature, which had been integrated with the findings of the study. Two themes, 6 subthemes and 17 categories emerged from the data collected and are described in Table 2 below.

Table 2: Summary of themes, subthemes and categories of women's perceptions of long acting reversible contraceptives

### 4.3.1 Theme 1: Perceived challenges associated with the use of LARC

| SUBTHEMES | CATEGORIES |
|---|---|
| 4.3.1.1 Perceived negative health outcomes associated with the use of LARC | 4.3.1.1.1 Changes in menstruation<br>4.3.1.1.2 Pain associated with the use of LARC<br>4.3.1.1.3 Skin changes<br>4.3.1.1.4 Nausea and changes in appetite<br>4.3.1.1.5 Decrease in libido<br>4.3.1.1.6 Cancer associated with use of LARC<br>4.3.1.1.7 Disappearance or loss of the implant or IUCD |
| 4.3.1.2 Perceived lack of healthcare provider skills | 4.3.1.2.1 Lack of clinically trained health care providers<br>4.3.1.2.2 Mismanagement of LARC side effects |
| 4.3.1.3 Perceived institutional barriers to women's access to LARC | 4.3.1.3.1 Staff shortages at clinics and long waiting times<br>4.3.1.3.2 Lack of comprehensive services for LARC |
| 4.3.1.4 Intrinsic factors perceived as barriers for women accessing LARC | 4.3.1.4.1 Self-perceived lack of knowledge about LARC<br>4.3.1.4.2 Self-perceived distrust of LARC methods |
| 4.3.1.5 Perceived financial implications associated with the use of LARC | 4.3.1.5.1 Costly private health services<br>4.3.1.5.2 Cost of unplanned pregnancies |

### 4.3.2 Theme 2: Perceived benefits associated with the use of LARC

| SUBTHEME | CATEGORIES |
|---|---|
| 4.3.2.1 Perceived positive health outcomes associated with the use of LARC | 4.3.2.1.1 Longer protection and perceived benefit of self-determined family spacing<br>4.3.2.1.2 Absence of side effects |

## 4.4 DISCUSSION

During the face-to-face in-depth interviews with the women, their perceptions of LARC were positive and negative. The following results are discussed in the themes and categories, which were generated from the data. Themes and categories are discussed in an integrated way, using literature as a control and quotes to provide a rich discussion. Stage/ lay terminology have been rectified in the quotes.

## 4.5 THEME 1: PERCEIVED CHALLENGES ASSOCIATED WITH THE USE OF LARC

This theme has 5 subthemes and 15 categories. The findings indicate that the women perceived some negative health outcomes associated with the use of LARC. There were more negative than positive perceived health outcomes reported. The reported challenges were from the participants themselves, their close friends and family on the use of long acting reversible contraceptives. The subthemes and categories are discussed below.

## 4.6 SUBTHEME: PERCEIVED NEGATIVE HEALTH OUTCOMES ASSOCIATED WITH THE USE OF LARC

The results indicate that some of this reluctance to the use of LARC was influenced by self-perceived side effects with LARC methods or from others' perceptions about LARC.

There are 15 categories related to negative health outcomes in this subtheme.

### 4.6.1 Category: Changes in menstruation

Some of the women reported menstruation changes such as heavy bleeding, amenorrhea and nuisance bleeding when they used LARC before. Most women indicated that they were reluctant to use LARC methods stating unacceptable changes in their menstruation, which affected them in many ways. It was obvious that these reports came from women who previously used LARC. Siyoum et al., (2017) states that 58.43% of women have menstrual disturbances on LARC.A participant responded: "*Yes I was bleeding too much… I don't have heavy flows but when I had the implant, I was like bleeding heavy and it would go on for five days and six days*" [P8]. A participant indicated: *"Still I went on bleeding a lot daily until I went to the clinic*" [P3]. A participant reported the following about her sister: "*She said she was bleeding heavily during her periods, like, the heavy flow which she never used to have before and had to use maternity pads*" [P7]. Another participant supported the perception: *"I was also bleeding non-stop when I went to remove it"* [P8]. According to Beesham, Smit, Beksinska, Panday, et al., (2019), heavy prolonged bleeding is the most frequent reason for the discontinuation of the Implanon. The women who experienced amenorrhea on the Implanon also reported the opposite, and they were concerned because according to them they were misinformed about the mechanism of action of the hormonal contraceptive, what to expect if side effects occurred and how to deal with them

appropriately. Amenorrhea occurs in 30%-40% of patients during the initial three months of Implanon insertion and subsequently remains around the same level. Implanon has shown to cause more amenorrhea and less frequent bleeding than Norplant (Ramdhan, Simonds, Wilson, et al., 2018). A participant added: *"So I tried it out, for the first year I didn't have a period as well which was very irritating for me. I mean, I had headaches*" [P6]. Another participant had this to say about amenorrhea due to use of the Implanon: "*The blood is dirty; the period blood is dirty and the body is cleaning out the dirty blood when you having a period*?" [P6]. Women in South Africa, Mali, Brazil and India perceive that menstruation cleansed the body of dirty blood or toxins (Polis, Hussain & Berry, 2018). Another participant concurred: "*When I don't get my periods I get pimples on my forehead or maybe on my face… it's from, I mean the blood is dirty*" [P9]. Some women perceived "blocked" blood caused by LARC (amenorrhea) caused nosebleeds; blood clots, fibroids; bad skin and weight gain (Polit & Beck 2017). This relates to myths about menses.

Bikorimana (2015) in Rwanda, concurs that women were reluctant to use LARC due to bleeding disturbances with the commonest of side effect being irregular heavy bleeding followed by amenorrhea and spotting. Some women felt that prolonged amenorrhea might lead to infertility in the future and believed they needed a break from the implant in order to get the blood out through menstruation. The following were the responses of women about their own and others' perceptions of amenorrhea, which influenced their decision not to choose the implant or to have it removed. A participant reported the following about her sister: "*She was not getting her period for a full three years*" [P3]. Another participant concurred: *"I also didn't get my period and that's something that freaks me out that's also why I stopped the implant*" [P2]. Women's reluctance to use LARC is also related to the

healthcare provider's failure to provide comprehensive counselling and education to women on what to expect, what actually happens in their body when they take a progestin only hormonal contraceptive, the side effects to expect and how to effectively manage it. Like Beesham et al., (2019) and Bikorimana (2015), Whaley & Burke (2015) argue that the most common side effect and reason for discontinuation of the IUCD is heavy menstrual bleeding which persists over time. Women do not only find the duration of bleeding problematic, but also the amount, with 31% of women experiencing heavy bleeding (Pillay et al., 2017). The participants also reported on the effect that heavy bleeding has on their health and intimacy. Reports were received that the heavy bleeding made them sick, referring to being anaemic as a result. Another report was that they could not engage in sex with their partners due to continuous heavy bleeding.

### 4.6.2 Category: Pain associated with the use of LARC

Women perceived the IUCD as the main cause of lower abdominal pain; while pain in the arm and headaches were associated with the implant. A participant reported the following about a friend: "*She struggled with the loop. She had constant abdominal pain*" [P10]. Another participant also added the following about a friend: *"Yes, she was complaining about cramps like six months later with the loop inside"* [P6]. Women's perceptions were that Implanon made them feel sick and caused them further health problems, as they linked it with side effects such as headaches. One participant supported: *"I had headaches…constant headaches from the Implanon*" [P6]. Another participant concurred by saying: *"It was more like a migraine because it came from the front. So, it was like, it was severe. Like I couldn't, I need to take a painkiller now for it like I could not handle it. That's during the period that I had the implant plus the bleeding and stuff*" [P9]. Healthcare providers are required to use a standardised procedure to insert or remove the implant. Once

successfully inserted a sterile dressing is applied with a pressure bandage on top of it. Failing to do so will result in bruising and swelling at the insertion site causing pain and discomfort in using the arm for a few days. Women would never forget this discomfort and will automatically blame it on the implant instead of the insertion technique. One of the participants said the following about her friend: *"But then her hand wasn't functioning properly, and she had pain in the arm"* [P7]. The results of the study conducted in India by Bhatia, Nangia, Aggarwal, et al., (2011) report that headaches and breast tenderness are the most common side effects associated with the implant. Pain localised at the insertion site is a common complication of sub dermal implants, occurs in approximately 2% to 3% of all women, and resolves by the third month (Ramdhan et al., 2018). This is also confirmed by Siyoum et al., (2017) in Ethiopia who found that 25.8% of women complained of pain in the arm of the implant insertion.

### 4.6.3 Category: Skin changes

Women indicated that they had skin irritation on the arm of the implant site. A study done by Ramdhan et al., (2018) affirmed that some women develop skin irritation, bruising, swelling and scarring at the site where the implant rod was inserted. A participant described the following: *"My arm was just paining, itching and it was irritating. I was scratching all the time with no rash*" [P8]. Another participant verbalised the following about the skin changes: "*I had like pimples on my face and I wanted to take it out*" [P8]. Literature however reports on positive outcomes of implant usage on the skin. According to Ramdhan et al., (2018), more than half of the women with pre-existing acne reported an improvement during implant usage, while the condition worsened in about 10% of the women.

### 4.6.4 Category: Nausea and changes in appetite leading to weight gain

It is reported that nausea affects approximately 4%-12% of different implant users (Ramdhan et al., 2018). A participant stated: *"Well I had nausea, okay, even after like, I've had it for six months and then I went to remove it and I was also bleeding non-stop when I went to remove it"* [P8]. Bhatia et al., (2011) reported that weight gain was one of the most common side effects associated with the implant. A number of women stated that they would not consider the implant again because of side effects like an increased appetite followed by weight gain. A participant reported the following about the Implanon: *"But then I noticed that I am getting fat, too fat"* [P6]. Another participant had a similar view: *"Sometimes I say maybe I get a lot of appetite and just eat everything that comes my way and then gain a lot of weight"* [P7]. A study conducted by Pillay et al., (2017) indicates that weight gain linked to an increased appetite accounts for 15% of Implanon removals. Contraceptive implants are associated with weight gain, though the weight gain may also be attributed to women's change in life style (Kakaire, Nakiggude, Lule, et al., 2014).

### 4.6.5 Category: Decrease in libido



A study done by Beesham et al., (2019) in KwaZulu-Natal indicates that 1.7% of women report decreased libido caused by the implant. A few women in a study by Pillay et al., (2017) also reported that the implant had negatively affected their libido. One participant reported: *"My husband was complaining lot that like, I don't know…I'm not interested in having sex or I am not alive"* [P10]. Mrwebi et al (2018) in South Africa indicate that only 1.1% of women report a low sex drive on the Implanon. Sex hormone globulin concentrations may be decreased for the first six months after Implanon insertion followed by a gradual recovery (Ramdhan et al., 2018). According to a study by Pillay et al., (2017)

there were no significant differences in the percentage of women who perceived a decrease in sexual desire or enjoyment during the use of the implant. Contrary to that, Gezginc, Balci, Karatayli, et al., (2007) indicate that despite the alterations in the menstrual cycle, the occurrence of spotting and the use of the contraceptive sub dermal implant did not affect the desire for enjoyment of sex or the frequency of sexual relations in users. The study found that from the women's perceptions, inputs heard from other women, friends and family about the side effects of LARC had an influence on their decision to stop LARC or choose SARC. Negative LARC stories are common among women presenting for abortions and may influence patient uptake of these methods (Brown, Chor, Hebert, Webb, et al., 2019). This contributes to an increase in unintended pregnancies and an increased need for abortions due to other factors related to SARC and its access.

### 4.6.6 Category: Cancer associated with the use of LARC

Friends, families and other women who had negative perceptions about the side effects of LARC played a role in letting others fear the unknown and influenced their decision not to use LARC. A participant reported: "*My cousin sister wanted to remove her own implant, she used to have one and she removed it because she was scared of cancer and stuff*" [P3]. Women perceived the implant and IUCD as foreign bodies that would cause them cancer, infertility and infection. A participant asked: *"The thing is someone once said these things in the future may cause cancer or something is it true or not? That is my biggest fear"* [P4]. A participant said: *"I have also heard that the implant causes cancer, but I don't know which type of cancer*" [P3].

In a study conducted in the Wakiso District in Uganda Atuyambe, Kibira, Bukenya, et al., (2015) also found that friends with negative first-hand or rumoured experiences discouraged women from using long-acting reversible contraceptives.

### 4.6.7 Category: Disappearance or loss of the implant or IUCD

Women indicated that they fear that the implant or UICD will move, get lost inside the body or even fall out in the toilet. A participant added: "*Sometimes maybe you don't know, you go to the bathroom and then poop it comes out because the sister did not put it in properly"* [P14]. Most women were afraid of having the Implanon inserted because they were afraid that it might get lost in their bodies or it might damage their arms (Rabopape, Muthelo, Malema, et al., 2019)). According to Potter, Rubin and Sherman (2014), women fear that the intrauterine contraceptive device will be stuck or disappear inside their body. A participant supported the perception: "*It's not a good thing to put it in my arm because it can disappear inside and that can be a problem for me*" [P12]. Another participant said: "*It is very scary the loop, I don't really trust it. I fear that it will get lost like inside my body somehow somewhere*" [P13]. Expulsion of IUDs, while still rare, is the most common complication following IUD insertion, and patients should be counselled regarding this possibility prior to placement (Yoost, 2014). Negative perceptions and fear of the unknown hinder women from considering the use of LARC methods.



## 4.7 SUBTHEME: PERCEIVED LACK OF HEALTHCARE PROVIDER SKILLS

Without demand to maintain skills and with few trained and competent healthcare providers in LARC women may need to access the services privately. There are two categories linked to the subtheme relating to healthcare provider skills.

### 4.7.1 Category: Lack of clinically trained healthcare workers

Some healthcare providers are only trained and competent in the insertion and not the removal on the Implanon (Pillay et al., 2017).

Very few healthcare providers who are skilled enough to insert and remove the LARC methods attend the Contraceptive and Fertility Planning course. A study done by Pillay et al., (2017) in South Africa determined that only 33% of women removed the implant at the same facility where it was inserted. A doctor in the private sector performed 16% of the removals. With the introduction of Implanon in 2013 in South Africa, a lot of focus was on the insertion and not the removal technique. A participant indicated that: "*Some people say that you have to go to private hospital, so they can put because at the clinic they can't put it properly or this is what I heard*" [P12]. Many healthcare providers lack the knowledge and clinical training to provide LARC methods in Africa (Kakaire et al., 2014). The lack of knowledge and skills to provide LARC methods contribute to a healthcare provider's reluctance to talk about LARC to potential users. A participant reported: *"I went to the clinic at Gugulethu and I was told it was not yet three years old. I was advised to go and take it out where it was inserted which was in the Eastern Cape"* [P6]. Some women in this study reported that upon their return to remove the implant they were referred to a different clinic other than the clinic where it was inserted because healthcare providers are not competent and comfortable removing it. It is apparent from their responses that women's reluctance to use LARC was reflected in their concerns about the insertion and removal technique of these contraceptive devices.

### 4.7.2 Category: Mismanagement of LARC side effects

Some healthcare providers are reluctant to remove the IUCD /Implanon before the three- or five-year term, despite a woman's complaints of side effects. According to Pillay et al., (2017), nurses uniformly indicated that they lack confidence with regard to implant removal skills and do not feel sufficiently competent with the procedure. A participant reported the following about a friend: "*Yea, she came here for the bleeding and they referred her to I can't remember Groote Schuur or Somerset and after she took it out, she was fine*" [P1]. The data collected in this study reveals that women are more likely to seek treatment for side effects caused by LARC from private health facilities, which may not be affordable. Another participant reported: *"A friend of mine had the implant and she was having this problem of bleeding and she end up going to the clinic then they refer her to Groote Schuur Hospital" [P14].* The detailed way in which side effects are reported could help potential IUCD users anticipate the side effects that are caused by the device (Yoost, 2014). Some women displayed a hesitancy to use LARC due to their decreased sense of being in control of reproductive decision-making, because they required another person to insert or remove the device (Zeal, Higgins & Newton, 2018).



## 4.8 SUBTHEME: PERCEIVED INSTITUTIONAL BARRIERS TO WOMEN'S ACCESS TO LARC

Lack of access to LARC and an inability to get enough healthcare providers trained in the insertions and removal of IUCDs and implants at the clinics impede the uptake of LARC. There are 2 categories linked to the subtheme relating to institutional barriers.

### 4.8.1 Category: Staff shortages at clinics and long waiting times

A study conducted by Ontiri, Ndirangu, Kabue, et al., (2019) in Kenya also supports the observation that there is often only one provider stationed at the FP clinic, and that person is also required to provide services at antenatal and postnatal care, immunisation, and child welfare clinics.

A participant concurred by saying: "*I went to Somerset Hospital but then every time I made the booking the woman that was there told me the sister wasn't available, so I came in twice and she told me she was on leave and nobody informed me"* [P2].

Most women of childbearing age attending the clinic are in some form of employment; formal or informal and they cannot afford to stay all day at the clinic to access LARC. A participant added: *"I would sit there from seven o'clock two times in a row waiting for a nurse that wasn't there at all"* [P6]. When more women choose LARC the workload for healthcare providers at the primary healthcare clinic is reduced because women make fewer visits to the clinic (Ontiri et al., 2019). A participant stated: *"Because I know you guys are busy, but it takes long even though you put an appointment, but then it usually takes long to sit and wait for you to see the sister"* [P10]. Long waiting times are among a range of access barriers for LARC at the clinics because very few healthcare providers were skilled enough to insert and remove LARC or they lacked the confidence to do so (Garret et al, 2015).

### 4.8.2 Category: Lack of comprehensive services for LARC

Some healthcare providers can insert but cannot remove the implant and certain clinics do not insert LARC and refer women elsewhere. Pillay et al., (2017) also affirm that service delivery capacity for removals is a problem in many places and women often resort to

private healthcare providers. Opportunities for nurses to become skilled in implant removals were limited in the early years after implant introduction when demand for removals was low (Adeagbo, Mullick, Pillay, et al., 2017). In SA, this resulted in a number of botched removals or repeated unsuccessful attempts at removal, fuelling negative media and community coverage for the implant (Adeagbo, et al., 2017). A participant said the following about a friend:

*"A friend of mine had the implant and she was having this problem of bleeding and she end up going to the clinic then they refer her to Groote Schuur Hospital to take it out."*

A participant reported: *"I was advised by the sister to go and take out the Implanon where it was inserted, so I went to the private doctor and paid four hundred rand to have it removed"* [P6]. Some healthcare providers at the clinics fail to make a full assessment, take proper history and do a physical examination on women, according to the WHO Medical Eligibility Criteria for Contraceptive Use (2015). The women reported lack of counselling and information about the different contraceptive methods. A participant revealed: "*Honestly, I didn't know because they told me that it was just small something on your arm so like, no, I'm rather going to stick to something that I know - the three months injection*" [P7].



## 4.9 SUBTHEME: INTRINSIC FACTORS PERCEIVED AS BARRIERS FOR WOMEN ACCESSING LARC

It was revealed in this study that women have poor knowledge of contraception, especially long-acting reversible contraceptives like the IUCD and the implant**.** There are 2 categories linked to the subtheme relating to "intrinsic factors perceived as barriers".

### 4.9.1 Category: Self perceived lack of knowledge about LARC

It is evident from previous studies and the data collected in this study that if women are ill-informed about the mechanism of action, side effects and benefits of LARC methods they will not choose to use them. A participant indicated: *"I don't know much about the loop, it has crossed my mind, but I think like I am not mentally (laughs) ready for that as yet"* [P2]. This was supported by the study conducted by Tibaijuka et al., (2017) that report that LARC methods are not accepted in part because of inadequate knowledge among women of reproductive age. A participant supported the perception: "*It's not a good thing to put it in your arm because you are putting a thing that you don't know what is going to happen next, if you can remove it or if you cannot remove it*" [P10]. The lack of knowledge about LARC methods by some clients also reflected the inadequate training of health workers on how to educate clients appropriately, or lack of time to perform appropriate client sensitisation due to health workers being short-staffed and busy (Tibaijuka et al., 2017). A participant reported: "*For me I am just scared and also I don't know much about it.*" [P12]. Women reported being ill-informed about the mechanism of action, benefits and side effects of the IUCD or Implanon as contraceptive methods. Another participant had a similar view: *"I don't know much about the loop, my friend does have a loop and says it's working for her but for me, to be honest, I don't want any the long … what do you call it*?" [P8].

### 4.9.2 Category: Self Perceived distrust of LARC methods

Women often do not trust LARC and the healthcare provider's skills and therefore seek help privately at a cost when they have side effects. A participant reported: "*For my opinion it is very scary the loop, I don't really trust it. I don't know much about it's like won't it get*

*lost like inside your body somehow somewhere?*" [P13]. Several doubts about the implant were apparent, mainly concerning the effectiveness of the method (Pillay et al., 2017). Another participant reported: "*The implant for me it's a big no because most of my friends around me like they use the implant, but they still get pregnant while they are using the implant*" [P7]. Trust could strongly influence women's willingness to try IUDs and implants and could ameliorate concerns about these methods for potential users (Higgins, Kramer & Ryder, 2016). A participant said: "*I think it can easily break. It also creeps me out to have something under my skin*" [P15].

## 4.10 SUBTHEME: PERCEIVED FINANCIAL IMPLICATIONS ASSOCIATED WITH THE USE OF LARC

The findings reveal that women are more likely to seek treatment for side effects caused by LARC from private health facilities, which may not be affordable. This subtheme is linked to the category "self-perceived mistrust of LARC methods." There are two categories related to this sub-theme.



### 4.10.1 Category: Costly Private Health Services

Implanon insertion is free at the clinic but at times removal is done at private health services at a cost due to staff shortages and lack of healthcare provider skill to remove the device at the clinic. A participant reported: "*So I went to the private doctor and paid four hundred rand to have it removed*" [P6]. According to Dickerson, Diaz, Jordon, et al., (2013) some women's concerns regarding the use of LARC included cost of placement, side effects, and perception of frequent early removal. A participant reported: "*I have been sitting here all day so then I got into argument with the sister and then decided you know what its fine will*

*just go to a private doctor*" [P2]. Service delivery capacity for removals is a problem in many primary health care clinics and women often resort to private sector providers (Adeagbo, et al., 2017).

### 4.10.2 Category: Cost of unplanned pregnancies

Participants reported financial implications, which negatively affected their lives. Women indicated that they did not trust LARC methods and fear method failure that can result in unintended pregnancy that could add to their financial, social and emotional burden. The percentage of women experiencing unintended pregnancy within the first year of use of Implanon is the same for perfect use and typical use at 0.05%. Some women continued use at one year, with the majority of them discontinuing contraceptive use due to bleeding abnormalities (Patel, 2014). A participant stated: *"She thought she was safe with the loop for 5 years but then she started feeling funny and when she went to the clinic was surprised to hear she was pregnant, yet the loop is still inside"* [P4]. In a study conducted in Brazil, it was estimated that the total cost attributed to unintended pregnancies were 1.4 billion dollars annually with between 0.8% and 99% attributed to miscarriages, births and infant complications (Connolly, Cecatti, Bahamondes, et al., 2014).



## 4.11 THEME 2: PERCEIVED BENEFITS ASSOCIATED WITH THE USE OF LARC

The findings indicated that women perceived LARC methods as having some positive outcomes, which benefited them in life with regard to childbearing and family planning. This theme has one subtheme and two categories.

## 4.12 SUBTHEME: PERCEIVED POSITIVE HEALTH OUTCOMES ASSOCIATED WITH THE USE OF LARC

There are two categories related to this subtheme: "perceived positive health outcomes associated with the use of LARC".

### 4.12.1 Category: longer protection and perceived benefit of self-determined family spacing

Zeal et al., (2018) emphasise that there are a variety of factors, which influence women's willingness to try LARC methods and these include reliability, efficacy, duration of action, positive perceptions from family and friends, recommendation from a provider and low maintenance nature of the methods. The women revealed that the implant and the IUCD offer protection again pregnancy for three, five or ten years allowing them to make less clinic visits with just one follow up, and only when they have concerns. Another participant elaborated: *"I liked the fact that I did not have to come to the clinic after it was put in because I know you guys are busy, but it takes long even though you have an appointment, but then it usually takes long to sit and wait for you to see the sister"* [P10]. White et al., (2013) state that among women interested in LARC, the most common reasons are that, relative to their current method, long-acting reversible contraceptive methods are more convenient, effective and provide longer-term protection against pregnancy. Women who are well- informed by a skilled healthcare provider, counselled about LARC, its side effects and benefits are usually aware that should side effects occur they would be dealt with at the clinic. The women indicated they enjoyed the fact that they could rely on a long-term family planning method. A participant said: "*I was happy with it because I knew that if in case I didn't have protection I knew I was not going to fall pregnant*" [P6]. White et al (2013) agreed that with respect to the copper IUCD women often said they would be

interested in these methods because they prevent pregnancy for long periods. Long-acting reversible contraceptives are convenient and highly effective and last up to three years (Implanon) and five to ten years for the IUCD (DoH 2018).

A participant added: "*I don't have to come now and again now and again for family planning"* [P1]. The effects of LARC are promptly reversible after they are removed and return to fertility is almost immediate (DoH, 2018). The primary motivation for choosing the implant is convenience because the long duration of pregnancy protection meant that frequent clinic visits were not required (Pillay et al., 2017).

A participant indicated: "*My sister was using…implantation for three years"* [P3]. Another participant had a similar view: "*So basically, there is a benefit to longer acting one because now I can relax and just enjoy life and not have worry about falling pregnant anytime soon or anything*" [P10].Women using LARC frequently reported increased reproductive and bodily autonomy related to the use of the IUD or implants (Zeal, Higgins & Newton, 2018). Most women in the study reported long-acting reversible contraceptives as an effective method that prevents unintended pregnancies. A participant reported: *"Oh yes the loop for five years is the one we want when we are done with the babies*" [P1]. Pregnancy can be planned, and family spaced according to choice. Having women not come to the clinic every four, eight and twelve weeks was beneficial for both the women and the clinic. A participant mentioned the following: *"So if I have one inserted now I will have my second child after I have taken out the loop in ten years*" [P6]. Finally, women who wanted to space their family and viewed a small family as being beneficial had positive perceptions of LARC. It is also well documented that LARC methods are convenient, safe and effective in preventing unwanted pregnancies (Kakaire et al., 2014).

### 4.12.2 Category: Absence of side effects

Women report no side effects and some women like the idea of not getting a period. Although the side effects influenced some women not to use the device, for others the advantages and ease of use made it their preferred method of choice (Potgieter, Kapp & Coetzee, 2018).

A participant reported the following about a friend: "*She didn't go in detail, but it wasn't painful, and she kept it in because she didn't want to have any more children. So, I think the loop is working perfectly well for her and she is happy with it*" [P8]. Some women experience side effects from the implant, but many do not (Rabopape et al., 2019). Another participant had a similar view about LARC: *"There is no complications and stuff so far on all the people that I have heard from who are on the implant"* [P4]. According to Patel, (2014), Implanon does not affect haemostasis and it is safe to use with obese and hypertensive women. A participant said the following about her cousin: *"Yes because she hasn't lost or picked up any weight and she gets her period every month on the Implanon"* [P7]. Women carry on with other important things in their lives instead of coming to sit for hours in a facility that has to deal with many patients.



## 4.13 SUMMARY

Participants in this study indicated that the perceived negative side effects caused by LARC influenced their decision to choose SARC over LARC. The negative perceptions from friends, families and others also played a role in influencing their decision to choose SARC over LARC. It would appear that women are not effectively counselled about the mechanism of action, benefits and side effects of LARC. Lack of support from others

(friends and family) about the effects of LARC as well as healthcare providers' involvement, or lack thereof regarding the insertion and removal of LARC methods, are some of the barriers for women to access LARC. The benefits of LARC in preventing pregnancy can be enhanced if healthcare providers, health promoters, advocacy groups and community care workers market and promote LARC methods so that women can be encouraged to overlook all the negative aspects surrounding the use of LARC and have their side effects managed appropriately.

# CHAPTER 5

## SUMMARY, LIMITATIONS, RECOMMENDATIONS, AND CONCLUSION

### 5.1 INTRODUCTION

In Chapter 4, the research findings were presented and discussed, and the relevant literature was incorporated as control of the findings. This chapter presents a summary of the findings; recommendations based on the study findings; discloses the study's limitations and ends with a concluding message.

The purpose of this study was to explore the perceptions of women regarding long-acting reversible contraceptives attending a primary health care clinic.

### 5.2 SUMMARY OF THE CHAPTERS

The study and its chapters are summarised in Table 3

**Table 3: Summary of chapters**



| Chapter | Description |
|---|---|
| **1** | Chapter One as an orientation to the study, formed the structural point of reference for the whole study. The purpose of the study was to explore women's perceptions of long-acting reversible contraceptives, while they attended a primary health care clinic in Cape Town, South Africa, with the intention of providing an understanding of the usage patterns of women of reproductive age (18–49 years) of long-acting reversible contraceptives. |

| | |
|---|---|
| **2** | Chapter Two provided a detailed description of the reviewed literature that is relevant to the study with reference to reproductive health and contraception. |
| **3** | Chapter Three explained the research methodology used in the study, the design and methods which included qualitative descriptive exploratory design. The population in this study were women between the ages of 18 to 49 years who were using short-acting reversible contraceptives. Purposive sampling and data collection methods were discussed. The data analysis and the execution steps were discussed. |
| **4** | Chapter Four focused on the research findings which were discussed according to various themes, subthemes, categories and quotes, which included the literature control in relation to the results. |
| **5** | Chapter Five provides a summary of the study, limitations of the study and recommendations of strategies that can be used to increase the uptake of long-acting reversible contraceptives to prevent unintended pregnancies, decrease the number of abortions, maternal mortality and morbidity due to illegal abortions. |

### 5.2.1 Summary of the findings`



The study revealed that women perceived LARC methods as a benefit to them with regard to childbearing and family planning. It is evident that most the women perceived LARC as a convenient and effective method that prevents unplanned pregnancies. The study, however, also highlighted some negative perceptions of LARC, as it related to their own experiences or that of friends and family. The study also revealed that the negative health outcomes associated with the use of LARC, such as changes in menstruation and the skin, pain and weight gain influence the women's decision to choose SARC over LARC or even discontinue LARC, with a consequent unintended pregnancy. Some women perceived the lack of healthcare provider skills as a reason for them to seek treatment for side effects at

private rather than public facilities. The study further revealed that staff shortages and long waiting times at the clinic for insertion and removal of LARC was a barrier for women to access these methods. The cost of unplanned pregnancies associated with LARC method failure had a negative impact on women financially. It was also clear in the study that women were not adequately counselled about LARC and were ill informed about the mechanism of action, side effects and benefits. The low use of LARC was also due to self-perceived lack of knowledge and distrust with regard to these methods.

## 5.3 LIMITATIONS OF THE STUDY

This study was conducted at one facility in the Western Cape, South Africa. As such, the findings cannot be generalised across all primary healthcare clinics. The study also presents the perceptions of women as it relates not only to their own experiences of LARC, but also to those of their friends and family members. This has potential for introducing misrepresentation of the actual experience of friends and family.

## 5.4 RECOMMENDATIONS



The following are recommendations to address the perceived barriers and challenges related to the use of LARC by women of reproductive age:

### 5.4.1 Recommendation for practice

- Quality sexual and reproductive health services, including abortion care should be an essential service and available to all those who need it in order to increase the uptake of LARC methods to prevent unwanted pregnancies and decrease the maternal mortality rate due to backstreet abortions.

- Standard operations procedures for insertion and removal of LARC methods should be developed and implemented by all healthcare providers in the public and private healthcare system
- Sexual reproductive health services must be integrated within all the healthcare programmes in order to offer comprehensive services for all women in their reproductive years when seeking care at the primary health care clinics.
- Standardised counselling tools like flip charts should be used in order to assist providers to explain the complexities around the effectiveness of LARC, mechanism of action and side effects.
- Treatment protocols and algorithms should be made available to guide providers on clinical care for women experiencing side effects like bleeding, abdominal cramps/pain and headaches
- The WHO Medical Eligibility Wheel should be made available to all healthcare providers in primary care in order to guide them with patient centred counselling and assisting women in choosing the appropriate LARC method suitable to their needs.
- Extended clinic hours during the week and weekends should be introduced by the DoH at primary care facilities in order to accommodate women in their reproductive years and improve access to LARC methods.
- Monitoring and evaluation of LARC patients' folders and LARC service points should be done every quarter in order to ensure that quality service is provided to women attending the clinic to access LARC and to identify any gaps.

### 5.4.2 Recommendation for education and training

- Strategies to be implemented to strengthen client health education within reproductive health programmes by involving health promoters and ensuring the availability of Information, Education and Communication material.
- A Contraceptive and Fertility Planning course should be integrated in the undergraduate nursing programme in order to equip all healthcare providers with the knowledge and skills regarding contraceptives and how to manage women using them effectively.
- The importance of history taking, physical examination, counselling and effective management of LARC side effects to be emphasised.
- The GATHER approach of (Greet, Ask, Tell, Help, Explain and Return) to be used for effective counselling.
- Values clarification and attitude change workshops to be conducted for all healthcare providers to render the clinics client friendly and increase access to LARC.
- More healthcare providers to be trained on the insertion and removal of LARC methods, mentored on practical sessions until found competent and then authorised to practice.
- Healthcare providers to be empowered with the knowledge and skills to manage side effects effectively.
- Course updates to be provided by the trainers on changes in protocols, policies and updates and new management strategies related to sexual reproductive health and LARC methods.

- Media campaigns, including visual and social media, radio and television in all the eleven languages in South Africa, as well as patient information leaflets can be used in addressing the myths or misinformation about LARC.

### 5.4.3 Recommendation for future research

- The Implanon has been in use since 2013 in South Africa and now could be the time to conduct a study with a larger sample in the reproductive health clinics in the country.
- Despite the WHO guidelines that there is no contraindication for HIV positive women in the fixed dose of Efavirenz there is still a lot of uncertainty among healthcare providers whether to provide the Implanon contraceptive to HIV positive women on the Efavirenz fixed dose regimen.. Evidence-based information is required to decrease the barriers of accessing LARC
- Future research is also recommended for women who had an Implanon inserted in 2014 and came back for reinsertion after the three-year duration to establish if there is a difference in their perceptions about the implant.
- Research should be conducted on the different non-hormonal IUCDs on the market to rule out any difference between the NOVA T 380 A and the COPPER T 380 A with regard to women experiencing heavy bleeding and abdominal cramps.

## 5.5 CONCLUSION

This study was conducted to explore women's perceptions of long-acting reversible contraceptives, while they attended a primary health care clinic in Cape Town, South Africa. The study aims to provide an understanding of the usage patterns of women of reproductive age (18–49 years) with regard to long-acting reversible contraceptives, and to recommend strategies to enhance measures to increase the uptake of LARC by policymakers. More negative than positive perceptions were reported by the women who participated in this study. It is anticipated that the recommendations made in relation to the negative perceptions will improve women's perceptions and will increase the uptake of long-acting reversible contraceptives.

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**ANNEXURE A: INFORMATION SHEET**


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## INFORMATION SHEET

Project Title: Women's perceptions of long-acting reversible contraceptives at a primary health care clinic in Cape Town, South Africa

**What is this study about?**

This is a research project that would be conducted by Judiac Ranape at a primary health care clinic in Cape Town. We are inviting you to participate in this research project because you are using the injectable or the oral contraceptive method, which is a short-acting contraceptive and not a long-acting contraceptive.

The purpose of this research project is to explore the perceptions and understandings of women of reproductive age with regard to long-acting contraceptives. This research project will hopefully inform researchers and relevant health care staff about the way women choose to use long-term contraceptives.

**What will I be asked to do if I agree to participate?**

You will be asked to participate in a research study, which will be taking place at the clinic.

Please note that participation in this study is voluntary and that there will be no direct benefits if you take part in this study. There are no penalties if you want to withdraw from the study at any time. Even if you do not wish to participate you will still be treated with respect and dignity and will receive the services you require at the clinic.

I would like to ask permission to take a voice recording of the interviews because it might not be possible to write all your answers down and to capture important information.

You will remain anonymous and everything that is being said will be treated as confidential. The researcher will ask your permission to do voice recordings and request that you be honest with your responses. You will have a face-to-face interview with the researcher in a private consulting room away from the waiting area and family planning room, and you will be allowed to talk freely about your perceptions of long-acting contraceptives.

The type of question you can expect, will be as follows: What are your views about the use of these contraceptive methods versus short-acting contraceptives such as tablets and injections?



**Would my participation in this study be kept confidential?**

The researcher will undertake to protect your identity and the nature of your contribution. To ensure anonymity, the information will only be shared with my supervisor and others that will be directly involved with this study. The notes and voice recordings from the interviews will be put into written form and you will have been identified by a code and not by name. All this information will be kept in a locked up safe at the university. In addition, if any report or article is written about this research project, your identity will be protected.

**What are the risks related to this research?**

All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

**What are the benefits of this research?**

This research is not designed to help you personally, but the results may help the investigator learn more about the perceptions of women with regard to the use of longacting contraceptives. We hope that, in future, researchers and policymakers may benefit from this study through improved understanding of how women choose to use long-acting contraceptives. Your participation in this research is completely voluntary.



**What if I have questions?**

This research is being conducted by Judiac Ranape, a Masters student at the University of the Western Cape. If you have any questions about the research study itself, please contact Ms Judiac Ranape at: Lady Michaelis Community Health Centre in Burnham Road, Plumstead. Email: Judiac.Ranape@westerncape.gov.za or 3603509@myuwc.ac.za

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Prof J Chipps

Head of Department: School of Nursing

University of the Western Cape

Private Bag X17 Bellville

7535 jchipps@uwc.ac.za

Prof Anthea Rhoda

Dean of the Faculty of Community and Health Sciences

University of the Western Cape

Private Bag X17 Bellville

7535 chs-

deansoffice@uwc.ac.za

This research has been approved by the University of the Western Cape's Biomedical Research Ethics Committee:

New Arts Building

C- Block, Top Floor, Room 28

University of the Western Cape

**ANNEXURE B: CONSENT FORM**


# UNIVERSITY OF THE WESTERN CAPE

PRIVATE BAG X 17, BELLVILLE 7535, SOUTH AFRICA

***Tel: 0836925919***

E-mail: 3603509@myuwc.ac.za


CONSENT FORM

**Title of Research Project:**

**Women's perceptions of long-acting reversible contraceptives at a primary health care clinic in Cape Town, South Africa**

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve, and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits. I consent to being recorded, and my responses being used for research purposes.



**PARTICIPANT'S NAME…….**

**PARTICIPANT'S SIGNATURE…….**

**DATE……**

**ANNEXURE C: INTERVIEW GUIDE**


# UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

***Tel: 0836925919***

**E-mail:**3603509@myuwc.ac.za


Intrauterine contraceptive devices (IUCDs) and the sub-dermal contraceptive implants are regarded as long-acting reversible contraceptives.

Broad research question:

What are your views about the use of these contraceptive methods versus short-acting contraceptives such as tablets and injections?

Use of the following probes and follow-up questions:

- Would you be able to explain further what you mean by…?
- Can you help me understand more about?
- Can you elaborate on that idea….?
- Could you give me an example?
- Could you explain that further…?
- Is there anything else you would like to add?

**ANNEXURE D: LETTER TO THE PROVINCE TO REQUEST PERMISSION**

**34 Flintdale Road**

**Southfield**

**7800**

**National Health Research Database Committee**

**Private Bag X 828**

**Pretoria**

**0001**

25 Sept 2018

**RE: Request for permission to conduct research at the Wynberg clinic, Cape Town, South Africa, South Peninsula health district of the metro region) Lower Maynard Road Wynberg.**

Dear Sir/Madam

My name is Judiac Ranape and I am a registered M Nursing student at the University of Western Cape. The research I wish to conduct for my master's involves **"Women's perceptions of long-acting reversible contraceptives at a primary health care clinic in Cape Town, South Africa".**



This project will be conducted under the supervision of Prof. F Daniels and Mrs H Boltman Binkowski (University of Western Cape).

I am hereby seeking your consent to approach patients that qualify to participate in this research. I will provide the committee with a copy of my proposal that includes copies of the study information sheet, interview guide and consent forms used in the research process, as well as a copy of the approval letter and ethics number, which I will receive from the University of Western Cape Ethics Committee.

This is a qualitative study. It is foreseen that data would be collected over one to two weeks, depending on the willingness of patients to participate.

An approximate number of 10-12 patients would need to be enrolled in the study. It is not envisioned that the data collection will affect the staff workload or patient care in any way. The only requirement that would affect the facility is a request to have a private room, by prior arrangement with the facility manager in which to conduct the research interviews. I have registered with the National Health Research Database and will be following the formal process as soon as my proposal is approved.

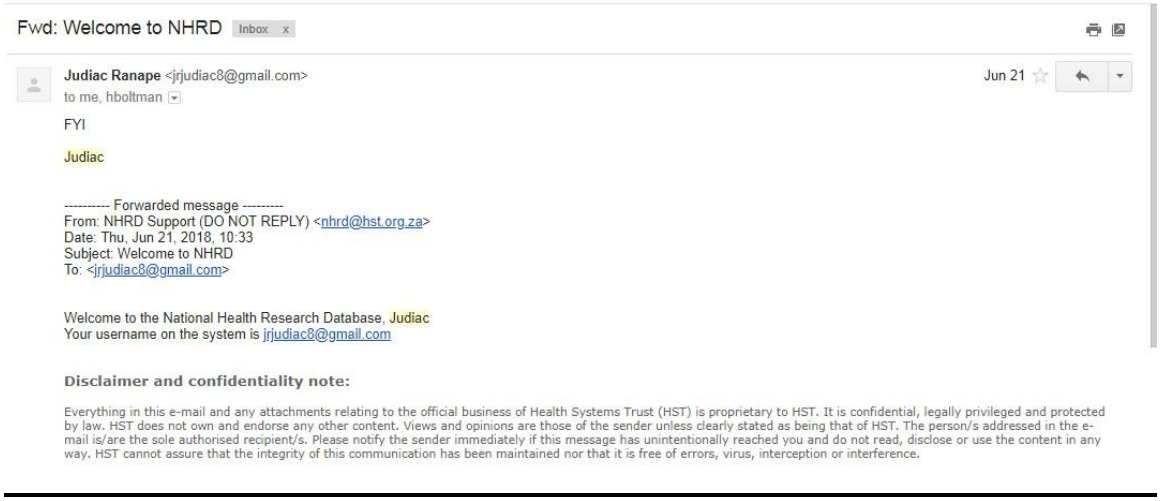
Upon completion of the study, I undertake to provide the City Health Department with a bound copy of my completed research report. If you require any further information, please do not hesitate to contact me on 0836925919 or Judiac.Ranape@westerncape.gov.za.

Thank you for your time and consideration in this matter.

Kind regards

Judiac Ranape

University of Western Cape



Fwd: Welcome to NHRD Inbox x

**Judiac Ranape** <jrjudiac8@gmail.com> Jun 21

to me, hboltman

FYI

Judiac

---------- Forwarded message ---------
From: NHRD Support (DO NOT REPLY) <nhrd@hst.org.za>
Date: Thu, Jun 21, 2018, 10:33
Subject: Welcome to NHRD
To: <jrjudiac8@gmail.com>

Welcome to the National Health Research Database, Judiac
Your username on the system is jrjudiac8@gmail.com

**Disclaimer and confidentiality note:**

Everything in this e-mail and any attachments relating to the official business of Health Systems Trust (HST) is proprietary to HST. It is confidential, legally privileged and protected by law. HST does not own and endorse any other content. Views and opinions are those of the sender unless clearly stated as being that of HST. The person/s addressed in the e-mail is/are the sole authorised recipient/s. Please notify the sender immediately if this message has unintentionally reached you and do not read, disclose or use the content in any way. HST cannot assure that the integrity of this communication has been maintained nor that it is free of errors, virus, interception or interference.

## ANNEXURE E: ETHICAL CLEARANCE

UNIVERSITY of the WESTERN CAPE

OFFICE OF THE DIRECTOR: RESEARCH
RESEARCH AND INNOVATION DIVISION

Private Bag X17, Bellville 7535
South Africa
T: +27 21 959 4111/2948
F: +27 21 959 3170
E: research-ethics@uwc.ac.za
www.uwc.ac.za

04 December 2018

Mrs J Ranape
School of Nursing
**Faculty of Community and Health Science**

**Ethics Reference Number:** BM18/7/26

**Project Title:** The perceptions of women using short acting contraceptives on the use of long acting contraceptives.

**Approval Period:** 23 November 2018 – 23 November 2019

I hereby certify that the Biomedical Science Research Ethics Committee of the University of the Western Cape approved the scientific methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

**Please remember to submit a progress report in good time for annual renewal.**

The Committee must be informed of any serious adverse event and/or termination of the study.

*Ms Patricia Josias*
*Research Ethics Committee Officer*
*University of the Western Cape*

***BMREC REGISTRATION NUMBER -130416-050***

**ANNEXURE F: LETTER REQUESTING PERMISSION FROM THE CITY OF CAPE TOWN**

**34 Flintdale Road**

**Southfield**

**7800**

**18 January 2019**

City of Cape Town Health

Dr Natacha Berkowitz

Epidemiologist: Specialised Health – City Health

Social Services

**Tel:** 021 400 6864



Dear Dr Berkowitz

I am a comprehensive nurse trainer for the Department of Health in the Southern/Western Substructure. I am postgraduate student at the University of the Western Cape for M.Nursing (Education) degree. I am requesting permission to conduct interviews with participants at the family planning clinic in Wynberg.

My minithesis deals with women's perceptions of long-acting reversible contraceptives at a primary care clinic in Cape Town, South Africa.

A qualitative research methodology will be used, and I will therefore be conducting in-depth interviews by means of a broad research question with participants who are attending the clinic for their contraceptive methods.

I sent an email to Dr Jennings on 31 December 2018 who advised me to make contact with you regarding my request for permission to conduct interviews for my minithesis at the family planning clinic in Wynberg. I have also followed her advice to submit my request on the website that she had given me, but I am unable to submit because there is a field that requires a budget to be stipulated and my minithesis requires no funding. I have since registered with the National Health Research Database and have submitted and I am currently awaiting their response. Please advise me as to what is required in order to gain access to the facility so that I can conduct the interviews.

Kindly find attached my research proposal and the ethics permission letter.

Best

Judiac Ranape

0836925919

## ANNEXURE G: PERMISSION GRANTED BY THE CITY OF CAPE TOWN

CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

CITY HEALTH

Dr Natacha Berkowitz
Epidemiologist: City Health

T: 021 400 6864 F: 021 421 4894
E: Natacha.Berkowitz@capetown.gov.za

Ref: 24279 2019-02-12

**RE: Women's perceptions of long-acting reversible contraceptives at a primary health care clinic in Cape Town, South Africa**

Dear Judiac Ranape

Your research request has been approved as per your protocol. Please refer to the subsequent pages for the approval of any facilities or focus areas requested. Approval comments on any proposed impact on City Health resources are also provided.

Mitchells Plain & Southern: Alphen Clinic and Claremont Clinic

Contact Person: Mrs Soraya Elloker (Area South Manager)

Tel/Cell: 021 400 3983/084 222 1478

Email: Soraya.Elloker@capetown.gov.za

**Please note the following:**

1. All individual patient information obtained must be kept confidential.
2. Access to the clinic and its patients must be arranged with the relevant Manager such that normal activities are not disrupted.
3. A copy of the final report must be uploaded to http://web1.capetown.gov.za/web1/mars/ProjectClosure/UploadReport/0/8093, within 6 months of its completion and feedback must also be given to the clinics involved.
4. Your project has been given an ID Number (8093). Please use this in any future correspondence with us.
5. No monetary incentives to be paid to clients on the City Health premises
6. If this research gives rise to a publication , please submit a draft before publication for City Health comment and include a disclaimer in the publication that "the research findings and recommendations do not represent an official view of the City of Cape Town "

Thank you for your co-operation and please contact me if you require any further information or assistance.

Kind Regards
Dr Natacha Berkowitz Epidemiologist: City Health

**ANNEXURE H: PROOF OF EDITING**

**LANGUGUAGE EDITING DECLARATION**

I hereby confirm that I have proofread and edited the following Master's thesis:

**Women's perceptions of long-acting reversible contraceptives at a primary health care clinic in Cape Town, South Africa**

**by Judiac Ranape**

The author, at their sole discretion, has the prerogative to accept, delete or change amendments made or suggested by the editor before submission.

Sincerely

Gava Kassiem

Independent Language Consultant/Academic Editor

MA (Language Practice)

Member of Professional Editors' Guild

Member of Pro Lingua

Email: gkassiem@gmail.com

Mobile: +27(0)82 4467400