RESEARCH ARTICLE

DETERMINANTS OF UTILIZATION OF POSTPARTUM HEALTH SERVICES AT THE WORKING AREA OF PUBLIC HEALTH CENTER MEDAN BELAWAN IN MEDAN BELAWAN SUBDISTRICT

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ABSTRACT

Background: Data from the Medan District Health Office in 2015, that the coverage of assistance during delivery by medical staff was 82.38%, postpartum health services was 80.80%, a woman postnatal received vitamin A was 80.80%. **Objective:** to find out the determinants of utilization of postpartum health services. **Methods:** The research was an quantitative research with explanatory survey design with cross sectional approach. It was conducted in the working area of Medan Belawan Public Health Center, Medan Belawan Subdistrict. The study population was all mothers who passed the postpartum period and had biological children aged 6-9 years who resided in the working area of Medan Belawan Public Health Center in 2015 as many as 1,385 people. The study sample was a portion of a population as many as 102 people. Sampling using purposive sampling technique. Data analysis used univariate analysis, and bivariate analysis with chi-square test. **Results:** the determinants of utilization of postpartum health services in the working area of Medan Belawan Public Health Center, Medan Belawan Subdistrict, were knowledge (p=0.032), ownership of Mother and Child Health Books (p=0.026), information source (p=0.003), and maternal conditions (p=0.001). The variable maternal condition is the most contributing and most dominant variable in determining the utilization of postpartum health services which has an Exp (B) value of 26.89. **Conclusion:** It is recommended to the Medan City Health Office and medical workers to improve socialization about the use of postpartum health services, train and guide cadres in the utilization of postpartum health services for postpartum mothers, fill out and check and inform about maternal and child health books, and provide information about everything regarding utilization of postpartum health services and reminding mothers of the time of their next visit.

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INTRODUCTION

Maternal and child health are an important basis in the development of public health, where women are pregnant and give birth to children. But the facts show that hundreds of thousands of women around the world continue related to pregnancy, childbirth and childbirth that should have been prevented. One of the biggest causes is social injustice in the present. In recent years it has been widely recognized and accepted that maternal deaths that should have been prevented are a violation of women's human rights. Around 529,000 women are estimated to die each year due to causes related to pregnancy / childbirth, and 99% of them this death occurs in developing countries around the world (Kemekes RI, 2008). The increase in maternal mortality according to the Indonesian Demographic and Health Survey (IDHS) in Indonesia in 2012

to 359 per 100,000 live births from 307 per 100,000 live births in the 2007 Indonesian Demographic and Health Survey was a very high problem. Indonesia as a large country with the fourth largest population after India, China and the USA (United State of America) is still very lagging behind in health sector development, as can be seen from the Human Development Index (HDI) ranking among countries in the world, namely Malaysia (64), Thailand (103) and Singapore (26), while Indonesia ranks 121 out of 187 countries in the world in 2011 (Badan Perencanaan Pembangunan Nasional, 2011). The main causes of maternal death in the world are bleeding (mostly postpartum hemorrhage), infection (mostly after giving birth), hypertensive disorders in pregnancy (eclampsia) and disorders during labor (WHO, 2012). Based on the results of further analysis of the 2010 population census, the three causes of maternal death were highest in Indonesia, namely hypertension

in pregnancy, postpartum complications and postpartum hemorrhage (Kemenkes, 2013). This data is also reinforced by the 2014 Maternal and Child Health Report in Indonesia where there were three main causes of maternal death, namely bleeding, hypertension in pregnancy, and infection (Kemekes RI, 2014). The period of puerperium at risk of postpartum complications mainly occurs in the first 3 days after childbirth and is at risk for the cause of high mortality can occur on the first day of the second day after giving birth. As many as 45% of deaths during puerperium occur in the first 24 hours after giving birth and as many as 66% occur in the first week after giving birth (Lutfiyah, 2014). Care for the puerperium is needed in this period because it is a critical period for both the mother and the baby (Wiknjosastro, 2008). Based on these situations and phenomena, in order to improve maternal and infant health it is necessary to conduct research on how determinants of utilization of postpartum health services in the Medan Belawan Health Center Medan Belawan District.

MATERIALS AND METHODS

Study design: This type of research was quantitative research with explanatory survey design method cross sectional. This study was conducted from October 2015 to June 2016.

Research subject: 102 respondents who volunteered to participate in this study were selected by purposive sampling. Inclusion criteria included: 1) mothers who are willing to become respondents, 2) mothers who have biological children aged 6-9 years and, 3) addresses of mothers living in the work area of Medan Belawan Health Center.

Data collection: Primary data, namely data collected in the study through interviews with mothers in the Medan Belawan Health Center Medan Belawan District work area based on a questionnaire. Secondary data, namely data that supports primary data obtained from the Medan City Health Office in 2015 and Medan Belawan Health Center, Medan Belawan District, are about the general description of Health Center and postpartum mothers' data/reports in the Medan Belawan Health Center Medan Belawan District work area.

Data analysis: Bivariate analysis to find out and test the relationship of the independent variable with the dependent variable by using the Chi Square test (X2), namely by connecting between the independent variables and the dependent variable. The results of bivariate test analysis if the value of p value is less than 0.05, the calculation results are statistically significant, if P value is more than or equal to 0.05 then the results of statistical calculations are not meaningful.

RESULTS

Table 1 showed that the majority of respondents in the low risk category (age 20-35 years) were 82 people (80.4%), high risk (age <20 years and> 35 years) as many as 20 people (19.6%). The results of the study showed that the respondents' education, most of the respondents had a high category of education (diploma/undergraduate) as many as 64 people (62.7%), low education (elementary/middle/high school) as many as 38 people (37.3%). The results showed that the majority of respondents in the low risk category (≤ 2 people) were 60 people (58.8%) and high risk (≥ 2 people) as many as 42 people (41.2%). The results showed that the work of respondents, most of the respondents did not work as many as

62 people (60.8%), who worked as many as 40 people (39.2%). The results of the calculation of the knowledge category show that most of the respondents in the good category were 64 people (62.7%), who had less knowledge as many as 38 people (37.3%). The results of the analysis of the relationship between maternal age and the use of postpartum health services showed that of 82 mothers with low risk most of them used puerperal health services as many as 45 people (44.1%) and those who did not use puerperal health services as many as 37 people (36.3 %). Meanwhile, of the 20 high-risk mothers, most of them took part in 12 post-partum health services (11.8%) and 8 people did not take part in childbirth health services (7.8%). The results of the chi-square statistical test obtained X2 = 0.171, 95% CI OR = 0.811 (0.300-2,192) with a p value = 0.803> 0.05 which indicates that there is no relationship between the age of the mother and the utilization of postpartum health services. The results of the analysis of the relationship between maternal education and the utilization of postpartum health services showed that of the 64 mothers with higher education most of them used puerperal health services as many as 35 people (34.3%), and those who did not use postnatal health services as many as 29 (28 4%). Meanwhile, as many as 38 people with low education were 22 people (21.6%) who utilized postpartum health services and those who did not use childbirth health services as many as 16 people (15.7%). The results of the chi-square statistical test obtained X2 = 0.099, 95% CI OR = 0.8778 (0.390-1.974) with a p value = 0.838> 0.05 which indicates that there is no relationship between maternal education and utilization of postpartum health services.

The results of the analysis of the relationship between maternal parity and the utilization of postpartum health services showed that as many as 60 people with low parity mostly used puerperal health services as many as 31 people (30.4%) and those who did not use as many as 29 people (28.4%). Meanwhile, of the 42 high-parity mothers, most of them used puerperal health services as many as 26 people (25.5%) and those who did not use childbirth health services as many as 16 people (15.7%). The results of the chi-square statistical test obtained X2 = 1.050, 95% CI OR = 0.658 (0.295-1.468) with a p value = 0.320> 0.05 which indicates that there is no relationship between maternal parity and the utilization of postpartum health services. The results of the analysis of the relationship between the work of mothers and the use of postpartum health services showed that of the 62 mothers who did not work, most of them utilized 32 post-partum health services (31.4%) and 30 people who did not use childbirth health services (29.4%) Meanwhile, of the 40 working mothers, most of them used puerperal health services as many as 25 people (24.5%), and those who did not use puerperal health services were 15 people (14.7%). The results of the chi-square statistical test obtained X2 = 1.169, 95% CI OR = 0.640 (0.284-1.440) with a p value = 0.312> 0.05 which indicates that there is no relationship between the work of mothers and the utilization of postnatal health services. The results of the analysis of the relationship between maternal knowledge and the utilization of postpartum health services showed that of 64 well-informed mothers most of them used 50 part-time puerperal health services (49.0%), and 14 people did not use postnatal health services (13 7%). While, of the 38 knowledgeable mothers, most of them did not use the puerperal health service as many as 31 people (30.4%) and those who utilized postnatal health services were 7 people (6.9%).

Table 1. Distribution of Respondents Based on Predisposing Factors in the Medan Belawan Health Center Working Area in Medan Belawan District in 2016

Predisposing factors	Amount	%
Age (Years)		
Low risk (20-35 years)	82	80,4
High risk (<20 years and >35 years)	20	19,6
Education		
Low education	64	62,7
High education	38	37,3
Parity		
Low parity	60	58,8
High parity	42	41,2
Work		
Not work	62	60,8
Work	40	39,2
Knowledge		
Good	64	62,7
Less	38	37,3

Table 2. Cross Table Relationship of Predisposing Factors with Utilization of Postpartum Health Services in the Medan Belawan Health Center Working Area in Medan Belawan District 2016 (n = 102)

Predisposing factors	Utilization of Postpartum Health Services				Amount		*p*	X^2	95% CI OR
	Not utilize		Utilize						
	n	%	n	%	n	%			
Age									0,811
High risk	8	7,8	12	11,8	20	19,6	0,803	0,171	(0,300-2,192)
Low risk	37	36,3	45	44,1	82	80,4			
Education									0,878
Low	16	15,7	22	21,6	38	37,3	0,838	0,099	(0,390-1,974)
High	29	28,4	35	34,3	64	62,7			
Parity									0,658
Low	29	28,4	31	30,4	60	58,8	0,320	1,050	(0,295-1,468)
High	16	15,7	26	25,5	42	41,2			
Work									
Not work	30	29,4	32	31,4	62	60,8	0,312	1,169	0,640 (0,284-
Work	15	14,7	25	24,5	40	39,2			1,440)
Knowledge									15,816
Less	31	30,4	7	6,9	38	37,3	0,001	34,473	(5,750-43,507)
Good	14	13,7	50	49,0	64	62,7			

The results of the chi-square statistical test obtained X2 = 34,473, 95% CI OR = 15,816 (5,750-43,507) with a value of p = 0,001 <0,05 which indicates that there is a significant relationship between maternal knowledge and utilization of postpartum health services.

DISCUSSION

The results of this study indicate that the majority of respondents in the low risk category (age 20-35 years) were 82 people (80.4%) and high risk (age <20 years and> 35 years) as many as 20 people (19.6%).) The results of bivariate analysis using the chi-square statistical test obtained X2 = 0.171, 95% CI OR = 0.811 (0.300-2.192) with a p value = 0.803> 0.05 which indicates that there is no relationship between maternal age and utilization of postpartum health services. This research is in line with the research conducted by Jayanthi (2014) in primipara mothers who stated that respondents aged 20-35 years did not carry out postnatal care at most because the thought that their pregnancies at ideal age would not cause significant risks so they assumed that postnatal care doesn't really matter. The results of this study indicate that the majority of respondents were educated in a high category (diploma/undergraduate) as many as 64 people (62.7%), low education (elementary/middle/high school) as many as 38 people (37.3%).

The results of bivariate analysis using the chi-square statistical test obtained X2 = 0.099, 95% CI OR = 0.8778 (0.390-1.974) with a p value = 0.838> 0.05 which indicates that there is no relationship between maternal education and utilization of health services postpartum. This research is in line with research conducted by Akhenan (2012) said that there is no relationship between education and the implementation of postnatal care. However, from the results of the study, it was found that mothers with elementary school education tended to carry out postnatal care compared to respondents with junior and high school education. This is probably because mothers who have junior and senior high school education feel more aware of their body condition. The results of this study indicate that the majority of respondents in the low risk category (≤ 2 people) were 60 people (58.8%) and high risk ((2 people) as many as 42 people (41.2%). The results of bivariate analysis using the chi-square statistical test obtained X2 = 1.050, 95% CI OR = 0.658 (0.295-1.468) with p = 0.320> 0.05 which indicates that there is no relationship between maternal parity and utilization of postpartum health services. This research is in line with research conducted by Lutfiyah (2014) in rural areas of Indonesia which suggested that there was no significant relationship between the order of birth of children and the use of postpartum services in women of childbearing age.

The results showed that the majority of respondents did not work as many as 62 people (60.8%) and those who worked as many as 40 people (39.2%). The results of bivariate analysis using the chi-square statistical test obtained X2 = 1,169, 95% CI OR = 0,640 (0,284-1,440) with p value = 0,312> 0,05 which indicates that there is no relationship between the work of mothers and the utilization of postpartum health services. This research is in line with the research conducted by Jayanthi (2014) in Jeneponto suggesting that the work of mothers is not related to the use of postnatal care. However, the results of this study contradict the research conducted by Khanal, et al (2014) and Sharma, et al. (2014), where the level of employment of mothers and husbands was significantly associated with the use of postpartum services. The results showed that most of the respondents in the good category were 64 people (62.7%) and those with less knowledge were 38 people (37.3%). The results of bivariate analysis using the chi-square statistical test obtained X2 = 34,473, 95% CI OR = 15,816 (5,750-43,507) with a value of p = 0,001 <0,05 which indicates that there is a significant relationship between maternal knowledge and utilization of postpartum health services. This study is also supported by research conducted by Sharma, et al. (2014) which suggests that knowledge is one of the factors that influence women to use childbirth services. Women who have knowledge of pregnancy complications are significantly more likely to take advantage of puerperal services (Sharma, 2014). Lutfiyah (2014) in his research in Rural Areas of Indonesia also obtained results that maternal knowledge was related to the utilization of postpartum health services. So it is clear that the better the level of knowledge of the mother, the better the mother in utilizing postpartum health services.

Conclusion

Utilization of postpartum health services in the work area of Medan Belawan Health Center Medan Belawan District in 2016 with the utilization category as many as 57 people (55.9%), while those who did not utilize the puerperal health services were 45 people (44.1%). The factor that needs, namely the variable condition of the mother is the most contributing and most dominant variable in determining the utilization of postpartum health services in the working area of Medan Belawan Health Center, Medan Belawan District in 2016. Predisposing factors that influence the utilization of postpartum health services in the work area of Medan Belawan

Public Health Center in Medan Belawan District in 2016 are knowledge (p = 0.032) with Exp (B) value of 0.150, which means that mothers who have good knowledge compared to mothers who have less knowledge regarding postpartum health services will have a tendency to utilize postpartum health services, which is equal to 0.15 times.

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