INTRODUCTION

Contraceptive methods have been used since ancient times, but effective and safe methods only became available in the 20th century ***(Hurt and Joseph, 2000).***

Contraception is defined as intentional prevention of conception through the use of various devices, sexual practices, chemicals, drugs, or surgical procedures ***(Stacey, 2013).***

Contraception is a major component of preventive health care for women. Some women are not satisfied with the methods of contraception currently available. This dissatisfaction with contraceptive methods may lead to unplanned pregnancies so, Increased patient-physician discussion and education may improve satisfaction with contraceptive methods currently used ***(Rosenfeld et al., 1993).***

Contraceptive methods can be classified in to either modern contraceptive methods like oral contraceptives (COCs), implants, injectable, intrauterine device (IUD), and condoms, Or Traditional methods like; Withdrawal, periodic abstinence, long term-abstinence and prolong breast feeding ***(El-Zanaty and Way, 2009).***

Contraceptive effectiveness depends on both the inherent effectiveness of the method itself and correct or perfect usage of the method ***(Trussell and Kost;1987).***

Birth control increases economic growth because of fewer dependent children, more women participating in the workforce and less consumption of scarce resources ***(Canning and Schultz, 2012)*** and Quality family planning services bring a wide range of benefits to women, their families and society. These benefits include; preventing pregnancy-related health risks in women, reducing infant mortality, Helping to prevent HIV/AIDS, Reducing the need for unsafe abortion, Empowering people, reducing adolescent pregnancies and slowing population growth ***(Andrew,2005).***

The EDHS results indicate that 60 percent of currently married women in Egypt are using contraception ***(EDHS, 2008).*** Urban women were more likely to use contraceptive methods than rural women (64 percent and 58percent, respectively) ***(El-Zanaty and Way, 2009).*** The IUD continues to be by far the most widely used method; 36 percent of married women were relying on the IUD, 12 percent on the pill, and 7 percent on the injectable (EDHS).

It is found by EDHS that 80% of married women interviewed in EDHS were satisfied from contraception in

almost all subgroups. The level of satisfaction was highest among women living in Urban (92 percent) and lowest among women living in rural Upper Egypt (76 percent) ***(EDHS, 2008).***

It is found that 26 percent of users during the five-year prior to the 2008 EDHS discontinued using a method within 12 months of starting use. The rate of discontinuation during the first year of use was much higher among pill users (40 percent) and injectable users (37 percent) than among IUD users (12 percent). With regard to the reasons for stopping use, users were more likely to discontinue during the first year of use because they experienced side effects, dissatisfaction with the method or had health concerns ***(El-Zanaty and Way, 2009).***

The risk of unintended pregnancy is often further complicated by interruptions in contraceptive use. A number of factors cause these interruptions, including misunderstanding how to use the method, a change in health insurance status; challenges with how to use the accessing methods or contacting providers with questions about use or side effects; the effects of a significant life event; and misperceptions of risk of pregnancy ***(Guttmacher Institute, 2008).***

Interruptions in use also may be caused by providers' misperceptions about the appropriateness or safety of specific

contraceptive methods for women with underlying medical conditions ***(Berg and Way, 2010).***

Health care providers need to counsel patients about each contraceptive option to allow them to select the best contraceptive method, based on their lifestyle, desire for children, desired family size, and intended timing for pregnancy. Because patient provider discussions about contraceptive options are the strongest indicator of selection, adherence, and satisfaction with a method, it is imperative that providers understand and are able to present patients with all available options ***(Lamvu and Way, 2006).***

In a study in Egypt clients said that counselling about their choice of contraceptive method and side effects was a major element of quality services, as were costs and access. Clients said they were satisfied when they received information about only one method or a limited number of methods ***(Nanbakhsh, 2008).***

AIM OF THE WORK

1- To measure women satisfaction of contraceptive methods they are using.

2- To identify causes of dissatisfaction of contraceptive methods they are using.

CONTRACEPTIVE METHODS

History

The practice of contraception is as old as human existence. For centuries, humans have relied on their imagination to avoid pregnancy. Ancient writings noted on the Kahun papyrus dating to 1850 BCE refer to contraceptive techniques using a vaginal pessary of crocodile dung and fermented dough, which most likely created a hostile environment for sperm. The Kahun papyrus also refers to vaginal plugs of gum, honey, and acacia. During the early second century in Rome, Soranus of Ephesus created a highly acidic concoction of fruits, nuts, and wool that was placed at the cervical os to create a spermicidal barrier **(Curtis et al., 2013)**.

Importance

Effective control of reproduction can be essential to a woman's ability to achieve her individual goals and to contribute to her sense of well-being. A patient's choice of contraceptive method involves factors such as efficacy, safety, noncontraceptive benefits, cost, and personal considerations. This article addresses the predominant modes of contraception used in the United States, along with the safety, efficacy, advantages, disadvantages, and noncontraceptive benefits of each **(Bonny et al., 2011)**.

Curtis et al. (2013) issued selected practice recommendations for contraceptive use in the United States, covering issues such as the initiation of contraception, follow-up, and possible problems, including missed pills and unscheduled bleeding. Highlights of the guidelines, which are adapted from the World Health Organization's recommendations, include the following:

- No laboratory testing is necessary before contraception is initiated
- No physical examination other than a blood pressure check is needed before initiating combined hormonal contraception
- Cervical cancer screening is not needed before intrauterine device (IUD) placement
- IUD removal is not necessary if a woman develops pelvic inflammatory disease; antibiotic treatment is sufficient

There are so many different types of contraception available We have reached the stage where unplanned pregnancies really should be rare, because of the range of good methods of birth control. At present, there are about 14 reliable ones. According to the Office of National Statistics, the Pill and the condom remain the most widely used methods in Britain. Both are employed by about 25 per cent of sexually active couples **(Delvin, 2013)**.

Table(1) shows popularity among the various methods of family planning. It is based on the recent survey carried out by the Office of National Statistics on contraception among women aged 16 to 49, plus information from the Family Planning Association. It relates to 2009, because at the present time no more recent worthwhile surveys have been done. The figures may differ very slightly from those in other tables. Even when using large samples, minor variations in results will occur **(Delvin, 2013)**.

Table (1): League table of popularity among the various methods of family planning

Rank	Contraceptive
1st equal	The Pill, including the mini-Pill – 25 per cent.
1st equal	The male condom – 25 per cent.
3rd	Vasectomy – 11 per cent.
4th	Female sterilisation – nine per cent.
5th	The coil (intra-uterine deviceor IUD) – four per cent.
6th	Withdrawal method – four per cent.
7th	Variations of the rhythm method – three per cent.
8th equal	The contraceptive injection ('the Jab') – two per cent.
8th equal	Mirena (intra-uterine system or IUS) – two per cent.
10th equal	The skin patch (Evra) – one per cent.
10th equal	The cap or diaphragm – one per cent.
10th equal	The implant – one per cent, but said to have become more popular in 2009 to 2012.
13th	The female condom – less than one per cent.
14th	The vaginal ring – less than one per cent.

Different methods

I. Periodic abstinence:

I. Coitus interruptus:

Coitus interruptus involves withdrawal of the entire penis from the vagina before ejaculation. Fertilization is prevented by lack of contact between spermatozoa and the ovum. This method of contraception remains a significant means of fertility control in the developing world **(Tang et al., 2012)**.

Efficacy:

Effectiveness depends largely on the man's capability to withdraw prior to ejaculation. The failure rate is estimated to be approximately 4% in the first year of perfect use. In typical use, the rate is approximately 19% during the first year of use **(Tang et al., 2012)**.

Advantages:

Advantages include immediate availability, no devices, no cost, no chemical involvement, and a theoretical reduced risk of transmission of sexually transmitted diseases (STDs) **(Tang et al., 2012)**.

Disadvantages:

The probability of pregnancy is high with incorrect or inconsistent use **(Tang et al., 2012)**.

II. Lactational amenorrhea:

Elevated prolactin levels and a reduction of gonadotropin-releasing hormone from the hypothalamus during lactation suppress ovulation. This leads to a reduction in luteinizing hormone (LH) release and inhibition of follicular maturation. The duration of this suppression varies and is influenced by the frequency and duration of breastfeeding and the length of time since birth. Mothers only need to use breastfeeding to be successful; however, as soon as the first menses occurs, she must begin to use another method of birth control to avoid pregnancy **(Tang et al., 2012)**.

Efficacy:

The perfect-use failure rate within the first 6 months is 0.5%. The typical-use failure rate within the first 6 months is 2% **(Tang et al., 2012)**.

Advantages:

Involution of the uterus occurs more rapidly. Menses are suppressed. This method can be used immediately after childbirth. This method facilitates postpartum weight loss **(Tang et al., 2012)**.

Disadvantages:

Return to fertility is uncertain. Frequent breastfeeding may be inconvenient. This method should not be used if the mother has human immunodeficiency virus (HIV) infection **(Tang et al., 2012)**.

III. Natural family planning:

Natural family planning is one of the most widely used methods of fertility regulation, particularly for those whose religious or cultural beliefs do not permit devices or drugs for contraception. This method involves periodic abstinence, with couples attempting to avoid intercourse during a woman's fertile period, which is around the time of ovulation. Techniques to determine the fertile period include the calendar method, cervical mucus method, or the symptothermal method **(Tang et al., 2012)**.

The calendar method is based on 3 assumptions as follows: A human ovum is capable of fertilization only for approximately 24 hours after ovulation, spermatozoa can retain their fertilizing ability for only 48 hours after coitus, and ovulation usually occurs 12-16 days before the onset of the subsequent menses. The menses is recorded for 6 cycles to approximate the fertile period. The earliest day of the fertile period is determined by the number of days in the shortest

menstrual cycle subtracted by 18. The latest day of the fertile period is calculated by the number of days in the longest cycle subtracted by 11 **(Tang et al., 2012)**.

The symptothermal method predicts the first day of abstinence by using either the calendar method or the first day mucus is detected, whichever is noted first. The end of the fertile period is predicted by measuring basal body temperature. The basal body temperature of a woman is relatively low during the follicular phase and rises in the luteal phase of the menstrual cycle in response to the thermogenic effect of progesterone. The rise in temperature can vary from 0.2-0.5°C. The elevated temperatures begin 1-2 days after ovulation and correspond to the rising level of progesterone. Intercourse can resume 3 days after the temperature rise **(Tang et al., 2012)**.

Efficacy:

The failure rate in typical use is estimated to be approximately 25% **(Tang et al., 2012)**.

Advantages:

No adverse effects from hormones occur. This may be the only method acceptable to couples for cultural or religious reasons. Immediate return of fertility occurs with cessation of use **(Tang et al., 2012)**.

Disadvantages:

This is most suitable for women with regular and predictable cycles. Complete abstinence is necessary during the fertile period unless backup contraception is used. This method requires discipline. The method is not effective with improper use. The failure rate is relatively high. This method does not protect against sexual transmitted diseases **(Tang et al., 2012)**.

Efficiency of different Contraceptive methods:

Some contraceptive methods are more effective in preventing pregnancy than others, while only condoms offer any protection against sexually transmitted infections (table 2) **(Delvin, 2013)**.

Table (2): Effectiveness of contraceptive methods

Contraceptive method	Effectiveness
Vasectomy	Almost 100 per cent
Female sterilisation	Almost 100 per cent
The Pill	Almost 100 per cent
Contraceptive injection	Almost 100 per cent
Contraceptive implants	Almost 100 per cent
IUS (Mirena)	98 to 99 per cent
IUD (the coil)	97 to 98 per cent
The mini-Pill	Around 98 per cent
Male condom	90 to 98 per cent
Female condom	90 to 98 per cent
Diaphragm with spermicide	90 to 96 per cent

II. Mechanical barriers:

Male condom:

The condom consists of a thin sheath placed over the glans and the shaft of the penis that is applied before any vaginal insertion. It is one of the most popular mechanical barriers. Among all of the barrier methods, the condom provides the most effective protection of the genital tract from sexual transmitted diseases. Its usage has increased from 13.2-18.9% among all women of reproductive age because of the concern regarding the acquisition of HIV and sexual trnsmitted diseases. It prevents

pregnancy by acting as a barrier to the passage of semen into the vagina. **(Tang et al., 2012)**

The failure rate of condoms in couples that use them consistently and correctly during the first year of use is estimated to be approximately 3%. However, the true failure rate is estimated to be approximately 14% during the first year of typical use. This marked difference of failure rates reflects errors in usage. Common errors with condoms usage include failure to use condoms with every act of intercourse and throughout intercourse, improper lubricant use with latex condoms (eg, oil-based lubricants), incorrect placement of the condom on the penis, and poor withdrawal technique **(Tang et al., 2012)**.

Condoms are readily available and are usually inexpensive. This method involves the male partner in the contraceptive choice. Condoms are effective against both pregnancy and STDs. Condoms possibly decrease enjoyment of sex. Some users may have a latex allergy. Condom breakage and slippage decrease effectiveness. Oil-based lubricants may damage the condom **(Tang et al., 2012)**.

Female condom:

The Reality female condom is a polyurethane sheath intended for one-time use, similar to the male condom. It