EGYPTIAN WOMEN'S KNOWLEDGE AND USE OF DIFFERENT CONTRACEPTIVE METHODS

Thesis

Submitted for partial fulfillment of

Master Degree in Obstetrics and Gynecology

By

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Acknowledgment

I would like to express my endless praise to Allah the most generous for his guidance through my life.

I'd also like to express my deep gratitude and my best regard to PROF. DR. YASSER GALAL for his fruitful guidance, considerable support and helpful criticisms of this thesis. I'd also like to express my gratitude to DR. AHMED MOHAMED BAHAA for his valuable advices and for offering me some of his precious time to create this work.

Finally, I'm grateful to my dear family and my husband for their understanding and support.

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EC:	Emergency contraception
IUCs:	intrauterine contraceptives
IUCD:	Intrauterine contraceptive device
COCs:	Combination Oral Contraceptives
POP:	Progesterone-Only Pill
DMPA:	Depo-medroxyprogesterone acetate
VTE:	venous thrombo-embolism
STIs:	sexually transmitted infections
LNG-IUS:	the levonorgestrel-releasing intrauterine system
CVR:	Contraceptive Vaginal Ring

INTRODUCTION:

Adequate information on family planning is of fundamental importance, since it allows the families to exercise their rights, to recognize contraceptive methods and to make independent choices. It should include guidance regarding methods, as well as sexual and reproductive health. In addition, health services must have methods and techniques for controlling fertility. ***(Luzia et al., ٢٠١٠)***

Contraceptive choices affect the long-term sexual health and fertility of women and men, particularly when contraception is not used correctly or consistently. For many women, the ability to control their fertility has enhanced their ability to control their lives. Given that the majority of contraceptive methods available are made to be used by women and that the consequences of a contraceptive failure can have a greater impact on the life and health of a woman than on her partner, this is a vital issue in women's health. The decision to use one contraceptive method over another is influenced by personal choice, perceptions of efficacy, personal risk, age, cost, education, current number of children, and level of cooperation between partners**.** ***(Sharon et al., ٢٠٠٤)***

Uncontrolled population growth is a great problem of the current century, which has many undesirable consequences. It is considered an obstacle to economic and social development in most developing countries. It also affects different groups of the society, including mothers and infants, since these two groups are more susceptible to different diseases and their consequent mortality. Therefore, the best approach to decreasing population growth is implementing and expanding family planning programs. ***(Nahid et al., ٢٠١١)***

Unplanned pregnancies (i.e. pregnancies that are either mistimed or unwanted) and sexually transmitted infections (STIs) are important and costly public health problems. ***(Clarke et al., ٢٠١٢)***

Unintended pregnancy can occur during a gap in contraception. Understanding the correlation between personal transitions and contraceptive gaps can help physicians anticipate the risk of contraceptive failure. To help prevent gaps in contraception, physicians should ask women about adverse effects, cost, difficulty remembering to take the next dose, and other issues affecting adherence. However, women who find early adverse effects intolerable

often benefit from switching to a new product. ***(Ruth et al., ٢٠١١)***

Counseling about family planning (FP) and other reproductive health issues requires a set of specific skills designed to facilitate informed decision-making. The GATHER approach to counseling--Greet, Ask, Tell, Help, Explain, and Return--has documented effectiveness in FP programs. The more of the GATHER elements a counselor uses, the more satisfied clients are with their care and the more likely they are to use contraception. A chart presents information on available FP methods--mechanism of action, advantages, disadvantages, use requirements, and follow-up. Special sections address topics such as FP for women who are breast feeding, and emergency oral contraception. Other sections offer guidelines on responding to a client's feelings, "active listening", and advising without being controlling. Finally, a checklist is included so counselors can rate themselves on each of the GATHER skills. ***(Federico R et al., ٢٠٠٥).***

Contraceptive use in developing countries has cut the number of maternal deaths by ٤٤٪ (about ٢٧٠،٠٠٠ deaths

averted in ٢٠٠٨) but could prevent ٧٣٪ if the full demand for birth control were met. ***(Ahmed, S. et al., ٢٠١٢)***

Since ١٩٨٨, the IUD has remained the most popular contraceptive method in Egypt. Before that, oral contraceptive was the leading method used by Egyptian women. The prevalence of IUD use among married women increased from ٤٪ in ١٩٨٠ to ٣٧٪ in ٢٠٠٣. ***(MOHP. ٢٠٠٤)***

The type of contraceptive method used is associated with the source where the method is acquired. Clinical methods such as intrauterine devices (IUDs) and sterilization are generally administered at the healthcare facility where there are necessary equipment, supplies, hygienic conditions, and staff with technical capacity. In contrast, supply methods such as oral contraceptives and condoms are typically obtained from private pharmacies and mobile units ***(Rathavuth et al., ٢٠٠٦).***

Contraceptive methods and subsequent fertility;

Reported ١٢-month conception rates in former cyclic OC users range from ٧٢٪-٩٤٪ and are similar to those observed in women discontinuing intrauterine devices (٧١٪-٩٢٪), progestin-only contraceptives (٧٠٪-٩٥٪), condoms (٩١٪), and natural family planning (٩٢٪). (***Barnhart et al., ٢٠٠٩)***

Table ١: Efficacy of contraceptive methods:

Method	% of Women Experiencing an Unintended Pregnancy within the First Year of Use	
	Typical Use	Perfect Use
No method	٨٥	٨٥
Spermicides	٢٩	١٨
Withdrawal	٢٧	٤
Fertility awareness-based methods	٢٥	
Standard Days method		٥
Two Day method		٤
Ovulation method		٣
Sponge		
Parous women	٣٢	٢٠
Nulliparous	١٦	٩
Diaphragm	١٦	٦
Condom		
Female (Reality)	٢١	٥
Male	١٥	٢
Combined pill and progestin-only pill	٨	٠,٣
Evra Patch	٨	٠,٣
NuvaRing	٨	٠,٣
Depo-Provera	٣	٠,٣
IUD ParaGard (copper T)	٠,٨	٠,٦
Implanon	٠,٠٥	٠,٠٥
Female Sterilization	٠,٥	٠,٥
Male Sterilization	٠,١٥	٠,١٠

Source: Trussell J. et al., ٢٠٠٧.

CHAPTER ONE:

COMBINED ORAL CONTRACEPTIVE PILLS

Hormonal contraceptives are among the most commonly used medications. Worldwide, in ٢٠٠٧, ٩٪ of women aged ١٥–٤٩ years were estimated to be using the oral contraceptive pill and ٤٪ were using injectable contraceptives or implants, amounting to over ٢١٠ million women exposed to these contraceptive types ***(Margaret et al., ٢٠١٢).***

Oral contraceptives are one of the most commonly used methods of contraception in the world. Most formulations contain either; ٢٠, ٣٠, or ٣٥ μg of ethinyl estradiol, and a progestin. Monophasic pills contain a consistent dose of estrogen and progestin. Multiphasic pills contain varying doses of estrogen and progestin. Traditionally, each package includes ٢١ active pills and ٧ placebo pills, it was developed to "mimic" the normal menstrual cycle. COCs without placebo pills were also made available. Combination oral contraceptives prevent

pregnancy by thickening cervical mucus and suppressing ovulation. ***(Trussell et al., ٢٠٠٧)***

Contraindications to COCs include smoking, uncontrolled hypertension, vascular disease, history of deep vein thrombosis or pulmonary embolism, prolonged immobilization with major surgery, current or history of heart disease, history of cerebrovascular accident, complicated valvular heart disease, migraine with aura, current breast cancer or within ٥ years of treatment, diabetes with end-organ or vascular damage or > ٢٠ years duration, active viral hepatitis, severe liver cirrhosis, and benign or malignant liver tumors. The risk of venous thrombo-embolism (VTE) ranges from ٠,٥ to ٩,٧/١٠ ٠٠٠ women and increases with age. This risk decreases as estrogen dose decreases. Minor adverse events include nausea, breast tenderness, and headache. Most of these adverse events resolve after ٢ to ٣ months of use. ***(Russell et al., ٢٠٠٨)***

When used correctly and consistently, combined oral contraceptive pills (COCPs) are among the most effective, reversible method of contraception with failure rates of ٠,١ – ٣/١٠٠ women years (Pearl index ٠,١٦). They also have remarkable non-contraceptive benefits which include

dramatic reductions in life time risks of ovarian cancer. A report revealed that use of COCPs has already prevented ٢٠٠،٠٠٠ ovarian cancers and ١٠٠،٠٠٠ deaths from the disease. ***(Russell et al., ٢٠٠٨)***

Low dose monophasic preparations (where each active pill in the cycle contains the same amount of hormones) were the only preparations available in the family planning clinic and thus given to the clients. Due to the continuous publicity regarding the metabolic side effects of the pills, multiphasic preparations (biphasic and triphasic) where varying doses of the steroids are given through a ٢١ day cycle were introduced to lower the amount of steroids while mimicking the hormonal peak and trough levels within the physiological menstrual cycle. However, metabolic studies with multiphasic products have shown no outstanding advantages over the monophasic ones and they are much more expensive. ***(Glasier , ٢٠٠٧)***

The new COCPs, Yasmin® (containing an oestrogen and drospirenone-a progestogen with both anti androgenic and mineralocorticoid activity) and dianette (containing an oestrogen and the antiandrogen cyproterone acetate) have been introduced in the developed world. Yasmin® which is