

The effect of health promotion and maternal health education in the postpartum and newborn babies in Balikpapan City

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Abstract

Quality maternal and newborn services, is the most important period of delivery to save the maximum number of lives to prevent maternal and infant deaths. WHO describes the global visit of every pregnant woman and newborn to get quality services from the period of pregnancy, the postpartum period, according to Universal Health Quality Coverage in 2030. Maternal Health Promotion and Health Education Interventions for mothers by health workers during prenatal care prepare for childbirth, the postpartum period and healthy newborns, prevent disturbances during pregnancy, and postpartum. The purpose of the effect of the implementation of health promotion and health education for postpartum mothers and newborns.

Cross Sectional Design Research Analytical Observation. The design examines the independent variables of promotion and health education of pregnant women in trimesters I to III when pregnant women have ANC from Health Workers with the assessment variable, the state of welfare of mothers and newborns. Consecutive samples of 60 postpartum mothers at the "Maternity Love Mother" Hospital. Data collection using MCH handbook instrument, univariate frequency distribution data analysis, bivariate maneuver test and multivariate multiple linear regression. Health promotion affects newborns; Maternal education has an effect on newborns and postpartum mothers. Husband and family support has an effect on postpartum mothers. R Square 0.244 Variables can explain newborns the remaining 24% are independent of other variables. Postpartum mothers R Square 0.308 against six independent variables can explain postpartum mothers 31%. New Infant Prediction Test Determined by Maternal Health Promotion and Education; postpartum mothers are influenced by maternal education and support from husbands and families. Health promotion and maternal health education from pregnancy to puerperium have not been implemented properly. carry out promotion and education of maternal health in adolescents, prospective brides and first trimester pregnant women.

Keywords: Health Promotion, Maternal Health Education, Newborns and Postpartum Mothers

INTRODUCTION

WHO estimates that as many as 5.6 million women and infants die worldwide from complications experienced during pregnancy, during life or delivery and in the first month of life, including 303,000 maternal deaths, 2.7 million newborn deaths and maternal deaths. 2.6 million stillbirths. Maternal and infant deaths that occur mostly on the day of birth, with most of the causes that can occur. Research that up to 3 million people can demonstrate from maternal and infant mortality each year through coverage of high quality care provided during pregnancy, newborn care and care and when experiencing illness at additional surgical costs ¹.

Responding to the main areas of maternal and perinatal health programs and adolescents being the center of attention, technical assistance activities have been carried out by WHO through the Integrated Management of Pregnancy and Childbirth IMPAC which is a package of guidelines and tools as an effort to improve women's health status, as well as reduce maternal and newborn mortality. The many different factors that are critical to access to skilled care before, during and after pregnancy and delivery are discussed. It targets the health systems, health workers and health promotion that mothers need to know about ².

Data and Information on Indonesia Health Profile 2016 estimated the number of fertile ages 15-49 years 69,739,202 for East Kalimantan 78,486, estimated pregnant women 5,359,593 for East Kalimantan 82,224, estimated maternity mothers 5,111,204 and East Kalimantan 78,486 people, while the estimated number of live births is 4,867,813 for East Kalimantan 74,749, the estimate for 0 years is 4,770,440 for East Kalimantan 70,749, These data indicate the need for good care for both mother and newborn, the period around delivery is the most important to save the maximum number of lives and prevent stillbirth. Maternal health services are an indicator of maternal access to health services and the level of maternal compliance to check pregnancy, give birth and the postpartum period and take the baby to health workers ³.

The Infant Mortality Rate in Balikpapan City in 2016 was 78 cases the same as in 2015, the under-five mortality rate was 16 cases, an increase from 2015 and 9 cases of

maternal mortality. Research conducted by Asmuji and Idriyani Implementation of postnatal education for postpartum mothers with the FCMC approach according to perceptions that arise from postpartum mothers, but this has not been carried out by paying attention to information needs according to the stages of the postpartum period. This postnatal education is the right alternative for health workers to prepare postpartum mothers in adapting to carry out their developmental tasks. Maternal and neonatal health knowledge is felt to be very important for pregnant women and their families, so that mothers and their families can get information about ongoing pregnancy, danger signs during pregnancy, preparation for childbirth, schedule reminders for examination of pregnant women, postpartum, and infant immunization and care. children until they reach the age of 2 years ⁴⁻⁷.

I am interested in seeing the results of the implementation of health promotion and maternal health education in the city of Balikpapan which have been achieved through classes for pregnant women and explanations of the MCH book during ante natal visits and has been carried out by health workers so far, but still found maternal, infant, and under-five mortality rates. red line, malnutrition of infants and toddlers, as well as the proliferation of information on the discovery of shunting, after which the results of this research will be presented to become a data base for the city of Balikpapan; therefore, my research is "The effect of health promotion and maternal health education in the scope of postpartum and newborns in Balikpapan City". The purpose of this study was to determine the effect of implementing maternal health and health education in the scope of post partum and newborn promotion in Balikpapan City in 2018

MATERIAL AND METHODS

The type of this study is analytical observation with a cross sectional design for postpartum mothers and newborns, the analytical research design examines the independent variables of the implementation of health promotion and maternal health education obtained from health workers in pregnant women from trimester one to three during the visit of pregnant women Ante Natal care with the dependent variable on the welfare of post partum mothers and newborns in the world at one time. conducted a multivariate analysis after obtaining maternal health promotion and education when the mother gave birth and the baby was fit at birth which was influenced by several variables. The population in this study were all postpartum mothers who gave birth at the Maternity Hospital Sayang Ibu in Balikpapan City during January to July 2018. There are 6 independent variables, so the number of samples needed is 60 pregnant women. This research was conducted at the Maternity Hospital Sayang Ibu period September to October 2018. Data normality test Kolmogorov Smirnov test. Comparative Hypothesis Testing or two mean differences for parametric data using Analysis of variance (Anova) with normally distributed data is used for the relationship between the independent variable and the dependent variable. As well as Multianalysis of variance (Manova) to test differences in several measurement results or values of more than 2 dependent variables between 2 or more groups. Multivariate Analysis using Multiple Linear Regression is an analysis of the relationship between several independent variables with one dependent variable, the dependent variable must be numeric while the independent variable can be numeric and categorical using SPSS computer software⁸⁻⁹.

RESULTS

1. Data Normality Test Results

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Newborn baby	.294	60	.000	.769	60	.000
Post Partum Mother	.271	60	.000	.812	60	.000

a. Lilliefors Significance Correction

The results of the Normality test of the variable data for newborns and postpartum mothers on 60 respondents had a normal distribution where the two variables had a P value of 0.000.

2. Descriptive Results.

Table 1 Description of Post-partum Mothers in the Post-partum scope and Newborns at the Maternity Hospital in the Capital City of Balikpapan in 2018

	Frequency	Percent	Valid Percent	Cumulative Percent
Post Partum Mother No Problem	28	46.7	46.7	46.7
Troubled Postpartum Mother	32	53.3	53.3	100.0
Total	60	100.0	100.0	
Newborn No problem	26	43.3	43.3	43.3
Troubled Newborns	34	56.7	56.7	100.0
Total	60	100.0	100.0	
Post Partum Mothers Feel the help and support of the health workers	28	56.7	56.7	56.7
Post Partum Mothers don't feel the help and support of the health workers	32	43.3	43.3	100.0
Total	60	100.0	100.0	
Maternal age post partum <20 years	4	6.7	6.7	6.7
Post partum mother age 20 to 35 years	49	81.7	81.7	88.3
Post-partum maternal age > 35 years	7	11.7	11.7	100.0
Total	60	100.0	100.0	
Primi Para	12	20.0	20.0	20.0
Multipara	40	66.7	66.7	86.7
Grande Multipara	8	13.3	13.3	100.0
Total	60	100.0	100.0	
Post Partum mom gets Support	22	36.7	36.7	36.7
Post Partum mother Didn't get Endorsement	38	63.3	63.3	100.0
Total	60	100.0	100.0	
SD	4	6.7	6.7	6.7
SMP	22	36.7	36.7	43.3
SMA	33	55.0	55.0	98.3
PT	1	1.7	1.7	100.0
Total	60	100.0	100.0	

From the 60 respondents, 32 mothers had problems giving birth (53.3%). Newborns with problems 34 Infants (56.7%). Post Partum Mothers did not apply a healthy lifestyle 34 mothers (56.7 %). post partum mothers did not feel the help and support of health workers 32 mothers (43.3 %). maternal age <20 years 4 mothers (6.7%) and post partum maternal age > 35 years 7 mothers (11.7%). Primi Para 12 mothers (20.0%) and Grande Multipara 8 Mother (13.3%). Post partum mothers did not receive support, 38 mothers (63.3 %). The education of the mothers was 22 mothers in junior high school (36.7%) and 33 mothers in high school (55.0 %).

3. Bivariate Results

Table 2 Manova Test Results Independent Variables and Dependent Variables within the scope of post partum and newborns at the Maternity Hospital Sayang Capital City of Balikpapan in 2018

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Bayi Baru Lahir	14.672a	10	1.467	3.184	.003
	Ibu Post Partum	29.062b	10	2.906	4.198	.000
Intercept	Bayi Baru Lahir	278.606	1	278.606	604.649	.000
	Ibu Post Partum	350.631	1	350.631	506.494	.000
Promosi	Bayi Baru Lahir	2.212	1	2.212	4.800	.033
	Ibu Post Partum	.046	1	.046	.066	.798
Edumat	Bayi Baru Lahir	.067	1	.067	.145	.705
	Ibu Post Partum	.979	1	.979	1.414	.240
Usia	Bayi Baru Lahir	.583	2	.291	.632	.536
	Ibu Post Partum	.187	2	.093	.135	.874
Paritas	Bayi Baru Lahir	.700	2	.350	.760	.473
	Ibu Post Partum	.654	2	.327	.472	.626
Didk	Bayi Baru Lahir	6.910	3	2.303	4.999	.004
	Ibu Post Partum	22.114	3	7.371	10.648	.000
Dukung	Bayi Baru Lahir	.618	1	.618	1.342	.252
	Ibu Post Partum	2.789	1	2.789	4.028	.050
Error	Bayi Baru Lahir	22.578	49	.461		
	Ibu Post Partum	33.921	49	.692		

Total	Bayi Baru Lahir	2381.000	60			
	Ibu Post Partum	2989.000	60			
Corrected	Bayi Baru Lahir	37.250	59			
Total	Ibu Post Partum	62.983	59			
a. R Squared = .394 (Adjusted R Squared = .270)						
b. R Squared = .461 (Adjusted R Squared = .352)						

Based on the data above, Maternal Health Education Independent Variables, an counfounding variables Maternal age and maternal parity do not affect the welfare of postpartum mothers and newborns where the three variables show Sig. > 0.05. Health Promotion shows Sig < 0.05 for Newborns, Sig > 0.05 for Post Partum Mothers. Mother's education shows Sig. < 0.05 for Newborns and Postpartum Mothers. Support shows Sig. >0.05 for Newborns and < 0.05 for Postpartum Mothers.

4. Multivariate Results

In the multivariate variable modeling, correlation test was conducted but the variables of Health Promotion, Maternal Health Education and Husband and Family Support used t test. The results obtained R Square 0.244 shows that the six independent variables can explain the newborn variable 24% while the rest is explained by other variables. Meanwhile, for Mrs. Post partum R Square 0.308, it shows that the six independent variables can explain the variable for Mrs. Post partum 31% while the rest is explained by other variables. This study has two dependent variables so that the results will be explained one by one. Variables that have a p-value <0.25 are used as candidates to be included in the multivariate analysis, so if they are tested, they are as follows:

a. Newborn baby

Table 3. Results of Candidate Selection for Independent Variables and Variables Counfounding of Newborns at Maternity Hospital Dear Mother Balikpapan City 2018

Variable	<i>p- value</i>
Promosi Kesehatan	0.006
Edukasi Kesehatan Maternal	0.104
Usia Ibu	0.508
Paritas Ibu	0.780
Pendidikan Ibu	0.026
Dukungan Suami dan Keluarga	0.617

Candidate selection test results result p-value <0.25 a Promotion of Maternal Health and Education, other variables> 0.25, this model Variable has a p-value> 0.25 because substantially it is a very important factor affecting newborns, the four variables are still included in the multivariate analysis, then the Multiple Linear Regression analysis was carried out again so that the following results were obtained:

Table 4. Results of Multiple Linear Regression Test for Independent Variables and Counfounding Variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.122	1.009		6.067	.000
Health Promotion	-.621	.229	-.390	-2.705	.009
Maternal Health Education	.012	.225	.007	.053	.958
Post Partum Mother's Age	-.153	.230	-.083	-.665	.509
Post partum mother parity	-.027	.174	-.019	-.152	.880
Post Partum Mother's Education	.356	.155	.291	2.301	.025
Support for Mother Post Partum	.345	.213	.211	1.624	.110

a. Dependent Variable: Newborn

Multiple Linear Regression Test Results, Maternal Health Education Variable p-value 0.958 was excluded. Then the Multiple Linear Regression analysis was carried out again so that the following results were obtained:

Table 5. Results of Full Model Multiple Linear Regression Test between Variables Independent and Counfounding Variables

Modeling	I		II		III		IV		V	
	B	P-value								
Health Promotion	.621	.009	.615	.003	.608	.003	.605	.008	.528	.008
Maternal Health Education	.021	.958	-	-	-	-	-	-	-	-
Post Partum Mother's Age	.163	.509	.156	.486	.157	.477	-	-	-	-
Post partum Mother Parity	.027	.880	.026	.881	-	-	-	-	-	-
Post Partum Mother's Education	.356	.025	.354	.022	.355	.019	.356	.019	.299	.046
Support for Mother Post Partum	.345	.110	.344	.105	.344	.093	.344	0.072	-	--

Full model Newborns p-value the largest stage I variable Maternal Health Education p-value > 0.05. Furthermore, having the largest p-value removed, stage II Maternal Age, stage III Maternal Parity, stage IV Husband and Family Support were excluded, each stage changed the value of R Square from 0.244 to 0.237, B coefficient was not more than 10%, stage V Health and Education Promotion Mother's p-value < 0.05 then analyzed for Multiple Linear Regression, the results are as follows:

Table 6. Results of Multiple Linear Regression Prediction Test between Variables Independent and Confounding Variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.334	.509		12.453	.000
Promosi Kesehatan	-.528	.191	-.332	-2.762	.008
Pendidikan Ibu Post Partum	.299	.147	.245	2.037	.046

a. Dependent Variable: Newborn

From the data above for newborns, the latest model, namely Health Promotion and Mother's Education, can predict the condition of the baby.

b. Post Partum Mother

Based on the results of the bivariate analysis in the previous section, there are six variables that are not included in the next step due to the p-value > 0.25, namely the variable Health Promotion, Maternal Health Education, Maternal Age, Maternal Parity and Husband and Family Support, then the Maternal Education variable has a p-value < 0.25 tested for the incidence of Newborns and Post Partum Mothers are as follows:

Table 7. Results of Candidate Selection for Independent Variables and Variables Confounding

Variable	p-value
Health Promotion	0.173
Maternal Health Education	0.061
Post Partum Mother's Age	0.783
Post partum mother parity	0.841
Post Partum Mother's Education	0.000
Support for Mother Post Partum	0.233

The results of the candidate selection test for post partum mothers obtained results with p-value < 0.25 being Education, other variables > 0.25, in this modeling Variables Health Promotion, Maternal Health Education, Maternal Age, Maternal Parity and Husband and Family Support the variables have p-value > 0.25 so it cannot be included in the multivariate analysis, but because these five variables are substantially important factors affecting postpartum mothers, the five variables will still be included in the multivariate analysis that affects postpartum mothers.

Thus, all the independent variables of the six variables were entered into the next step of the multivariate analysis process, then the Multiple Linear Regression analysis was carried out again so that the following results were obtained:

Table 8. Results of Multiple Linear Regression Test for Independent Variables and Counfounding Variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.738	1.255		3.775	.000
Health Promotion	-.288	.285	-.140	-1.011	.317
Maternal Health Education	-.182	.280	-.089	-.652	.517
Post Partum Mother's Age	-.083	.286	-.034	-.288	.774
Post partum mother parity	.094	.217	.053	.435	.665
Post Partum Mother's Education	.757	.192	.477	3.938	.000
Support for Mother Post Partum	.663	.265	.312	2.508	.015

a. Dependent Variable: Post partum mother

Multiple Linear Regression Test Results, Maternal age variable p-value 0.774 was excluded. Then the Multiple Linear Regression analysis was carried out again so that the following results were obtained

Table 9. Results of Full Model Multiple Linear Regression Test between Variables Independent and Counfounding Variables

Modeling	I		II		III		IV		V	
	B	P value	B	P-value	B	P-value	B	P-value	B	P-value
Health Promotion	.288	.317	.297	.003	.326	.234	.399	.008	.-	.-
Maternal Health Education	.182	.517	.164	.546	.157	.561	-	-	-	-
Post Partum Mother's Age	.083	.774	-	-	-	-	-	-	-	-
Post partum mother parity	.094	.665	.090	.676	-	-	-	-	-	-
Post Partum Mother's Education	.757	.000	.760	.000	.755	.000	.779	.000	.802	.000
Support for Mother Post Partum	.663	.015	.676	.102	.659	.012	.676	.009	.584	.022

It can be seen that in the Full model of Post partum Mothers, the largest p-value in stage I is the Maternal Age variable, p-value > 0.05. Furthermore, the one with the largest p-value is removed, stage II Maternal Parity, stage III Maternal Health Education, stage IV Health Promotion variables that are issued, each stage changes the value of R Square from 0.308 to 0.300 and the coefficient of each stage is not more than 10%, at stage V of the variables of Mother's Education and Husband and Family Support p-value <0.05 then the Multiple Linear Regression analysis was carried out again so that the following results were obtained:

Table 10. Results of Multiple Linear Regression Prediction Test between Variables Independent and Counfounding Variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.038	.691		5.846	.000
Pendidikan Ibu Post Partum	.802	.185	.505	4.325	.000
Dukungan pada Ibu Post Partum	.584	.248	.275	2.352	.022

a. Dependent Variable: Post partum mother

From the data above for post partum mothers, the latest modeling, namely maternal education and husband and family support, can predict the condition of pregnant women.

5. Assumption Test.

In order for the line equation used when predicting to produce valid numbers, it is necessary to test Assumptions to fulfill the assumptions that have become requirements in the multiple linear regression test, as follows

a. Assumption of Existence

In newborns for the value of the independent variables namely Health Promotion, Maternal Health Education, Mother's Age, Mother's Parity, Mother's Education and Husband and Family Support with Newborn Dependent Variables, the analysis of the

description of Residual variables from the model shows Mean 0.000 and St Deviation 0.690 so that this assumption is met. Post partum mother shows Mean 0.000 and St Deviation 0.859 so that this assumption is fulfilled.

b. Assumption of Independence

A condition where the dependent values are independent of each other, using the Durbin Watson test, are met if the values are 2 to +2. In Newborns it shows 2.106 and Post partum mothers 2.157 so that the assumption is fulfilled.

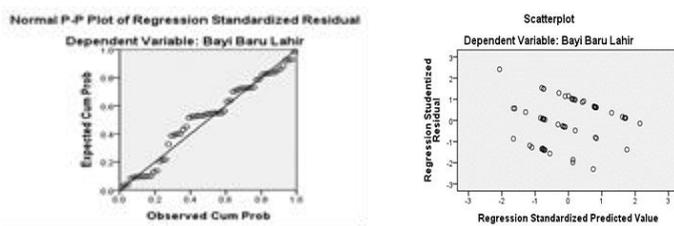
c. Linearity Assumption

In this test, the dependent mean value for the combination of all independent variables, looking at the location of the line or linear plane formed from the regression equation, is known from the ANOVA test, showing a p value of 0.003 meeting the Linearity Assumption.

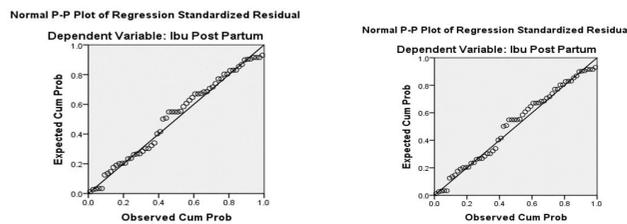
d. Homoscedascity Assumption

This assumption is fulfilled can be seen in the graph below.

1) Newborn Baby



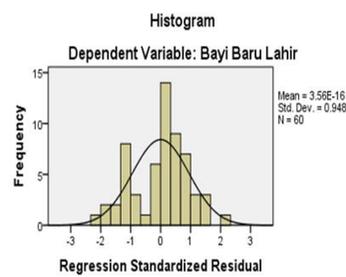
2) Post partum mother



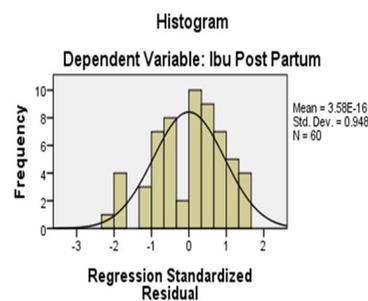
e. Normality Assumption

Assumptions in this section are met can be seen in the graph below

1). Newborn baby



2) Post partum mother



f. Diagnostic Multicollinearity

This assumption test detects collinearity among independent variables, because between these variables there should not be an equally strong correlation as seen from the VIF value if it is more than 10 then collinearity has occurred, the two dependent variables are

1) Newborn Baby.

Table 11. The results of this assumption test detect collinearity between the Independent Variables and Counfounding Variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	6.122	1.009		6.067	.000		
Health Promotion	-.621	.229	-.390	-2.705	.009	.685	1.460
Maternal Health Education	.012	.225	.007	.053	.958	.704	1.420
Post Partum Mother's Age	-.153	.230	-.083	-.665	.509	.924	1.082
Post partum mother parity	-.027	.174	-.019	-.152	.880	.889	1.125
Post Partum Mother's Education	.356	.155	.291	2.301	.025	.891	1.123
Support for Mother Post Partum	.345	.213	.211	1.624	.110	.843	1.186

a. Dependent Variable: Newborn

There is no strong correlation where the six variables have a VIF value below 10.

2) Post Partum Mother

Table 12. The results of this assumption test detect collinearity between the Independent Variables and Counfounding Variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	4.738	1.255		3.775	.000		
Health Promotion	-.288	.285	-.140	-1.011	.317	.685	1.460
Maternal Health Education	-.182	.280	-.089	-.652	.517	.704	1.420
Post Partum Mother's Age	-.083	.286	-.034	-.288	.774	.924	1.082
Post partum mother parity	.094	.217	.053	.435	.665	.889	1.125
Post Partum Mother's Education	.757	.192	.477	3.938	.000	.891	1.123
Support for Mother Post Partum	.663	.265	.312	2.508	.015	.843	1.186

a. Dependent Variable: Post partum mother

There is no strong correlation where the six variables have a VIF value below

DISCUSSION

The results of the study showed that mothers who gave birth to problems or were not prosperous 32 mothers (53.3%) and problematic newborns 34 infants (56.7%) from 60 post partum mothers, one mother checked herself since she was pregnant to the doctor, eight mothers only attended classes for pregnant women, so many mothers who do not receive health promotion or maternal health education provided by health workers.

The effect of the implementation of health promotion in the scope of post partum and newborns in Balikpapan City. Health Promotion shows an effect for Newborns, but has no effect for Post Partum Mothers. Health Promotion is not just a lifestyle change, but is related to changing the environment which is expected to be more supportive in making healthy decisions. Changes in the lifestyle of pregnant women can create a supportive environment, change behavior, and increase awareness. The Ottawa Charter includes strategies to increase people's control over their own health^{10,11}.

The effect of implementing Maternal health education in the scope of post partum and newborns in Balikpapan City. Knowledge of maternal and neonatal health is very important for pregnant women and their families. The information provided by health workers is often not carried out properly or applied properly, it can be caused because the mother does not understand or is not in accordance with the needs and conditions when

the mother comes to the health service. This is because the mother does not understand or does not comply with the needs and conditions when the mother comes to the health service. The cause of the occurrence could be the result of one-way communication between health workers and mothers and mothers who did not receive sufficient support to apply the information obtained^{12,13}.

It is evident from the fact that there are still many postpartum mothers who say they do not feel the assistance or support of health workers, but from the results of this study, maternal health education does not affect postpartum mothers or newborns in a prosperous condition. It can be seen from the post partum mothers during pregnancy who had a pregnancy checkup above four times 50 post partum mothers but had an arm circumference of 23 cm as many as 13 mothers with primiparous 2 mothers and 24 -25 cm there were 8 mothers who were primiparous three mothers. only 8 mothers took part in the class for pregnant women, where 2 were junior high school teachers and 6 were high school mothers. All post partum mothers did not attend the toddler class. In these two activities, a lot of health promotion and maternal health education was given to mothers during pregnancy and their husbands or accompanying families. All post partum mothers have MCH Handbook but not all mothers know the contents of the book. The explanation of the contents of the book is given in stages to pregnant women during visits to the Public Health Center which organizes the National program for the welfare of pregnant women and their unborn babies¹⁴⁻¹⁶.

The influence of maternal parity during the implementation of health promotion and maternal health education in the scope of post partum and newborns in the city of Balikpapan. Parity more than equal to four times, has a risk of 5.3 times to give birth to LBW compared to subjects with parity less than four times. This study parity does not affect and cannot predict both mother and baby, eight 8 grande multiparous mothers and twelve primi-para mothers and the most multiparous mothers who describe mothers who have given birth to a fetus can survive, if the distance between pregnancies is less than 2 years, then the mother will be weak due to frequent pregnancy, childbirth, and breastfeeding, so that it often results in various problems such as mothers suffering from anemia, malnutrition, and high parity will increase the risk of bleeding after giving birth which endangers the mother's life. Of the 32 postpartum mothers who have problems and are not prosperous, most of them are due to anemia until the mother gets blood transfusions, and other causes that cause postpartum mothers and newborns to be unhealthy¹⁷⁻¹⁹.

The influence of husband and family support during the implementation of health promotion and maternal health education in the scope of post partum and newborns in Balikpapan City. Pregnancy is a major transition period in a woman's life. Changes that occur include physical as well as emotional, so that the cohesiveness of husband and wife is needed not only during the pregnancy program, but continues in every phase of pregnancy until the birth of the baby. Husbands always accompany controls to the doctor and help make decisions during pregnancy, provide encouragement, support so that the wife is calm, maintain good communication and must also show affection by giving hugs and holding hands²⁰⁻²².

Education is a process of learning the knowledge, skills and habits of a group of people that are passed down from one generation to the next through teaching, training and others. Non-formal education, knowledge is obtained from everyday life and various experiences either experienced or learned from others. However, the presence of post

partum mothers and problematic or poor newborns shows that health promotion and maternal health education are very necessary to obtain good results for post partum mothers as well as newborns. According to the Indonesian Dictionary, education is the process of changing the attitudes and behavior of a person or group of people in an effort to mature humans through teaching and training efforts²¹.

Mother's Education and Husband and Family Support that can predict the condition of Pregnant Women. The results of the study 69% explained that there were many factors that caused mothers not to achieve skilled care during pregnancy, birth until after birth, including the quality and availability of services for pregnant women. Not all mothers felt the provision of health promotion and maternal health education by health workers and did not attend classes for pregnant women and classes for toddlers where at that time a lot of health promotion and maternal health education was given²³.

When maternal health education and health promotion are provided by health workers, it is necessary to pay attention to the scope of health promotion including the dimensions of health service aspects, and the dimensions of the setting or place of implementation of health promotion. In addition, health workers need to make a follow-up plan with the mother, husband and family as well as evaluate the implementation of the follow-up plan at the next meeting²².

The husband's role in providing psychological support when his wife is pregnant is important, in addition to formal and informal maternal education, supporting mothers in the process of pregnancy, delivery to birth can help pregnant women prepare for the arrival of their baby, but cannot reach such as promotion and maternal health education as prescribed by a health professional. Mothers can experience stress levels triggering stimulation of uterine contractions at risk of miscarriage, increasing blood pressure, triggering factors for preeclampsia. Husband's support helps the mother and tends to reduce stress, affecting the health of the fetus in the womb which is sensitive to stress. In addition, husbands need support, especially costs during childbirth. Cost is always a problem for every pregnant woman until post partum, it is necessary to have health insurance to prepare for childbirth^{19,23}.

CONCLUSION

The implementation of Maternal health education in the scope of post partum and newborn in the city of Balikpapan has not been felt by the mother during pregnancy, all post partum mothers have the MCH Handbook but not all mothers and their families know the contents of the book. Maternal age does not affect during the implementation of health promotion and Maternal health education in the scope of post partum and newborns in Balikpapan City. The role of the husband in providing psychological support when his wife is pregnant is important. Husband and family support helps mothers and tends to reduce stress, affecting the health of the fetus in the womb which is sensitive to stress. Mother's education has an influence and can predict the standard of living of babies and mothers by providing health promotion and education during pregnancy to the puerperium.

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