

FACTORS ASSOCIATED WITH POST-PARTUM CONTRACEPTION PLANNING

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ABSTRACT

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The problem of stunting that occurs in Indonesia is caused by one of the sensitive factors, namely bad parenting. Improper parenting can occur in mothers whose children are born too close together (<2 years). Postpartum contraception can also be a solution for those who are "4 Too." The achievement of postpartum family planning services in Sarirejo District (65.12%) has not met the target (70%). This study aims to analyze the effect of age, number of children, level of education and knowledge of postpartum family planning plans for pregnant women in Sarirejo District. This is analytic observational research with cross-sectional design. The research subjects were all pregnant women in Sarirejo District in April 2023 with a total sample of 77 respondents. The results showed that the variables Age ($p=0.001$), Number of Children ($p=0.001$) and Knowledge ($p=0.001$) were related to postpartum contraceptive plans. Meanwhile, education level only at senior high school level ($p=0.001$) has an influence on postnatal contraceptive use plans. The conclusion is that postpartum contraceptive use increases with increasing maternal age, increasing number of children, increasing maternal education and increasing knowledge. There is a need to increase understanding and knowledge of pregnant women about the importance of postnatal family planning through counseling and collaboration with village midwives.

ABSTRAK

Kata Kunci:
kontrasepsi,
pasca persalinan,
ibu hamil

Kontrasepsi pasca persalinan dapat menjadi solusi bagi mereka yang ingin terhindar dari "4 Terlalu". Pencapaian pelayanan Keluarga Berencana (KB) pasca persalinan di Kecamatan Sarirejo (65.12%) belum memenuhi target (70%). Penelitian sebelumnya menyatakan bahwa penggunaan kontrasepsi dapat dipengaruhi oleh umur, jumlah anak, tingkat pendidikan dan pengetahuan. Penelitian ini bertujuan untuk menganalisis pengaruh antara umur, jumlah anak, tingkat pendidikan dan pengetahuan dengan rencana KB pasca persalinan pada ibu hamil di Kecamatan Sarirejo. Penelitian ini merupakan penelitian observasional analitik dengan desain cross sectional. Subjek penelitian ini adalah seluruh ibu hamil di Kecamatan Sarirejo pada bulan April 2023 dengan jumlah sampel sebanyak 77 responden. Hasil penelitian menunjukkan bahwa variabel Umur ($p=0.001$), Jumlah Anak ($p=0.001$) dan Pengetahuan ($p=0.001$) berpengaruh terhadap rencana KB pasca persalinan. Sedangkan pada tingkat pendidikan hanya pada tingkat SMA ($p=0.001$) yang memberikan pengaruh terhadap rencana penggunaan kontrasepsi pasca persalinan. Kesimpulannya adalah penggunaan kontrasepsi pasca persalinan meningkat dengan adanya peningkatan usia ibu, meningkat seiring meningkatnya jumlah anak, meningkat pada ibu berpendidikan dan meningkatkan pengetahuan. Perlu peningkatan pemahaman dan pengetahuan ibu hamil tentang pentingnya KB pasca persalinan melalui penyuluhan dan kerja sama dengan bidan desa.

INTRODUCTION

The use of contraception in Indonesia has succeeded in reducing the population increase. Contraception, which was intensified from the 1970s, had a positive impact on national development. A high population is a

burden on development, especially in the fields of health and education. The use of contraception in the New Order Era was made easier by the existence of centralized orders by limiting the number of children with slogans "2 Children is Enough". Over time, people

gained the freedom to choose and determine the planned number of children, and the slogan changed to “2 Children is Healthier”. This change in slogan provides leeway for people not to use contraception.

Close birth spacing (<2 years) is also included in the criteria “4 too” - too close (birth spacing <2 years), too young (gestational age <20 years), too old (gestational age >35 years) and too often/a lot (>3 children). Efforts to avoid birth that are too close can be done by using contraception, especially postpartum contraception, while this “4 too” event can contribute to the health of the mother and child (1) (2).

Postpartum contraception is contraception given to mothers giving birth in the baby age range 0-42 days. Postpartum contraception or postnatal family planning (KB Pasca Persalinan/KBPP) includes hormonal and non-hormonal contraception; all non-hormonal contraception can be an option for postpartum women, while some hormonal contraception is not allowed for breastfeeding mothers so consideration is needed in the selection because it will affect milk production (3).

The screening results of the Sarirejo Sub-District Family Assistance Team (TPK) in April 2023 regarding the use of postpartum contraception in postpartum women obtained the following data, out of 43 postpartum mothers there were 15 postpartum mothers who did not use contraception (34.88%), while the ideal was all mothers puerperia should use postpartum contraception. The target indicator for the percentage of postpartum family planning services is 70% (4), so that the achievements in Sarirejo Sub-District have not met the target (65.12%).

Contraception does have various side effects, such as injection birth control and IUD birth control. The 3-month injectable contraceptive has side effects of menstrual disorders and decreased libido during intercourse (5). These side effects can be accepted if the prospective acceptor has good knowledge about contraception. Sources of information about contraception are very diverse, pregnant women have many opportunities to get information from printed media such as maternal and child handbook (MCH), electronic media, consultations with health workers, family, friends, etc. (6).

The low use of postnatal contraception can be associated with age, education level, parity, and employment. Young mothers tend to be less experienced than older mothers. A good level of maternal education also makes it easier for mothers to assess which contraception is good for themselves (7). The number of children is the main consideration for husband and wife during their reproductive period. Couples with the desired number of children tend to want to terminate subsequent pregnancies (8). Knowledge can also be a predisposing factor in contraceptive use. Mothers with less knowledge about contraception cannot choose more from the contraceptives provided (9).

METHOD

This research was an observational study with a cross-sectional research design. The subjects of this study were all pregnant women in Sarirejo Sub-District in April 2023, totaling 132 pregnant women. Sample calculation using the sample size formula from Lemeshow, obtained a sample of 77 pregnant women (10). Data collection was carried out using a questionnaire. The questionnaire was tested for validity and reliability with a validity value of 0.00-0.008 (value < α) and a Cronbach's alpha value of 0.684 (value > 0.6) for reliability.

The dependent variable in this study was postpartum family planning plans, while the independent variables in this study were age, number of children, educational level and knowledge of contraception. Analisis data dalam penelitian ini adalah analisis univariat untuk mendeskripsikan karakteristik variabel penelitian, kemudian analisis hubungan antar variabel menggunakan uji regresi logistik sederhana dengan taraf signifikansi 5%. Untuk data usia dan jumlah anak menggunakan data ratio.

RESULTS

Description of the Characteristics of the Respondents

Respondents' ages ranged from 19-41 years, then divided by the range of 5 years. The results presented in Table 1 show that most respondents are 25-29 years old with 27 pregnant

women (35.1%), while the least are 15-19 years old with two pregnant women (2.6%) and ages 40-44 years of pregnant women as many as two people (2.6%). The number of children owned ranged from 0-3 children. Table 1 shows that the highest number of respondents were pregnant women with one child, 46 pregnant women (59.7%), while the lowest were pregnant women with three children, three pregnant women (3.9%).

The education level is divided into four groups, starting from the primary school graduate group to the higher education group. The results presented in Table 1 show that most of the respondents who graduated from high school were 48 pregnant women (62.3%) and the least one pregnant woman who graduated from elementary school (1.3%). The level of knowledge is divided into three groups consisting of high, medium and low knowledge levels. The results presented in Table 1 show that the respondents with a moderate level of knowledge were mostly 41 pregnant women (53.2%), and respondents with a low level of knowledge were 10 pregnant women (13.0%).

Table 1. Characteristics of Pregnant Women in Sarirejo Sub-District

Characteristic	f	%
Age (years)		
15-19	2	2.6
20-24	17	22.1
25-29	27	35.1
30-34	17	22.1
35-39	12	15.6
40-44	2	2.6
Number of children		
0 (does not have)	21	27.3
1 (one)	46	59.7
2 (two)	7	9.1
3 (three)	3	3.9
Educational level		
Elementary School	1	1.3
Junior High School	14	18.2
Senior High School	48	62.3
University	14	18.2
Knowledge level		
Low	10	13.0
Moderate	41	53.2
High	26	33.8

Postpartum Contraceptive Plan Overview

Table 2 shows that most of the respondents did not plan to use postpartum contraception, as many as 63 pregnant women (81.8%), while 14 pregnant women (18.2%) planned to use postpartum contraception. Postpartum contraception was very less attractive to pregnant women for certain reasons. These reasons are explained in the Distribution of Reasons for Pregnant Women Not Planning Postpartum Contraception.

Table 2. Plans for Postpartum Contraception

Characteristic	f	%
Postpartum contraception plan		
Yes (will use in 0-42 days)	14	18.2
No (will use in more than 42 days)	63	81.8

Distribution of Reasons Pregnant Women Do Not Plan Postpartum Contraception

Table 3 regarding the distribution of reasons for pregnant women not planning to use postpartum contraception shows the highest reason being husbands not allowing it (20.63%) and the next highest being fear, fear of side effects, fear of fat, and fear of menstrual disorders (17.46%). The lowest reasons were feeling old and not fertile anymore (1.60%) and because, still being in their puerperium, they wanted to focus on the baby and did not want to take family planning right away (4.76%).

Description of the reasons for not having postpartum contraceptives based on age, number of children, level of education and knowledge in Sarirejo District

Table 4 shows that the age group at risk does not plan to use postpartum contraception with reason number 1 as breastfeeding disorders, breast milk not flowing smoothly, breastfeeding, and fear of breast milk not flowing smoothly (25.0%). Meanwhile, those in the age group who were not at risk did not plan to use contraception with reason number 4, the husband did not allow it (21.8%).

Pregnant women who currently have 0-2 children who do not plan to use postpartum contraception mostly have reason number 4 for their husbands not allowing it (21.3%), while mothers with three or more children who do not plan to use postpartum contraception have reason number 1, breastfeeding disorders, breast milk not flowing smoothly, breastfeeding, and fear of breast milk not flowing smooth (50.0%) and reason number 8 feels old and not fertile anymore (50.0%).

Women of elementary school education level who do not plan to use postpartum contraception all have reason number 1: breastfeeding disorders, breast milk not flowing smoothly, breastfeeding, and fear

of breast milk not flowing smoothly (100.0%). For mothers with junior high school education those who do not plan to use postpartum contraception have the sixth most common reason: fear, fear of side effects, fear of getting fat, and fear of menstrual disorders (40.0%). Mothers with a high school education level who did not plan to use postpartum contraception had the fourth most reason, because their husbands did not allow it (20.5%). Meanwhile, for mothers with higher education do not plan to use postpartum contraception, the biggest reason was number 2, wanting to have children soon, lots of children (38.5%).

Table 3. Distribution of Reasons Pregnant Women Do Not Plan Postpartum Contraception

Reasons for Not Planning Postpartum Contraception	f	%
Breastfeeding disorders, breast milk not flowing smoothly, breastfeeding, fear of breast milk not flowing smoothly (reason 1)	10	15.87
Want to have children soon, many children (reason 2)	10	15.87
Because I'm still in my postpartum period, I want to focus on the baby, I don't want to go straight to family planning (reason 3)	3	4.76
Husband does not allow (reason 4)	13	20.63
Don't know, not sure, don't know birth control completely (reason 5)	9	14.29
Afraid of side effects, afraid of getting fat, afraid of menstrual disorders (reason 6)	11	17.46
Waiting for a child at the age of 2 months more (reason 7)	6	9.52
Feeling old and not fertile anymore (reason 8)	1	1.60

Association of Age on Postpartum Contraceptive Plans

The cross-tabulation results presented in Table 5 show that pregnant women aged 15-19 years and pregnant women aged 40-44 years have the same frequency (50.0%) between those who have a postpartum family planning plan and those who do not have a family planning plan. Meanwhile, most pregnant women aged 20-39 years did not have a postpartum family planning plan (88.9-66.7%). Pregnant women aged 15-19 years (50.0%), pregnant women aged 40-44 years (50.0%) and pregnant women aged 35-39 years (33.3%) had higher postnatal contraceptive plans than pregnant women in the age range of 20-24 years (11.8%), 25-29 years (11.1%) and 30-34 years (17.6%).

The results of the logistic regression test on the variable age with postpartum family planning using age discrete data, obtained a p value of 0.000 ($p < \alpha$), meaning that there is an association between age and postpartum family planning. Meanwhile the exponential value of

$B = 0.953$ shows every 1 additional age of pregnant women will increase the chances of planning postpartum contraception by 0.953 times.

Association of Child on Postpartum Contraceptive Plans

The association of the number of children and postpartum contraceptive plans in Table 5 shows that the majority of pregnant women who do not have children and pregnant women with one child do not do postpartum family planning (85.7% and 87.0%). Most of the pregnant women with two children did postpartum family planning (57.1%) compared to those who didn't. Meanwhile, pregnant women with three children did not do postpartum family planning (66.7%) more than those who did. Pregnant women with two (57.1%) and (three children (33.3%) who plan to use postpartum family planning have a higher percentage compared to pregnant women who do not have children (14.3%) and one child (13.0%).

The results of the logistic regression test on the variable number of children with postpartum family planning obtained a p-value of 0.001 ($p < \alpha$), meaning that there is an association of the number of children with postpartum family planning. The exponential B value for this variable is 0.439, so it can be interpreted that every 1 increase in the number of children will increase the chances of planning postpartum contraception by 0.439 times.

Association of Educational on Postpartum Contraception Plan

The association of education level and postpartum family planning plans in Table 5 shows that the number of all educated pregnant women do not have postpartum family planning plans (71.4-100.0%) is higher than pregnant women who have a plan, both those who have graduated from elementary school, graduated from junior high school, graduated from high school, and graduated from college. Pregnant women with primary school

education have lower postpartum contraceptive plans compared to pregnant women with junior high school, high school and university education.

The results of logistic regression on the education level variable with postpartum contraception plans have different p values at each level of education. Pregnant women with primary school education and high school graduation had a p value = 0.000 ($p < \alpha$), there was an association of elementary and high school education levels and postpartum contraceptive plans, while pregnant women with junior high school education had $p = 0.121$ and college graduates had a p value = 0.13 ($p > \alpha$), meaning that there is no association of graduating from junior high school and university with postpartum contraceptive plans. The exponential value of B at high school graduation is 0.231, so it can be said that pregnant women with high school education will have 0.231 times the chance compared to pregnant women with elementary school education.

Table 5. The Association of Age, Number of Children, Educational level and Knowledge with Postpartum Contraception Plans in Sarirejo Sub-District

Characteristics	Postpartum contraception plan				p value	Exp. (B)
	Yes		No			
	f	%	f	%		
Age (years)					0.001	0.953
15-19	1	50.0	1	50.0		
20-24	2	11.8	15	88.2		
25-29	3	11.1	24	88.9		
30-34	3	17.6	14	82.4		
35-39	4	33.3	8	66.7		
40-44	1	50.0	1	50.0		
Number of children					0.001	0.439
0 (doesn't have)	3	14.3	18	85.7		
1 (one)	6	13.0	40	87.0		
2 (two)	4	57.1	3	42.9		
3 (three)	1	33.3	2	66.7		
7Educational level						
Elementary School grad	0	0.0	1	100.0	0.001	Ref
Junior High School grad	4	28.6	10	71.4	0.121	0.400
Senior High School grad	9	18.8	39	81.3	0.001	0.231
University	1	7.1	13	92.9	0.130	0.077
Knowledge level					0.001	0.863
Low	2	20.0	8	80.0		
Moderate	3	7.3	38	92.7		
High	9	34.6	17	65.4		

Association of Knowledge on Postpartum Contraceptive Plans

The association of the level of knowledge and postpartum family planning in Table 5 shows that pregnant women with low and moderate levels of knowledge mostly do not have postpartum family planning plans (80.0% and 92.7%) compared to those who do. Pregnant women with a high level of knowledge mostly did not have a postpartum family planning plan (65.4%) compared to pregnant women who did. The percentage of pregnant women with a high level of knowledge who had a postpartum family

planning plan was higher (34.6%) than that of moderate knowledge (7.3%) and low level of knowledge (20.0%).

The association of the knowledge variable (using discrete values) on postpartum family planning obtained a p value of 0.000 ($p < \alpha$), meaning that there is an association of knowledge and postpartum family planning. The exponential value of B for the knowledge variable is 0.863, meaning that every increase of 1 knowledge value will increase the chances of planning postpartum contraception by 0.863 times.

DISCUSSION

Association of Age on Postpartum Contraceptive Plans

One's understanding and mindset can be seen from increasing one's age, thereby increasing one's knowledge (11). A person's age will affect a person's maturity in thinking and working. The level of maturity and strength of a person is more mature and reliable compared to someone who is immature. This is part of the experience and maturity of the soul (12). Pregnant women aged 40-44 years have had a level of maturity in thinking for the good of their reproductive health, pregnant women at a younger age feel healthier than older pregnant women.

Pregnant women who are in the age range of 20-35 years are included in the criteria for not-at-risk pregnant women (healthy pregnant women), while those aged <20 years and >35 years are included in the "4 Too" classification (Too young to get pregnant and Too old to get pregnant) who have a high risk of pregnancy (1). Pregnant women with high-risk ages will indirectly think that pregnant women should immediately use postpartum contraception to prevent subsequent pregnancies and allow time for the reproductive organs to return to health. This can affect pregnant women with high risk to plan postpartum contraception compared to pregnant women who are not at risk.

Similar studies state that a factor associated with contraceptive use in women of childbearing age is age. The role of family planning counselors through socialization in the community is needed to encourage

pregnant women to use postpartum contraception (13).

The reason for not doing family planning after giving birth when viewed from an internal perspective for mothers aged <20 years is that mothers do not want to do family planning immediately, maybe because mothers still do not understand the importance of postpartum family planning. Mothers aged >35 years have their own reasons for wanting to focus on breastfeeding, while the truth is that postpartum birth control does not affect milk production, so it can be said that mothers aged >35 years also do not understand that there are no side effects of postpartum contraception (without estrogen) on breast milk.

Mothers with an age range of 20-35 years have the biggest reason because their husbands do not allow mothers to use family planning after giving birth. Most likely because the age of the mother is still in the productive age and the husband still wants to have more children.

In line with research on the factors that have an association with the use of postpartum contraception, the result is that there is an association from the husband's support for the use of postpartum contraception on new contraception participants. Husbands can provide support to their wives after giving birth to use contraception immediately, so that proper communication and roles are needed in the use of postpartum contraception, especially planning the desired number of children (14).

Association of Child on Postpartum Contraceptive Plans

The family planning program currently being promoted is that two children are healthier, meaning that with two children the

mother will be healthier than with three or more children and so on (15). The number of children a person has is an indicator of "4 Too," i.e. Too many (>3 children) (16). Pregnant women with two children may think they want to give their bodies a chance to be healthy, so after giving birth to their third child they plan to use contraception.

Pregnant women who are at risk of having too many children tend to use postpartum contraception to avoid the risk of having too many children. However, there were respondents who had three children and they did not have a postpartum contraception plan. They give reasons for wanting to focus on breastfeeding and other mothers have reasons of feeling they are old enough and will never be able to get pregnant again. If seen from these answers, their reason for not using postpartum contraception is a lack of knowledge, because contraceptives are available which do not affect milk production, and menopausal women are still at the age of 50.

Research conducted on factors related to IUD use at the Doloduo Health Center in Bolaang Mongondow Regency found that there is a relationship of parity and IUD use (17). Mother is afraid of the IUD insertion process. The results of the study also showed that most mothers with 0-2 children did not plan postpartum contraception because there was no support from their husbands. The researcher assumes that mothers with children aged 0-2 years will obey their husbands because they feel that the number of children is still quite reasonable and the husband is able to provide a living.

Association of Educational on Postpartum Contraception Plan

Formal education is an obligation for all Indonesian people, the Ministry of Education has a 12 year compulsory education program (18). In formal education, a person is taught how to think logically, identify a problem, analyze and try to find a solution. A higher level of education will provide an opportunity for someone to more easily obtain information compared to a low level of education (11).

Pregnant women with a high school education level have a higher chance of having a postpartum contraceptive plan compared to

pregnant women with an elementary school education level. Mothers with high school education will more easily accept the information provided than mothers with elementary education. This will help mothers easily receive information about contraception and this can increase their knowledge and be able to think logically about their reproductive health needs.

Similar studies show that there is a relationship of the education level of the mother and the choice of IUD contraception (19). Other research also states that education is related to the use of IUD contraception, mothers with low education may be slow in adopting new knowledge (12). Other studies also say that mothers with primary school education are less interested in IUDs because they are afraid and lack knowledge about using IUD contraception (17).

Mothers with high school education are more able to access information through digital media such as Google, Facebook, WhatsApp, etc., compared to mothers with elementary education. Reasons for not doing family planning among mothers with primary school education are because of breastfeeding disorders, breast milk not flowing smoothly, breastfeeding, and fear of breast milk not flowing smoothly. Reasons for mothers with junior high school education for not participating in family planning are because they are afraid of side effects, afraid of getting fat, and afraid of menstrual disorders. Reasons of mothers with high school education for not participating in family planning are because their husband does not allow, while reasons for mothers with higher education are wanting to have children soon or planning to have many children.

Association of Knowledge on Postpartum Contraceptive Plans

Knowledge will be the basis of a person's attitude before deciding to follow up or behave. The better one's knowledge, the easier it is for someone to respond to something, as well as helping someone decide how to behave (20). The number of children a person has can indicate experience in previous reproductive cycles. Pregnant mothers who have had children may already use contraception, with this experience mothers gain more knowledge about contraception.

Previous good or bad experiences can have a different impact in the future.

These results are in accordance with previous research which states that there is a relationship between the number of children and mother's knowledge (7). The experience of giving birth and using contraception before, will psychologically increase one's level of understanding. Other research also states that pregnant women who have never had family planning before have less knowledge and this happens to primiparous women (21).

Supporting data for reasons why mothers don't plan to use birth control after childbirth are that their husbands don't allow, with the next highest reason for not using birth control after childbirth being fear, fear of side effects, fear of getting fat, and fear of menstrual disorders. Not being sure and not knowing fully about family planning were also main reasons. This could be due to the lack of knowledge of pregnant women about contraception. So that it can be concluded that the mother's ignorance in choosing suitable contraception or the mother's ignorance about the correct postpartum family planning can affect the mother's knowledge.

CONCLUSIONS AND SUGGESTION

Conclusion

Increasing maternal age, increasing number of children and better knowledge will increase the mother's desire to use contraception after giving birth. The best plan for using contraceptives was found in mothers with senior high school education, while mothers with elementary school, junior high school or even college graduates did not find good opportunities.

Suggestion

Suggestions that can be given are to increase education about postpartum contraceptive methods through classes for pregnant women, and carry out postpartum counseling at postpartum visits (0-42 days).

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