

Review Journal: Analysis Of Side Effects Of Hormonal Contraception (Pil And Injection)

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ABSTRACT

Contraception is a method used in the government's efforts to organize a Family Planning or "Keluarga Berencana" (KB) program. Contraceptives available in Indonesia are divided into hormonal contraceptives (pills, injections, and implants) and non-hormonal contraceptives such as IUDs or intra uterine devices. Of these two types of contraception, Indonesian people, especially women who use contraception, prefer hormonal contraception compared to non-hormonal contraception because it is considered more comfortable and easy to use. Among the three types of hormonal contraceptives, pills and injections are among the most widely used. However, in choosing between injections or birth control pills, some people are sometimes confused about which one to choose because they consider the side effects of both. So in this literature review, the authors compared the side effects between birth control pills and birth control injections from several existing journals. The results stated that there was no significant difference between the side effects of birth control pills or birth control injections and the duration of use was one of the factors that influenced the occurrence of side effects, especially the side effect of weight gain. So to overcome these side effects, the acceptors are expected to change the type of contraception if they have used >5 years and are advised to use non-hormonal contraception.

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1. INTRODUCTION

Indonesia is a country with quite a large population and is even listed as the country with the fourth most populous population following three other countries namely China, India and the United States. With a large population of a country, it will result in and impact on all aspects, one of which is the problem of poverty due to the high population which causes an increase in the unemployment rate.

The rate of population growth in Indonesia can be said to be quite rapid and not quite under control, even according to BPS (Central Statistics Agency) data cited in a journal that in 2017 Indonesia's growth rate reached 1.34%, which means that in 1 year there are around 3-4 million babies born, this figure is even higher than in 2015 and 2016, which respectively were 1.31% and 1.27%^[1]

In dealing with high population birth rates, each country certainly has its own policy to deal with it, just like Indonesia, which has made policies to overcome this by creating a Family Planning (KB) program. The family planning or family planning program is one of the government's efforts to regulate the birth rate, ideal age for childbirth, regulate pregnancy, protect and assist in accordance with reproductive rights to create quality families. With this program, every woman can manage her pregnancy so that the maternal mortality rate can be reduced. This program does not only have an impact on controlling birth rates but also creating healthy and quality families.

Through the Family Planning program or "Keluarga Berencana" program, each family can focus on educating and paying attention to their children without being reduced by either focusing on education costs, health costs, even the cost of daily consumption to provide sufficient and nutritious nutrition for their children so that they can create a quality family. because a quality family is the first

step in realizing quality human resources as well. In fact, the family has a function that cannot be replaced by other institutions and is the first means of forming a child's character.

In realizing the Family Planning program, of course it cannot involve just a few parties, but all parties, both the community, health workers and also the government must participate in making it happen. The Population and Family Planning Agency (BKKBN) is an institution in charge of population control and family planning. In carrying out its duties, this institution needs to be routine and active in carrying out family planning counseling which of course is assisted by various parties, one of which is family planning cadres with the aim of providing education and understanding about contraception.

The use of contraception is an effort as well as a method recommended by the government in preventing pregnancy as well as carrying out the Family Planning or “Keluarga Berencana” (KB) program. Basically there are 2 types of contraception available in Indonesia, namely hormonal contraception and non-hormonal contraception. Quoted in a journal of non-hormonal contraception, one of which is a type of intra-uterine contraception (IUD) or can also be done by means of vasectomy for men and tubectomy for women, while hormonal contraception includes birth control pills, implants and injections^[2]. Both types of contraception both have side effects, although the side effects that arise between hormonal and non-hormonal contraceptives are different. In a journal written by Liwang F, it was found data on contraceptive users at the UPT Puskesmas Tampak Siring 1, Gianyar Regency regarding family planning participants in 2016 where it was noted that the most users of injectable hormonal contraceptives were 1,499 people out of a total of 3,432^[3]. With the discovery of these data it can be said that many people, especially women, still choose to use hormonal contraception compared to non-hormonal contraception. However, it cannot be denied that there are others who are still confused about which type of hormonal contraception to choose because they consider the side effects. Therefore the authors are interested in conducting a literature study regarding the evaluation of the side effects of hormonal contraception for contraceptive acceptors.

2. METHOD

The method used by researchers is literature review, namely conducting studies from various sources with a publication period of 10 years (2012-2022). This literature study was carried out using the help of databases such as Google Scholar and Google Scholar. Of the 15 sources found, the authors took 6 journals to be used as a comparison which were deemed appropriate to the topic raised.

3. RESULT AND DISCUSSION

From the search results regarding the side effects of hormonal contraception, especially the side effects of using birth control pills and birth control injections, we get a summary as listed in the following table:

Tabel 1. Efek Samping Kontrasepsi Hormonal

Writer's name	Title	Results
(Zettira <i>et al.</i> ,2015)	Analisis Hubungan a. Penggunaan Kontrasepsi Disfungsi Seksual Pada Wanita	Single hormonal contraceptives (one of a progestin and an estrogen) have a significant side effect of sexual dysfunction b. Combined hormonal contraceptives provide more significant side effects on the occurrence of sexual dysfunction
(Rahayu <i>et al.</i> ,2017)	Efek samping Akseptor KB Suntik Depo Medroksi Progesterone Acetat (DMPA) Setelah 2 Tahun	Of the 74 respondents experienced side effects a. Menstrual disorders with no occurrence or called amenorrhea 39 people (52%) b. Weight gain 43 people (58.1%)

		c. Experiencing nausea and vomiting 2 people (2.7%)
(Sari <i>et al.</i> ,2020)	Analisis faktor Risiko Kejadian Efek Samping Penggunaan Pil Oral Kontrasepsi	The biggest side effect felt by 100 of them a. Headache 65% b. 46% BB increase c. Mood swings 46%
(Putri <i>et al.</i> ,2021)	Gambaran Penggunaan Kontrasepsi Hormonal dan Kejadian Efek Samping Penggunaan Kontrasepsi Hormonal Pada Wanita Usia Subur	The side effect that often occurs from this type of injectable birth control for 1 month is weight gain.
(Kusumawati <i>et al.</i> ,2021)	Hubungan Penggunaan KB Suntik DMPA Terhadap Indeks Massa Tubuh (IMT)	There is no relationship between the use of DMPA injectable birth control and body mass index
(Yuliani,2020)	Kenaikan Berat Badan Sebagai Efek Samping Akseptor KB	Injecting family planning acceptors with use >5 years have a 6.4 times greater risk of experiencing weight gain

In the table above you can see a comparison of the side effects that arise from the use of hormonal contraception, namely birth control injections and birth control pills. If you look at it at first glance, you don't see a significant difference between the two, in fact, both of them tend to have the same side effects with the most common side effects being weight gain and menstrual problems..

Basically the use of hormonal contraception either birth control pills or birth control injections can be used singly or in combination, namely one of estrogen or progestin and even both, but in a journal written by Zettira et al (2015) stated that the combination of the two, namely progestin and estrogen is far significantly more side effects than when either one is used[10]. The journal stated that one of the side effects that occurs from using hormonal contraception is sexual dysfunction.

Sexual dysfunction itself is a disorder that occurs in sexual function. This disorder can be interpreted as a recurring or persistent failure. The incidence of sexual dysfunction is influenced by various factors, especially the duration of use of hormonal contraception. The longer hormonal contraception is used, the more sexual complaints felt by users of hormonal contraception. The occurrence of sexual dysfunction is different for each person.

In a study it was said that the use of hormonal contraception after 3 months would decrease sexual arousal and sexual desire, while after 9 months of use it was reported to have an impact on decreased sexual activity. Basically sexual dysfunction is divided into 4 types, namely; Disorders of sexual arousal; impaired orgasm in women; pain during penetration; and sexual dysfunction due to side effects of a drug[11]. This sexual dysfunction is of course very influential, especially on the emotional health of women who may also have an impact on household welfare.

Meanwhile, from several sources listed above, most of the side effects that are most often experienced by hormonal birth control acceptors are weight gain. Weight gain itself occurs due to several factors which include genetic factors, environment, diet and even hormonal factors[12]. From this statement it can be said that the cause of the weight gain experienced by acceptors is due to hormones as it is known that these hormonal acceptors either by injection or orally can increase one of the concentrations of estrogen or progestin in the body which ultimately have an impact on body weight. Which progestin can increase body weight because it increases appetite while estrogen increases body weight by causing fluid retention[6]. Even though one journal stated that there was no relationship between the use of birth control injections and BMI, most acceptors experienced weight gain.

Apart from the side effects of weight gain, another side effect that often occurs is menstrual disorders. According to Susilowati (2012)[12] This type of menstrual disorder can result in bleeding that takes longer or less time, including spotting in the form of spotting, amenorrhea in the form of no menstruation, or menorrhagia, the occurrence of menstruation or menstrual bleeding for a long time. This is due to hormonal imbalances in users or acceptors of hormonal contraception in the form of KB injections. However, this is reasonable as long as each acceptor maintains communication with the health worker every time he gets the symptoms as mentioned above because based on the acceptance of the contraceptive injection acceptor, these side effects will usually disappear by themselves after the umpteenth time of use.

From the side effects that occur in hormonal birth control acceptors, it can also be said that the duration of use is a big risk for the occurrence of these side effects. Especially on the side effects of weight gain because of the risk of obesity. Therefore, in a journal written by Yuliani F (2020)[9] it is stated that for users of hormonal birth control >5 years it is recommended to change the type of contraception to non-hormonal contraception such as the IUD as an effort to avoid obesity due to excess hormones. In other sources it is also stated that users of hormonal contraception for more than one year increase the risk of obesity 1.36 times, while users with a duration of more than equal to 7 years increase the risk of obesity 8.3 times[13]

Hormonal contraception, both pills and injections, and even non-hormonal contraception, both have side effects, but in fact, currently people, especially women who use contraception, still choose many types of hormonal contraception for reasons of convenience and convenience. In a journal written by Kusuma (2017)[14] states that out of nearly 380 million couples who do family planning, 65 million of them are in developing countries and the most contraceptive choice is hormonal contraception.

Nevertheless, the government's policy in implementing family planning programs is more directed towards the use of non-hormonal family planning such as tubectomy for women and vasectomy for men considering economic considerations which are considered more efficient besides that from a health perspective non-hormonal family planning is considered safer for health as stated in the journal Luba et al (2021)[15] because it doesn't affect hormones in the body so it can avoid side effects that occur in the long term.

4. CONCLUSION

From the literature study that has been carried out, the results state that there is no significant difference between the side effects of birth control pills or birth control injections and the duration of use is one of the factors that influence the occurrence of side effects, especially the side effect of weight gain. So to overcome these side effects acceptors are expected to change the type of contraception if they have been using it for >5 years and are advised to use non-hormonal contraception.

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