

The Relationship Between Types of Hormon Contraception and Side Effects on Hormonal Contraception Acceptors

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ABSTRACT

Background. One of the causes of the delay in the growth rate of development is high population growth. One of various ways that are used by the government in increase the growth rate of development is by controlling the population. One of the causes of discontinue as acceptors is the side effects experienced by the acceptors. Therefore, the side effects must be adequately explained so that acceptors can understand and reduce anxiety. Hormonal contraception acceptors in the Secang Health Center area also experienced various side effects both related to menstruation and non-menstruation. The results of a preliminary study carried out found that the majority of acceptors experienced side effects in the form of the absence of menstruation and this caused some respondents to want to stop using hormonal contraception for fear that the absence of menstruation would be a sign of pregnancy. Research to determine the relationship between the use of hormonal contraception and the incidence of side effects on acceptors of hormonal contraception.

Methods: this type of research was correlational analytics with a cross-sectional approach. Research Instrument used a checklist. The research population was 60 respondents and the sampling technique used the total population. Bivariate test data analysis using the Chi Square test with an error of 5%.

Results: There is a relationship between the type of contraception and the side effects of menstrual disorders (amenorrhea and spotting) at $p: 0.001$; there is a relationship between the type of contraception and the side effects of non-menstrual disorders (nausea, vomiting and dizziness) with $p: 0.004$.

Conclusions: There is a need for effective counselling and KIE before contraceptive services, especially regarding the various side effects that can occur in hormonal contraceptive acceptors to prevent an anxiety that arises in acceptors so that acceptor dropout does not occur

Keyword : hormonal contraception; side effects

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Background. One of the causes of the delay in the growth rate of development is high population growth (Kemenkes RI, 2020). One of various ways that are used by the government in increase the growth rate of development is by controlling the population (Primadi Oscar, 2020). Contraceptive use always causes side effects and some even experience complications experienced by acceptors (Ema Pristi Yunita, 2019). The number of side effects experienced by acceptors can cause acceptors anxiety, which in turn can lead to dropping out as acceptors (Al Kauzsar Mumthi'ah, 2021) Hormonal side effects are generally related to menstrual disorders in the form of spotting, amenorrhea and changes in body weight, both decreased and increased body weight, nausea, vomiting

and the appearance of acne (Yayah Rokayah et al., 2021). While non-hormonal side effects on IUD acceptors usually occur menstrual changes in the form of an increase in the amount of menstrual blood (Lenny Irmawati Sirait & Siantar, 2020) .

Unsustainability of acceptors in using contraception can lead to pregnancy, which has an impact on women's health, especially for women who are already in the high-risk age period, namely women aged over 35 years if the woman is pregnant (Rahman et al., 2017). The existence of side effects experienced by acceptors can also result in a lack of timeliness for acceptors on repeat visits to get the next contraceptive service. Research conducted by Evitasari et al states that there is a relationship between the occurrence of side effects and

unmet need with $p: 0.032$, OR: 13 (Evitasari et al., 2019). Hormonal contraception acceptors in the Secang Health Center area also experienced various side effects both related to menstruation and non-menstruation.

Based on the background above, the authors wanted to conduct research on the relationship between the use of hormonal contraception and the incidence of side effects on hormonal contraceptive acceptors .

This Research to find out the relationship between the use of hormonal contraceptives and the incidence of side effects on hormonal contraceptive acceptors.

Methods: The research was conducted in September - December 2022. The population in this study was all mothers receiving contraception at the Secang Health Center, totalling 60 respondents. The sampling technique used is the total population (Riyanto Agus, 2019). The research instrument uses a checklist (Kurniawan Wawan & Agustini Aat, 2021). Ethical clearance is carried out at the Health Polytechnic of the Ministry of Health, Semarang. This is a correlational analysis study with cross sectional approach (Dahlan, 2020). Data analysis was carried out using the Chi Square Test with an error of 5% (Riyanto Agus, 2020).

Research ethics is carried out by submitting informed consent to prospective acceptors (Notoatmodjo, 2018).

Results and Discussion

Table 1. The types of Hormonal contraception

No	Type of CS	f	%
1	Progesteron	49	81,7
2	Combination	11	18,3
	Jumlah	60	100

The results of the study found that the majority used Progesterone type contraception , namely 81.7 % (49) and as many as 18.3% used Progesterone type contraception. These results are in accordance with research conducted by Reni et al which out of 49 respondents, there was almost a balance between those who had less knowledge and those who had good knowledge and of the 49

respondents, the majority as much as 40.28% used this type of injectable contraception (Usman et al., 2017).

Table 2. The side effect of menstrual disorders.

No	Menstrual disorders	f	%
1	yes	45	75
2	No	15	25
	Total	60	100

Based on the results of research on menstrual disorders in acceptors, out of 60 respondents who experienced side effects of menstrual disorders, the majority experienced menstrual disorders, both spotting and amenorrhea, namely 75% (45%), while 25% did not experience menstrual disorders or their menstruation remained normal. These results are consistent with the theory in Winarsih, 2017, that the side effects of using hormonal contraceptives related to menstruation are the occurrence of amenorrhea and vaginal bleeding or spotting, which is caused because, acceptors of hormonal contraceptives will experience endometrial thinning and even endometrial atrophy can occur so that the endometrial lining sheds, during the menstrual period it will be greatly reduced (Winarsih Sri, 2017). This is in line with the results of Andi et al's study which stated that the majority of hormonal contraceptive acceptors experienced amenorrhea, namely 52.9% (Hariati et al., 2020). This is also in line with the result of Syamsul et al, which shows that the percentage of married women who know the side effects or problems from the method of birth control used is 41%, and the proportion of currently married women informed about measures to deal with these side effects is 30% (Syamsul & Bala Bakri, 2020)

Table 3. The side effects of non menstrual disorders

No	The side effects	f	%
1	yes	19	31,7
2	No	41	68,3
	Total	60	100

Based on the results of research on the side effects of non-menstrual disorders

(nausea, vomiting, dizziness) obtained from 60 respondents, the majority, namely experienced 68.3% (41) experienced did not experience non-menstrual disorders (nausea, vomiting and dizziness) and as many as 31.7% (19) experience non-menstrual disturbances in the form of nausea / vomiting / dizziness). This is relevant with which states that side effects on hormonal contraceptive acceptors are complaints of nausea, vomiting and dizziness. (Lenny Irmawati Sirait & Siantar, 2020. Complaints of dizziness are also found in research conducted by Andi which showed that out of 50 respondents, 35.3% experienced nausea and vomiting, as many as 31.4% (Hariati et al., 2020).

Table 4. Relationship between types of contraception and side effects of menstrual disorders

Menstrual disorders	The types of Contraception				Total	
	Kombinasi		progesteron		n	%
	n	%	n	%		
Yes	1	1,7	44	73,3	45	100
No	10	16,7	5	8,3	15	100
Total	11	18,3	49	87,1	60	100

P = 0,001 X² count 27.050

The Chi Square statistical test obtained that there is a relationship between the type of contraception and side effects of menstrual disorders with a p value of 0.001, X² count 27.050. Hormonal contraception also causes side effects of menstrual disorders in the form of amenorrhea and spotting. Administering synthetic hormones will result in histological changes in the endometrium. Although the exact cause of this menstrual disorder cannot be known, this progesterone causes the blood vessels in the endometrium to become fragile, causing these symptoms(Asyari Muslich et al., 2018) In combination with contraceptive acceptors, estradiol is responsible for endometrial proliferation. This is different from progesterone, which causes the endometrial lining to thin or atrophy (Winarsih Sri, 2017). According to Winarsih, that the absence of menstruation (amenorrhea) is caused by the inadequate effect of estrogen on the

endometrium, so that the proliferation of the endometrium is imperfect due to the gestagens contained in pills, contraception does not have sufficient ability to release endometrial tissue (Winarsih Sri, 2017). According to Winarsih, there are side effects of spotting. Based on observations, it is proven that the gestagen component plays a role in the occurrence of this spotting, which is caused by dilation of the small veins in the endometrium and these veins become brittle and local bleeding occurs (Winarsih Sri, 2017)

The results of this study are in accordance with the results of Fitria's study, 2022, that there is a relationship between types of hormonal contraception and the menstrual cycle with a p 0.003 and, a PR of 1.629 meaning that acceptors of progesterone contraception have 1.6 times greater experience menstrual cycle disorders compared to those using combined hormonal contraception (Wari & Esti, 2020).

Table 5. Relationship between types of contraception and side effects of non-menstrual disorders (nausea, vomiting, dizziness)

Non menstrual disorders	The types of Contraception				n
	Kombinasi		progesteron		
	n	%	n	%	
Yes	8	13,3	11	18,3	19
No	3	5	38	63,3	41
Total	11	18,3	49	81,7	60

P = 0,004 X² count of 8.300

Chi Square statistical test found that there was a relationship between the type of contraception and the side effects of non-menstrual disorders (nausea, vomiting, dizziness) with a p value of 0.004, X² count of 8.300. This is in accordance with Yayah r, 2021 which states that side effects on hormonal contraceptive acceptors are complaints of nausea, vomiting and dizziness(Yayah Rokayah et al., 2021). and research showed that of the 31 respondents, the majority, namely 58.1%, used hormonal contraception (Dhita Ayu E & Sri Winarsih, 2023). Complaints of nausea and vomiting in hormonal contraceptive acceptors are mainly caused by

the estrogen component in combined contraceptive acceptors, while the gestagen component causes an increase in appetite, fatigue, difficulty with contraception, feelings of depression and sometimes weight gain (Sri Winarsih, 2017). This is natural because the addition of this synthetic hormone causes the levels of the hormones estrogen and progesterone in the body also increase. This increase in levels causes these complaints, which are similar to the initial condition of pregnant women caused by an increase in the hormones estrogen and progesterone.

Complaints of acceptors who have just used hormonal contraception are often referred to as *pseudo pregnancy*, because the symptoms are similar to those of pregnancy. Nausea, vomiting, dizziness are also found in the early stages of using pills and with the longer use of pills, they will gradually disappear after the body adjusts to the addition of these synthetic hormones from outside. (Winarsih Sri, 2017). This condition is in accordance with the results of Nabelle's which shows hormonal contraceptive methods are 4.05 times more likely to experience subjective complaints than non-hormonal acceptors (Kusuma, 2016). The presence of complaints of nausea and vomiting is also in line with the results of Dinah's research, which out of 93 respondents who used DMPA contraception, 7.3% experienced nausea and vomiting and 9.4% experienced headaches (Fadhilah et al., 2020). Research conducted by Erna also stated that the side effects experienced by MKJP and non-MKJP acceptors were nausea, vomiting by 6% and dizziness by 11%. (Setiawati et al., 2017).

Conclusion and suggestions. There is a relationship between the type of contraception and side effects of menstrual disorders (amenorrhea and spotting) with $p: 0.001$, X^2 count 27.050. There is a relationship between the type of contraception and side effects of non-menstrual disorders (nausea, vomiting and dizziness) with $p: 0.004$ and X^2 count 8.300. For Acceptor: each acceptor is confirmed to have known the side effects that will be experienced so as not to cause anxiety

which can result in dropping out as acceptors. The side effects experienced will decrease as the body adjusts to additional synthetic hormones from outside which aim to prevent pregnancy and most do not need treatment. Midwives should provide counseling on the side effects of hormonal contraception to acceptors.

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