

THE INFLUENCE OF CONTRACEPTIVE DEVICE Flip Sheet MEDIA ON THE LEVEL OF KNOWLEDGE OF POST PARTICULAR MOTHERS AT GLADAGSARI HEALTH CENTER BOYOLALI DISTRICT

THE INFLUENCE OF CONTRACEPTIVE DEVICE FLIP SHEET MEDIA ON THE LEVEL OF KNOWLEDGE OF POSTPARTUM MOTHERS AT THE GLADAGSARI COMMUNITY HEALTH CENTER, BOYOLALI REGENCY

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ABSTRACT

Efforts and strategies are needed to anticipate a population explosion in Indonesia, namely in the form of encouraging stakeholders to increase outreach and education regarding family planning as a priority program. One of the reasons why there are still so many women aged 10-54 years who do not use contraception is the lack of information and education about birth control methods. One strategy to change this behavior was by providing information to increase postpartum mothers' knowledge about postpartum contraception so as to raise awareness and can be done by providing outreach, one of which is using flip sheets. This research aims to determine the effect of contraceptive feedback sheet media on the level of knowledge of postpartum mothers at the Gladagsari Community Health Center, Boyolali Regency. **Method** : Quantitative research with a design using a quasi experimental design with a one group pre test – post test design. The research sample was postpartum mothers in October 2023 at the Gladagsari Community Health Center, Boyolali Regency, a total of 48 mothers taken in total sampling. The research instrument used flip sheets and knowledge questionnaires. Data analysis used paired t-test. **Result** : Most of the postpartum mothers were aged 20-30 years (66.7%), had a high school education (60.4%), were housewives (50%), and were multiparous (52.1%). Before being given education using flip-sheet media, mothers had moderate knowledge of contraceptives (52.1%) and after being given education using flip-sheet media, mothers had relatively high knowledge (62.5%). Bivariate analysis obtained a significance value of $0.000 < 0.05$, meaning that there was an influence of contraceptive flip-sheet media on the mother's postpartum knowledge level. Mothers should increase their knowledge regarding postpartum contraception to maintain the health and well-being of mother and child.

Key words: Flip sheet media, contraceptives, level of knowledge of postpartum mothers

INTRODUCTION

High population growth is one of the population problems both in Indonesia and in other developing countries. One effort to overcome high population growth is by implementing a

Family Planning (KB) program to control fertility. This is also in accordance with the draft Strategic Plan of the Ministry of Health for 2020-2024, which was presented by the Secretary General of the Ministry of Health, one

of the policy strategies for improving maternal and child health is expanding access and quality of family planning and reproductive health services (Ministry of Health of the Republic of Indonesia, 2019).

Efforts and strategies are needed to anticipate a population explosion in Indonesia, namely in the form of encouraging stakeholders to increase outreach and education regarding family planning as a priority program (BKKBN, 2018). There are still 27.1 percent of women aged 10-54 years who do not use contraception after giving birth (Balitbangkes Ministry of Health of the Republic of Indonesia, 2018). One of the reasons why there are still so many women aged 10-54 years who do not use contraception is the lack of information and education about birth control methods. This high number allows for an increase in pregnancies that are closely spaced. Apart from that, the percentage of women who are informed by health workers about contraceptives in the form of side effects, problems with the method chosen, and about actions (solutions) to overcome side effects is still below 50 percent (BKKBN, 2018). This shows that appropriate methods are still needed to provide sufficient information to women, especially women of

childbearing age and postpartum mothers.

Based on data from BPS Central Java Province 2022, it is known that in 2021 in Boyolali Regency, of the 172,389 new PUS, 63.05% have become family planning participants, of which 12,704 people use IUDs, 6651 people use MOW, 777 people use MOP, 1908 people use condoms, 11281 people used implants, and 70363 people used injections.

One strategy to change someone's behavior is by providing information to increase knowledge so as to raise awareness and can be done by providing counseling. Knowledge gained from personal experience or from the experiences of other people allows someone to be able to solve problems in their life (Samodra & Devianti, 2017).

Postnatal mothers' knowledge about postpartum contraception is important for health workers, especially midwives, who directly have the authority to provide counseling regarding contraception to postpartum mothers. Inaccurate understanding of postpartum contraception can have an impact on the failure to achieve family planning programs. Inappropriate selection of the type of contraception by postpartum mothers can also have an impact on birth control failure and also

maternal discomfort caused by the side effects of the contraception used. With good knowledge and understanding of postpartum contraception, it is hoped that it can also increase postpartum mothers' interest in using one type of postpartum contraception (Al Falah, 2019).

Tools are needed to provide health education, so that the message conveyed can be given and received well by the target audience. The use of assistive devices is adjusted to the abilities of the health counselors and the mother's condition. One health education tool that can be used easily is flip sheet media. This media is commonly used because it is relatively easy to make and can be easily understood by counselors. This method of course cannot be separated from the midwife's role in providing counseling. Providers have an important role in assisting women in choosing contraceptives (Darmastuti et al, 2020).

Wilcoxon statistical test on knowledge and attitudes obtained a *p* value of 0.000, which means that the use of flip-sheet media is effective on the level of knowledge and attitudes of postpartum mothers regarding the selection of contraceptive methods that are appropriate and suitable for postpartum mothers themselves. So health education using flip sheets is

effective in encouraging postpartum mothers to choose postpartum contraceptive methods. Research by Mohardy et al (2023) also shows results where postnatal family planning service counseling can use flip-sheet media. The results of bivariate analysis showed that there was a significant relationship between family planning counseling and the decision to use postpartum family planning ($p < 0.05$).

Based on the background above, the aim of this research is to determine the effect of contraceptive flip-sheet media on the level of knowledge of postpartum mothers at the Gladagsari Community Health Center, Boyolali Regency .

RESEARCH METHODS

This type of research is quantitative research. The research design uses a *quasi experimental design* with a *one group pre test – post test design*. The population in this study was postpartum mothers in October 2023 at the Gladagsari Community Health Center, Boyolali Regency, totaling 48 mothers where the sample was taken by *total sampling* . The research instruments were a reverse media sheet and a postpartum mother's knowledge questionnaire about contraceptives. The data analysis technique uses *paired t-test* .

RESULTS AND DISCUSSION

RESULTS

1. Respondent Characteristics

Table 1. Frequency Distribution of Respondent Characteristics According to Maternal Age

Mother's Age	Frequency	Per cent asset (%)
<20 years	6	12.5%
20-35 years	39	81.2%
>35 years	3	6.3%
Total	48	100 %

Table 2. Frequency Distribution of Respondent Characteristics According to Mother's Education Level

Mother's Education Level	Frequency	Per cent asset (%)
elementary school	4	8 , 3 %
JUNIOR HIGH SCHOOL	12	25 , 0 %
high school	29	60 , 4 %
Diploma	1	2 , 1 %
Bachelor	2	4 , 2 %
Total	48	100 .0%

Table 3. Frequency Distribution of Respondent Characteristics According to Mother's Occupation

Mother's Job	Frequency	Per cent asset (%)
IRT	24	50 , 0 %
Private sector employee	23	47 , 9 %
Farmer	1	2 , 1 %
Total	48	100 .0%

Table 4. Frequency Distribution of Respondent Characteristics According to Mother's Parity

Parity	Frequency	Per cent asset (%)
Primipara	23	47 , 9 %
Multiparous	25	52 , 1 %
Total	48	100 .0%

2. Univariate Analysis

Table 5. Postpartum Mothers' Level of Knowledge about Contraceptive Devices Before Being Provided with Media Education Flip Sheet

Pretest	Frequency	Per cent asset (%)
Low	19	39.6%
Currently	25	52.1%
Tall	4	8.3%
Total	48	100.0%

Table 6. Level of Knowledge of Postpartum Mothers about Contraceptives After Being Provided with Education with the Media Flip Sheet

Posttest	Frequency	Per cent asset (%)
Low	4	8.3%
Currently	14	29.2%
Tall	30	62.5%
Total	48	100.0%

Table 7. Comparative Test Results of Postpartum Mothers' Level of Knowledge about Contraceptives Before and After Being Provided with Education with the Media Flip Sheet

Descriptive statistics	Before	After	<i>p value</i>
Mean ± SD	12,313 ± 2,242	15,688 ± 2,442	0,000
Median (Min-Max)	12 (8-18)	17 (10-20)	

DISCUSSION

1. Unnaught Mother

The results of the analysis of respondent characteristics based on the age of the respondents showed that the majority of respondents were 20-30 years old, namely 32 people (66.7%). This shows that according to age, the majority of respondents are adults and are not at risk of becoming pregnant and giving birth. This is because the age of 20-30 years is the age when the body's physiological and psychological condition is capable of experiencing the process of pregnancy and childbirth. If this is related to knowledge, this age includes early adulthood which is still very productive, especially if the mother has sufficient experience regarding contraceptives, this will further increase her knowledge about postpartum contraceptives.

The results of this study are in accordance with the opinion of Maryati and Indriani (2021) where aged 20-35 years are safer in using contraceptives because physically reproductive health is more mature and is a benchmark for the level of maturity of a person who is said to be more mature in thoughts and behavior. Ages <20 years and >35 years are also highly expected to use contraception because this age is the risk age for pregnancy and childbirth. So this

period is a period of spacing and preventing pregnancy so that the choice of contraception is more aimed at using long-term contraceptives.

Likewise, it supports the research results of Indrawati et al (2022) where the majority of respondents were not at risk, namely 20-35 years old (65%). Healthy reproduction is the safe age for pregnancy and childbirth which is in the age range of 20-35 years, so it is necessary to use postpartum contraception for the health of the mother and child. The research results of Niam et al (2022) also support this research where the majority of respondents were aged 20-35 years (80%).

2. Mother's Education Level

The results of the analysis of respondent characteristics based on education level showed that the majority of respondents had a high school/vocational school education (69.2%). This shows that respondents with secondary education means that if it is related to knowledge, they are quite capable of understanding, capturing all information and receiving all information, especially regarding postpartum contraceptives. So, by obtaining good knowledge, it is hoped that respondents will be able to behave better in selecting postpartum

contraceptives according to the mother's needs and conditions.

The level of education influences the use of contraceptive methods. This is because the level of education influences the acceptor's understanding of long-term contraceptives including the profile, advantages, disadvantages and side effects of using these contraceptives. Usually young mothers tend to be afraid and embarrassed about things that they think are taboo. So they are reluctant to use intrauterine contraception. (Rosidah, 2020).

The results of this study support the research results of Niam et al (2022) where the majority of mothers had a high school education (80%). The higher the education, the easier and more understandable the knowledge given to them is, especially regarding postpartum contraception. So it is hoped that mothers can choose contraceptives according to their needs and conditions. The greater the knowledge about postpartum contraception, the greater the potential for participation as a postpartum contraceptive acceptor. On the other hand, if knowledge is lacking it will be an obstacle in the process of participating in becoming a postpartum family planning acceptor.

The research results of Ruhana et al (2024) also support the results of this

study where the majority of mothers have a high school education (44.12%). Respondents who are highly educated tend to use postpartum contraception, apart from being influenced by the respondents' own motivation and interests, this is also influenced by the presence of midwives in the village who use postpartum contraception.

3. Mother's Job

The results of the analysis of respondents' characteristics based on occupation showed that the majority of respondents were housewives (50%). If it is related to knowledge, housewives will have enough free time to look for information regarding postpartum contraceptives so that mothers can have more free time to think about what contraceptives they can use according to the mother's needs and conditions. Employment status can influence participation in family planning because there are factors influencing the work environment that encourage a person to participate in family planning, so that it will indirectly influence the status of contraceptive use.

According to Ruhana et al (2024), many mothers who did not work or were only housewives before education did not use postpartum contraception. This is because they do not interact with other people so much that they do not get

information about their health from other people. This is also influenced by the social and cultural conditions of the community which consider that postpartum birth control is not important, birth control can be used after the postpartum period has passed, so they use birth control after the postpartum period has passed. Apart from that, negative knowledge and attitudes towards the use of postpartum contraceptives make respondents less likely to use postpartum contraceptives.

Deviana et al (2023) in their research also support the results of this study where the majority of mothers do not work or are housewives. Due to the demands of quite a lot of household work in addition to taking care of children and husbands, it is increasingly common for mothers to use postpartum contraceptives in line with the knowledge they have regarding contraceptives which they often learn from counseling by village midwives. By using contraception because of self-motivation to regulate birth by considering the dependency *ratio* of a child.

4. Maternal Parity

The results of the analysis of respondent characteristics based on parity showed that there were more multiparous

respondents (52.1%) than primiparous respondents (47.9%). Multiparous are mothers who have given birth to a child more than once. This condition means that the mother has more than one child who needs attention, so using postpartum contraception can help the mother to space out pregnancies, especially if the mother is of productive age and is safe for pregnancy, so that the mother can be healthier and more prosperous.

According to Jumiaty et al (2023), the higher the mother's parity, the higher the use of postpartum contraception and the lower the mother's age, the lower the use of postpartum contraception. So parity can influence whether or not a method is medically suitable (Maryati and Indriani 2021). If it is related to knowledge, the more parity a mother has, the higher her knowledge. This is related to the influence of one's own and other people's life experiences so that it influences current or future knowledge and behavior (Notoatmodjo, 2018).

The results of this study support the research results of Suryanti et al (2023) where the majority of mothers were multiparous (61.9%). Parity 2-3 is the safest parity in terms of maternal mortality. Parity 1 and parity more than 3 (high parity) have higher maternal mortality rates. Women with parity ≤ 3 children tend to use less family planning,

especially IUDs, because they still want to have more children. So parity in women of childbearing age is included in multiparous parity. This indicates that the number of living children he has is still not sufficient for the desired number. Where the greater the number of living children a person has, the greater the possibility of limiting births. The number of living children has a very significant influence in determining the choice of long-term contraceptives.

High parity increases postpartum contraceptive use. The number of children is one of the fundamental factors influencing the behavior of couples of childbearing age (PUS) in using contraceptive methods. One of the things that drives you to decide to join a family planning program is if you feel that the number of living children is sufficient for the desired number of children (Nuriah 2018).

5. Postpartum Mothers' Level of Knowledge about Contraceptive Devices Before Being Given Education Using Flip Sheet Media

The results of the study showed that the majority of postpartum mothers' level of knowledge about contraceptives before being given education using flip-sheet media included moderate knowledge, as many as 25 people

(52.1%). This is also supported by the results of descriptive statistics where it is known that the mean \pm SD value is 12.313 ± 2.242 and the median value (min-max) is 12 with a value range of 8-18. According to researchers, these results indicate that before mothers were given counseling using flip sheets, respondents already had fairly good knowledge regarding contraceptives. This is possibly because the mother is a multiparous mother who has given birth to two living children, so the mother gained knowledge of contraceptives from her experience as a mother which they obtained from midwives, obstetricians, family, friends or the mass media. Apart from that, the moderate knowledge that the majority of postpartum mothers already have can be influenced by the mother's fairly high level of education, namely high school graduates, productive young adults. So that mothers can adequately understand the various kinds of information they receive, especially regarding postpartum contraception.

According to Pardosi (2022), many postpartum mothers know about family planning in general, but do not know about postnatal family planning. This is one of the causes of low postpartum birth control outcomes. When postpartum mothers know about postpartum birth control, the mother is able to determine

her attitude in choosing birth control and when to use birth control. Pardosi added that knowledge about contraception contributes to high and low interest in using contraception. As one of the predisposing factors, mothers' knowledge about contraception needs to be increased so that what mothers know can be applied in real life, not only at the level of knowing or understanding. An acceptor should have prior knowledge about contraception, its benefits, and all kinds of problems, before choosing and using it. So that you can determine which contraception is suitable and can overcome problems that occur related to the contraception you choose. The knowledge that the acceptor has about contraception is related to how complete and clear the information the acceptor is.

6. Postpartum Mothers' Level of Knowledge about Contraceptive Devices After Being Provided with Education Using Flip Sheet Media

The results of the study showed that the majority of postnatal mothers' level of knowledge about contraceptives after being given education using flip-sheet media included high knowledge, as many as 30 people (62.5%). This is also supported by the results of descriptive statistics where it is known that the mean \pm SD value is 15.688 ± 2.442 and the median value also increases to 17 with a

value range of 10-20. So it can be interpreted that there is an increase in the level of knowledge both categorically and on average. This indicates that education using flip sheet media, which is a cheap and simple medium, can increase postpartum mothers' knowledge about contraceptives.

The research results of Darmastuti et al (2020) support the results of this research where providing balanced counseling is able to increase mothers' knowledge regarding family planning. The use of postpartum contraception is ideally used after giving birth under 42 days. Good health promotion media can support the success of health promotion efforts. One of the effective media is flip sheet media. The flip sheet form is a health promotion media that is still widely used today and is considered effective for health promotion efforts on various health problems, including education regarding contraceptives. The research results of Sutrisno and Sinanto (2022) found that there was an influence of using flip sheets as a health promotion medium on changes in people's knowledge, attitudes and behavior regarding nutrition and other health problems.

7. The Influence of Contraceptive Device Flip Sheet Media on the Level of Knowledge of Post-Natal Mothers at

the Gladagsari Community Health Center, Boyolali Regency

The results of bivariate analysis using parametric *paired t-test analysis* obtained a significance value (*p value*) of $0.000 < 0.05$ so that H_0 was rejected and H_a was accepted, meaning that there was an influence of contraceptive flip-sheet media on the level of knowledge of postpartum mothers at the Gladagsari Community Health Center, Boyolali Regency. This can be interpreted that by providing education or health education through counseling using flip sheets about contraceptives, it is able to increase the level of knowledge of postpartum mothers. With increased knowledge of mothers, it is hoped that they can immediately improve their behavior in using postpartum contraceptive devices immediately, which is ideally used after giving birth under 42 days for the health and welfare of mother and child.

The use of assistive devices is adjusted to the abilities of the health counselors and the mother's condition. One health education tool that can be used easily is flip sheet media. This media is commonly used because it is relatively easy to make and can be easily understood by counselors. This method of course cannot be separated from the midwife's role in providing counseling. Providers have an important role in

assisting women in selecting contraceptives (Darmastuti et al, 2020).

The research results of Mohardy et al (2023) also show similar results to this research where counseling for postpartum family planning services can use flip sheets as media. The results of the bivariate analysis showed that there was a significant relationship between family planning counseling and the decision to use postpartum family planning ($p \text{ value} < 0.05$).

The research results of Herlinadiyaningsih et al (2023) also provide similar findings to the results of this study where providing counseling can increase mothers' knowledge about family planning. Family planning counseling is carried out for clients who need help or assistance in choosing contraceptive methods or devices/drugs, for example because they don't know yet, their knowledge is still lacking or it could be because their knowledge is inaccurate or wrong regarding the use of contraceptives (Gobel, 2019). Inaccurate understanding of postpartum contraception can have an impact on the failure to achieve family planning programs.

CONCLUSIONS AND SUGGESTIONS

1. Conclusion

- a. The characteristics of the respondents were that the majority of respondents were aged 20-30 years (66.7%), had a high school education (60.4%), were housewives (50%), and were of parity including multiparous (52.1%) .
- b. postpartum mothers' level of knowledge about contraceptives before being given education using flip-sheet media was moderate knowledge at 52.1 % .
- c. postpartum mothers' level of knowledge about contraceptives after being given education using flip-sheet media was included in good knowledge at 62.5 % .
- d. There is an influence of contraceptive flip sheet media on the level of knowledge of postpartum mothers at the Gladagsari Community Health Center, Boyolali Regency (*p value* 0.000<0.05).

2. Suggestion

It is hoped that postpartum mothers can be more active and active in seeking information regarding postpartum contraceptives so that their knowledge can be further increased followed by behavior and attitudes to want to use postpartum contraceptives for the health and welfare of the mother and child as well as the welfare of the

nation. Midwives can collaborate with local regional health centers or local village heads to be more active in providing health education regarding postpartum contraceptives using flip-sheet media and further increase efforts to promote postpartum contraceptives to postpartum mothers so that coverage of postpartum family planning services copy may continue to increase. Future researchers are expected to be able to develop similar research results, namely regarding the provision of education through the media of contraceptive flip sheets on postpartum mothers' knowledge or by varying other educational media such as leaflets or booklets which are more practical and cheaper or animated media so that they are clearer and more interesting and research can be carried out. further related to factors that might influence postpartum mothers' level of knowledge regarding contraceptives and their willingness to use postpartum family planning as an effort to increase the attainment of postpartum family planning acceptors.

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