

**BALEFUL EFFECTS OF THE COMMERCIAL BIRTH CONTROL PILLS
AND FOCUS ON FRONTIER HERBAL CONTRACEPTIVES DEVOID OF
SIDE EFFECTS
EFFECTS OF PILLS CONTRARY HERBAL**

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Abstract: The present review encompasses the contraception, methods of contraception, hormonal or chemical birth control pills and the herbal products having contraceptive activity with their merits and demerits. The commercially available birth control pills are detrimental to women health, might be life-threatening sometimes. The detrimental effects posed by such pills are: fat deposition in the liver, kidney and uterus, prevention of metabolism and further conception, disruption of the epithelial layer of the uterus, irregular and painful menstruation, breast cancer and ultimately permanent infertility. This study will help us to view the undeniable baleful effects of the commercial birth control pills and thus will rush us to explore some herbal birth control pills that will be cheaper, having no side effects and might be effective for the sexes (male & female). A research work has already been conducted in this regard which might be an evolutionary step in this realm.

Keywords— Baleful effects, birth control pill, herbal contraceptives, frontier research

1. INTRODUCTION

Fertility control, also known as contraception and Birth control, the methods or devices used to prevent pregnancy. Planning, provision and use of birth control is called family planning. The most effective methods of birth control are sterilization by means of vasectomy in males and tubal ligation in females, intrauterine devices (IUDs) and implantable contraceptives. This is followed by a number of hormonal contraceptives including oral pills, patches, vaginal rings, and injections. Less effective methods

include barriers such as condoms, diaphragms and contraceptive sponge and fertility awareness methods. The least effective methods are spermicidal and withdrawal by the male before ejaculation. Sterilization, while highly effective, is not usually reversible; all other methods are reversible, most immediately upon stopping them. Birth control pills secondarily prevent pregnancy by changing the uterine lining and cervical mucus to make it harder for sperm to reach the uterus and for an embryo to implant. Several dietary and herbal supplements can interfere with the efficacy of birth control pills [15]. By using different herbal products we can control the birth in both male and female with safety. Some plants, flowers and seeds that can be used for this purpose [10]. There are also many herbs that are very innocuous, which can be used by virtually anyone without any negative effects [8, 9]. It is necessary to establish herbal birth control extracts which have no side effects on different organs. This paper discusses about the contraception, types, various methods, their mode of action, the merits and demerits of the commercial and herbal birth control pills and focusing on the frontier herbal contraceptives that will have no detrimental effects on the women health even might be used for both the sexes.

2. BIRTH CONTROL PILL

Birth control pill is the hormone or other chemical containing drug or tablet which is taken daily orally, also popularly called the "pill" only. As these tablets contain the hormone so that these hampers the normal mechanism of the body (normal hormone level in the blood). And in the long run prevents the conception. Hormones are the chemical substances which act on different parts of the body and control their activity as well. There are various types of birth control pills such as: hormonal birth control pill, chemical birth control pill and herbal birth control pill. But the hormonal and chemical ones are mostly used.

These birth control pills are mostly taken by the women and these act on the ovary and uterus and hamper their normal activity. Thus they prevent the normal conception when the women come in contact with the men.

3. THE ADVERSE EFFECTS OF THE COMMERCIALY AVAILABLE BIRTH CONTROL PILLS

The birth control pills those are available in the markets have many unavoidable side effects on the body. Presently researches on the effects of the birth control pills revealed that, the risk of different diseases and complications are increasing day by day among those women who are taking the birth control pills orally. Most common problems or side effects associated with the commercial pills are given below:

Excessive deposition of the fat on the uterus, ovary and fallopian tube of the women that prevent the conception in future. These pills also rupture the epithelial layer of the uterus [14].

In the kidney, these have many adverse effects. These deposit excessive fat droplets and decrease the activity of the kidney.

In the liver these deposit excessive fat droplets that prevent the proper function of the liver.

The menstruation cycle becomes painful.

Irregular menstruation becomes a common phenomenon.

A research in United States of America has revealed that the risk of breast cancer increase about 50% in those women who take the birth control pills [6].

The most alarming effect of the birth control pill is that it causes the permanent sterility in the women who take the birth control pill at a regular basis.

Hormonal imbalance in source cases.

Decreased of sexual desire or libido.

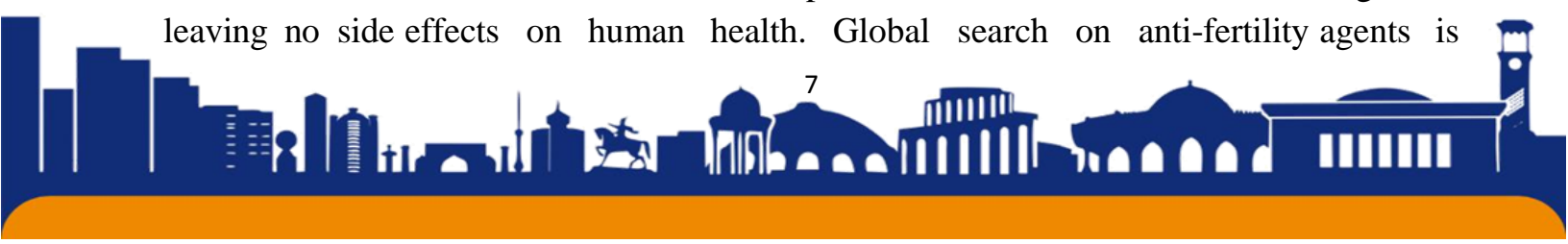
Unwanted/ unexpected sudden bleeding from the uterus due to low quality pills.

In Fred Hachinson Cancer Research Center, USA, the researchers have come to know more about the breast cancer. They have said that, very few people suffer from the breast cancer. But as the women take birth control pills having different chemical and hormonal elements in these, mostly the young ladies who use the birth control pills. So the risk of the breast cancer among the women can be controlled if the dose and formulation of the birth control pills are taken under consideration and people become concern of it [12].

The doctors have revealed that, normally the women aged less than 40 years of old do not have the risk of breast cancer whether they take the pill or not. But the recent researches have revealed that for the administration of the estrogen containing birth control pills the risk of the breast cancer increases up to 50%.

4. HERBAL PRODUCTS HAVING BIRTH CONTROL ACTIVITY

Nature is the source of all the raw materials that we need. About 2-3 decades ago, most of the drugs were of herbal origin [9]. A variety of reasons remain behind why people like to use natural medicines as it is evident that patients are getting even more distressed after using the chemically synthesized drugs, rather than natural means like the herbal products such as seeds, fruits, leaves and plants that can conquer detrimental/harmful diseases. These herbal products can be used for controlling birth leaving no side effects on human health. Global search on anti-fertility agents is



going on to tackle the problem of population explosion many hormonal drugs are available for the purpose but they are not free from side effects [16]. Hence the search for a suitable product from indigenous medicinal plants is proposed which could be effectively used in place of so called "pill". There are various herbal products which have different preventive activities. Some type of herbal seed, fruits and plants also have activity for controlling the birth. Usually these seed, fruits and plants are used against leucoderma, wounds, alopecia, asthma, tubercular glands, leprosy, fever, ulcer and tumor [20] but many of them have the efficacy for the anti-contraception by the oil and crystalline steroidal fraction of the seeds [18].

5. THE MECHANISM OF ACTION OF THE HERBAL PRODUCTS IN RELATION TO CONTRACEPTION

Most of the constituents contained in any herbal product normally acts on the vital organs of the body according to their site of predilection. The herbal products which are responsible for the birth control work mostly in the genitalia irrespective of sex to control the morphology and also the hormonal state in the blood stream of the body. The herbal extracts exert their effects by different processes. The most important ones are given below:

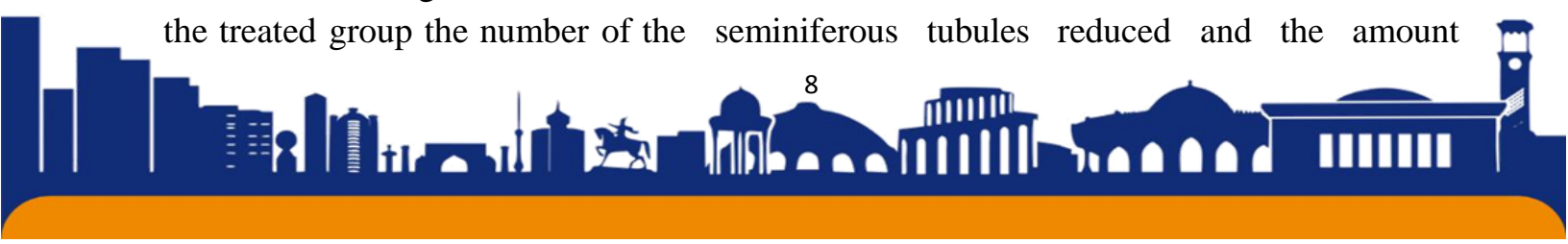
In case of female, they mainly act on the ovary regarding folliculogenesis and also change the level of female hormones in blood. If the administration of these herbal extracts is abruptly stopped then again the conception occur without leaving any harmful effects on the vital organs of the body.

In case of male, the herbal extracts act on the testes regarding the spermatogenesis and also control the level of male hormones in blood.

6. A NEW HERBAL PRODUCT

For the purpose of exploring a safe and effective herbal product for birth control a research has been conducted in the Bioresearch Laboratory of the Dept. of Anatomy and Histology, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh. The main purpose of the research was the formulation and marketing of a newtype of herbal product that might be a combination of some herbal extracts and which will leave no side effects on the body. This extract can be used for both the sexes. To evaluate the efficacy, this herbal extract has been applied on the White Swiss albino mice (both male and female) and it has been proven successful. About 82% of the female did not conceive after the treatment done by this herbal extract.

The histological observation of the testes in case of the male mice revealed that in the treated group the number of the seminiferous tubules reduced and the amount



of spermatozoa within the lumen of the seminiferous tubules also decreased. The number of the sertoli and leydig cells also reduced within and between the seminiferous tubules along with slight deposition of fat droplets and vacuolation. The ultimate result of the research divulged that the extract had a potential impact on the testis regarding the contraceptive effect as in the treated group the female did not conceive after keeping with the treated male [2].

In case of the female the results revealed that the number of the ovarian follicles de-creased accompanied with the distortion and derangement of the granulosa layer of the ovary in the treated group. The aforesaid features of the treated ovaries indicated the antifertility effect of the aqueous extract of *Hibiscus rosasinensis*. In addition, in the treated group, the baleful histological alterations like the vacuolation, fat droplet deposition, sloughing off and hemorrhage in the granulosa layer were not found [1] indicating that this extract is safe to be used for the women community as these changes are the common phenomena for the commercially available hormonal or synthetic pills. The findings of this research had the similarity with that of the [13] and Upadhyay and Upadhyay, 2011.

Due to the application of the herbal extract there were no gross alarming lesions on the vital organs of the body of mice (both the sexes) [4]. Even during the experimental tenure there were no such changes in the body weight and hematological parameters comparing with that of the control group. The amount of the Red Blood Cells (RBC), White Blood Cells (WBC) and Hemoglobin (Hb) concentration were unchanged in comparison to the normal/control [5]. The best efficacy of this herbal extract is that, after stopping the administration of this herbal product the normal activity of the ovary and testes is regained. More over after the treatment the samples of liver [3] and kidney [4] were taken from the treated mice (male and female), in both the cases it has revealed that there was no baleful effect of the herbal extract. The appearance of the organs seems to be as normal as the control one both macroscopically and microscopically (histology). This research might be an evolutionary activity in this realm [3].

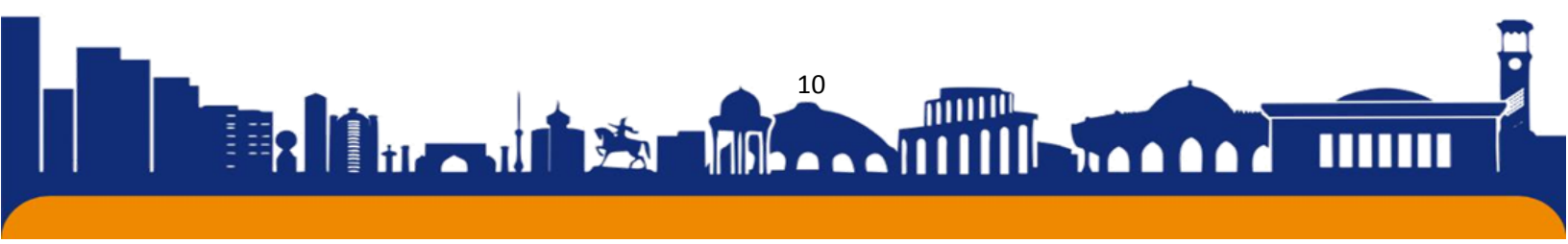
7. CONCLUSION

Nowadays, people are becoming more interested to use herbal products than the chemical/synthetic ones as the herbal products are comparatively safer and can be used for a long period of time without any negative impact on health. The herbal products are much more effective and better than that of the commercially available chemical and hormonal products used as birth control tool. Longer usage of those commercially

available products will make the user infertile and also susceptible to many life threatening diseases. Nature is the best source of all the herbal products that could be used in diversified field of human usage in life as per need. So by keeping the baleful effects of the contraceptive pills and other synthetic products we should pay more attention on the commercialization of the herbal products for the betterment of the all human being irrespective of sex. Future research might be focused on the determination of the specific constituents, their quantity in the herbal extracts and to explore the ways to find out the constituents responsible. Many researches has been already done on the aforesaid matter and many are going on and this is the high time to concentrate more to make the best use of the nature in the form of drugs and soon.

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