

# Relationship Between Perception Of Body Images, FertilityAnd Side Effects To Postpartum Contraception Use

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Abstract— The postpartum period was a period where there was a change in emotional, physical, social — changes in physiology, body image, fertility, and sexual behavior. Disruption of body image due to the use of hormonal contraceptives can make the acceptor feel worried and anxious about the side effects caused to her body. Many acceptors were hesitant to continue contraception. Objective: Find out the effect of fertility body image perception and side effects on postpartum contraception. Methods: Descriptive analytic type observational study with a cross-sectional study design using a quantitative approach. This research was carried out in 4 Palembang City Health Centers. The target population was all postpartum mothers delivered with health workers. The total sample size was 176. Quantitative data analysis consisted of univariable analysis in the form of descriptive, bivariable analysis used chi-square test and multivariable analysis used logistic regression. Results: chi-square analysis showed that individually body image, fertility perception, and side effects variables were significantly related to postpartum contraceptive use with p values of 0.04; 0.03; and 0.03 while the external variables, namely age, education level, and occupation were not significant to the use of postpartum contraception. In multivariable analysis, logistic regression variables influenced the use of postpartum contraception were perceptions of fertility. Conclusion: respondents considered the body image and the perception of fertility were not necessary, and the use of contraception side effects were not safely effected on postnatal contraception.

Keywords— Perception of body image, fertility, side effects, postpartum contraception

# I. INTRODUCTION

Unwanted pregnancies were not only experienced by unmarried women but also married couples. Through planning, the family could determine the desired family size, the appropriate time considered to have children, and the contraceptive method that would be used. The decision to plan a family could not be separated from various considerations such as the physical and mental readiness of the spouse, the family's financial condition, and no less important was to consider maternal and child health. These considerations then determined the family's decision to immediately or postpone pregnancy.[1]

According to Basic Health Research (Riskesdas) of 2016, postpartum contraception service coverage in Indonesia was 59.6% and varied by province, with a range of 26.0% (Papua) and 73.2% (Bangka Belitung).[2].

A maternal goal of 2017 in Palembang was 4685 and who received postpartum contraception of 68.2%. Coverage of postpartum contraception was closely related to the birth rate of how many postpartum mothers immediately use contraception. From these data was concluded that the coverage of childbirth assistance by health workers was quite high, but the coverage for postpartum contraception was still low.[3]

Postpartum contraception defined as the prevention of unwanted pregnancy and prevention of contiguous pregnancy through the first 12 months after giving birth.[4] This new awareness of the program of postpartum contraception. This got momentum also in Indonesia. Based on the recommendation of Rapat Nasional Program Keluarga Berencana 2008 cited by Widyastuti[5], program of postpartum contraception, which in Indonesia known as KB pasca persalinan and pasca keguguran - KB PP & PK (Postpartum and post miscarriage contraception) was considered as one main program that must be widely available in all province. The purpose of this program was for increase status health of both mother and child and achieving significant achievements in level prevalence contraception.

Contraception side effects were a result of contraceptive use that was not desired by the user.[6] Side effects caused by hormonal contraceptive methods, such as pill, injection, and implant although almost the same were accepted by each acceptor but can lead to different responses for each acceptor. This difference in response depends on how the acceptor responds to changes that occur in her body. The acceptor's attitude towards her body both consciously and unconsciously which includes perceptions and feelings about the size, shape, appearance function and potential of the body is called body image (Stuart and Sundeen, 1998 cited by[7].

Disruption of body image (negative body image) due to the use of hormonal contraception on acceptors, could make acceptors feel worried and anxious about the side effects caused to the body; as a result, many contraceptive acceptors are increasingly hesitant to continue the use of contraception.[8] The more acceptors who were hesitant in using contraception, the more the number of dropouts would be produced, this had an impact on the failure of



family planning programs that had been implemented by the government.

Based on the description above, the general purpose of this study was determining the relationship of perception of body image, fertility and side effects on postpartum contraception in Palembang city area in 2017. While the specific purpose was analyzing differences in body image perception to the use of postpartum contraception in postpartum women in Palembang City in 2017. 1) It analyzed the differences in the perception of fertility, to the use of postpartum contraception in postpartum mothers in the area of Palembang city 2017. 2) Analyzed the differences in side effects perceptions to the postpartum contraception use by postpartum women in Palembang City in 2017. 3) Analyzed the relationship of body image perception, fertility and side effects on postpartum contraception use in Palembang area in 2017.

#### II. METHODS

This study was a descriptive type of observational study analytic with cross-sectional study design, quantitatively, the measurement of independent variables and dependent variables was done in time simultaneously for a certain period.

Definition and classification of independent variables studied, namely:

1)perception of body image was a person's perception of body shape measured using a modification from Body Shape Questionnaire 3 (BSQ13) contained 13 questions related to one's satisfaction with body shape with a scale of nominal data; 2) Fertility perception, an interpretation or view which was concluded by postpartum mothers regarding the return of fertility after gave birth.

Measurement would be seen from the aspect of understanding, benefit, risks and conclusions regarding fertility after childbirth. A scale of data in the form of nominal; 3) Perception of side effects namely interpretation or view concluded postpartum mothers regarding side effects caused by the use of contraception. The measurement was seen from the perception of aspects of side effects caused by usage contraception, both hormonal and non-hormonal, the scale of data was nominal.

The dependent variable in this study was contraception use. The use of postpartum contraception was the initiation or use of family planning methods after giving birth until six weeks / 42 days after giving birth to prevent unplanned pregnancies, especially within 1-2 years. Postpartum contraceptive use at week 6 or 42 days after giving birth, either hormonal and non-hormonal contraception use, the scale of data was nominal.

Confounding variables in this study included age, education, and employment. The data scale was ordinal and nominal.

The target population was all postpartum mothers who gave birth to the health worker. The affordable population was the entire postpartum mothers who lived in community health centers, maternity clinics, BPM in

Palembang span of 2016 - 201 7. Samples were obtained in this study 176.

#### III. RESULT

#### Characteristics of the subjects

Postpartum mothers who used postpartum contraception amounted to 67 people or 38.1%. Most respondents considered that body image was not necessary, which was 115 people or 65.3%. While the respondents who considered fertility perceptions were not important there were 79 people or 44.9% and respondents who considered contraception was unsafe were only 46.6%.

Most respondents aged 25-34 were as many as 80 people or 45.5% while those aged under 24 years by 32 persons or 18.2%. The highest level of education of respondents was at the secondary level, namely 131 people or 74.4%. For the employment status, most of the respondents were not working or just as housewives, namely 169 people or 96.0%.

Characteristics of postpartum mothers who gave birth to health workers in 4 Palembang City Health Centers namely Ariodilah Health Center, Kenten Health Center, Punti Kayu Health Center and Alang-Alang Lebar Health Center were shown in Table 1.

TABLE I. CHARACTERISTICS OF THE SUBJECTS IN

Variable	n (176)	%
Postpartum contraception use Use	67	38.1
Do not use	109	61.9
	109	01.9
Body image perception	115	c = 0
Body image is not important	115	65.3
Body image important	61	34.7
Fertility perception	70	44.0
Not important	79	44.9
Important	97	55.1
Side effects		
Contraception is unsafe	82	46.6
Contraception safe	94	53.4
Age of respondent		
≤24 years	32	18.2
25-34 years	80	45.5
≥ 35 years	64	36.4
Level of education		
Elementary	39	22.2
Secon dary	131	74.4
High	6	3,4
Work		
Work	7	4.0
Does not work	169	96.0

## Bivariable analysis

Analysis between the variable of body image perception, the perception of fertility, and a side effect on the use of postpartum contraception. The chi-square test results between the independent variables and the dependent variable were shown in Table 2.



TABLE II. ANALYSIS OF CHI-SQUARE BETWEEN VARIABLES OF BODY IMAGE PERCEPTION, A PERCEPTION OF FERTILITY, AND SIDE EFFECTS ON THE USE OF POSTPARTUM CONTRACEPTION

	Use of postpartum contraception					
Variable	use No			OR	p	
		use				
	n	%	n	%		
Body image						
perception						
Body image is not	50	43.5	65	56.5	1.9	0.04
important						
Body image is	17	27.9	44	72.1		
important						
Fertility perception						
Not important	37	46.8	42	53.2	1.9	0.03
Important	30	30,9	67	69.1		
Side effects						
Contraception unsafe	38	46.3	44	53.7	1.9	0.03
Contraception is safe	29	30,9	65	69.1		

The results of the analysis in Table 2 above showed that overall perception of body image, a perception of fertility, and side effects significantly influenced postpartum contraception use with p values of 0.04 and 0.03, respectively, and OR values of 1.99; 1.97; and 1.94. This result could be interpreted that respondents who thought that body image was not necessary would be 1.99 times using postpartum contraception compared to respondents who think that body image was important. Similarly, respondents who considered fertility perception was not important would 1.97 times used postpartum contraception compared to those who considered fertility perception important. Respondents who considered that contraception unsafe would be 1.94 times postpartum contraception compared to those considered it safe.

2. Analysis between the variables of age, education level and employment status to the use of postpartum contraception

The results of the analysis between external variables on the use of postpartum contraception showed that overall outside variables of age, education level, and occupation did not significantly influence the use of postpartum contraception with p values all above 0.05. The overall analysis results were shown in Table 3 below.

TABLE III. CHI-SQUARE ANALYSIS BETWEEN THE VARIABLES OF AGE, EDUCATION LEVEL, AND WORK STATUS TO THE USE OF POSTPARTUM CONTRACEPTIO

Use of postpartum contraception						
Variable	use	use No use		OR	p	
	n	%	n	%	J.	
Age o	f					
respondent						
≤24 years	7	21.9	25	78.1	Ref	
25-34 years	35	43,8	45	56.3	0.82	0.57
≥ 35 years	25	39.1	39	60,9	2.28	0.09
Level o	f					
education						
Basic	13	33.3	26	66.7	Ref	
Middle	51	38.9	80	61.1	2.00	0.46
High	3	50.0	3	50.0	1.56	0.59
Work						
work	2	28.6	5	71.4	0.64	0.59
Does not work	65	38.5	104	61.5		

[8].Logistic Regression Analysis between variables of body image perception, fertility perception, and side effects

moreover, age on postpartum contraception use

Multivariable analysis was done by including all independent variables and one external variable, namely age. Age was included in the logistic regression analysis because the p-value was below 0.25. Backward modeling was to see the changes in the contribution of each variable to respondents in postpartum family planning. The hypothesis test used was a logistic regression analysis with a significance level of p <0.05. The results of logistic regression analysis shown in Table 4 below

TABLE IV. LOGISTIC REGRESSION ANALYSIS BETWEEN THE PERCEPTION OF BODY IMAGE, THE PERCEPTION OF FERTILITY, AND SIDE EFFECTS AND AGE ON THE USE OF POSTPARTUM CONTRACEPTION

Variable	OR	р	95% CI
Body image perception			
Body image was not important	1.84		
Body image important	Ref	0.08	0,92-3,67
Fertility perception			
Not important	1.91	0.04	1.01-3.59
Important	Ref		
Age of respondent			
≤24 years	Ref	0.84	0,47-1.86
25-34 years	0.93	0.08	0,89-6,50
≥ 35 years	2,4		
N		176	
$R^{2}$		0.07	

From table 4 above, was obtained the results that only fertility perception variables were significantly meaningful to the use of postpartum contraception after being controlled by body image and age of respondents. The determinant coefficient value obtained was 0.07 which meant that the perception of body image, the perception of fertility and age of the respondents contributed to the use of postpartum contraception only by 7%.



#### IV. DISCUSSION

The results of the bivariable analysis showed that perception of body image, fertility, and side effects had significant statistically and practically on postpartum contraception use. In percentage, from 61 respondents of postpartum contraception user who thought that body image was important was only 27.9. It meant that the use of postpartum contraception caused respondents who did not use postpartum contraception because of fear of body changes; the percentage was more significant. It could be seen that the use of postpartum contraception will be successful if the respondent does not pay attention to the condition of his body image.

The percentage of respondents considered fertility was important and used contraception was relatively small, namely only 30.9% of the total of 97 respondents. These results indicated that respondents considered fertility important were more likely not to use postpartum contraception. OR results in fertility perception were 1.97, which meant that respondents who had fertility perceptions were not important would 1.97 times using postpartum contraception compared to those who considered fertility important. This indicated that though perceptions about fertility were important after childbirth but not used it as a guideline by postpartum mothers to determining the right time to adopt contraception.

Side effects of contraception also showed the same thing that respondents felt contraception was unsafe and used postpartum contraception less than those who did not use it. It meant there was an assumption that postpartum contraception would cause side effects. However, from the P value obtained there were significant differences between those who felt safe and unsafe of contraception. It was understandable that even though having side effects of postpartum contraception use, actually had benefits for women in the welfare of their families. The benefits included maintaining a distance of pregnancy, accompanying child development, having time to socialize with the environment and having space for married couples to create a harmonious family and help with the family economy.

Results of the analysis of external variables, namely age, education level, and occupation did not show a significant relationship to the use of postpartum contraception. There was a difference in the percentage of use of postpartum contraception based on age. The highest usage was at the most productive age of 25-34 years which was 43.8%. It was understandable that these ages were vulnerable ages to experience pregnancy. This was in line with the results of the 1991 IDHS secondary data study in Indonesia which stated that maternal age did not have a significant relationship with the choosing of postpartum contraception methods.

In this study, the level of education did not have a significant relationship with the use of postpartum contraception. In the context of contraception use in general, the level of education had a positive relationship with the use of modern contraception. The higher the level

of education of women, the more likely to use modern contraception. This result was also not by his research Romero-Gutierrez et al.[9] which showed a significant the relationship between the level of education and the use of postpartum contraception.

Based on the percentage of work, mothers who use postpartum contraception were greater than mothers who work. Analysis results showed insignificant results at working mothers on the use of postpartum contraception. This result was different from the results of the study from Panuntun[10] which suggested that there was a relationship between work and the choosing of hormonal contraception (injections). This was due to the support of family planning services that provided free or low-cost services so that low-income mothers got the same opportunity to choose nonhormonal.

The multivariable analysis results showed that only fertile perception variables affected the use of postpartum contraception after being controlled by the variable of body image perception, and the age range of respondents. These results indicated that contraceptive use was something inherent in people's lives about unknown fertility after giving birth. The use of contraception was a necessity for the community with a clear goal of spreading births and limiting the number of children.

### V. CONCLUSION

There was a significant relationship between perception of body image, a perception of fertility, side effects on the use of postpartum contraception; whereas age, the level of education and employment status were not significantly related to the use of postpartum contraception.

Fertility perception was a variable that influences significantly after being tested together with variables of body image perception, and age on the use of postpartum contraception.

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