Napata College
Faculty of medicine

Fmaily Planning Knowledge, Attitude and Practice among married women in Bahri district ,Khartoum state 2022.

A thesis submitted to the program of Medicine and general surgery as a graduati on project.

Prepared by:

Mai Hassan Alamin Hassan
Meaad Alaauldin Yassin Mohammed
Fatima Ahmed Alturaify Ahmed
Alaa Bannaga yagoub Musa

Supervisor:

Dr. Makarim Mohammed Zain .

Consultant of obstetrician and gynecology.

2022.

الآية :

قال الله تعالى :

{ نَرْفَعُ دَرَجَاتٍ مَنْ نَشَاءُ وَفَوْقَ كُلِّ ذِي عِلْمٍ عَلِيم }

صدق الله العظيم
سورة يوسف الأية (76)

Dedication

To our God ,the creator and Source of all wisdom and knowledge,

To our parents,

Brothers and sisters

Colleagues and friends

And to all who seek knowledge.

ACKNOWLEDGEMENT

➤ We express our deep gratitude and appreciation to those who agree d to participate in this project , for their time expended and courage in sharing their insights with a fledging student . It is to them that we ar e most indebted , and we can only hope that the product of our collabo ration benefits each one as much as we benefited from the process . w e had been immeasurably enriched by working under the supervision of DR. Makarim Mohammed Zain , the subject teacher , she has great level of knowledge and she has an art of encouraging , correcting and directing us in every situation possible , which has enabled us to comp lete the project . Also , we thank Napata collage for supporting us in c ompleting this project . At times , our studies carried out at great cost t o those closest to us . we thank our families and our freinds for their b est understanding and support . we acknowledge to all the people who have involved and supported us in making this project .

Abbreviation

Abbreviations	Meaning
FB	Family Planning
WHO	World health organization
IUCDs	Intrauterine contraceptive device
SPSS	Statistical package for social science

Abstract

Evaluation of the various factors that influence the use of family planning services is important to improve services and policies. This study aimed to asses Knowledge ,Attitude and use of family planning methods among married women in Khartoum North (Bahri).

A cross sectional study was conducted in a simple randomized sampling of married women between November 1st 2022, and December 5th 2022.

Four hundred married women aged 20-49 were surveyed using a structured questionnaire. The mean age of the participants was 30-39 years, 55% were university educated and 52% were housewives. More than half of them (59%) had 1-3 living children.

All of the respondent's (100%) were aware of at least one contraceptive method. The most common source of information on contraception was doctors (46%),

followed by Healthcare center staff (43%) and finally by social media , friends and family.

More than two thirds of participants (74%) reported use of at least one contraceptive method, and about (26%) have not used any family planning method. Pills were the most commonly used method (52.7%) followed by natural method (20.3%), Implants (18.9%), condoms(9.5%)and ligation (8.1%).Among these more than half (66%) reported adverse side effects ranging from

irregular menustrautions (59.2%) to inflammations (38.8%) , to unwanted pregnancies (10.2%) and even ectopic pregnancies (8.2%) and uterine perforations (6.1%).

Among the women not using family planning methods (26%), the causes behind not using them were commonly the adverse health effects(46.2%),husband

refusal (42.3%),no desire to regulate pregnancy (38.5%), no enough information (34.6%) and religious causes (26.9%).

The majority of these women (76.9%) had no desire for future use and (23.1%) had intention to use family planning methods in the future.

This study reveals that with increase level of education, awareness also increased. Most of the respondents have the considerable knowledge and favourable attitude towards contraceptive methods and the wide knowledge practice gap has shown a decrease in this study, which was contradictory to findings of studies done in other developing countries. Improved female education strategies and better access to services are needed to solve these

problems. The use of communication media suitable for audience and adequate message is important in conducting effective family planning awareness activities. Efforts should be made to educate the public about the safety and convenience of modern, long term, reversible methods of contraception among both healthcare professionals and the public.

ملخص البحث

تقييم العوامل المختلفة التي تؤثر على استخدام خدمات تنظيم الأسرة مهم لتحسين الخدمات والسياسات.
هدفت هذه الدراسة إلى تقييم الوعي واستخدام وسائل تنظيم الأسرة بين المتزوجات في الخرطوم بحري
أجريت دراسة مقطعية على عينة مناسبة من النساء المتزوجات بين 1 نوفمبر 2022 و 5 ديسمبر 2022.
تم مسح أربعمائة امرأة متزوجة تتراوح أعمارهن بين 20 و 49 عامًا باستخدام استبيان منظم و كانت نتائج تفريغ العينات ع لى النحو التالي :

كان متوسط عمر المشاركات يتراوح بين 30-39 سنة ، 55٪ منهن جامعيات و 52٪ كن ربات بيوت ، وكان أكثر من نصفهم يتراوح بنسبة (59%) لديهم 1-3 أطفال أحياء.
كان جميع المبحوثين(100%) على دراية بأسلوب واحد على الأقل من وسائل منع الحمل.
كان الأطباء أكثر مصادر المعلومات الشائعة حول وسائل منع الحمل بنسبة (46%) ، يليهم العاملون في مراكزالرعاية الصحية بنسبة (43%) وأخيراً وسائل التواصل الاجتماعي والأصدقاء والعائلة.
أبلغ أكثر من ثلثي المشاركين بنسبة (74%) عن استخدام وسيلة واحدة على الأقل من وسائل منع الحمل ، وحوالي (26%) لم يستخدموا أي وسيلة لتنظيم الأسرة.
كانت الحبوب هي الطريقة الأكثر استخدامًا بنسبة (52.7٪) تليها الطريقة الطبيعية (20.3%) ، الشريحة (18.9%) ، الواقي الذكري (9.5%) والربط (8.1%).
من بين هؤلاء أكثر من نصفهم (66%) أبلغوا عن آثار جانبية ضارة تتراوح من عدم انتظام الدورة الشهرية (59.2%) إلى الالتهابات (38.8%) ، إلى حالات الحمل غير المرغوب فيه (10.2%) وحتى حالات الحمل خارج الرحم (8.2%) وانثقاب
الرحم(6.1%).
من بين النساء اللواتي لا يستخدمن وسائل تنظيم الأسرة(26%) ، كانت الأسباب وراء عدم استخدامهن لها هي الآثار الصحية السلبية بنسبة (46.2%)، ورفض الزوج (42.3%) ، وعدم الرغبة في تنظيم الحمل (38.5%) ، وعدم وجود معلومات كافية (34.6٪) وقضايا دينية (26.9%).
غالبية هؤلاء النساء بنسبة (76.9%) لم يكن لديهن رغبة في الاستخدام المستقبلي و(23.1%) كان لديهن نية لاستخدام وسائل تنظيم الأسرة في المستقبل.
تكشف هذه الدراسة أنه مع زيادة مستوى التعليم ، ازداد الوعي أيضًا.
معظم المستجوبين لديهم معرفة كبيرة وموقف إيجابي تجاه طرق منع الحمل ولكن كانت فجوة واسعة في الممارسة المعرفية واضحة في هذه الدراسة ، والتي كانت مشابهة لنتائج الدراسات التي أجريت في بلدان أخرى متباطئة.
هناك حاجة إلى استراتيجيات محسنة لتعليم الإناث وإمكانية وصول أفضل إلى الخدمات لحل هذه المشاكل.
يعد استخدام وسائل الاتصال المناسبة للجمهور والرسالة المناسبة أمرًا مهمًا في إجراء أنشطة توعوية فعالة بشأن تنظيم الأسرة كما يجب بذل الجهود لتثقيف الجمهور حول سلامة وملاءمة وسائل منع الحمل الحديثة وطويلة الأجل والقابلة للسحب أو الإزالة بين المتخصصين في الرعاية الصحية والجمهور.

List of contents:

List of figures :

List of tables :

CHAPTER ONE
INTRODUCTION

BACKGROUND
PROBLEM STATEMENT
JUSTIFICATION
OBJECTIVES

INTRODUCTION

1.1 Background

Family planning is "the ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility" (working definition used by the WHO department of reproductive Health and Research [WHO, 2008) [1]. Family planning may involve consideration of the number of children a person wishes to have, including the choice to have no children, and the age at which a person wishes to have them. Things that may play a role on family planning decisions (highly variable from person to person): marital situation, career or work considerations, financial situations. If sexually active, family planning may involve the use of contraception and other techniques to control the timing of reproduction

1.1.Contraceptive methods

Methods of contraception include oral contraceptive pills, implants, injectable, patches, vaginal rings, Intrauterine devices, condoms, male and female sterilization, lactational amenorrhea methods ,withdrawal and fertility awareness based methods .These methods have different mechanisms of action and effectiveness in preventing unintended pregnancy. Effectiveness of methods is measured by the number of pregnancies per 100 women using the method per year. Methods are classified by their effectiveness as commonly used into :Very effective (0–0.9 pregnancies per 100 women); Effective (1-9 pregnancies per 100 women); Moderately effective(10-19 pregnancies per 100 women);Less effective (20 or more pregnancies per 100 women)[2].

In Sudan services were initiated in 1965 and in 1985 were integrated in primary health care system [3]. Utilization rates are among the lowest in the world. These low rates may have been due to the result of poor acceptance, inadequate knowledge, or inaccessibility of the services in a community that is large and of such diverse cultural backgrounds. The Contraceptive prevelance rate (CPR) is also very low, only 8.3% in Sudan , again reflected by the poor planning services utilization[4] . The present paper is an attempt to assess the factors that influence the utilization of family planning services including knowledge, attitude and practice among child bearing women.

1.2 Problem statement

Use of contraception prevents pregnancy-related health risks for women, especially for adolescent girls, and when births are separated by less than two years, the infant mortality rate is 45% higher than it is when births are 2-3 years apart and 60% higher than it is when births are four or more years apart. [2]

In Sudan according to the Family Planning(FP2020)core indicator it is estimated that the unmet need for modern contraception among married women 28.9%[4].This suggests that despite wide spread knowledge about family planning services, the majority doesn't approve the use of it.

Nevertheless, the picture is still incomplete and offers only a broad look at a group that is far complex than survey statistics alone can suggest. More in depth, quantitative and qualitative studies are required to probe such issues such as women's reproductive decision making, men's unmet needs for family planning, the gap between women's approval and use of contraceptive and how different groups of women regard reproductive health issues.

The purpose of this study is to endeavor to fill in the gap between women's knowledge and acceptance of contraception and use of contraception. In Bahri district (where this research will be based), although there is some changes in the old-age attitudes to family sizes, Family Planning programs effectiveness is not completely understood and little is known about people's awareness about importance of family planning services.

1.3 JUSTIFICATION

1.3.1. Topic selection:

From observation many Sudanese women have large families and they don't have a space between pregnancies and there is an large unmet need for contraception use among married women .This places a huge burden on the country ,society and even at the family level.
Increasing maternal and child mortality is also a matter of great concern worldwide and especially in a country like Sudan . Beside there is a need for more comprehensive studies to explore family planning- related knowledge in Sudanese people.

1.3.2. Area selection:

Bahri district was selected because many people with different background and different socioeconomic status lived there. Populations also can provide the adequate number for the convenient sample size.

1.4 OBJECTIVE

1.4.1. General objective

To assess Knowledge,Attitude and Practice among married women in Bahri district ,Khartoum .

1.4.2. Specific

1-To determine women knowledge, attitude and practice of contraception.
2-To describe sociodemographic Information of the participants like age , educational Level ,occupation and duration of marriage.
3-To determine the methods of contraception used by the women and their availability in Bahri district. .
4-To find out the factors that limit family planning usage (social, economic, cultural, religious and medical).

Chapter two

LITERATURE REVIEW

Literature Review

Family planning services are defined as educational , comprehensive medical or social activities which enable individuals , including minors , to determine freely the number and spacing of their children and to select the means by which this may be achieved " [5]. Family planning may involve consideration of the number of children a woman wishes to have , including the choice to have no children , as well as the age at which she wishes to have them . These matters are influenced by external factors such as marital situation , career considerations , financial position , and any disabilities that may affect their ability to have children and raise them . If sexually active , family planning may involve the use of contraception and other techniques to control the timing of reproduction . Other aspects of family planning include sex education , prevention and management of sexually transmitted infections , pre - conception counseling and management and the infertility management .[6][7]

Family planning , as defined by WHO , encompasses services leading up to conception . Abortion is not considered as component family planning, although access to contraception and family planning reduces the need for abortion[8] . Family planning is sometimes used as a synonym or euphemism for access to and the use of contraception . However , it often involves methods and practices in addition to contraception . Additionally , there are many who might wish to use contraception but are not , necessarily , planning a family (e.g. unmarried adolescents , young married couples delaying childbearing while building a career) ; family planning has become a catch - all phrase for much of the work undertaken in this realm . Contemporary notions of family planning , however , tend to place a woman and her childbearing decisions at the center of the discussion , as notions of women's empowerment and reproductive autonomy have gained traction in many parts of the world . It is most usually applied to a female - male couple who wish to limit the number of children they have and / or to control the timing of pregnancy (also known as spacing children) . Family planning has been shown to reduce teenage birth rates and birth rates for unmarried women[6][7

2.1.Purposes

Family Planning services support people's decisions about when , or if , they would like to have children by offering education , counseling and birth control methods . Planned pregnancies spaced two or more years apart result in healthier babies and fewer medical problems for the woman . Planning for a child will help you avoid the social , health , and financial problems you face

if an unplanned pregnancy happens . There are many birth control methods and techniques available today . No one method is best for everyone at every stage of life . You can choose a birth control method to match your personal needs . It is important to think about what method will be best for you. Raising a child requires significant amounts of resources : time ,social , financial , and environmental. Planning can help assure that resources are available . The purpose of family planning is to make sure that any couple , man , or woman who has a child has the resources that are needed in order to complete this goal . Resources When women can pursue additional education and paid employment , families can invest more in each child . Children with fewer siblings tend to stay in school longer than those with many siblings. Leaving school in order to have children has long - term implications for the future of these girls , as well as the human capital of their families and communities . Family planning slows unsustainable population growth which drains resources from the environment , and national and regional development efforts that aims to improve access to family planning for women after childbirth and during the first 12 months of motherhood .

Closely - spaced and unintended pregnancies are a health risk to both mother and child : spacing pregnancies at least 2 years apart can avert 10 % of infant deaths and about 1 in 5 deaths in children aged 1 to 4. Both early and late motherhood have increased risks . Young teenagers face a higher risk of complications and death as a result of pregnancy . Waiting until the mother is at least 18 years old before trying to have children improves maternal and child health . Also , if additional children are desired after a child is born , it is healthier for the mother and the child to wait at least 2 years after the previous birth before attempting to conceive (but not more than 5 years) . After a miscarriage or abortion , it is healthier to wait at least 6 months.

2.2.Finances

Family planning is among the most cost-effective of all health interventions. "The cost savings stem from a reduction in unintended pregnancy, as well as a reduction in transmission of sexually transmitted infections, including HIV".[9]

Childbirth and prenatal health care cost averaged $7,090 for normal delivery in the United States in 1996. U.S. Department of Agriculture estimates that for a child born in 2007, a U.S. family will spend an average of $11,000 to $23,000 per year for the first 17 years of child's life. (Total inflation-adjusted estimated expenditure: $196,000 to $393,000, depending on household income.)[10].

Investing in family planning has clear economic benefits and can also help countries to achieve their "demographic dividend", which means that

countries productivity is able to increase when there are more people in the workforce and less dependents. UNFPA says that "For every dollar invested in contraception, the cost of pregnancy-related care is reduced by $1.47."[12]
UNFPA states, "The lifetime opportunity cost related to adolescent pregnancy – a measure of the annual income a young mother misses out on over her lifetime – ranges from 1 per cent of annual gross domestic product in a large country such as China to 30 per cent of annual GDP in a small economy such as Uganda. If adolescent girls in Brazil and India were able to wait until their early twenties to have children, the increased economic productivity would equal more than $3.5 billion and $7.7 billion, respectively. [11]
In the Copenhagen Consensus produced by Nobel laureates in collaboration with the UN, universal access to contraception ranks as the third-highest policy initiative in social, economic, and environmental benefits for every dollar spent.[12]. Providing universal access to sexual and reproductive health services and eliminating the unmet need for contraception will result in 640,000 fewer newborn deaths, 150,000 fewer maternal deaths and 600,000 fewer children who lose their mother. At the same time, societies will experience fewer dependents and more women in the workforce, driving faster economic growth. The costs of universal access to contraceptives will be about $3.6 billion/year, but the benefits will be more than $400 billion annually and maternal deaths will be reduced by 150,000.

2.3 Modern methods

In regard to the use of modern methods of contraception, The United Nations Population Fund (UNFPA) says, "Contraceptives prevent unintended pregnancies, reduce the number of abortions, and lower the incidence of death and disability related to complications of pregnancy and childbirth."[10] UNFPA states, "If all women with an unmet need for contraceptives were able to use modern methods, an additional 24 million abortions (14 million of which would be unsafe), 6 million miscarriages, 70,000 maternal deaths and 500,000 infant deaths would be prevented."[11]
In cases where couples may not want to have children just yet, family planning programs help a lot. Federal family planning programs reduced childbearing among poor women by as much as 29 percent, according to a University of Michigan study.
Adoption is another option used to build a family. There are seven steps that one must make towards adoption. One must decide to pursue an adoption, apply to adopt, complete an adoption home study, get approved to adopt, be matched with a child, receive an adoptive placement, and then legalize the adoption[13].

A number of contraceptive methods are available to prevent unwanted pregnancy . There are natural methods and various chemical - based methods , each with particular advantages and disadvantages . Long - acting reversible contraceptive methods , such as intrauterine device (IUDT shaped device is made from material containing progesterone hormone or plastic and copper and is fitted inside a woman's uterus by a trained healthcare provider . It's a long - acting and reversible method of contraception , which can stay in place for three to 10 years , depending on the type. Some IUDs contain hormones that are gradually released to prevent pregnancy . The IUD can also be an effective emergency contraception if fitted by a healthcare professional within five days (120 hours) of having unprotected sex .IUDs containing coppers are 99 % effective and the ones containing hormones are 99.8 % effective , so you're about as protected as you possibly can be by a contraceptive method .Cons include : Irregular bleeding and spotting occurs in the first six months of use ; requires a trained healthcare provider for insertion and removal ; does not protect against STD , and implant small , flexible rod is placed under the skin in a woman's upper arm , releasing a form of the hormone progesterone . The hormone stops the ovary releasing the egg and thickens the cervical mucus making it difficult for sperm to enter the womb . The implant requires a small procedure using local anesthetic to fit and remove the rod and needs to be replaced after three years . Pros of the implant include : Highly effective ; doesn't interrupt sex ; is a long - lasting , reversible contraceptive option . Cons include : Requires a trained healthcare provider for insertion and removal ; sometimes there can be irregular bleeding initially ; does not protect against STIS . Hormonal contraceptives include the pill and the Depo Provera injection. There are two types of pill combined: oral contraceptive pill and progestogen - only contraceptive pill. Condoms protects against most sexually transmitted disease as well as preventing pregnancy . This method of contraception can be used on demand and act as a physical barrier .

The injection contains a synthetic version of the hormone progesterone, over the next 12 weeks the hormone is slowly released into your bloodstream . Pros : The injection lasts for up to three months ; is very effective ; permits sexual spontaneity and doesn't interrupt sex Cons : The injection may cause disrupted periods or irregular bleeding ; it requires keeping track of the number of months used ; it does not protect against STDs : Contraceptive ring :This method consists of a flexible plastic ring constantly releasing hormones that is placed in the vagina by the woman . It stays in place for three weeks , and then you remove it , take a week off then pop another one in . The ring releases the hormones estrogen and progesterone . These are the same hormones used

in the combined oral contraceptive pill , but at a lower dose .Pros include : You can insert and remove a vaginal ring yourself , this contraceptive method has few side effects , allows control of your periods and allows your fertility to return quickly when the ring is removed . Cons include : It is not suitable for women who can't take estrogen - containing contraception ; you need to remember to replace it at the right time ; does not protect against STDs. Diaphragm is a small , soft silicon dome is placed inside the vagina to stop sperm from entering the uterus . It forms a physical barrier between the man's sperm and the woman's egg , like a condom The diaphragm needs to stay in place for at least six hours after sex . After six - but no longer than 24 hours after sex - it needs to be taken out and cleaned Some of the pros : You can use the same diaphragm more than once , and can last up to two years if you look after it . Some of the cons : Using a diaphragm can take practice and requires keeping track of the hours inserted . The diaphragm works fairly well if used correctly , but not as well as the pill , a contraceptive implant or an IUD . [14].

2.4.Fertility Awareness

Fertility Awareness(FAM) is a natural family planning strategy that women can use to help prevent pregnancy . It involves tracking your natural cycle of fertility and your menstrual cycle , developing a better awareness of your body , and using a variety of non - pharmaceutical methods to detect ovulation . The rhythm method is where your previous menstrual cycles are tracked on a calendar , and this information is used to predict future ovulation dates . FAM combines the rhythm method with even more attention to the body to better predict ovulation and prevent pregnancy . In the rhythm method and in FAM , you abstain from sex (periodic abstinence) during your most fertile days . Alternatively , you can use backup contraception on your fertile days . The effectiveness of FAM varies depending on the combination of tracking you use . There are many ways to prevent pregnancy that are more effective than a natural method . They involve medication or medical intervention. FAM is one of the least reliable forms of pregnancy prevention . But it can be an appropriate choice of birth control for some diligent and self - aware adult women [15].These methods are used for various reasons : There are no drug - related side effects [16],it is free to use and only has a small upfront cost , it works both ways , or for religious reasons (the Catholic Church promotes this as the only acceptable form of family planning calling it Natural Family Planning) . Its disadvantages are that either abstinence or backup method is required on fertile days , typical use is often less effective than other methods, and it does not protect against sexually transmitted disease.

2.5. Media campaign

Mass media campaigns have potential to provide useful information on the benefits and logistics of family planning and influence social norms around such contentious topics at low cost . However , mass media campaigns are also hard to evaluate given their mass targeting . As a result , limited evidence exists on their effectiveness in changing attitudes and behavior . The Health Education Division of the Ministry of Health conducted the Tanzanian Family Planning Communication Project from January 1991 through December 1994 , a project funded by the U.S. Agency for International Development (USAID) .[17] In 2014 , only 16 percent of women of childbearing age in Burkina Faso used modern methods of contraception , and the average woman gave birth to six children over her lifetime . Surveys suggest that women lack information about the health benefits of controlling fertility and massively overestimate the health risks of contraception. Gender attitudes and intra - household bargaining issues are likely a barrier to contraceptive use : most rural women report never having discussed contraception with their husbands and at the same time many report it is appropriate for a woman to hide contraception use from her husband .

2.6. Demand for family planning

214 million women of reproductive age in developing countries who do not want to become pregnant are not using a modern contraceptive method [5]. This could be a result of a limited choice of methods , limited access to contraception , fear of side - effects , cultural or religious opposition , poor quality of available services , user or provider bias , or gender - based barriers . In Africa , 24.2 % of women of reproductive age do not have access to modern contraction . In Asia , Latin America , and the Caribbean , the unmet need is 10-11 % . Meeting the unmet need for contraception could prevent 104,000 maternal deaths per year , a 29 % reduction of women dying from postpartum hemorrhage or unsafe abortions .[18]

2.7. Obstacles to family planning

There are many reasons as to why women do not use contraceptives . These reasons include logistical problems , scientific and religious concerns , limited access to transportation in order to access health clinics , lack of education and knowledge and opposition by partners , families or communities. The UNFPA says that "Poorer women and those in rural areas often have less access to family planning services. Certain groups - including adolescent, unmarried, the urban poor, rural population, sex workers and people living with HIV also face a variety of barriers to family planning. This can lead to higher rates of unwanted pregnancy, increased risk of HI and other STIs,

limited choice of contraceptive methods, and higher levels of unmet need for family planning ". [11]

2.8.COVID - 19

As of March 2020 , there were an estimated 450 million women using modern contraceptives across 114 priority low- and middle - income countries . The COVID - 19 pandemic as well as social distancing and other strategies to reduce transmission are anticipated to impact the ability of these women to continue using contraception .

Some 47 million women in 114 low- and middle - income . countries are projected to be unable to use modern contraceptives if the average Jockdown , or COVID - 19 - related disruption , continues for 6 months with major disruptions to services . For every 3 months the lockdown continues , assuming high levels of disruption , up to 2 million additional women may be unable to use modern contraceptives . If the lockdown continues for 6 months and there are major service disruptions due to COVID - 19 , an additional 7 million unintended pregnancies are expected to occur . [19]

2.9. World Contraception Day

September 26 is designated as World Contraception Day , devoted to raising awareness of contraception and improving education about sexual and reproductive health , with a vision of " a world where every pregnancy is wanted "[38] . It is supported by a group of international NGOs , including : Asian Pacific Council on Contraception , Centro Latinamericano Salud y Mujer , European Society of Contraception and Reproductive Health , German Foundation for World Population , International Federation of Pediatric and Adolescent Gynecology . International Planned Parenthood Federation , Marie Stopes International , Population Services International , The Population Council , The USAID , Women Deliver .[20]

2.10. Abortion

The United Nations Population Fund explicitly states it " never promotes abortion as a form of family planning " [39]. The World Health Organization states that. Family planning contraception reduces the need for abortion , especially unsafe abortion"[2].

The campaign to conflate contraception and abortion is rooted on the assertion that contraception ends , rather than prevents , pregnancy . This is due to the notion that preventing implantation implies an abortion , when considering fertilization as the initial moment of pregnancy . According to an amicus brief submitted to the U.S. Supreme Court 1 October 2013 led by Physicians for Reproductive Health and the American College of Obstetricians and Gynecologists , a contraceptive method prevents pregnancy by interfering

with fertilization , or implantation . Abortion , separate from contraceptives , ends an established pregnancy . [21]

2.11. Previous studies related to the study:

In Sudan by the year 2015 a study titled Knowledge , Attitude and Practice of Family Planning Among Married Women Attending Primary Health Center in Sudan Concluded that a significant proportion of respondents have good knowledge and favorable attitude towards family planning , but , practice of using contraception was poor . Fear of side effects of contraception and women wanting more children are significant reasons for poor practice . Socio - demographic factors like education level , gender and number of children and husband support of family planning were found to influence the use of contraceptive methods among respondents . [22]

In Enugu , Nigeria in the year 2001 a study titled Knowledge , Attitude and Practice of Family Planning amongst Women in a High Density Low - Income concluded that a total of 334 Nigerian women were interviewed on knowledge , attitude and practice of family planning. About 97.6 % were found literate. Knowledge and approval of family planning was high , 81,7 % but the practice of family planning was low , as only 20 % of the women were on a family planning method. The commonest methods for both ever use and current use were safe period / Billings , condom , IUCD and injectable . [23]

In Nepal by the year 2008 a study titled Awareness and practice of family Planning methods in women attending Gyne OPD at Nepal Medical College Teaching Hospital concluded that with increase in level of education , awareness also increased . Although most of the women were aware about the methods , they were ignorant about the details like duration of protection , return of fertility on discontinuation and non - contraceptive benefits . The most common reason for discontinuation of FP methods was stated as side effects . A wide knowledge practice gap was evident in this study , which was similar to the findings of studies done in other developing countries . Improved female education strategies and better access services are needed to solve these problems . The use of communication media suitable for the audience and adequate message is important in conducting effective family planning awareness activities . [24]

In Lucknow , India by the year 2009 a study done titled Socio Demographic Determinants and Knowledge , Attitude , Practice Survey of Family Planning concluded that utilization of family planning methods was found more in women of higher age group , parity , education and SES whereas their residential area (urban or rural) was not found an influencing factor on practice of family planning by them . The urban - rural gap was found bridged to a considerable extent with respect to family planning , yet aspects like

dispersing information about efficacy of modern contraceptives need to be addressed . The study also revealed a good knowledge and favorable attitude towards future use of family planning methods . All the women interviewed were in favor of practicing family planning . However , only 55.9 % women were found to have used some form of family planning. [25]

In Ethiopia by the year 2013 a study titled Family Planning Knowledge , Attitude and Practice among Married Couples in Jimma Zone , Ethiopia concluded that good knowledge among males and females was observed , yet differences in knowledge of specific contraception methods exist . The study reveals that mere physical access (proximity to clinics for family planning) and awareness of contraceptives are not sufficient to ensure that contraceptive needs are met . We also noticed the existence of a sex preference for boys both among men and women . Condom use by men is above the national average but it is low compared to most Sub - Saharan African countries . It is evident from this study that high knowledge on contraception is not matched with the high contraceptive use . Among reasons for not using contraception , wanting to have a child and side effects of contraceptives were given by men and women respectively . [26]

In the Banteay Meanchey , Cambodia study titled knowledge , Attitude and practice of family planning among married women the results showed that knowledge of modern contraceptives among the respondents is universal , with 99 % of women being aware of at least one modern method of contraceptive . The respondents and stakeholders showed a positive attitude in their support of family planning programs , and more than half of the respondents knew where to obtain contraceptive methods . Around 56 % of the women were practicing family planning.[27].

Chapter three
METHODOLOGY

METHODOLOGY

3.1-Study design:

This is a descriptive, cross sectional community-based study conducted in November - December 2022 of the academic year 2021-2022 in Bahri district, Khartoum state. It is cross sectional survey because questionnaires were distributed to the target respondents at one time. Descriptive - correlation was used to describe variables to be measured and determine the key factors influencing the practice of family planning services in Bahri, Khartoum.

3.2-Study area:

The study was conducted in Khartoum North or Khartoum Bahri district . Khartoum Bahri is a city in the capital of Sudan, It is located on the north bank of the blue Nile and the east bank of the blue Nile and the east bank of the River Nile, near the confluence of the Blue Nile with the white Nile, and bridges connect it with both Khartoum to the south and Omdurman to its west . Khartoum North has many neighborhoods some of which are Alamlak , Kober , Khafouri, Alsababi, Almazad and many more.

3.3-Study population:

The study population selected was the married women resident of bahri district. The study population size was unknown due to lack of statistical information. Included women aged (20-49).

3.4-Selection criteria:

3.4.1. Inclusion:

1-Married women in Bahri aged (20-49) were included.
2-Women who consented to the study.

3.4.2. Exclusion:

1-Unmarried women in Bahri aged (20-49) were excluded.

VARIABLES
Dependent variable: Women who uses or have used contraception.
Independent variable:Age,Educational level ,Occupation,Duration of marriage
And number of children.

3.5-Sampling

Sample size was calculated using Cochran's sample size formula to compromise 384 participants, assuming 50%of women are using contraceptive methods (to maximize sample size) and 5% margin error within

95% confidence level. However, a successful 400 eligible participants were interviewed. A prior consent was obtained from the participants before filling the questionnaire.

n=z^2/4e^2

= (1.96)^2/4(0.05)^2

=384.16

=400

n=sample size

e=acceptable sampling error (e=0.05)

z=value at reliability level or significance level

Reliability level 95% or significance level 0.05;z=1.96.

3.5.2. Sampling technique: The study was done using a simple randomized sample of married women.

3.6. Data collection:

Data is collected using questionnaires with close and open questions that cover all the objective. The questionnaire contained questions about the socio-demographic characteristics, knowledge about family planning, sources of family planning services, family planning practice and hindrance to participation

3.7. Data analysis:

Quantitative data was entered in a computer and analyzed using the SPSS computer package. Frequency tables and graphs were used to summarize data.

3.8. Ethical considerations:

The study proposal was approved by the community department of Napata College.

Respondents were requested for their consent to participate in the study. The purpose of the study was explained to them and they were assured their confidentiality.

Chapter four

RESULT

Results of the analysis

4.1. The age group 30 - 39 years reported in 152(38%) of the women, above 39 years 140(35%) and between 20 - 29 years 108(27%) (Figure 1).

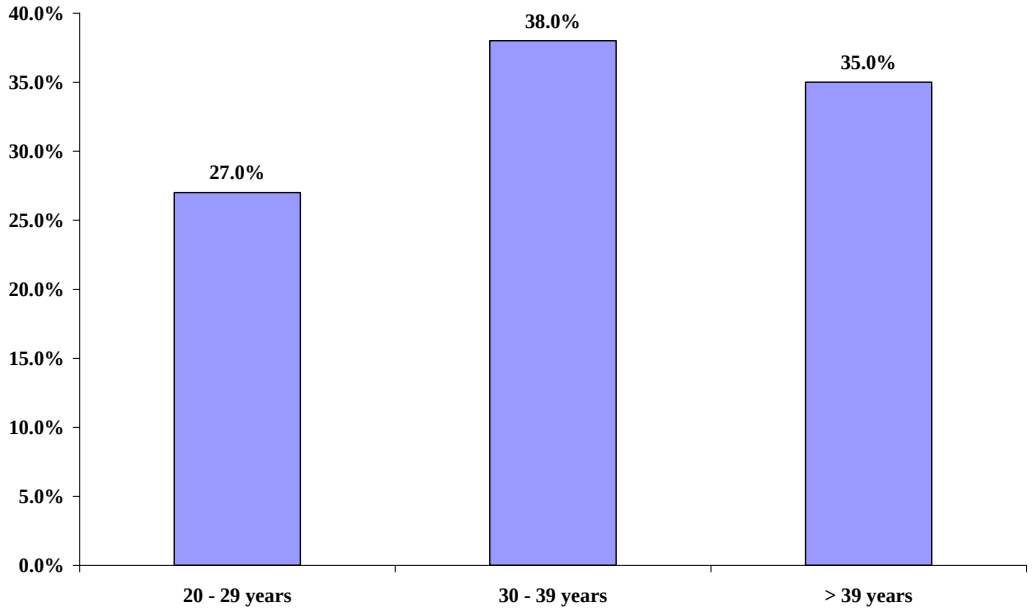


Figure (1) Disturbuation of age among the study group (n=400)

4.2. Housewives were 208(52%), employees were 168(42%) and workers were 24(6%) of the women (Figure 2).

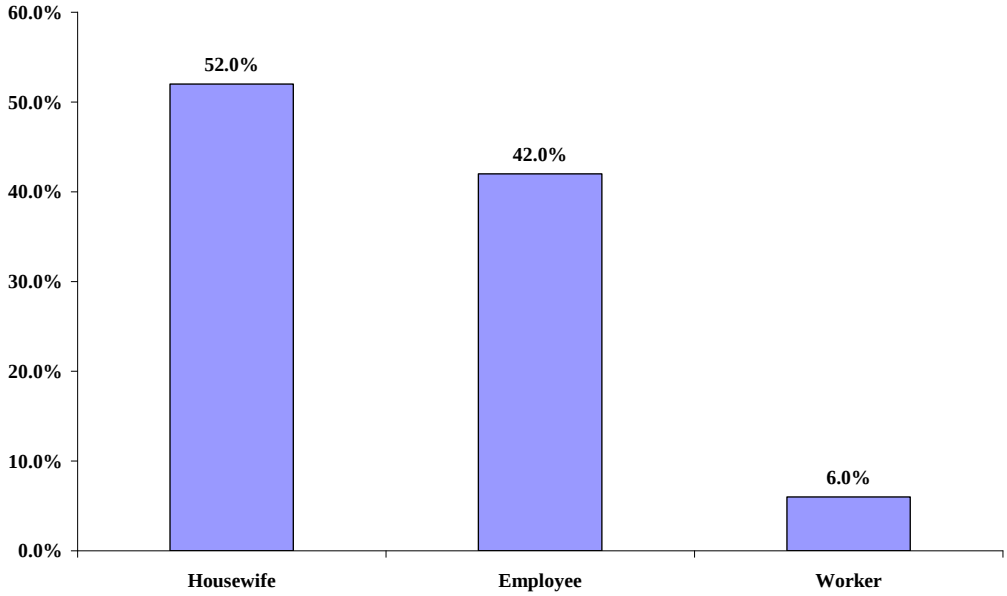


Figure (2) occupation

4.3. University level of education reported in 220(55%) of the women, secondary 104(26%), primary 48(12%) and above university 28(7%) (Table 1).

Table (1) educational level

Educational level	Frequency	%
Primary	48	12.0

Secondary	104	26.0
University	220	55.0
Above university	28	7.0
Total	400	100.0

4.4. The duration of marriage was more than 10 years in 200(50%) of the women, between 5 - 10 years 112(28%) and less than 5 years 88(22%) of the women (Figure 3).

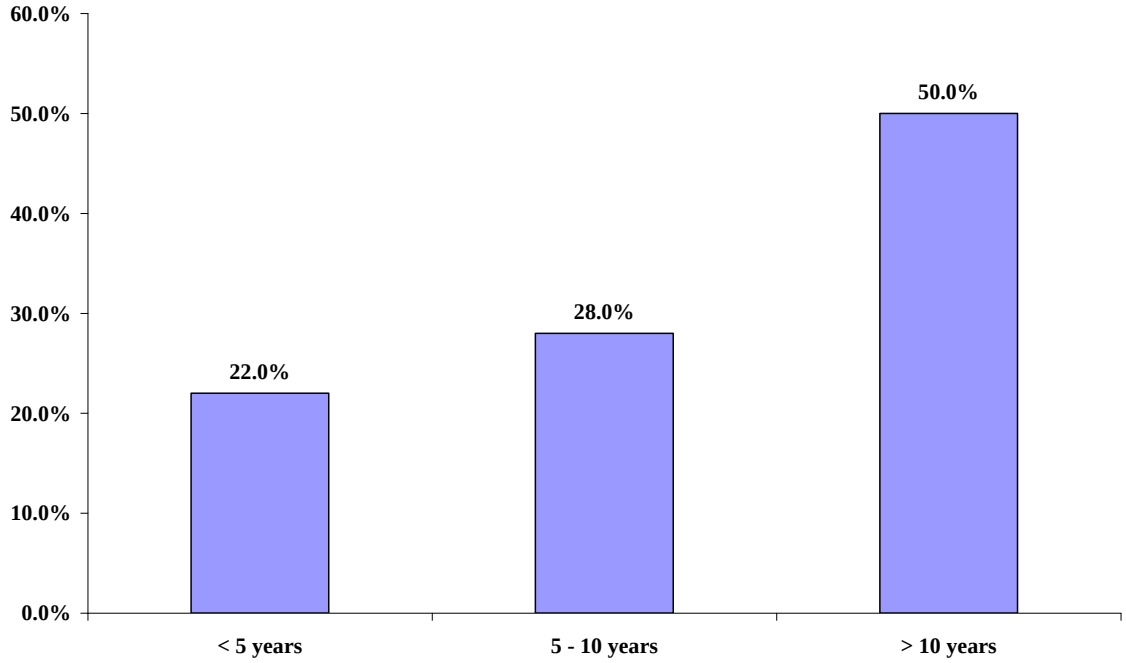


Figure (3) duration of marriage

4.5. The number of children was 1 - 3 in 236(59%) of the women, between 4 - 6 in 112 (28%), more than 6 in 36(9%) and 16(4%) of the women had no children (Table 2).

Table (2) number of children

Number of children	Frequency	%
None	16	4.0
1 - 3	236	59.0
4 - 6	112	28.0
> 6	36	9.0
Total	400	100.0

4.5. All of the women 100(100%) had knowledge about family planning. The sources of kno wledge were doctor 184(46%), health care centers 172(43%), family members 136(34%) and social media 108(27%) (Table 3).

Table (3) source of knowledge about family planning

Source	Yes	
	Frequency	%
Doctor	184	46
Health centers	172	43
Family	136	34
Social media	108	27

4.6. The rate of using family planning methods was 296(74%) among the partici pants and 104(26%) of the women did not use family planning methods (Figure 4).

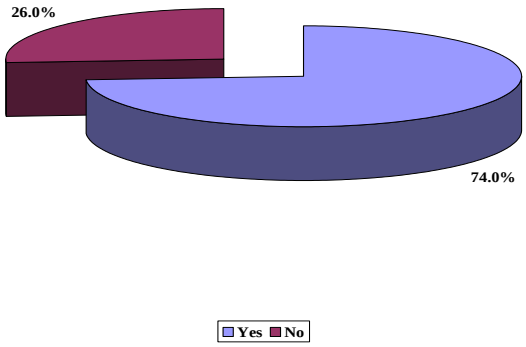


Figure (4) use of family planning methods

4.7. The methods used by the women in this study were pills 156(52.7%), natura l 60(20.3%), Emplaning 56(18.9%), condom 42(9.5%), intrauterine contraceptiv e device 24(8.1%), injection 24(8.1%) and ligation 24(8.1%) (Table 4).

Table (4) types of family methods used

Methods	Yes	
Pills	156	52.7
Natural	60	20.3
Implanon	56	18.9
Condom	42	9.5
IUCD	24	8.1
Injection	24	8.1
Ligation	24	8.1

4.8. The sources of family planning methods were health center 136(45.9%), ph armacy 129(40.5%) and both health canter and pharmacy 40(13.5%) (Table 5).

Table (5) source of family planning methods

Source of methods	Frequency	%
Health center	136	45.9
Pharmacy	129	40.5
Health center and pharmacy	40	13.5
Total	296	100.0

4.9. The women who were experienced side effects due to use of family plannin g methods were 196(66.2%) and 100(33.8%) did not (Figure 5).

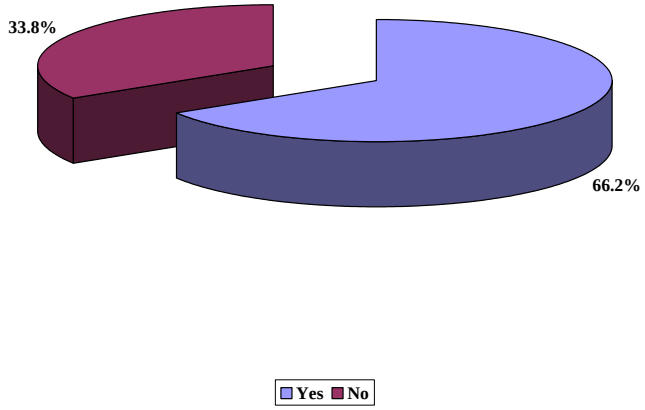


Figure (5) experience of side effects due to use of family planning methods

4.10. The causes of use of family planning methods were child birth spacing 204(68.9%), health state of the women 72(24.3%) and both health state and child birth spacing 20(6.8%) (Table 6).

Table (6) causes of use of family planning methods

Causes of use	Frequency	%
Health condition	72	24.3
Child birth spacing	204	68.9
Health condition and spacing	20	6.8
Total	296	100.0

4.11. Pregnancy 20(10.2%), ectopic pregnancy 16(8.2%) and uterine perforation 12(6.1%) (Table 7).

Table (7) side effects

Side effects	Yes	
	Frequency	%
Irregular menstruation	116	59.2
Inflammations	76	38.8
Facial warts	60	30.6
Bleeding	44	22.4
Unwanted pregnancy	20	10.2
Ectopic pregnancy	16	8.2
Uterine perforation	12	6.1

4.12. Among the women who experienced side effects of family planning metho ds , the side effects were irregular menstruation 116(59.2%), inflammations 76(38.8%), facial warts 60(30.6%), bleeding 44(22.4%), unwanted The interpregna ncy interval among the 312 women who had 2 children or more was 2 - 3 years 200(64.1%), above 3 years 88(28.2%) and less than 2 years 24(7.7%) (Figure 6) .

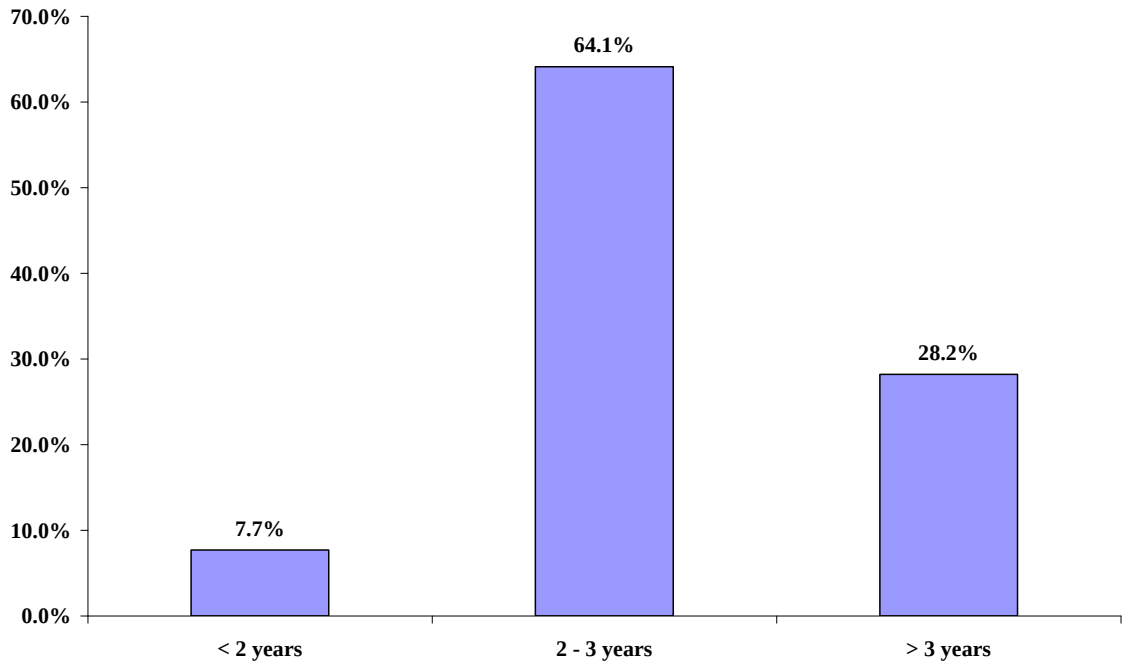


Figure (6) interpregnancy interval

* women who had 2 children or more

4.13. Among the women who were not used family planning methods the causes behind no u se were health effects 48(46.2%), husband refusal 44(42.3%), no desire to regulate pregnancy 40(38.5%), no enough information 36(34.6%) and religious causes 28(26.9%) (Table 8).

Table (8) causes behind no use of family planning methods

Causes	Yes	
	Frequency	%
Health effect	48	46.2
Husband refusal	44	42.3
No desire to regulate deliveries	40	38.5
No enough information	36	34.6
Religious causes	28	26.9

4.14. Among the women who did not used family planning methods the majorit y 80(76.9%) had no desire for future use and 24(23.1%) had intention to use fam ily planning methods in future (Figure 7).

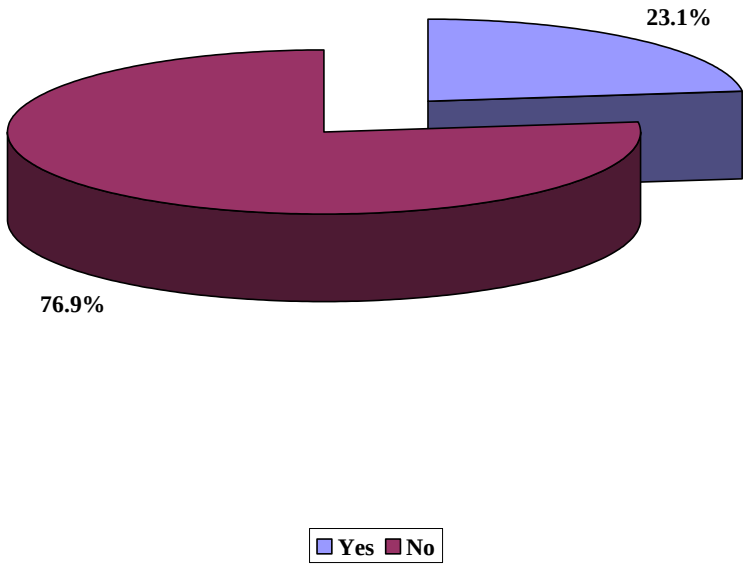


Figure (7) future use of family planning methods

*** women not used family planning methods**

Chapter five

DISCUSSION

Discussion

This study is aimed to define the factors influencing utilization of family planning services in 400 married women. Family planning services in our country are still developing and parallel to this, there are some advances in the health indicators, but the need for family planning which cannot be met still stands out as an important health problem.

Our age group participants was highest at 30 – 39 years reported in 152 (38%) of the women.(figure1) Compared to previous study done in Sudan 2015 the age group 30-39 years were (40%).

According to the education most of them were in university level of education with percent of 55% (220 women), (Table 1) In comparison to previous study done in Sudan , University level education (20%).

According to the duration of marriage most of women have duration between 5_10 years was 112 (28%) of women, (figure3) In comparison to previous study done in Sudan duration between 5-10 were (57%).

Most of women contributed to this study have 1_3 children with percent of 59% (236 women), (Table 2) In comparison to previous study done in Sudan women with less than 3 children were (15%).

Knowledge of family planning by the women is satisfactory result as 100% said yes they already hear about it. Compared to previous study done in Sudan, the women who heard about contraceptives were (87%) . The sources of knowledge from doctors were 184 women (46%), from health care centers were 172 women (43%) ,while (34%) 136 women knowledge came from family members and (27%) 108 women hear about it from social media accounts .(Table 3) Compared to previous study done in Sudan the source of information for the participants that heard from doctors were (25%); family planning centers were (9.5%); family members(17%) and social media (35%).

The rate of using family planning methods was 296 women (74%) among the participants. (figure4) ,practice of women towards contraceptives shows that they tend to use contraceptives pills more with percent of (52.7%) 156 women , then natural planning by the percent of (20.3%) 60 women . (Table 4) Compared to previous study done in Sudan the percentage of women that used Oral pills were (83%); IUCD (66%); Condom (52%); Injections (49%); Natural (41%); Implants (39%); Ligation (37%).

Among the women who experienced side effects of family planning method, (59.2%) 116 of them said irregular menstruation is the main symptom, (30.6%) 60 women complained of facial acne and mood changes and weight gain . This result is like that conducted in Nepal and Lucknow showed most women complained of irregular vaginal bleeding by (52.5%) and weight gain, acne

and mood changes by (42.5%).

The causes of use of family planning methods mostly were child birth spacing with percent of (68.9%) 204 women , another cause is health state of the mother reported as (24.3%) 72 women and both child birth spacing and health state accounted as (6.8%) 20 women . (Table 6) In contrast to our study the previous study done in Sudan 2015 health conditions accounted for (5.5%) while child spacing were (5%). In their conducted study most participants did not use family planning accounted for (60%)

The cause behind no use were health effects with high percent of (46.2%) 48 women , followed by husband refusal with percent of (42.3%) 44 women , (Table 8) In relation to previous study done in Sudan 2015 the causes of rejection of family planning were mainly fear of side effects (31.5%), had no desire to regulate their pregnancy (14%) husband disapproval (5.5%) and lastly due to religious beliefs (1%).

Conclusion

This study conducted exclusively on married women most of them were in university level of education and the age group participants was highest at 30 – 39 years most of them were housewives. Women who had 2 children and more had mean inter-pregnancy interval of 2_3 years . All women already knew about family planning before and this knowledge came mostly from doctors and health care workers and this can be taken as a clear evidence of increased awareness.

Most of the women had duration of marriage more than 10 years and have 1_3 children.296 out of 400 women are using family planning methods, they mostly prefers contraceptive pills followed by natural contraception, then implants and condom followed by IUCD and injections and lastly came the uterine ligation. According to symptoms experienced by the women irregular menstruation was in the top then came others symptoms like facial acne, weight gain and mood changes, bleeding and unplanned pregnancy while using contraceptives , ectopic pregnancy and uterine perforation were almost rare. The major causes of using family planning methods were child birth spacing top modern by health state of the mother, on another hand the causes of refusal of use of family planning methods were health effects followed by husband refusal and other women had no desire to regulate their pregnancies. One third of the women in this study who did not try to use contraceptives are willing to try it in future where some still refusing to use those methods.

Recommendations

The study revealed a huge awareness in our community about the family planning and whether it is good and brings benefits or it is harmful thing.

We recommend that more widespread quantitative and qualitative studies to be done in the field to explore further aspect of this topic.

We recommend such knowledge about family planning must be in routine antenatal clinic activities for the pregnant ladies.

Improving female education about such topic is important but the male must be aware about these methods in detail to increase the knowledge of both for the maximum degrees.

We recommend that misinformation and misperceptions about Family Planning methods should be corrected through wide spread educational Campaigns .

Finally, improving the accessibility and availability of all Family Planning services with the most safely procedures to maximize the effect of Family Planning programs.

REFERENCEIS :

[1] Stith Butler A, Wright Clayton E, editors. A Review of the HHS Family Planning Program: Mission, Management, and Measurement of Results. Washington (DC): National Academies Press (US); 2009. 2, Overview of Family Planning in the United States.

[2]Family Planning: A Global Handbook for Providers. 2018 World Health Organization and Johns Hopkins Bloomberg School of Public Health. https://apps.who.int/iris/bitstream/handle/10665/260156/9780999203705-eng.pdf?sequence=1

[3]Ibnouf, A.H., Van den Borne, H.W. & Maarse, J.A.M. (2007). Utilization of family planning services by married Sudanese women of reproductive age. EMHJ - Eastern Mediterranean Health Journal, 13 (6), 1372-1381, 2007 https://apps.who.int/iris/handle/10665/117388

[4]track20.org. FP core indicator Sudan [Internet]. 2022 [cited 2022 Nov 13]. Available from https://track20.org/Sudan

[5]dualityhealth.co.UK/reason-you-may-want-to-visit-a-family-planning-clinic. [internet].2019.[cited 2022 Nov 19]. Available from:https://dualityhealth.co.uk/reasons-you-may-want-to-visit-a-family-planning-clinic/

[6]"What services do family planning clinics provide?". NHS. Archived from the original on 11 November 2014. Retrieved 8 March 2008.

[7].World Health Organization. (n.d.). Sexual and Reproductive Health. Retrieved on 30 October 2019.

[8]Bajos, N.; Le Guen, M.; Bohet, A.; Panjo, Henri; Moreau, C. (2014). "Effectiveness of family planning policies: The abortion paradox". PLOS ONE. 9 (3): e91539.

[9]Tsui, A. O; McDonald-Mosley, R; Burke, A. E (2010). "Family Planning and the Burden of Unintended Pregnancies". Epidemiologic Reviews. 32 (1): 152–74.

[10] Center for Nutrition Policy and Promotion. "Expenditures on Children

by Families, 2007; Miscellaneous Publication Number 1528-2007". United States Department of Agriculture.

[11]United Nations Population Fund. "Family planning". Retrieved 6 March 2018.
[12]"Health - Women & Children | Copenhagen Consensus Center". [Internet] [Cited 2022 Nov 23].
Available from:www.copenhagenconsensus.com

[13]"How to Adopt". Adoption Exchange Association. [Internet]. [cited 2022 Nov 23]. Available from:https://www.adoptuskids.org/adoption-and-foster-care/how-to-adopt-and-foster/getting-started.

[14]Department of Health and Human Services, Office on women's Health (2012)."Birth control methods fact sheet". Archived from the original on 18 April 2012. Retrieved 21
April 2012.
https://www.womenshealth.gov/publications/our-publications/fact-sheet/birth-control-methods.cfm.

[15]PlannedParenthood.org. Fertility Awareness. [Internet]. [cited 2022 Nov 26].Available from:https://www.plannedparenthood.org/learn/birth-control/fertility-awareness.

[16]Manhart, Michael D; Duane, Marguerite; Lind, April; Sinai, Irit; Golden-Tevald, Jean (2013). "Fertility awareness-based methods of family planning: A review of effectiveness for avoiding pregnancy using SORT". Osteopathic Family Physician. 5: 2–8 .

[17]"The Impact of Multimedia Family Planning Promotion On the Contraceptive Behavior of Women in Tanzania". Guttmacher Institute. 2005-07-11.

[18]apha.org. "Universal access to contraception. [internet]. [cited 2020 Nov 26]. Available from: https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2015/12/17/09/14/universal-access-to-contraception.

[19]UNFPA. "Impact of the COVID-19 Pandemic on Family Planning and Ending Gender-based Violence, Female Genital Mutilation and Child Marriage" (pdf) [Internet] . [published 27 April 2020]. [cited 2022 Nove 27].

[20].Wikipedia.org. World contraception Day. [Internet]. [Cited 2022 Nov 27].Available
from:https://en.m.wikipedia.org/wiki/Family_planning#cite_ref-28

[21]Rowlands, S (2007). "Contraception and abortion". Journal of the Royal Society of Medicine. 100 (10): 465–8..

[22]Siddig Omer Handady, Khalid Naseralla, Hajar Hassan Sakin, Awad Ali M. Alawad. Knowledge, Attitude and Practice of Family Planning
Among Married Women Attending Primary Health Center in Sudan. International Journal of Public Health Research.
Vol. 3, No. 5, 2015, pp. 243-24.

[23]Onwuzurike BK, Uzochukwu BS. Knowledge, attitude and practice of family planning amongst women in a high density low income urban of Enugu, Nigeria. Afr J Reprod Health. 2001 Aug;5(2):83-9. PMID: 12471916.

[24]Tuladhar H, Marahatta R. Awareness and practice of family planning methods in women attending gyne OPD at Nepal Medical College Teaching Hospital. Nepal Med Coll J. 2008 Sep;10(3):184-91. PMID: 19253864.

[25]Sharma V, Mohan U, Das V, Awasthi S. Socio demographic determinants and knowledge, attitude, practice: survey of family planning. J Family Med Prim Care. 2012 Jan;1(1):43-7. doi: 10.4103/2249-4863.94451. PMID: 24479000; PMCID: PMC3893950.

[26]Tilahun T, Coene G, Luchters S, Kassahun W, Leye E, Temmerman M, Degomme O. Family planning knowledge, attitude and practice among married couples in Jimma Zone, Ethiopia. PLoS One. 2013 Apr 23;8(4):e61335. doi: 10.1371/journal.pone.0061335. PMID: 23637815; PMCID: PMC3634055.

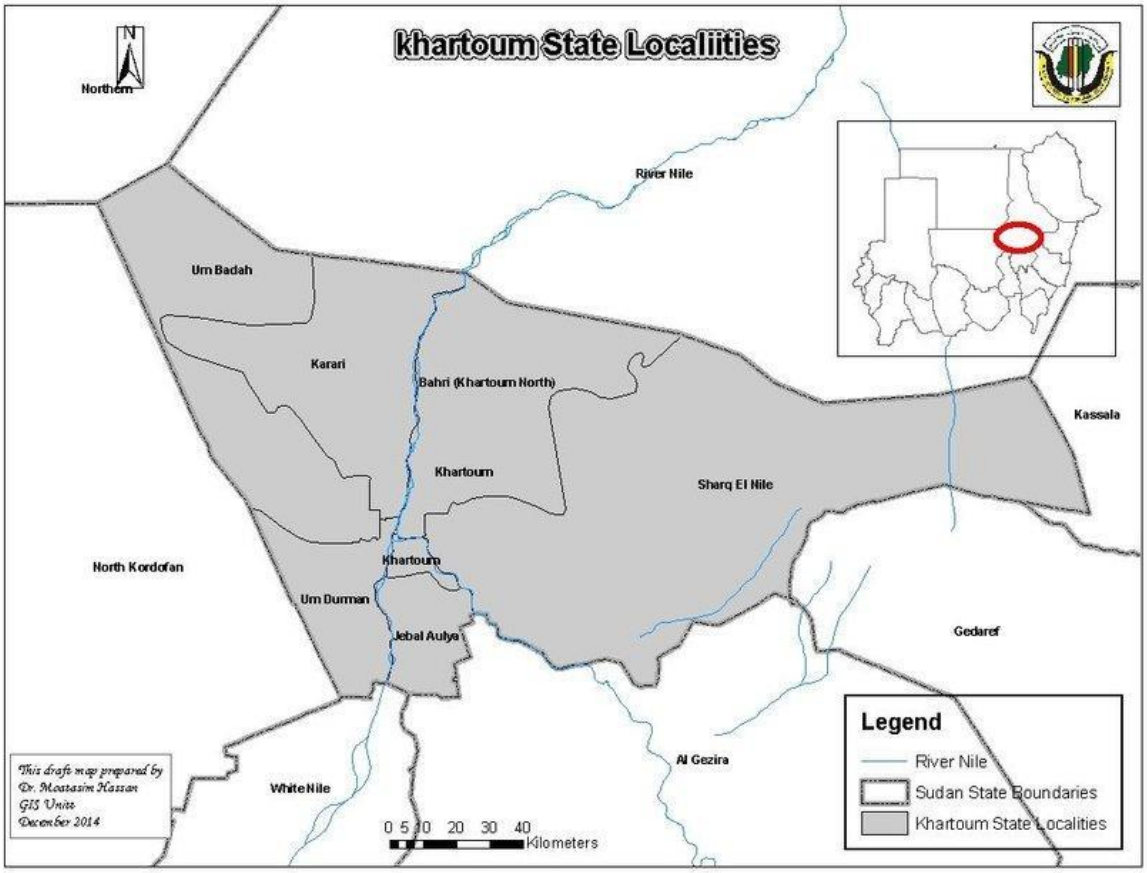
[27]Sreytouch V. Knowledge, Attitude and Practice of family planning among women in Banteay Meanchey, Cambodia. 2010; 27: 103-115.

Annexes

Work plan

Planned Activity	September2022	October 2022	November 2022	December 2022
Proposal writing and consultation with supervisor	//////////	//////////		
Contacting with local authorities to get approval		//////////		
Preparation and distribution of data collecting tools		//////////	//////////	
Data collection			//////////	
Data entry and analysis			//////////	
Baseline finding report draft			//////////	
Finalizing the study report				//////////
Circulation of				//////////

report				//////////// ////////////



Khartoum state Map .

Questionnaire

كلية نبته الجامعية

طب المجتمع

استبيان بعنوان : مدى معرفة النساء المتزوجات عن تنظيم الأسرة في ولاية الخرطوم

كل المعلومات سرية بغرض البحث العلمي

الموافقة على المشاركة في البحث : نعم ( ) لا ( )

1.العمر

2.الوظيفة

3.المستوى التعليمي

4.فترة الزواج

5.عدد الأبناء

6.هل سمعت بتنظيم الأسرة ؟

7.إذا كانت اجابتك بنعم من أين سمعت بتنظيم الاسره

1) الأسرة (2) الطبيب (3) المراكز الصحية (4) وسائل التواصل الإجتماعي

8.هل تستخدمين موانع الحمل نعم او لا

9.اذا كانت الاجابة بنعم ، فأي نوع تستخدمين ؟

1) التنظيم طبيعي (2) الواقي (3) الحبوب (4) اللولب (5) الحقن (6) الربط (7) الشريحة

10.هل حدثت لك آثار جانبية أثناء إستعمال مانع الحمل :

1) حبوب في الوجه

2) حمل غير مرغوب فيه

3) حمل الخارج الرحم

4) ثقب جدار الرحم

5)عدم انتظام الدورة الشهرية

6) نزيف

7)التهابات

11. ما هي مدة المباعدة بين ولاداتك ؟

12.اذا لم تستخدمي وسائل منع الحمل في حياتك هل ترغبين مستقبلا باستخدامها ؟

13. إذا لم تستخدمي وسائل منع الحمل في حياتك اذكرى الأسباب ؟

1. لأضرارها الصحية

2.لا ارغب في تنظيم الولادات

3. ليست من تعاليم الدين

4. عدم موافقة الزوج

5. لا اعلم عنها الكثير

14.مصدر توفر الوسائل ؟

1.مركز صحي

2. صيدلية

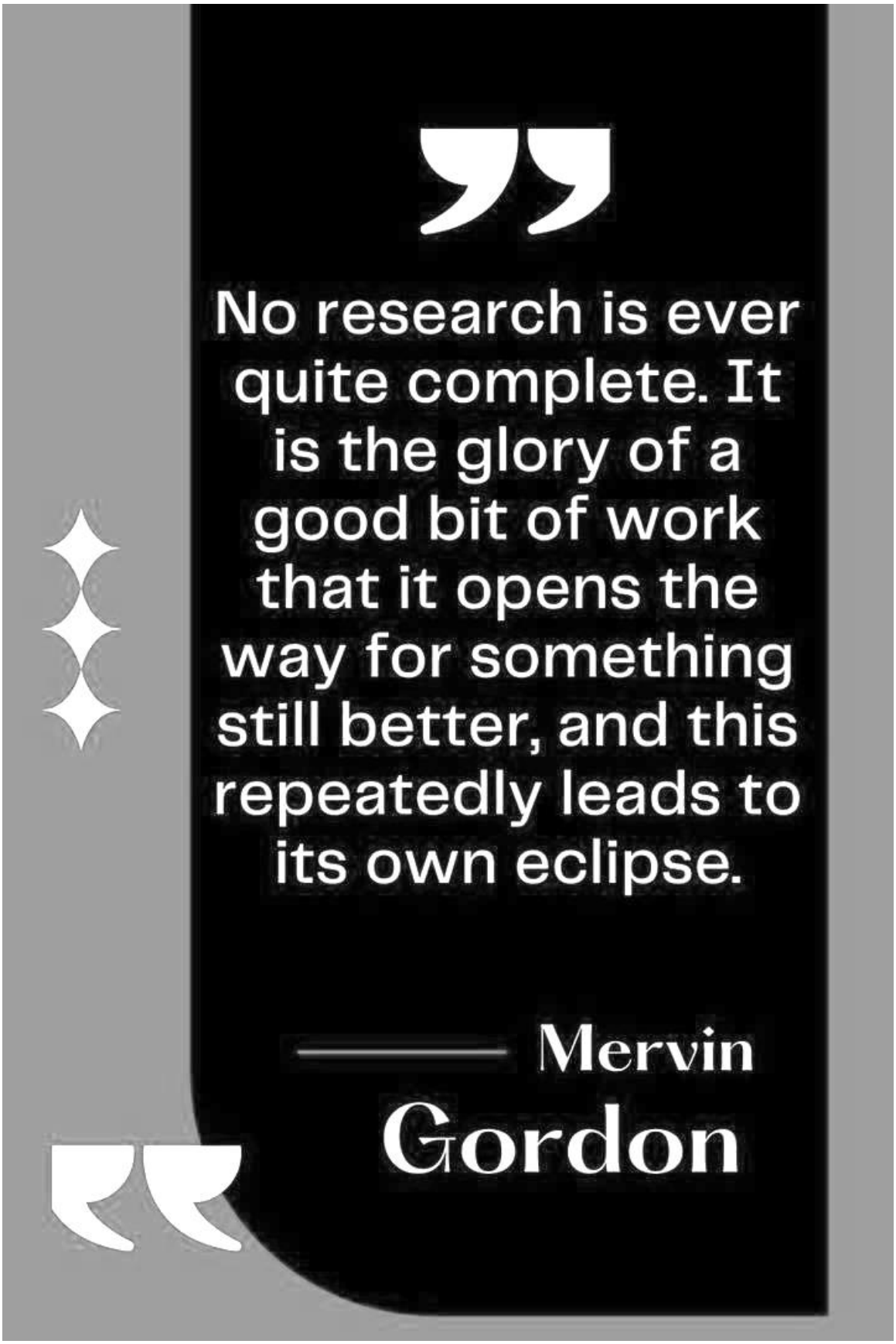
3. أخرى

15.أسباب استعمال وسائل التنظيم :

1. منع الحمل بسبب الحالة الصحية

2. تنظيم فترات الانجاب

3. أخرى


No research is ever quite complete. It is the glory of a good bit of work that it opens the way for something still better, and this repeatedly leads to its own eclipse.
Mervin Gordon