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STUDY ON THE INFLUENCE OF COMBINED ORAL CONTRACEPTIVE MEDICINES

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Abstract

The concept of contraceptive is a multitude of methods that ensure birth control. It aims to meet the sexual needs of partners without fear of unwanted pregnancies. Since ancient times there have been contraceptive trials, but especially loss of unwanted pregnancies.

History of contraception reveals important information about the discovery of some substances and mechanisms used in this regard.

Contraceptive methods using contraceptive medication are hormonal drug products such as contraceptive pills, contraceptive hormonal injections, hormonal patches (patches) with skin fixation, and vaginal contraceptive rings. Contraception through the use of hormonal methods has very good results, prevents pregnancy by stopping monthly production of ovules and can also mitigate the unpleasant manifestations that occur during menstruation.

Key words: contraceptive, control., hormonal drug, vaginal contraceptive, prevents pregnancy,ovules

INTRODUCTION

Until 1960, the use of contraceptive methods was a taboo topic because the society of the times in question not only did not "favor the idea of using them, but even punished their moral use" (Cristea A.N, 2011). The invention of oral contraception has revolutionized the way society thinks, giving women the freedom to choose the education, careers, and the founding of a family (Bennet J. et al., 2009).

The first contraceptive pill was launched in 1960 in the United States of America. Seven years later, the "pill" appeared on the cover of Time, illustrating its enormous social impact (Goldzieher J.W, 1984).

At first, the pill encountered unprepared mentalities for such a medical, social, and psychological revolution (Spheroff L., 2011).

Then the administration of the pill was considered as a medical treatment and the prevention of pregnancy was seen as a side effect, not the

main reason for prescribing. (Guillenbaud J., 2002) However, although the popularity of oral contraceptives remains high, the drugs themselves have evolved in response to subsequent findings in the human reproductive system, as well as efforts to reduce the negative side effects of the pill (Meyer J. M. et al., 1984).

The major technological or medical development in in particular, one embraced very quickly by a large part of the population, it takes years, even decades, for the whole range of its effects to become evident. (Pincus G. et al., 1958) As many recent studies have shown, many questions remain unanswered about the effects of hormones in long-term oral contraceptives, including the environment, and the effects of hormones used in other medical treatments. (Miloș A. et al., 2007)

In all these obvious cases, the adverse effects of hormonal pills - weight gain, irritability and depression, anxiety, migraines, and, more recently, the risk of inducing breast cancer and deadly blood clots - are not much underlined or at least taken account (Cuculici P. et al., 2012).

Mainly hormonal contraception is based on the inhibitory effect of natural sex steroid hormones on hypothalamus and pituitary gland. Depending on the preparation used, hormonal contraception also causes changes in the cervical mucus and the endometrium, changes that are temporarily adverse to the reproductive function. (Huezo C. et al., 2009) It also performs a particular "maintenance" of the reproductive apparatus and some protective effects on several organs and systems of the body. (Rock John et al., 1957)

Oral contraception is based on the use of hormonal preparations called estroprogestative synthesis. Ethinyl estradiol is preferentially used in the structure of oral estroprogestative and derives from 17ß -Estradiol by adding to the C17 the ethynyl radical, which gives it superior estrogenic activity. It is less metabolised during the first hepatic passage compared to natural steroid hormones, and therefore retains its efficacy after oral administration at low doses. (Winter I C, 1970)

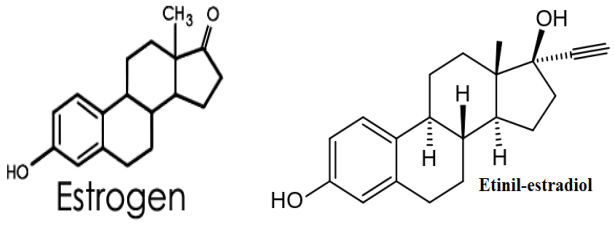

Fig. 1. Chemical structure of estrogen and ethinyl estradiol

Natural progesterone has a reduced efficacy per se due to its rapid metabolism. For this reason, synthetic progestogens are used that are more effective, have anti-gonadotropic, antiandrogenic action, and have increased affinity for the progesterone receptor. (Meyer J. M. et al., 1984)

Synthetic progestogens (also called progestins) used with contraceptive bite are much more stable in metabolism during the first hepatic passage, which allows lowering doses in the case of oral administration. (Pincus G. et al., 1958)

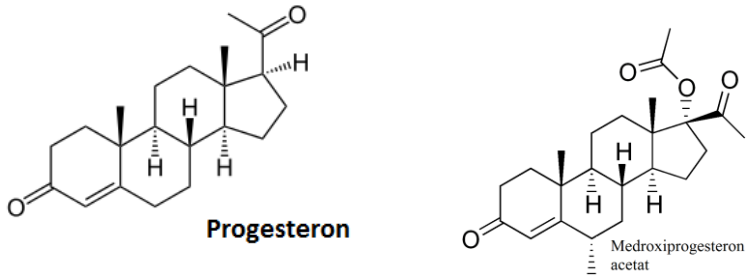

Fig. 2. Chemical structure of progesterone and medroxyprogesterone acetate

There are several types of contraceptives, namely: combined oral contraceptives, progestative oral contraceptives, progestagen injectable contraceptives, emergency contraceptive pills, subdermal implants (hormone pads), hormonal vaginal rings. (Vaughan.P, 1970) Oral contraceptives contain synthetic substances similar to natural hormones produced by the ovary (estrogen and progesterone), these medicines being called combined oral contraceptives (COC). (Winter IC, 1970)

MATERIAL AND METHOD

The sample surveyed consisted of 153 women aged between 18 and 45, a sample based on volunteering. Women were asked in pharmacies to complete a questionnaire and an interview guide without declining their identity. The women's availability rate for completing the questionnaires was 83%, ie 153 women (n = 153). Subsequently, the sample was divided into three age groups: 18-25 years, 25-35 years and 35-45 years old, in order to compare some aspects of the use of contraceptives.

All participants were given a questionnaire on how to use contraceptives and an interview guide. The questionnaire targets beliefs / beliefs about contraception, and participants are asked to tick the answer that suits them. The interview guide includes aspects of religious orientation, level of education, socio-economic status, residence environment, history of chronic illness, drug use, allergies, use of birth control pills on the recommendation of a specialist doctor or self-medication.

RESULTS AND DISCUSSION

It was revealed that with regard to the use of contraceptives by age group, there are significant differences between groups as follows: among the three age groups most concerned with the use of contraceptives are women aged 25-35 years (33%, n = 51), followed by women aged 18-25 years (35%, n = 53), over 35 years of age giving birth pills (32% n = 49).

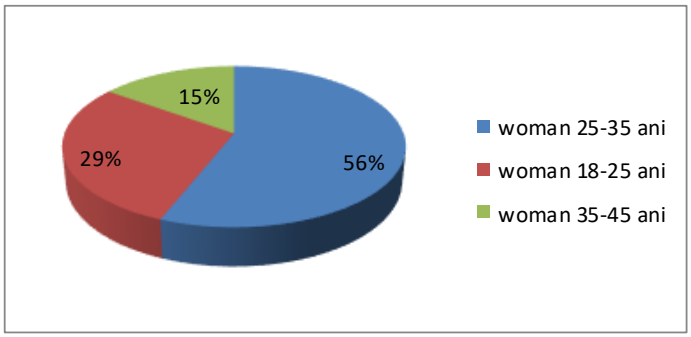

Fig. 3. Significance of differences in female contraceptive consumption by age group

The older the age and the number of days for the use of contraceptives increases, the adverse reactions that occur are diversifying and multiplying. In order to limit the adverse reactions that may occur as a consequence of contraception, it is necessary to use them following clinical / paraclinical investigations and at the recommendation of specialists.

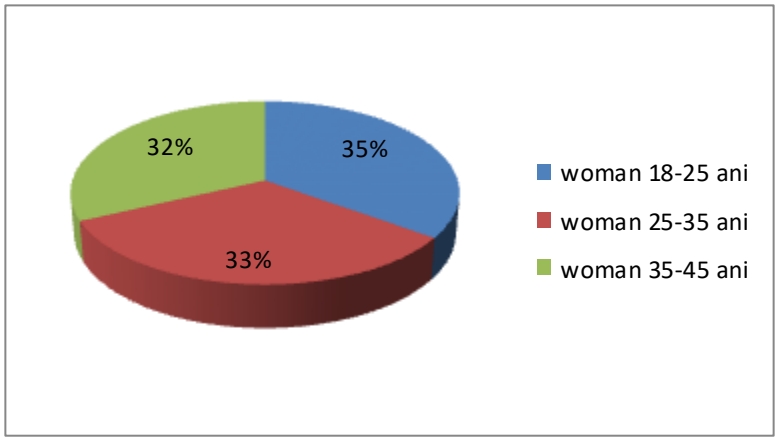

Fig. 4. Long-term use of COC, and the occurrence of side effects

Regarding the use of contraceptives at the recommendation of the specialists, it was revealed that 61% of the women use them at the recommendation of the specialized doctor, and 39% of the women have taken the advice of the Internet, the magazines, the advice of the friends.

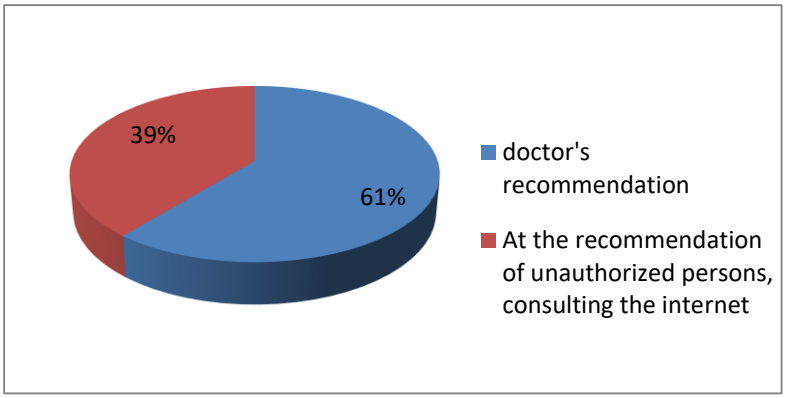

Fig. 5. Significance of differences in female contraceptive consumption according to recommendation

The study revealed the existence of an active interest in contraceptive pills especially in urban women (63%, n = 96), and in rural areas there was interest in them (37%, n = 57), but this is not materialized in in particular because of the stigma of shame they would face by going to local pharmacies to buy them.

Long-term use of oral contraceptives may be accompanied by various problems, but this only happens in a small number of cases, especially when contraception has not been correlated with the advice of the gynecologist, following a consultation with the emergence of some diseases over time, or other situations that would require giving up contraception, or choosing other less invasive contraceptive methods for the body.

Women in the 18-25 age group experience the following side effects as a consequence of contraceptive use: CNS disorders (migraine, decreased libido, etc.), gastrointestinal disorders (nausea, vomiting, abdominal pain), hypersensitivity reactions.

The following side effects have been reported in women aged 25-35 years: CNS disorders (migraine, decreased libido), thromboembolism, gastrointestinal disorders (nausea, vomiting, abdominal pain), liver disorders. Women in the 35-45 age group reveal the following side effects:

thromboembolism, hypertension, gastrointestinal disorders, cardiovascular disease, liver problems.

CONCLUSIONS

The older the age and the number of days for the use of contraceptives increases, the adverse reactions that occur are diversifying and multiplying. In order to limit the adverse reactions that may occur as a consequence of contraception, it is imperative to use them as a result of clinical / paraclinical investigations and at the advice of specialists.

What remains negative is how women start using birth control pills, at the urging of people without advice and without prior medical investigation

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