Factor of Socio Demography and Obstetric that Influence the Timeliness of Early Breastfeeding in Tegal Regency

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ABSTRACT

Background: There are more than 10 million infants die world wide every year, 45 % of them are caused by malnutrition either directly or indirectly. Provision of mother's breast milk within the first hour of birth may reduce infant mortality in the first month by 22%. However, breastfeeding in the first hour of birth only reaches 43% of the total number birth. In South Asia the achievement of early initiation of breastfeeding is only 41% of the total births within the first hours of birth, whereas in Indonesia is only 34.5%. The study aimed to discover the factors that influence the timeliness of early initiation of breastfeeding in Tegal Regency.
Subjects and Method: The type of the study was analytic observational with cross sectional approach in Tegal Regency that consisted of Pagiyanten Community Health Center, Pagerbarang Community Health Center, Bumijawa Community Health Center, Jatinegara Community Health Center and RSUD dr. Soeselo. The study was conducted in February up to March 2017 by using 121 samples of post partum mother, and the sampling technique used was exhaustive sampling method. The dependent variable in the study was time of early breastfeeding, whereas independent variables included maternal education, maternal occupation, family income, maternal knowledge, parity, ANC history and health workers' support. The data was measured by a set of questionnaires which was employed as the guidelines of interview and the result of the study was analyzed by using multiple logistic regression.
Results: Factors that influenced the timeliness of early initiation of breastfeeding were maternal education ≥Senior High School (OR=3.90; 95% CI= 1.14 to 13.37; p=0.030), maternal occupation (OR= 7.93; 95% CI=1.68 to 37.52; p=0.009), ANC history ≥ 4 times (OR=3.48; 95% CI =0.82 to 14.81; p=0.092), and strong health workers' support (OR=12.58; 95% CI= 4.30 to 36.77; p<0.001) with the value of Negelkerker R square was 0.387.
Conclusion: Factors that influenced the timeliness of early breastfeeding initiation included education, occupation, ANC history, and health workers' support.

Keywords: Socio demography, obstetric factor, early breastfeeding initiation.

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BACKGROUND

Neonatal nutrition (early breastfeeding initiation within the first hour of birth and exclusive breastfeeding) is the primary intervention for the survival of newborns during perinatal period. Early initiation of breastfeeding is significantly related to the decrease of all causes of neonatal mortality such as low birth weight and neonatal infection (Khanal *et al*, 2015).

Early initiation of breastfeeding is considered as able to stimulate immune-globulin and lymphocytes found in colostrums to prevent pathogen infection during the maturation of normal intestine. Early initiation of breastfeeding also may prevent

hypothermia on newborns (Khanal et al., 2015).

In South Asia the accomplishment of early initiation of breastfeeding is only 41% from total births within the first hour of birth. Some countries in South Asia have the worst practice of early initiation of breastfeeding in the world, those countries include Pakistan 29% of the total birth, 41% of infants in India, 47% infants in Bangladesh dan 45% infants in Nepal. In Indonesia based on Riskesdas 2013 it is seen that the majority breastfeeding initiation process occur within 1-6 hours of birth, which is 35.2% and less than 1 hour (early initiation of breastfeeding) is 34.5% (Sharma and Byrne, 2016; Kemenkes RI, 2014).

Early Initiation of Breastfeeding within the first hour of birth is the easiest breastfeeding effort and the most commonly successful, since during the first hour of birth, mother has been physically and psychologically ready to breastfeed, supported by information/ counseling on breastfeeding and support from healthcare service providers (health workers) (Adugna, 2014).

According to Liben and Yesuf (2016) parity and education may influence the timeliness of early breastfeeding. In addition, there are also antenatal care, knowledge, midwife's procedure, and midwife's support (Bimerew *et al*, 2016; Hidayat, 2012; Sirajuddin *et al*, 2013).

In Tegal Regency the implementation data of early initiation of breastfeeding was just reported in 2016, the previous year was not reported. The result of quarterly report showed not all infants get breast milk through early initiation of breastfeeding within the first hour of birth such as in Slawi Community Health Center was only 50.9% (481 infants get Early Initiation of Breastfeeding out of 945 births) (Dinkes Tegal, 2016).

Another fact in Tegal regency showed that there were patients who did not know yet the benefits of early initiation of breastfeeding and considered the first breast milk to come out (colostrums), which is yellow in color, is dirty and should be disposed. Meanwhile in RSUD dr. Soesel0, the implementation of early initiation of breastfeeding was not yet possible to be executed on all patients, since there were some cases where mothers and infants could not conduct rooming in. In addition, in some cases the implementation of early initiation of breastfeeding was also conducted after the examination/ treatment on infants had completed.

The study aimed to know the factor of socio demography and obstetric that influenced the timeliness of early initiation of breastfeeding, which consisted of education, occupation, family income, maternal knowledge, parity, history of antenatal care and health workers' support.

SUBJECTS AND METHOD

The design used in the study was non experimental quantitative study by using analytic observational design with cross sectional study that was the study design by simultaneously measuring and observing (at the same time) between factor of risk/ exposure and disease.

The subjects of the study were post partum mother who were still in the childbirth facility in Community Health Center that owned Basic Emergency Obstetric Care (BEOC) namely Bumijawa, Jatinegara, Pagerbarang, and Pagiyanten Community Health Center, and RSUD dr Soeselo, Tegal Regency.

The study was conducted in February up to March 2017 with the number of samples referred to Hair *et al* (1998) which

was cited by Murti (2013) that states sample of multivariate analysis is recommended between 15 up to 20 subjects for each independent variables, so that the estimated samples of the study was 105 up to 140 respondents

The sampling technique used was exhausted sampling by considering inclusion and exclusion criteria. The inclusion criteria was mothers who underwent vaginal delivery, whereas the exclusion criteria consisted of mothers who underwent cesarean delivery, mother with hemorrhage, infants who were born were having asphyxia and mothers who gave birth not in the location of the study, however because of certain things the puerperium was spent in the location of the study.

Dependent variable of the study was time of early breastfeeding, whereas the independent variables included education, occupation, family income, maternal knowledge, parity, history of antenatal, health workers' support.

The instrument of the study was questionnaires. The questionnaires were used to obtain primary data, in addition to questionnaires, primary data were also obtained from the result of observation during the process of early breasfeeding. Questionnaires of the study were used as the guidelines for interview. The interview was conducted after mothers were transferred to puerperium room.

The operational definition of the study consisted of socio demography factors that included education, education was the last level of formal education respondents had ever gone through adalah with categorical scale and the parameter was 0=<high school, 1=≥high school; Occupation variable, occupation was one's activity to get income, the categorical data scale was 0=employed, 1=unemployed; income variable, income was earning which was obtained by respondent within a whole month, the categorical scale was, 0<Rp. 1.487.000, 1≥ Rp. 1.487.000; knowledge variable, knowledge was respondents' knowledge about the practice/ implementation of early initiation of breastfeeding and its benefits, the scale used was continuous transformed into categorical for the sake of the study, 0= insufficient<mean, 1=good ≥ mean;

In addition to definition for the above variables the other operational definition included parity variable, parity is the number of children a mother had ever given birth to with categorical scale, 0= multipara, 1= primipara; history of ANC variable, history of antenatal care (ANC) examination was a regular examination conducted by pregnant women to know the condition of mother and fetus, the scale use was categorical, 0=<4 times, 1=≥4 times; health workers' support variable, health workers' support was any forms of rolew tendency give by health workers in Tegal Regency which were observed by mothers about early initiation of breastfeeding either in a form of counseling or practice, the scale used was continuous, however it was transformed into categorical for the sake of the study 0= weak<mean, 1=strong ≥mean, whereas the time to early initiation of breastfeeding was the time it took to let infants with their own instinct to be able to nursing soon within the first hour of birth, hence skin contact could occur between mother and infant, and infant could suck the nipple, the scale used was categorical with the parameter was 0=>1 hour, 1=≤1 hour.

Reliability shows within an understanding that an instrument is relatively reliable as data collection tool because the instrument is considered sufficient. Reliability test is conducted by analyzing data of test result. In this study the researchers

used reliability technique since the researchers in analyzing data only used questionnaires to the respondents by testing it once (Hidayat, 2014). Therefore reliability test was conducted by using formula of Cronbach Alpha with the help of SPSS program.

The value of Cronbach Alpha calculation is recognizable that a question is considered reliable when the calculated r or minimum alpha result is 0.6. The reliability test of the study was conducted in RSU Kardinah Tegal, with the result as follow:

Table 1. Reliability test of questionnaires on factors of socio demography and obstetric that influence the timeliness of early breastfeeding in Tegal Regency

Variables	Item total correlation	Cronbach Alpha
Knowledge	≥ 0.41	0.75
Health workers' support	≥ 0.35	0.74

Table 1 showed that the value of Cronbach Alpha for knowledge was 0.75with item total correlation value was more than 0.41, therefore the questionnaires for knowledge in the study was reliable, whereas the value of Cronbach Alpha for health workers' support was 0.74 ≥ 0.60 item total correlation value was more than 0.35, therefore the questionnaires of health workers' support in this study was reliable Data quantitative analysis was conducted by using multiple logistic regression.

RESULTS

A. Respondents' Characteristics

Table 2 showed the study result of the socio demography and obstetric factors that influenced timeliness of early breastfeeding in Tegal regency which was conducted on 121 subjects of the study. It obtained the percentage of the majority age was on reproductive age as much as 76.03% of post partum mothers.

Table 2. Characteristics of study subjects based on age

Study subjects age	n	%
<20 year or ≥35 year	29	23.97
20 – 35 year	92	76.03
Total	121	100

B. Univariate Analysis

Univariate analysis was used to explain or describe figures or value of each variable with the measurement of percent proportion. Univariate analysis on socio demography and obstetric factors that influenced timeliness of early breastfeeding in Tegal Regency included level of education, occupational status, family income, maternal knowledge on early initiation of breastfeeding, maternal parity status, history of antenatal care, health workers' support in the practice of early initiation of breastfeeding and the duration of early initiation of breastfeeding process. The result of univariate analysis can be seen in Table 3.

Table 3 Showed that the result of univariate analysis toward factors of socio demography and obstetric that influenced the timeliness of early breastfeeding in Tegal Regency were for socio demography data, out of 121 respondents it was obtained that many of respondents' education level was less than high school which was 64.46-% or in other words there were 78 postpartum mothers with less than high school education, 80.99% of maternal occupational status was housewife or in other words mothers who did not work with the family monthly income was equal to or more than regional minimum wage was 57.02% in which Tegal Regency's Regional

Minimum Wage was Rp. 1.487.000. The postpartum mothers' level of knowledge on early initiation of breastfeeding mostly was good or about 57.85%, in which the knowledge was measured whether it was good or less good by using the average/ mean of total value of knowledge possessed by post partum mothers.

Table 3. Univariate analysis on factors influence the timeliness of early breastfeeding

Characteristics	Criteria	n	%
Education	<High School	78	64.46
	≥ High School	43	35.54
Occupation	Employed	23	19.01
	Unemployed	98	80.99
Income	< Rp. 1.487.000	52	42.,98
	≥ Rp. 1.487.000	69	57.02
Knowledge	Less good	51	42.15
	Good	70	57.85
Parity	Multipara	68	56.20
	Primipara	53	43.80
History of ANC	< 4 times	13	10.74
	≥ 4 times	108	89.26
Health Workers' Support	Weak	58	47.93
	Strong	63	52.07
Duration of Early Initiation of Breasfeeding	>1 hour	44	36.36
	≤ 1 hour	77	63.64

The result of univariate analysis for obstetric factor was as follow: maternal parity in the study showed the result that most subjects had given birth more than once or multipara, it was as much as 56.20% with the history of antenatal care was more than 4 times or mothers had regularly undergone antenatal care examination as much as 89.26%. The majority of health workers in the research location had given strong support in the practice of breastfeeding early initiation, as much as 52.07%, in which the majority of early initiation of breastfeeding practices had been conducted timely or less/ equal to the first hour of birth, which was 63.64%

C. Bivariate Analysis

Bivariate analysis was conducted to know the correlation between factors of socio demography and obstetric with the timeliness of early breastfeeding. Factors of socio demography included level of education, occupational status, family income, and level of maternal knowledge about early initiation of breastfeeding, whereas obstetric factors included maternal parity status, history of antenatal care examination, and health workers' support in the practice of early initiation of breastfeeding. The result of bivariate analysis of the study was presented in Table 4.

In table 4 which was about the result of bivariate analysis of socio demography and obstetric factors that influenced the timeliness of early breastfeeding in Tegal Regency, it could be observed that the practice of early initiation of breastfeeding within an hour or less was more likely conducted by mothers with less than high school education which was as much as 42.97%, it was because the majority of respondents' education was less than high school, whereas the value of p was 0.030. The value was less than 0.05, meant maternal education had significant correlation with the timeliness of early breastfeeding.

Table 4. The result of bivariate analysis of socio demography and obstetric factors that influenced the timeliness of early breastfeeding in Tegal Regency

Variable	Criteria	<1 hour		≥1 hour		p
		n	%	n	%	
Education	<High School	52	42.97	26	21.49	0.030
	≥ High School	25	20.66	18	14.88	
Occupation	Employed	19	15.70	4	3.31	0.009
	Unemployed	58	47.93	40	33.06	
Income	< Rp. 1.487.000	31	25.62	21	17.35	0.713
	≥ Rp. 1.487.000	46	38.02	23	19.01	
Knowledge	Less good	30	24.79	21	17.36	0.701
	Good	47	38.84	23	19.01	
Parity	Multipara	45	37.19	23	19.01	0.489
	Primipara	32	26.45	21	17.35	
History of ANC	< 4 times	7	5.79	6	4.96	0.092
	≥ 4 times	70	57.85	38	31.40	
Health workers' support	weak	8	6.61	50	41.32	<0.001
	strong	36	29.75	27	22.32	

Maternal occupational status had the value of p as much as 0.009 thus there was a correlation between maternal occupation with the timeliness of early breastfeeding in which mothers whose early initiation of breastfeeding were conducted ≤ 1 hour after birth were mostly working at home, which was 47.93%.

Family income did not have any correlation with the timeliness of early breastfeeding, the value of p=0.713. The practice of early initiation of breastfeeding within less or equal to 1 hour after birth was more likely conducted by mothers whose family income was higher than regional minimum wage, which was Rp 1,487,000.

The value of p for the level of knowledge was 0.701, thus there was no correlation between maternal level of knowledge and the timeliness of early breastfeeding, however the practice of early initiation of breastfeeding was more likely conducted by mothers with good knowledge, which was 38.84%.

Maternal parity did not have significant correlation with the timeliness of early breastfeeding since the value of p= 0.489. The practice or early initiation of breastfeeding within less than 1 hour after birth was more likely conducted by multipara mothers of 37.19%.

Mothers who were regularly underwent pregnancy examination which was antenatal care for more than 4 times during their pregnancy were more likely to conduct early initiation of breastfeeding within less or equal to one hour, which was as much as 57.85%. History of ANC examination had significant correlation with the timeliness of early breastfeeding with the value of p was 0.092, the figure was considered close to significant.

Support of health workers was the most dominant factor in the practice of early breastfeeding, in which mothers who obtained strong support from health workers in practicing early initiation of breastfeeding were likely to be timely in conducting early initiation of breastfeeding than mothers who obtained weak support, in which appropriate timing was less than 1 hour after birth. Health workers support had significant correlation with the time-

liness of early initiation of breastfeeding with the value of p < 0.001.

D. Multivariate analysis

Table 5 show the result of multivariate analysis by using multiple logistic regression on socio demography and obstetric factors that influenced the timeliness of early breastfeeding in Tegal Regency with the result that socio demography and obstetric factors had significant effect toward the timeliness of early initiation of breastfeeding in Tegal Regency. The value of Negelkerker R square was 0.387, which meant socio demography and obstetric factors influenced the timeliness of early initiation of breastfeeding as much as 38.7%, meanwhile 61.3% was influenced by other factors which were not studied in the study.

Table 5. The result of multivariate analysis of socio demography and obstetric factors that influenced the timeliness of early breastfeeding in Tegal Regency.

Variables	OR	95% CI		p
		Lower	Upper	
Maternal education ≥ Senior High School	3.90	1.14	13.37	0.030
Working at home mothers	7.93	1.68	37.52	0.009
Family income ≥ Rp. 1.487.000	0.83	0.32	2.21	0.713
Good maternal knowledge	0.83	0.31	2.18	0.701
Primipara maternal parity	0.69	0.25	1.95	0.489
History of ANC ≥ 4 times	3.48	0.82	14.81	0.092
Strong health workers' support	12.58	4.30	36.77	<0.001
N Observation= 121 -2 log likelihood= 118.42 Negelkerker R^2= 38.70% Constant = -4.08				

Based on the OR value of each variable, from the result of analysis by using multiple logistics regression test it could be explained that: Mothers whose level of education was higher or equal to high school education had 3.90 times possibility to be more timely in conducting early initiation of breastfeeding compared to those whose level of education was lower than high school. The correlation was statistically significant (OR=3.90; 95% CI= 1.14 to 13.37; p=0.030).

Mothers who worked at home had 7.93 times possibility to be more timely in early initiation of breastfeeding than those who worked outside. The correlation is statistically significant (OR=7.93; 95% CI =1.68 to 37.52; p= 0.009).

Family income did not have correlation with the timeliness of early breastfeeding, however mothers who came from family whose income was higher than regional minimum wage (Rp 1,487,000) would possibly reduce by 0.83 times of the early breastfeeding timeliness compared to those who came from family whose income was lower than regional minimum wages (Rp. 1.487.000). The correlation was statistically insignificant (OR=0.83; 95% CI= 0.32 to 2.21; p=0.713).

Maternal knowledge did not have correlation with the timeliness of early breastfeeding, however mothers with good knowledge would reduce by 0.83 times of early breastfeeding timeliness compared to mothers with less knowledge. The corre-

lation was statistically insignificant (OR= 0.83; 95% CI =0.31 to 2.18; p=0.701).

Maternal parity did not have correlation with the timeliness of early breastfeeding however primipara mothers had the possibility to reduce by 0.69 time of the early breastfeeding timeliness compared to multipara mothers. The correlation was statistically insignificant (OR= 0.69; 95% CI =0.25 to 1.95, p= 0.489).

Mothers who regularly underwent antenatal care more than 4 times during their pregnancy would possibly increase by 3.48 times of the timeliness of early initiation of breastfeeding compared to those who underwent antenatal care less than 4 times. The correlation was statistically close to significant (OR=3.48; 95% CI=0.82 to 14.81; p= 0.092).

Strong support from health workers in implementing early initiation of breastfeeding had the possibility to increase by 12.58 times of the timeliness of early initiation of breastfeeding, compared weak health workers' support. The correlation was statistically significant (OR= 12.58; 95% CI= 4.30 to 36.77; p<0.001).

Based on Hosmer and Lemeshow test a significance value was obtained which was 0.32 or bigger than α=0.05, thus it was concluded that the formulated multiple logistic regression equation model was feasible or appropriate and possible to interpret.

Based on the regression equation it could be predicted that if less educated mothers (0), employed mothers (0), mothers with income less than Rp. 1.487.000 (0), mothers with less knowledge (0), mothers who had given birth more than once/ multipara (0), mothers who seldom underwent pregnancy examination (0) and obtained weak support in implementing early initiation of breastfeeding would reduce the timeliness of early initiation of breastfeeding by 4.08 times.

DISCUSSION

Early initiation of breastfeeding is one of the government programs that has been regulated in the article 9 of "Government Regulation of the Republic of Indonesia No. 33/ 2012 about Exclusive Breastfeeding" however not all newborn infants undergo early initiation of breastfeeding timely. Factors affecting in the implementation timing of early initiation of breastfeeding are as follow:

A. The correlation of education with the timeliness of early breastfeeding

Education had an influence toward the timeliness of early breastfeeding in which mothers whose level of education was higher than high school had 3.90 times possibility to be timely in conducting early initiation of breastfeeding compared to those whose level of education was lower than high school. The result of the study is in accordance with Sirajuddin, Abdullah, Lumula (2013) who studied about "The Determinants of Early Initiation of Breastfeeding", the result of the study finds that education is related to the implementation of early initiation of breastfeeding, sufficient education give 5.9 times bigger influence toward the implementation of early initiation of breastfeeding than less education.

The higher one's education the higher one's power of reasoning toward every information given therefore it is easier to take action. Mothers with higher education are more open minded to receive new knowledge, therefore the practice of early initiation of breastfeeding on mothers with higher level of education is likely to be successfully conducted before the firat hour

of birth compared to on mothers with lower education (Sirajuddin e*t al*, 2013).

B. The correlation of occupation with the timeliness of early breastfeeding

Maternal occupational status was related to the timeliness of early breastfeeding. Unemployed mothers had possibility as much as 7.93 times in the timeliness of early initiation of breastfeeding compared to working mothers. The study is in accordance with the study conducted by Lakew *et al*. in 2015 entitled "*Socio-medical determinants of timely breastfeeding initiation in Ethiopia: Evidence from the 2011 nation wide Demographic and Health Survey*". The study revealed the result that on working mothers there is 23% possibility to be untimely in conduct early initiation of breastfeeding".

Working mothers are more possible to experience stress during their pregnancy because of their professional demand. The stress endured by mothers may affect the condition of mothers as well as the fetus. The condition may get carried through the process of delivery, hence during the implementation of breastfeeding early initiation the result is not as it is expected such as asphyxia baby and can not undergo early initiation of breastfeeding or else the baby fails in getting the mother's nipple because of unstable condition (Lakew *et al,* 2015).

Unemployed mother can be considered as mothers who only play their roles as homemakers. They have plenty time at home without any obligation to work outside. Housewives are likely to have a lot of time to conduct pregnancy care and give attention to their pregnancy, including the readiness to give breast milk since early through early initiation of breastfeeding. Meanwhile working mothers are demanded to do the activity outside the home more or less 7 hours a day, afterward those mothers still have to carry the responsibility at home, hence mothers' time and energy are spent to handle their duty, including house chores. The condition affects the pregnancy, as the result mothers are not ready for early initiation of breastfeeding (Lakew *et al,* 2015).

C. The correlation of family income and the timeliness of early breastfeeding

Family income did not have any correlation with the timeliness of early initiation of breastfeeding. In which high family income had negative correlation which meant that mothers who came from family with high income or more the Rp 1,487,000 had the more possibility to reduce the timeliness in conducting early initiation of breastfeeding by 0.83 times. The study is supported by a study conducted by Sharma dan Byrne (2016) about, "*Early initiation of breastfeeding: a systematic literature review of factors and barriers in South Asia*", in which the respondents in Srilanka showed the result that the delay in early initiation of breastfeeding was likely conducted in rich families and more practices of early initiation of breastfeeding were conducted by women from poor families. It is because those who come from poor family background are more easily to direct in implementing new knowledge, whereas those who come from rich families demand practical and quick treatment .

D. Correlation of parity with the timeliness of early breastfeeding

Maternal knowledge did not have correlation with the timeliness of early breastfeeding. The course of correlation of knowledge in the study was not different from the family income that was negative, it means that mothers with good knowledge have the possibility to reduce the timeliness of early initiation of breastfeeding by 0.83 times compared to mothers with less

knowledge. The study is in accordance with a study conducted by Sirajuddin, Abdullah, Lumula in 2013 entitled "*Determinant of the Implementation Early Breastfeeding Initiation*", that showed the result that knowledge does not have contribution toward the implementation of early initiation of breastfeeding. It is because mothers with good knowledge have a big chance to conduct an action and maternal attitude greatly determines whether she will undergo early initiation of breastfeeding or not. It is influenced by maternal situation and condition who is still exhausted after giving birth hence the process of breastfeeding early initiation is not implemented and mothers postponing giving breast milk to their infants.

E. The correlation of parity with the timeliness of early breastfeeding.

Maternal parity did not have correlation with the timeliness of early breastfeeding with negative course of correlation. Primipara mothers had the possibility to reduce the timelines of breastfeeding early initiation by 0.69 times compared to multipara mothers. The study is in accordance with the study conducted by Hidayat in 2012 about "The Comparison of Early Initiation of Breastfeeding Implementation based on Pregnant Women's Level of Knowledge", that showed the similar result that parity does not have significant correlation with the implementation of breastfeeding early initiation. It is because primipara mothers are likely to give the best for their infants, yet they do not have enough experience in giving breast milk immediately, whereas multipara mothers are likely to have prepared breast milk immediately, since they already have experience and are supported by counseling during antenatal care.

F. Correlation of ANC history with the timeliness of early breastfeeding

The history of *antenatal* care (ANC) examination correlated with the timeliness of early breastfeeding. Mothers who regularly conducted pregnancy examination which was ≥ 4 times, had the possibility to increase the timeliness of early breastfeeding by 3.48 times compared to those who conducted pregnancy examination < 4 times. The study is in accordance with a study conducted by Bimerew *et al.* in 2016 entitled "*Prevalence of timely breastfeeding initiation and associated factors in Dembecha district, North West Ethiopia: a cross-sectional study*". The result of the study showed that mothers who conduct antenatal visits more than four times will give breast milk immediately after birth 3.1 times bigger than those who conduct antenatal visits less than four times. It is because in accordance with 10T pregnancy examination standard pregnant women will get counseling during dialogues, therefore maternal knowledge on early initiation of breastfeeding will be improved. Midwives' appropriate approach will help mothers in deciding whether they will conduct early initiation of breastfeeding or not.

G. The correlation of health workers' support with the timeliness of early breastfeeding

Health workers' support had significant correlation with the timeliness of early breastfeeding. Health workers' support is the most dominant factor in the timeliness of early breastfeeding. Strong health worker support had 12.58 times bigger possibility to conduct timely early initiation of breastfeeding than weak health workers' support. The study is in accordance with a study conducted by Raharjo (2014). The result shows the role of midwives in significant way related to mothers' practice in doing

early initiation of breastfeeding. Encouragement and motivation from health workers helps mothers to take a stand in early initiation of breastfeeding practice.

Based on the result of the study on socio demography and obstetric factor that influence the timeliness of early breastfeeding in Tegal Regency it can be concluded that factors that can influence the timeliness of early breastfeeding include maternal education ≥ SMA, maternal occupation at home, history of ANC ≥ 4 times and strong support from health workers.

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