

# Association between Exclusive Breastfeeding with Health Belief Model in Working Mothers

Mardiana<sup>1</sup>, Ave Alyatalaththova Mahabay Aryotochter<sup>2</sup>, Galuh Nita Prameswari<sup>1</sup>,  
Muhammad Azinar<sup>2</sup>, Lukman Fauzi<sup>3</sup>, Efa Nugroho<sup>2</sup>

<sup>1</sup>Department of Public Health Nutrition, Public Health Science Study Program, Universitas Negeri Semarang, Indonesia, <sup>2</sup>Department of Health Promotion, Public Health Science Study Program, Universitas Negeri Semarang, Indonesia, <sup>3</sup>Department of Epidemiology and Biostatistics, Public Health Science Study Program, Universitas Negeri Semarang, Indonesia

## ABSTRACT

Exclusive breastfeeding is important thing to do from the mother to the baby since it could decrease infant mortality rate. Exclusive breastfeeding on work place has been arranged in Indonesian Government Regulation No. 33/ 2012. Though the company has provided dedicated room for lactation as supporting factor to the achievement of exclusive breastfeeding, yet it only reach 14.25%. This research has objective to find out factors related with exclusive breast feeding practice by Health Belief Model theory. The research is conducted with cross sectional design. Sample size is 78 working women having baby ages 6-12 months. The sample is obtained by simple random sampling technique. The analysis of data correlation is processed by chi square test ( $\alpha=0,05$ ) and logistic regression. Research result showed that perception ( $p=0,036$ ), parity ( $p=0,018$ ), knowledge ( $p=0,017$ ), socio culture ( $p=0,016$ ), family support ( $p=0,006$ ), direct superior support ( $p=0,013$ ), and nanny role ( $p=0,045$ ) in the relation of exclusive breastfeeding practice on working mother at Garment Company "X". Result of logistic regression indicate direct superior support is the most influenced variable. Low practice of exclusive breast feeding on working mother at Garment Company "X" is influenced by direct superior support factor. Also the factor of perception, parity, knowledge, socio culture, family support and nanny role.

**Keywords :** *working, mother, lactation, exclusive, breastfeeding*

## INTRODUCTION

Based on Indonesia Demography and Health Survey (IDHS) in 2012 indicate infant mortality rate (IMR) is 32 per 1000 life birth. This is quite far from 2015 target which is 23 per 1000 birth life. One effort to decrease the IMR is by exclusive breast feeding. Exclusive breast feeding means giving breast milk to the baby for first six month of life without additional food or other liquid. The percentage of exclusive breast feeding in Indonesia in 2013 is 54.34%, in 2014 it is increased to 60%. And still, far from the target 80%.<sup>1</sup>

The government has tried to increase exclusive breast feeding. One of the effort is through health regulation number 33 year 2012. In the regulation mentions that every work place is obligated to provide lactation room. The garment X company has provided it as regulated yet the number of working mother giving exclusive breast feeding is still low, which is only 14.25%.

Rahmawati, research result mentioned that job is one of the reason of exclusive breast feeding failure. The 8 hours work hours become the reason of low intensity of mother-baby meet. Indeed, there has been a 3 ministries joint regulations issued by Ministry of Women Empowerment and Children Protection (48/MEN.PP/XII/2008), Ministry of Workers and Transmigration (PER.27/MEN/XII/2008) and Ministry of Health (1177/MENKES/PB/XII/2008) mentioned breast feeding during work hour at work place.<sup>2</sup>

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### Corresponding author:

**Mardiana**

Departement of Public Health Nutrition, Public Health Science Study Program,

E-mail: mardiana.ikm@mail.unnes.ac.id

Anggraeni, mentioned that there is a difference of exclusive breast feeding based on work status.<sup>3</sup> Research by Putri, mentioned that exclusive breast feeding on mother working in factory is less than housewife.<sup>4</sup> Other research by Hidayanti, found out work place support like lactation room and health attendant suggestion influence exclusive breast feeding by working mother.<sup>5</sup>

The Health Belief Model (HBM) theory can be used to describe behaviour determined factor. It can be used in this research since the practice of exclusive breast feeding is a matter of privacy. The HBM theory says the behavior of one is influenced by the perception or individual belief it self.<sup>6</sup> Therefore, this research's objective is to find out the factors influencing exclusive breast feeding by HBM theory approach.

## MATERIAL AND METHOD

The research is conducted at Garment Company

**Table 1. Factors related with Exclusive Breast Feeding Practice of Working Mother at Garment Company "X"**

No	Variables	Cathegory	Exclusive Breast Feeding Practice						p value
			No		Yes		Number		
			f	%	f	%	f	%	
1.	Perception	Poor	36	46,2	2	2,6	38	48,7	0,036 *
		Good	30	38,5	10	12,8	40	51,3	
2.	Parity	1 child	33	42,3	1	1,3	34	43,6	0,018 *
		>1 child	33	42,3	11	14,1	44	56,4	
3.	Knowledge	Poor	35	44,9	1	1,3	36	46,2	0,017 *
		Average	26	33,3	9	11,5	35	44,9	
		Good	5	6,4	2	2,6	7	9,0	
4.	Socioculture	Negative	22	28,2	0	0	22	28,2	0,016 **
		Positive	44	56,4	12	15,4	56	71,8	
5.	Nanny Role	Poor	35	44,9	2	2,6	37	47,4	0,045 *
		Good	31	39,7	10	12,8	41	52,6	
6.	Family Support	Less Support	37	47,4	1	1,3	38	48,7	0,006 *
		Support	29	37,2	11	14,1	40	51,3	
7.	Direct Superior Support	Less Support	52	66,7	5	6,4	57	73,1	0,013 **
		Support	14	17,9	7	9,0	21	26,9	
8.	Peer Support	Less Support	28	35,9	5	6,4	33	42,3	1,000 *
		Support	38	48,7	7	9,0	45	57,7	
9.	Education	Elementary ( $\leq 9$ years)	30	38,5	2	2,6	32	41,0	0,108 **
		High School ( $> 9-12$ years)	36	46,2	10	12,8	46	59,0	

Remark :

\* : *chi-square test*

\*\* : *fisher exact test*

"X", located on Bawen, Central Java, Indonesia, in March to April 2016. This research is analitical with cross sectional study . The samples are working mother at Garment Company "X" having infant ages 6-12 months and 78 working mothers are selected by simple random sampling. The data analysis is conducted by two methods which are chi-square test or Fisher Exact Test  $\alpha = 0,05$ ) and logistic regression.

## FINDING

HBM theory is the theory of the alter of health behavior and psychological model used to predict health behavior by focusing on perception and individual belief on a disease. The HBM theory is based on an understanding that someone will take any action related with health based on the perception and belief. *Chi-square test* or *fisher exact test* results are as below:

From table 1 can be found that p value on perception variable = 0.036, parity = 0.018, knowledge = 0.017, socio culture = 0.016, nanny role = 0.045, family support = 0.006, direct superior support 0.013, peer support = 1.000 and education = 0.108. Variables with p value < 0.05 are variables having significant relation with exclusive breast feeding practice. On the opposite, variables having p > 0.05 do not related with exclusive breast feeding practice on working mother at Garment Company “X”.

**Table 2. Logistic Regression of Exclusive Breast Feeding Practice Research Variables**

Variable	Wald	df	p
Education(1)	c	1	.996
Socioculture(1)	.000	1	.996
Family Support(1)	.000	1	.998
Direct Superior Support(1)	4.187	1	.041
Nanny role(1)	.000	1	.999
Constant	.067	1	.796

From Logistic Regression Analysis can be seen that direct superior support variable is the most dominant among all variables. As on table 2, Wald value of the variable is 4.187 which is the highest compare to others. Aligned with the p value 0.041 which is the smallest value compare to others.

Perception is one of the variable that related with exclusive breast feeding practice on working mother at Garment Company “X”(p = 0,036 < 0,05). Mother having poor perception regarding lactation management mostly do not do exclusive breast feeding compare to mother having good perception. Questions asked consist of vulnerable perception, seriousness, advantage, obstacle, and terms and condition to do lactation management and exclusive breast feeding. From the result can be known that respondents perception regarding vulnerability and seriousness of health problem due to do not give exclusive breast feeding obtain lower score compare to other perception. This is caused by the impacts or disadvantages occurred from do not give exclusive breast feeding are indirectly visible. This result is supported by one by Fikawati, Miguel, and Pawenrusi, stated that there is significant relation between mother perception regarding exclusive breast feeding.<sup>7,8,9</sup> It is also aligned with HBM Theory stated that one behavior is determined by perception owned.<sup>6</sup>

Parity has a significant relation with exclusive breast feeding practice on working mother at Garment

Company “X”(p = 0,018 < 0,05). Mother having child >1 is tend to give exclusive breast feeding than mother having 1 child. The experience of breast feeding on previous birth giving influencing someone to repeat it on the next birth giving.<sup>10</sup> In HBM theory, parity is included in demography variable. Demography is one of the factor influencing someone perception to behave.<sup>6</sup> Breast feeding experience also become a terms to repeat it on next birth giving, thus it will initiate a mother to give exclusive breast feeding to the baby though she is working by doing lactation management.

Beside the perception and parity, other variable having significant relation with exclusive breast feeding is knowledge (p = 0,017 < 0,05). Most of mothers are less aware the importance of breast milk as baby main nutrition source. Mother only know about exclusive breast feeding, yet does not know and understand correctly regarding lactation management and other things that should be concerned in order to keep giving exclusive breast milk particularly on working mother.<sup>11</sup>

A behavior is closely related with the local culture. Research result indicates that socio culture has a significant relation with exclusive breast feeding practice on working mother at Garment Company “X”(p = 0,016 < 0,05). Mother having negative socio culture (still rely on belief and tradition regarding breast feeding) does not give exclusive breast milk. On the opposite, mother giving exclusive breast milk is no longer rely on

belief, tradition and myth that can fail exclusive breast feeding such as giving or spreading honey on the lips of new born baby so the baby can talk earlier, giving coffee so the baby do not stiff and feeding banana so the baby gains weight and health.

Other variable having significant relation with exclusive breast feeding is nanny role ( $p = 0,045 < 0,05$ ). The nanny has an important role to replace the mother during work time. Yet many of the nannies are not provide sufficient support to give exclusive breast feeding and do lactation management. The data indicates that mothers having nanny with good role tend to give exclusive breast feeding compare to them having nanny with less role.

A support is one of the factor that can motivate someone to behave. It can be obtained the environment, whether it is family or work place. Family support is significantly related with exclusive breast feeding practice on working mother at Garment Company "X" ( $p=0,006 < 0,05$ ). The respondent said that the most supporting family member in lactation management are husband and mother (the baby's grandmother). Support giving can ignite mother behavior in exclusive breast feeding. It is showed by the research result. Respondents with family support tend to do lactation management and exclusive breast feeding compare to them with less family support.

Beside family support, one from direct superior also related with exclusive breast feeding practice ( $p = 0,013 < 0,05$ ). The data obtained indicate that many direct superior does not give sufficient support the mother to do exclusive breast feeding . This causing many mother do not give exclusive breast milk to the baby. Mother with support tend to do exclusive breast feeding for her baby compare to them with less support from direct superior.

The tolerance and special permission for breast feeding mother to do lactation management like breast milk squeezing within working hour surely will give positive impact on exclusive breast feeding by working mother. Beside, if a sufficient facility is provided on the work place, it will be assisted working mother to do exclusive breast feeding.<sup>11</sup> The support from direct superior is cathegorized in sign to act in HBM theory. The support gived can motivate a mother to practice exclusive breast feeding though she is working.<sup>6</sup>

Yet, for peer support statistically does not related with exclusive breast feeding practice ( $p = 1,000 > 0,05$ ). This result is contradictive compare with result of research by Ida and Suyes, stated that one of the factors influencing exclusive breast feeding is peer support.<sup>12,13</sup> Mother working outside her home will interact more with the people in the work environment. Thus the support from work peer will influence the mother decision to do exclusive breast feeding.<sup>11</sup> In HBM theory, peer support also become a sign to act influencing a mother to behave.

Based on the data obtained can be known that tough many work peer support, yet only few mother do exclusive breast feeding practice. This is due to the peer giving the support does not practice lactation management and experience failure in exclusive breast feeding practice. According to behavior theory stated by Bandura which is Social Learning Theory explaining that human behavior is a continuous both side interaction between cognitive, environment and behavior factors. So the behavior to do exclusive breast milk is not only influenced by cognitive factor, but also environment factor. Environment factor in this term is not just a support provided by work peer but much further is the example given by the work peer (modeling). With many case of unpracticing lactation management such as squeezed breast milk and failure to do exclusive breast feeding by friend that viewed as a model or example, are caused the respondents not to do squeezed breast milk and do not give exclusive breast feeding though they got support from their work peer.<sup>6</sup>

Other variable that does not related with exclusive breast feeding practice on working mother at Garment Company "X" is education ( $p= 0,108 > 0,05$ ). This result is aligned with Weber and Banu, stated that education does not related with exclusive breast feeding practice.<sup>14,15</sup> Yet vary with the research by Sholeye, stated that mother education is related with exclusive breast feeding practice.<sup>16</sup>

HBM theory categorize education as demography variable that able to influence perception to behave on someone.<sup>6</sup> But as statistical test result, obtain that there is no relation between education with breast feeding practice on working mother at Garment Company "X". This difference can be occured due to the respondent's education back ground is only reached senior high school. Beside that the information regarding breast milk does not obtained from the school, but from instantion and health attendant. So does on Theory of

Reasoned Action (TRA) which stated that one behavior is influenced by belief, attitude and will, ignoring the education background.

From all variables significantly related with exclusive breast feeding practice, the analysis result of logistic regression stated that variable of direct superior support as the most dominant variable. This is acceptable, since the respondent is the working mother. The work environment is one of the circumstance that able to influence a mother to behave. Work demand and high work load dictate the mother to complete her job. If it does not counterbalance with support from the superior to lactation management, then the mother will have large percentage to fail in exclusive breast feeding practice.

### CONCLUSION

The research showed that low practice of exclusive breast feeding on working mother at Garment Company “X” Semarang, Central Java, Indonesia is influenced by some variables. Variables that related with exclusive breast feeding practice are perception, parity, knowledge, socio culture, family support, direct superior support and nanny role. While variables of education and peer support are not related with exclusive breast feeding practice on working mother at Garment Company “X”. Result of logistic regression showed that direct superior support is the most dominant variable in this research.

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