**AWARENESS AND PREDICTORS OF USE OF DMPA/SC(SELF INJECTION TYPE) AMONG WOMEN OF REPRODUCTIVE AGES(15-19)YEARS ATTENDING KITUI COUNTY REFERRAL HOSPITAL.**

**BY**

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A RESEARCH PROPOSAL SUBMITTED TO THE DEPARTMENT OF NURSING IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELORS OF SCIENCE DEGREE IN NURSING OF SOUTH EASTERN KENYA UNIVERSITY

# DECLARATION

I declare that this research is my own work and has never been presented any institution of learning for this award

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**SUPERVISOR’S DECLATATIION**

This proposal has been submitted for examination with our approval as the university supervisors

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LECTURER

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SEKU

**SIGNATURE……………………………**

**DATE………………………………………**

# 

# DEDICATION

I dedicate this work to my beloved mother

# ACKNOWLEDGEMENT

I would like to express my sincere gratitude to the almighty God for protection throughout my academic life. I would also like to thank my supervisor, madam Grace Mwaniki of South Eastern Kenya university, department of nursing for the support and guidance throughout the development of this proposal

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# LIST OF ABBREVIATIONS

CPR - Contraceptive Prevalence Rate

DHS - Demographic and Health Survey

DMPA-SC-Depo medroxyprogesterone/subcutanous

FP - Family Planning

IUD s - Intrauterine Devices

KDHS - Kenya Demographic and Health Survey

KNBS - Kenya National Bureau of Statistics

MCH - Maternal Child Health

MDHS - Multiple Indicator Cluster Survey

MOH - Ministry of Health

NACOSTI - National Commission of Science, Technology, and Innovation

NCPD - National Council for Population and Development

NGO - Non-Governmental Organization

SEKU - South Eastern Kenya University

SPSS - Statistical Package for the Social Sciences

TFR - Total Fertility Rate

USA - United States of America

WHO - World Health Organizations

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# DEFINITION OF TERMS

|  |  |
| --- | --- |
| **Reproductive health** | it is a state of complete physical, mental and social well being and not merely the absence of disease or infirmity in all matters relating to reproductive system and to its functions and processes |
| **Contraception** | the practice of utilizing family planning methods intended to prevent or space future pregnancy |
| **Unmet need** | sexually active married or unmarried women that do not want t have a child and are not using contraceptive method, yet they need to use it |
| **Family planning** | practice of controlling the number and spacing of children through various contraceptive methods and reproductive health services |
| **Contraceptive prevalence rate** | percentage of women of reproductive age who are currently using any form of contraception to prevent pregnancy |
| **Fertility rate** | average number of children a woman would have during her reproductive ages |

# 1.0 CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND

Family planning plays a major role in reducing maternal and neonatal morbidity and mortality. Consequently, it contributes to the achievement of Sustainable Development Goals to which Kenya is a signatory (starbid, Norton and Marcus, 2016). Effective family planning services are critical for the attainment of these sustainable development goals (united states agency of international development, 2005). Contraceptives allow people to attain the desired number of children and determine the spacing of pregnancies. It is achieved through use of contraceptive methods. Reproductive health, address the reproductive processes, functions and systems of all stages of life (WHO, 2010). Reproductive health therefore implies that people are able to have responsible, satisfying and the freedom to decide if, when and how often to sire children.

There are different types of contraceptives including, pills, intrauterine devices, implants, condoms etc. However depot medroxyprogesterone acetate (DMPA) is a sythetic form of the hormone progestin.There are two brands of DMPA which include the traditional formulation often referred to as depo shot and the DMPA/SC self administered type. It prevents pregnancy by suppressing ovulation and making the cervical mucus inhabitable for the sperm (hatcher,2001).DMPA/SC is a newer formulation of DMPA that is administered through subcutaneous injection which mans the medication is just injected beneath the skin rather than into the muscle. This method offers less painful and easier injection process compared to the intramuscular version .

DMPA/SC self administration empowers women to administer the contraceptive injection themselves, eliminating the need to for a health care provider.this may increase convenience,autonomy and privacy for women seeking hormonal contraception.. DMPA/SC comes with a package of advantages which include reduced dependence on healthcare providers for injections, potential for timely and and convenient injections and improved accessibility to contraception particularly in areas with limited healthcare infrastructure.

According to the World Contraceptive Use 2019 report published by the United Nations Department of Economic and Social Affairs, the worldwide contraceptive prevalence rate (CPR) was 58.4% in 2019. In 2019, the highest CPR was in Eastern Asia (81.4%) and Northern America (75.8%), while the lowest CPR was in Middle Africa (17.7%) and Western Africa (22.8%).

Female sterilization was the most commonly used method of contraception globally, accounting for 18.5% of all contraceptive use, followed by intrauterine devices (13.2%) and the pill (10.1%). Male condoms accounted for 6.6% of contraceptive use globally.although many women are using DMPA(intramuscular), very few women (0-14%) are aware and using the subcutaneous self administer type(World Contraceptive Use report 2019).

The CPR OF Africa is at 33% as at 2019 (United Nations Department of Economic and Social affairs, 2019). This rate includes all modern contraceptive methods, such as oral contraceptive pills, male and female condoms, injectables, implants, IUDs, and sterilization. Many African economies are characterized by rapid population growth that is partly attributed to high fertility rate, high birth rates accompanied by steady decline in death rates, low contraceptive rate and declining mortality rate (Oyedokun, 2007).

According to the Kenya Demographic and Health Survey 2022, the contraceptive prevalence rate (CPR) among married women aged 15-49 in Kenya was 63%with 57%using the modern methods. This rate includes all modern contraceptive methods such as oral contraceptive pills, male and female condoms, injectables, implants, IUDs, and sterilization. Among sexually active unmarried women, age 15-49, 70% use a contraceptive method and 59%of these women use modern contraceptives.Tthe use of traditional methods is more common among sexually active unmarried women than sexually active married women(11% and 6% respectively).among currently married women, the most common used methods are injectables(20%), implants(19%) and contraceptive pills(8%).among sexually unmarried women male condoms are the most widely use contraceptive method(20%) followed by injectables(16%) and implants(11%.)

The percentage of of currently married women using a modern method is lowest in Mandera(2%), followed by wajir(3%), Marsabit(6%0 and Garrisa(11%), with Embu(82%)recording the highest.In a study it was estimated that half of Kenyans rapid population growth is attributed to unwanted or mistimed births (KDHS 2022?)

According to Kenya demographic and health survey, 2022 the total contraceptive preference rate of Kitui county is 68.3% with 62.4% being the prevalence of the modern methods. The percentage distribution by method is injectables (35.2%)), implants(16.3%), pills(4.8%).Even with the increased usage of injectables, mainly depo provera, there is little awareness on DMPA/SC self injection(Kitui county referral hospital, 2023)

**1.2 PROBLEM STATEMENT**

Access to effective and convenient methods of contraception is essential for promoting family planning and reproductive health among women of reproductive age(WHO, 2014). The introduction of the self-injection type of Depo-Medroxyprogesterone Acetate (DMPA/SC) offers a promising option for women seeking a reversible, long-acting contraceptive method(Kennedy et al,2019). However, there remains a lack of comprehensive understanding regarding the awareness and predictors of DMPA/SC self-injection among women of reproductive ages(Narasimhan, 2019)

Awareness or knowledge of contraception is a necessary component of demand of contraception i.e women must know about a contraceptive method in order to use it(khan 2015). According to Wood 2022, information about dmpa-sc capability to be self injected is limited. Over 80% of women of women have an information on injectable contraceptive ranging from 80% in DR C-CONGO to 92.4% in Kenya yet only about one-fifth to one-fourth of women knew on the option of of self injection ranging from 13.0% in Kenya and 24.8%in Bukina Faso.The variation in level of awareness may be due to the different implementation strategies, adopted to integrate DMPA-SC into the family planning programs.

The development of the self-injection form of Depo-Medroxyprogesterone Acetate (DMPA/SC), which offers the benefits of both ease and reversibility, promises a potentially revolutionary method of contraception. However, there is a knowledge gap regarding the degree of awareness about DMPA/SC self-injection and the factors that influence its adoption among women of reproductive age who visit Kitui County Referral Hospital. This lack of knowledge makes it difficult to develop well-targeted programs and policies that could help people make informed contraceptive decisions, which would eventually affect the reproductive health of women in the area. To improve reproductive health services and results in the region, a thorough investigation of knowledge levels and predictors of DMPA/SC self-injection is essential.

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**1.3 JUSTIFICATION OF THE PROBLEM**

Unintended pregnancies can lead to a range of adverse consequences, including maternal and child health risks, socio-economic challenges, and limited access to education and employment opportunities(Gipson, 2008). Understanding the factors that influence DMPA-SC use can contribute to reducing unintended pregnancies and their associated impacts.

DMPA-SC is a viable contraceptive option for individuals who may not have access to other methods due to cultural, geographical, or logistical reasons. Ensuring awareness and uptake of DMPA-SC can empower individuals with a broader range of family planning choices, thereby promoting reproductive health rights.

Knowledge about the awareness and predictors of DMPA-SC use can inform healthcare resource allocation strategies. By identifying the factors influencing its use, healthcare providers can tailor their services to better meet the needs of the community, allocate resources effectively, and enhance the overall quality of reproductive health services.

Enhancing awareness and utilization of DMPA-SC can contribute to achieving public health goals related to family planning, maternal health, and child well-being. By addressing gaps in knowledge and barriers to use, the overall health of the community can be improved, reducing the burden on healthcare systems.

Despite the potential benefits of DMPA-SC as a contraceptive method, limited research has focused specifically on the awareness and predictors of its use in the context of Kitui County Referral Hospital. Conducting research in this area can fill a critical gap in the understanding of reproductive health behaviors within the local population and inform evidence-based interventions.

1. **1.4 RESEARCH QUESTIONS**
2. What is the level of awareness on DMPA-SC among women of reproductive ages(15-49)years attending Kitui county referral hospital?
3. What are the sociodemographic factors influencing awareness on DMPA-SC among women of reproductive ages(15-49)years attending Kitui county referral hospital ?
4. What are the predictors that influence the use of DMPA-SC among women of reproductive ages (15-49)years attending Kitui county referral hospital?

**1.5 RESEARCH OBJECTIVES**

1.5.1 **RESEARCH OBJECTIVES**

To assess the awareness and predictors of use of DMPA-SC among women of reproductive ages(15-49)years attending Kitui county referral hospital

1.5.2 SPECIFIC OBJECTIVES

1. To assess the level of awareness on use of DMPA-SC among women of reproductive ages(15-49)years attending Kitui county referral hospital
2. To examine the sociodemographic factors affecting awareness of use of DMPA-SC among women of reproductive ages915-49)years attending Kitui county referral hospital
3. To understand the predictors that influence the use of DMPA-SC among women of reproductive ages(15-49)years attending Kitui county referral hospital

**1.6 CONCEPTIAL FRMAWORK**

#### Independent variables

**social and demographic factors** eg age, marital status,level of education,cultural factors

#### Dependent

Use of DMPA-SC(self injected type)

**Awareness on use of DMPA-SC**

Knowledge of DMPA-SC, aminstation, mechanism of action, side effects

**Predictors influencing use of DMPA-SC**

Service provider factors and facility related factors

2.0 CHAPTER TWO ;LITERATURE REVIEW

**2.1Awareness of DMPA-SC( self injection type)**

In a study done by Keneddy, 2019 on self administration of injectable contraception verses provider administered intramuscular contraception, meta analysis found out that women were more conversant with the provider assisted contraception method as compared to the self administered contraception.however when the women we educated on both methods of contraception there was higher continuation with self administration as compared to provider administration.

In a feasibility and acceptability study conducted in Ghana,2019, a total of 150 health care providers were trained to administer DMPA-SC and to train clients, at first the clients level of awareness was low but after the training of self injection there was increased adoption of this method of contraception and therefore results indicated that it was feasible and acceptable(Nai&Patrick, 2020)

In another study conducted in southern Malawi on men involvement in supporting self injectable contraceptive, it found that only women who were aware of the DMPA-SC contraception had the powers of convincing their spouses on using the method. The study also found out that men can support their partners in DMPA-SC self injection use through actively participating in the injection process, providing emotional support and advocating for communities and other men to accept self injection and family planning use(Ruderman. 2020)

According to Wood SN, 2022, information about DMPA-SC capability to be self injected is limited. Over 80% of women of women have an information on injectable contraceptive ranging from 80% in DR C-CONGO to 92.4% in Kenya yet only about one-fifth to one-fourth of women knew on the option of of self injection ranging from 13.0% in Kenya and 24.8%in Bukina Faso. The variation in level of awareness may be due to the different implementation strategies, adopted to integrate DMPA-SC into the family planning programs.

In another study about contraceptive self injection knowledge attitude and practices among 167 consenting female students of a tertiary health institution in south west Nigeria, more than a quarter(32%) of the respondents were not aware of the contraceptive self injection.however attitude towards self injected contraceptive was positive(91%) of those who were aware of this method. However only 2.4% of the respondents had used the method(Idowu,2022)

In conclusion, awareness levels on DMPA-SC is limited since its an emerging form of contraception. Level of awareness however varies with different factors and addressing them will see an increased uptake of this method of contraception.

2.2 PREDICTORS ON USE OF DMPA-SC(SELF INJECTION TYPE**)**

### 2.2.1 Age of the woman

Younger people who started having sex were less likely to utilize contraception and tended to participate in higher-risk sexual behaviors, such as using drugs or alcohol before having sex (Moore et al., 2008). According to study conducted in the UK, having sex at a young age is made worse by ignorance, lack of access to contraceptives, a lack of negotiation skills and self-efficacy, or a lack of self-efficacy to withstand pressure (Tripp, 2005). According to a study by Noreen et al. (2018), the use of contraception specifically DMPA-SC declines with age. This demonstrates that the trend of using DMPA-SC declines as fertility drops with increasing age. The consistent rise in contraceptive use among women between the ages of 20 and 34 suggests that these women are increasingly concerned with using contraceptive(DMPA-SC). Previous research have noted this kind of association between age and contraceptive use (Osmani et al., 2015). The rate of unwanted pregnancies declines with age, and another factor in this fall is the dread of negative health effects (Solanke, 2017).

According to MDHS (2004), it was shown that women who were 35 years and older used contemporary DMPA-SC 53 to 70% more often than women in other age groups. The key conclusion of this study was that DMPA-SC and contraceptive in general use was less common among younger women than among older women. The unmet need for contraception in Kenya is highest among women under the age of 35 and falls after that, according to KDHS (2003). In a study on perceptions of and barriers to the use of contraception among adolescents, Kinaro (2013) found that the prevalence of contraception including DMPA-SC rose with age. The overall rise in demand for family planning differs depending on background traits. Age-related total demand rises and peaks between 35 and 39 years old, after which it falls (KDHS, 2014). As a result, in Kenya, the age-specific fertility rate for teenagers (15-19) is 103 per 1000 women. Because of this, the contraceptive prevalence rate in Kenya among sexually active adolescent girls who are not married is 23% (KNBS and ICF Macro, 2010).

### 2.2.2 Religion

In study done by Najafi (2013) in Pakistan, Muslim wives in comparison to the non Muslimwives were noted to have more children because of their religion which does not allow the use of DMPA-SC as a form of contraception and culture which encourage women to give birth to as many children as possible. Therefore, it was observed that Muslim women are more likely to desire additional children and less likely to be using DMPA-SC when they desire no more children. In a study done in the City slums in Kenya revealed that Catholic faithful’s utilization of of DMPA-SC and other contraceptives was lower compared to the Protestants. This is because Catholics believers discourage their followers from using contraceptives including depo provera as birth control measures. Catholics are instead encouraged to rely more on observation of menstruation cycles and natural safe days of a woman (Wawire *et al.,* 2011).

### 2.2.3Marital status

Women between the ages of 15 and 49 who participated in a study on the factors influencing decision-making regarding contraceptive(DMPA-SC) use in two rural provinces of Cambodia were found to be more likely to use DMPA-SC than women without spouse support (Samandari et al., 2010). The majority of the sexually active youth's DMPA-SC use was influenced by marital status, according to Kayongo (2013) in her study on factors that influence uptake of contraceptives(DMPA-SC) among the youth in Busia District in Uganda. As a result, marital status must be taken into account to increase uptake.

### 2.2.4 Sociocultural beliefs

It was discovered that women with spousal support were more likely to take DMPA-SC than women without it in a study of the factors influencing decision-making regarding contraceptive usage in two rural provinces of Cambodia (Samandari et al., 2010). In her study on factors that influence uptake of contraceptives among the youth in Busia District of Uganda, Kayongo (2013) found that the majority of the sexually active youth's contrceptive9DMPA-SC) use was influenced by marital status. To increase DMPA-SC it is necessary to consider marital status.

Women in Cambodia who thought their husbands had a favorable attitude towards DMPA-SC practiced contraception more successfully and were less likely to utilize the method than those who were anxious about discussing contraception with their husbands. Apart from husbands, peers, in-laws, and elders play significant roles in South Asian society's decision-making around contraception(DMPA-SC) (Samandari et al., 2010). In a different study conducted in Malawi, Lawrence (2002) found that women cited male disapproval as a barrier to using using contraceptives(DMPA-SC). Elders in the community are rumored to discourage couples from using depo provera, which makes them a barrier to contraceptive use.

Key findings from the Pakistan Demographic and Health Survey on numerous socio-cultural aspects, such as how in-law opposition or spouse opposition is a significant contributor to unmet demand, are consistent with earlier studies (Mustafa et al., 2015). According to Casterline et al. (2001), in a study on Punjabi women, the influence of the husband and mother-in-law in choosing contraceptives(DMPA-SC) had an impact on how the women perceived themselves because they would disagree with their husbands' attitudes toward fertility and it was not socially or culturally acceptable.

### 2.2.5 Service provider factors

Wawire et al. (2011) claim that women's perceptions of facility provider elements such quality, friendliness of staff, and advertising may encourage the use of contraceptives. The women will be encouraged to return to the same facility for contraception once they have received the required care. When client/provider relationships are impacted, low contraceptive adoption in the facility concerned is the result, according to Speizer et al. (2015). According to a study conducted in Kenya, unmet family planning needs are caused by deficits in provider competency and relationships with clients. Contraceptive use was hampered by service providers' sporadic absenteeism during regular facility hours and requests for unofficial fees for services.

The chance of respondents using depo provera services was marginally influenced by the staff's friendliness, suggesting that when personnel were nice, respondents were more likely to do so. Women who thought the family planning services were of high quality were more likely to use them than women who thought they were of lower quality. According to the premise that taste and preference play a significant role in demand decisions, the positive influence of service quality is given a high priority (Wawire et al., 2011). KDHS (2022) found that medical professionals frequently lack knowledge of more modern, less expensive family planning techniques such implants and intrauterine contraceptive devices (IUCDs) and DMPA-SC

2.2.6 Facility related factors

Unplanned births among adolescents occur despite the greatest of contraceptive intentions including DMPA-SC, according to a Brazilian study. Programs to prevent teen pregnancy continue to be ineffective at the intended levels. Access to contraceptive knowledge, methods, and services is frequently necessary for adolescents to succeed in preventing pregnancy (Gomes, 2008).

Transport, according to Richter et al. (2005), continues to be a key barrier to accessing contemporary contraceptives. Most women of reproductive age are unable to access contraception because of the distance to the medical institution. According to a study by West Off (2006), in some areas of Sub-Saharan Africa, a lack of availability to contemporary contraceptives is a major barrier to their use because of supply issues brought on by their remoteness from the source. Due to difficulty accessing health facilities, out-of-stock contraceptives were also noted as a barrier to contraceptive use.

When Kenya was upgraded to a middle-income nation, donor funding for family planning decreased from $7 million to $1 million, according to UNFPA (2014). Counties are not investing much in family planning, which puts a lot of pressure on their availability and the sector's operations. It should be noted that family planning products compete for budgetary funds with other items, making it challenging to close the gap.

Wawire et al. (2011) found that the closeness of the family planning service provider had a marginal impact, meaning that the farther away someone lived from the provider, the less likely they were to use the services. The negative effects of being far from the service provider can be ascribed to the fact that there are always going to be some hidden costs associated with transportation as well as waiting and travel time.

### 2.2.7 Level of education

Noreen (2017) found that women with education levels just reaching the primary level have higher unmet needs than women with higher education levels, who are also more likely to utilize DMPA-SC. The reason for this is because greater education increases access to family planning services and provides more knowledge. Better educated women tend to be more professionally involved and take contraceptives including DMPA-SCmore frequently since they wish to keep their families small due to their obligations at work (Saleem et al., 2005). High levels of education and modest family sizes are associated. According to Abu-Ghaida et al. (2004)

CHAPTER THREE: RESEARCH METHODOLOGY

1. **3.1 INTRODUCTION**

Research methodology describes the way in important information will be assembled to answer the research questions or describe a phenomena related to the research problem (burns and groove, 2005). It focuses on research setting, population under study, selection of the sample, size of the sample, tools for collecting data, validity, reliability and ethical considerations.

1. **3.2 Study design**

A descriptive crossectional research design will be used in this study

1. **3.3 Study area**

The study will be conducted in Kitui county referral hospital in Kitui county. Kitui county is located 170km south east of Nairobi in the former eastern province of Kenya (KNBS, 2019). Kitui county covers a geographical area of 30,430km with a population of 1,136,187, population density of 37people per km square and an annual growth rate of 2.2%. the county headquarters is Kitui town. The facility provides both inpatient and outpatient services with several departments

1. **3.4. Study population**

Estimated study population of 300 women of reproductive ages 15-49years will be used in the study

1. **3.4.0 Target population**

Women of reproductive ages 15-49years attending Kitui county referral hospital

1. **3.4.1 Inclusion criteria**

Women of reproductive ages 15-49years attending Kitui county referral hospital who will consent to take part in the study

1. **3.4.2 Exclusion criteria**
2. Women who were unwilling to participate in the study
3. **3.5 study variables**

### 3.5.1 Dependent variable

Use of DMPA-SC(self injection type)

### 3.5.2 independent variables

1. Sociodemographic factors
2. predictors of use of dmpa-sc
3. Awareness of dmpa-sc(self injection type)
4. **3.6 sampling techniques**

### 3.6.1 sample size

### The sample size will be calculated using Yamane formula.

The Yamane formula is given by:

n = N/1 + (n × e^2)

Where:

n is the desired sample size.

N is the total population size.

e is the desired margin of error as a proportion

n = 300/1 + (300 × 0.0025)

n = 300 / (1 + 300 \* 0.0025)

n = 300 / (1 + 0.75)

n = 300 / 1.75

n ≈ 171.43

Therefore sample size will be 172.

### 3.6.2 sampling technique

The respondents in the study will be selected using systematic sampling method. This method ensures that every respondent has a chance in participating in the study and therefore reduces bias.

**3.7 Data collection tools**

Research instruments will include interviewer-administered questionnaires to the selected participants. These tools will capture the necessary information to address the research questions. The components of the questionnaire will be created based on the study objectives and research questions. The interview administered questionnaires will be used because of the following advantages, it gives the researcher a face to face interaction with the respondent thereby giving a possibility of depth assessment, it also gives the researcher an opportunity to observe the non- verbal behaviour and responses are obtained from a wide range of subjects.

### 3.7.1 Pretest of the study

Before the actual data collection dates, the tools will be pre-tested to ensure a well designated questionnaire that meets the research objectives and questions and that the questions are easy to understand. The study will be carried out among women attending Machakos county referral hospital.

**3.8 Limitations of the study**

There will be a degree of biasness as it is assumed that the respondents will be mainly come from the urban set up of Kitui county leaving out the rural part, the research will be carried out in Kitui county referral hospital and therefore it will not be easy to generalize to other areas

**3.9 Data collection procedure**

In this study, data will be gathered face-to-face between the interviewer and the interviewee utilizing a structured interview schedule. To ensure anonymity, the interviews will take place in a private setting. The researcher will personally address the respondent and outline the goals and advantages of the study. Additionally, the researcher will guarantee the respondent's privacy and inform them that participation in the study is entirely voluntary and that they are free to discontinue at any moment. Following the discussion, the respondent will provide written agreement to the researcher.

The researcher will ask the respondent questions following the structured interview schedule after obtaining consent, probing where the respondent's answers are not clear. The researcher will thank the respondent for participating once the entire interview is over. Last but not least, the researcher will make sure that every response is thoroughly documented.

To prevent unauthorized access to the information contained once they are mixed, the completed surveys will be placed in a separate envelope labeled "answered questionnaires."

**3.10 Data analysis and presentation**

To determine the link between factors, all obtained data will be combined and statistically analyzed using SPSS version 20.

Data will be interpreted and descriptive summaries and graphical representation in charts will be provided.

**3.11 Ethical considerations**

Prior to the actual research, the proposal will be presented to South Eastern Kenya University department of nursing for approval.Ethical approval will be sought in Mount Kenya university prior to data collection A permit to carry out the study will be requested from National Commission of Science Technology and Information(NACOSTI).

**3.12 dissemination**

Upon completion of the research, the findings will be presented to South Eastern Kenya University and to Kitui county referral hospital through a thoroughly compiled and analyzed report

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# APPENDICES

1. **Appendix I: Work Plan**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **2023** | | | | | |
| **Feb- April** | **May** | **June-July** | **Aug -Sep** | **Oct -Nov** | **Dec** |
| Proposal development |  |  |  |  |  |  |
| Proposal defence |  |  |  |  |  |  |
| Ethical clearance |  |  |  |  |  |  |
| Data collection |  |  |  |  |  |  |
| Data analysis/ project development |  |  |  |  |  |  |
| Project defense |  |  |  |  |  |  |

Appendix II: Budget

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Core activities** | **Items** | **Quantity** | **Unit cost**  **(Ksh)** | **Cost**  **(Ksh)** |
| **Stationary** | Pens | 5 | 10 each | 50 |
| Flash disk | 1 | 500 each | 500 |
| Note book | 1 | 100 each | 100 |
| **Proposal writing** | Internet & airtime |  | 80daily for 15 days | 1200 |
| Printing | 50pages | 10 per page | 500 |
| Binding | 1 | 100 per copy | 100 |
| **Transportation cost** |  | 10 days | BLI – Kitui hospital  100 daily | 1000 |
| **Food and drinks** |  | 10 days | 200 daily | 2000 |
| **Questionnaire** | Printing & Photocopying |  | 1200 | 1200 |
| **Final Report** | Printing | 100 pages | 10 per page | 1000 |
| Binding | 1 | 100 per copy | 100 |
| **TOTAL** |  |  |  | **6750** |

**Appendix III: Letters for seeking approval to collect data**

Joshua Kimtai,

P.O BOX 21,

Kitale.

Phone: 0726237146

Email: [joshuakimtai32@gmail.com](mailto:joshuakimtai32@gmail.com)

July 20, 2023.

Kitui County Referral Hospital,

P.O Box 22-90200,

Kitui, Kenya.

Dear Sir/Madam

**RE: permission to**  **conduct a research study on Awareness and predictors of use of DMPA-SC(self injection type) among women of reproductive ages(15-49)years attending Kitui county referral hospital**

I am an undergraduate pursuing Bachelor’s degree of science in Nursing student at South Eastern Kenya University.As part of the degree requirements, I am kindly requesting for your permission to conduct a research study about *Awareness and predictors of use of DMPA-SC(self injection type) among women of reproductive ages(15-49)years attending Kitui county referral hospital*

Regards

Sincerely

Joshua kimtai

**Joshua kimtai.**

1. O Box 21

Kitale.

Phone: 0758081874

Email: [joshuakimtai32@gmail.com](mailto:joshuakimtai32@gmail.com)

July 20, 2022.

South Eastern Kenya University

Ethical approval committee,

P.O Box 179- 90200,

Kitui, Kenya.

Dear Sir/ Madam

**RE: Approval to conduct a research study on Awareness and predictors of use of DMPA-SC(self injection type) among women of reproductive ages(15-49)years attending Kitui county referral hospital**

I am an undergraduate pursuing Bachelor’s degree of science in Nursing student at South Eastern Kenya University. As part of the degree requirements, I am kindly requesting for your approval to conduct a research study about *Awareness and predictors of use of DMPA-SC(self injection type) among women of reproductive ages(15-49)years attending Kitui county referral hospital*

Regards

Sincerely

**Joshua kimtai .**

APPENDIX IV; QUESTIONNAIRE

**SECTION A; DEMOGRAPHIC DATA**

1. How old are you?……………………
2. What is your marital status?
3. single
4. Married
5. Widowed
6. Divorced
7. What is your level of education?
8. None
9. Primary school
10. Secondary school
11. College/university
12. What is your religious denomination?
13. Roman catholic church
14. Seventh day Adventist church
15. Pentecostal churches of Kenya
16. Atheist
17. Others(specify)…………………
18. What is your tribe?…………………
19. What is your employment status?
20. Unemployed
21. Self employed
22. Government employed
23. How many children do you have?……………(specify).

**SECTION B; QUESTIONS ON AWARENESS**

1. Have you heard about family planning method DMPA-SC(self injection type)
2. yes
3. No
4. If yes………………

What is the source of your information?

1. Media
2. Friends
3. Books
4. Family planning clinic
5. Any other………………………….r(specify)
6. How is DMPA-SC administered?
7. orally
8. Topically
9. Rectally
10. subcutaneousInjection
11. How often is DMPA-SCadministered?
12. Monthly
13. Weekly
14. Every three months
15. Yearly
16. don’t know
17. Do you know how it protects against pregnancy?
18. Yes
19. Know
20. Mention four common side effects of depo provera ?
21. ….…………………………………………………………………………………………..
22. ….……………………………………………………………………………………
23. ….…………………………………………………………………………………….
24. ….……………………………………………………………………………………
25. Can any women in the reproductive age use depo provera?
26. Yes
27. No
28. How would you rate yourself on knowledge abvout DMPA-SC (self injection type)
29. Very knowledgeable
30. Somewhat knowledgeable
31. Not knowledgeable

**SECTION C: QUESTIONS ON ACCESS TO DMPA-SC**

1. Do you find DMPA-SCeach time you go for family planning?
2. Yes
3. No
4. How long does it take you to walk to the facility?
5. less than 60mins
6. About 60mins
7. More than 60mins
8. More than 2hours
9. Do you always find health care workers at the family planning clinic?
10. Yes
11. No
12. Do health care workers provide you with information on DMPA-SC at the family planning clinic?
13. Yes
14. No
15. Does your religion allow you to use DMPA-SC method of contraceptive?
16. yes
17. No

APPENDIX V: MAP OF STUDY AREA 