

Factors associated with the intention to exclusively breastfeed at Siloam Lippo Cikarang Hospital

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Abstract

Background World Health Organization (WHO) recommends breastfeeding as the appropriate method of infant feeding. Predelivery intentions about breastfeeding are strong predictors of both initiating and continuing exclusively breastfeeding through the post delivery period.

Objective To determine the association of age, education, occupation, parity, and information got by pregnant women with the intention to give exclusive breastfeeding at Siloam Lippo Cikarang Hospital.

Methods Pregnant women were chosen by consecutive sampling filled in questionnaires contained identity, knowledge, obstacles of breastfeeding and intentions to exclusively breastfeed. Pregnant women visiting Obstetrics and Gynecologic Department Siloam Lippo Cikarang Hospital who were able to read and write in Indonesian were eligible for this study.

Result: Most of the 200 respondents were between 20-30 years of age (69.5%), college graduated (55.5%), working women (50.5%), multiparous (58.5%) and have already got the information about breastfeeding (64.5%). The commonly cited source is printed device (40%). Knowledge about breastfeeding in general were good (78%), but respondents who intended to exclusively breastfeed were only 58.5%. Multivariate analysis showed that the factors significant associated with the intention to exclusively breastfeed were age, with OR 0.9 (95%CI 0.84;0.98, P<0.05) and information, with OR 0.28 (95%CI 0.143;0.56, P<0.001)

Conclusions The significant influencing factors to the intentions to give exclusively breastfeed are age and information. [Paediatr Indones 2008;48:156-60].

Keywords: Pregnant women, intention, breastfeeding

World Health Organization and American Academic of Pediatrics advocate exclusive breastfeeding for six months despite awareness of many advantages of breastfeeding.^{1,2} Although various initiatives have been attempted to increase breastfeeding, the rates of exclusive breastfeeding remain low in many countries, for example in Germany was about 10% and in Asian countries only 21.1% had exclusive breastfeeding until six months.^{3,4} According to the 1997 Indonesian Health Demography Survey, the rate of exclusive breastfeeding was still low (52%), and it had only slightly increased to 55.1% in the year 2002.⁵

To better understand women's breastfeeding behaviors and to develop strategies to promote breastfeeding, studies had been performed to determine why women stopped breastfeeding.^{6,7} Factors known to be associated with early breastfeeding cessation include the perception or intention of the pregnant women to exclusively breastfed after their babies

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were born. Given the important role of a women's behavioral intention to exclusively breastfed, it is also important to determine factors associated with the intention, such as age, education, job, parity and information got by pregnant women.⁸⁻¹¹

Siloam Hospital Lippo Cikarang (SHLC) has participated in the Baby Friendly Hospital Initiative by supporting pregnant women with promoting breast milk as the best food for babies. Pregnant women who come for antenatal care at our hospital come from various level of education and socioeconomic, and their knowledge and intention of breastfeeding were never known before. The objective of this study was to determine the association of age, education, occupation, parity, and information got by pregnant women with the intention to give exclusive breastfeeding at Siloam Lippo Cikarang Hospital. This study also described breastfeeding knowledge of pregnant women and their obstacles related to breastfeeding.

Methods

This was a cross-sectional and analytic study to determine the rate of knowledge and perception of women's obstacles in breastfeeding, and also to find the association of some factors with the intention of exclusive breastfeeding. This study was done at SHLC on December 2007 until February 2008. The subjects were pregnant women visiting Obstetric and Gynecologic Department of SHLC. Sample size was calculated using "rule of thumb" logistic regression, i.e., 5 to 50 times as many as independent variables. With 5 risk factors, between 50 to 250 subjects were needed.

Pregnant women who were chosen by consecutive sampling filled in questionnaires that contained information about identity, knowledge, obstacles of breastfeeding and the intentions to exclusively breastfeed. Eleven questions were performed to determine knowledge of breastfeeding, points ≥ 7 showed good knowledge and <7 showed poor knowledge. Eight questions determined obstacles in giving exclusive breastfeeding, with the points ≥ 5 showed that the women don't think exclusive breastfeeding as obstacles, and <5 showed that the women thought exclusive breastfeeding as

obstacles. The last question contains three options of the feeding methods chosen by the women for their future babies (I will breastfed my baby for six months, I will not breastfed my baby, and I will try to breastfed for 6 months but if I fail I'll use formula milk). Pregnant women visiting Obstetrics and Gynecologic Department Siloam Lippo Cikarang Hospital who were able to read and write in Indonesian were eligible for this study. The data were analyzed using SPSS 13.1 and the correlation were analyzed using multivariate analysis with a p-value below 0.05 considered significant.

Results

Total of 200 pregnant women with the median age of 29 years old. Many were academic graduated (55.5%) and the majorities were workers (50.5%). Most pregnant women had children before (58%), and 105 (90%) of them breastfed their babies. The characteristics of the subjects are shown in **Table 1**.

In the questions of knowledge, a lot of pregnant women considered breast milk to be better than formula milks (99.5%), but most fail to recognize the sign of enough amounts of feeding (93.5%). One hundred and fifty six pregnant women (78%) have good knowledge of breastfeeding, while 193 (96.5%) didn't thought breastfeeding as an obstacles. In

Table 1. Characteristics of subjects

Characteristics	N (n = 200)	%
Age (years)		
< 20	1	0.5
20-30	139	69.5
> 30	60	30
Education		
Below High school level	7	3.5
High school graduated	82	41
Academy graduated	111	55.5
Job		
House wife	92	46
Workers	101	50.5
Business	7	3.5
Parity		
1	84	43
> 1	116	58
Information		
Got information	129	64.5
Never got information	71	35.5

contrast, respondents who intended to give exclusive breastfeeding were only 58.5% (Table 2).

Information about breastfeeding was obtained mostly from printed device (40%), while paramedic only have 25% role to give information about breastfeeding (Table 3).

From bivariate analysis and correlation matrix, we found that all factors did not have correlation between each other. After using multivariate analysis with logistic regression analysis, Odds Ratio of every variable was found. The two factors most strongly associated with intention to exclusively breastfeed were age (OR 0.9, 95% CI 0.84; 0.99, P<0.05) and information got by pregnant women (OR 0.28, 95% CI 0.14; 0.56, P< 0.001) (Table 4).

Table 2. Knowledge, perception and intention about exclusive breastfeeding

	n (n = 200)	%
Knowledge of breastfeeding		
Good knowledge	156	78
Poor knowledge	44	22
Perception of breastfeeding as obstacles		
Do not thought breastfeeding as obstacles	193	96.5
Thought breastfeeding as obstacles	7	3.5
Intention to exclusive breastfeeding		
Intended to breastfeed exclusively	117	58.5
Not sure to breastfeed exclusively	83	41.5
Not intended to breastfeed exclusively	0	0

Table 3. Source of information about breastfeeding got by pregnant women

Source	n	%
Electronic device	77	38.5
Printed device	80	40
Paramedic	50	25
Others	11	5.5

Table 4. Factors associated with exclusively breastfeed

Characteristics	Odds Ratio (OR)	95% Confidence Interval	P
Age (yr)			
< 30	0.9	0.84; 0.99	0.027
> 30			
Education			
Below Academic level	1.46	0.84; 2.54	0.18
Academic graduated			
Job			
House wive	0.59	0.33; 1.05	0.074
Workers			
Parity			
1	0.54	0.26; 1.1	0.093
> 1			
Information			
Got information	0.28	0.14; 0.56	0.001
Never got information			

Discussion

Intention of women to give breastfeeding plays an important role in the success of exclusive breastfeeding practice. A study at US showed that most pregnant women (85–92%) had made decision about their infant feeding at second trimester of gestation.¹² There is also evidence that a mother who intended to breastfed her baby since antenatal periode, actually nurture her baby with breastmilk for longer duration and have better attachment with her baby.¹³ In this study, we found that the intention of pregnant women in SHLC to exclusively breastfeed their babies is 58.5%, while there were still a lot of women who not sure to exclusively breastfeed for six months (41.5%). Marques⁶ in his study on 364 pregnant women in Brazil also found 66% women stated that breastfeeding for six months is hard and impossible to performe. Factors associated with the intention to exclusively breastfeed are also determined in this study and will be discussed one by one.

Age of pregnant women has a strong correlation on how a woman decides something, especially about breastfeeding. Most of the subjects (69.5%) were between 20-30 years old, with median age of 29 years old. This is a reproductive and economically productive age as well. Fauzi¹⁴ in his study on 290 working mothers in Jakarta at 2006 also found similar characteristics of mothers (57.6% were between 20-30 years old). Using multivariate analysis, this study found that women age 20-30 years old had intention to exclusively breastfeed 0.9 times than compared with women less than 20 years old or more that 30 years old (OR 0.9, 95%CI 0.84;0.99, P<0.05).

Although pregnant women in SHLC had various level of education, most of them are academic graduated (55.5%), while high school graduated were 41% and below school graduated were only 3.5%. Previous study had tried to find the correlation between mother's education and the duration of breastfeeding. Mothers who were academic graduated in Singapore actually 2.07 times likely to breastfed their babies compared with that of mothers with lower level of education.⁴ Iskandar¹⁵ in his study in Jawa and Bali on 1993 showed that higher education had no positive relation with duration of breastfeeding, which 25% of mothers stopped breastfeeding when

their babies reached the age of 2-5 months old. In this study, education had no significant association with the intention to exclusively breastfeed.

As in industrial region, the characteristics of pregnant women in SHLC mostly were working women (50.5%), while 3.5% were business and 46% were housewife. According to the Statistics Center Bureau 2003, the number of working women in Indonesia has increased to 35.37% of 100,316,007 workers.¹⁶ The study of Martinez¹⁷ in US showed that from 100 working mothers, only 19.8% still breastfed, while 50.1% of non-working mothers still breastfed their babies until six months. Fauzi¹⁴ also found that only 4% of 290 working mothers in Jakarta who still exclusively breastfed their babies until six months. This study did not find significant correlation between the mother's job and the intention of the pregnant women to exclusively breastfeed. Working mothers in this study had lower intention (53.5%), while 65.2% housewives intended to exclusively breastfed. This may be because of the minimal facilities in the workplace, especially for mothers to pump and store the breastmilk.

Fifty - eight percents of the pregnant women in this study were multiparous, while 43% were primiparous. There were not significant correlation between parity and intention to exclusively breastfeed. Study among 542 mothers in Sweden also found that parity did not influence the duration of breastfeeding.

It is interesting that the most popular source of information for the pregnant women in SHLC were printed media (40%) while paramedic only have role in 25% subjects. There were also 35.5% women who were never got any information at all. This finding is similar with that of the study in US on 245 mothers, that showed information about breastfeeding given by paramedic were only got by 10.8% pregnant women.⁹ Survey on 2098 mothers in Singapore also found that 54.5% mothers did not achieve information for breastfeeding strategy from physician, nurse or midwives.⁴ It is interesting that the results in this study showed significant association between information got by pregnant women and the intention to exclusive breastfeed (OR 0.28; 95%CI 0.14;0.56, $P < 0.001$). It showed that women who got information 0.28 times intended to breastfeed their babies exclusively. The source of information might have correlation with

the finding. Printed device as the main source of information in this study might not influence a lot with the intention to exclusively breastfeeding. In Brazil, 74% of 364 pregnant women admitted got information by posters, but 34% of them could not recall any of the advice given, and 13% had misperception.

Most subjects (78%) had better knowledge of breastfeeding. Fauzi¹⁴ in Jakarta also found that only 4.5% mothers had poor knowledge about breastfeeding. Most pregnant women in this study also did not think that breastfeeding as an obstacle. But it still had no correlation with the intention to breastfeed.

This study suggested that since there are still a lot of women did not have the intention to give exclusively breastfeeding, maybe in the future we should provide more doctor, nurses and midwives to promote/ give more intensive information about breastfeeding during their antenatal care.

In conclusion, the significant influencing factors to the intentions to give exclusive breastfeeding are age and information.

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