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THE 4th INTERNATIONAL CONFERENCE ON HEALTH SCIENCE 2017

"The Optimalization of Adolescent Health in The Era of SDGs"

INNA GARUDA HOTEL YOGYAKARTA, INDONESIA
November 5th, 2017

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Oral Presentation

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FACTORS ASSOCIATED WITH EXCLUSIVE BREASTFEEDING AMONG WORKING MOTHERS INYOGYAKARTA CITY, INDONESIA

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ABSTRACT

Exclusive breastfeeding is a health behavior that can be influenced by a lot of factors. Being a working mother is one of the factors that limits the practice of exclusive breastfeeding, yetthe number of female workers keep increasing every year. The aim of this study is to determine factors that are associated with exclusive breastfeeding among working mothers in Umbulharjo Subdistrict, Yogyakarta City. The factors studied are knowledge, attitude, facility's availability, duration of work, husband's support, and health provider's support. This is an observational analytic study with cross sectional design involving 84 working mothersselected through purposive sampling technique. Data was collected using a questionnaire. The data were analyzed using univariate analysis, bivariate analysis (chi square), and multivariate analysis (logistic regression). The proportion of working mothers who practiced exclusive breastfeeding was 67,9%. The main factors that were found to be associated with practiced of exclusive breastfeeding among working mothers are duration of work (p= 0,001 PR= 8,6 CI95%= 2,548–28,854) and health provider's support (p= 0,000 PR= 9,2 CI95%= 2,741–30,820). The most significant factor influencing practice exclusive breastfeeding among working mothers was the health provider's support. Thus, health providers can maximize maternity leave to do health promotion, so that when the working mothers returns to work, they are already psychologically prepared to continue exclusive breastfeeding.

Keywords : *Working Mothers, Exclusive Breastfeeding, Health Provider's Support*

INTRODUCTION

World Health Organization(WHO) internationally targeted to increase exclusive breastfeeding rate up to at least 50%.[1] Indonesia has reached the target globally with rate 55,7%.[2] That rate is still low compared to other middle-income countries like Sri Lanka (76%), Cambodia (74%), Mongolia (66%), dan Bangladesh (64%).[3] Inadequate rates of exclusive breastfeeding result from social and cultural, health-system and commercial factors, as well as poor knowledge about breastfeeding.[1]

One study that sough to being a working mother is one of the factors that restrains the exclusive breastfeeding.[4]Working mothers are more likely not to practiceexclusive breastfeeding compared to non-working mothers.[5]This same study[5] showed that 74,7% working mothers not practicing exclusive breastfeeding.Iin a study conducted in Taiwan, it was found that the average number of days a mother practiced exclusive breastfeeding before returning to work is 56 days, and only 10,6% of the mothers did continue to breasfeed after returning to work.[6]

Lawrence Green (1980) said behavior is often determined by 3 main factors, that is predisposing factor, enabling factor, and reinforcing factor.[7]Factors that contribute to the success of exclusive breastfeeding are predisposing factor, that is the knowledge about how to keep the breast milk and breastfeeding management at work, enabling factor that is facility's availability and breast milk facilities, and reinforcing factor, that is supervisor's support and health provider's support.[8]

Exclusive breastfeeding is a health behavior that can be influenced by a lot of factors. Because of this, we sought to establish factors associated with exclusive breastfeeding among working mothers in Umbulharjo Subdistrict, Yogyakarta City. The scope of this study is a health behavior in midwifery, especially exclusive breastfeeding.

The aim of this study was to determine the factors that are associated with exclusive breastfeeding among working mothers in Umbulharjo Subdistrict, Yogyakarta City. The results of this studyare expected to be useful for the development of maternal and child health services, in particular to awareness on promotion of enabling factors of exclusive breastfeeding among working mothers and on the other hand, it will help health workers address negating factors.

METHOD

This is an observational analytic study with cross sectional design. The primary data was collected using selft administered questionnaire at Umbulharjo 1 and 2 Community Health Center working area between April 2017 until May 2017.Our target was breastfeeding working mothers. Our inclusion criteria entailed those working mothers who had infants aged between 6 and 12 months.Single mothers and mothers that working on health institution were excluded from this study. Mothers were required to recall their practice on breastfeeding. The amount of samples are 80 respondents which was calculated using hypothesis test of two different proportion. We apportioned them through proportionate sampling technique to each of the areas. Umbulharo 1 Community Health Center's area takes 70% of the sample size, whereas Umbulharo 2 Community Health Center's area takes 30%.Then, we took the samples using purposive sampling technique. Only the respondents that fulfill our criteria was included in this study. The data were analyzed using univariate analysis, bivariate analysis (chi square), and multivariate analysis (logistic regression) with significance level 5%.We have received recommendation of ethical approval from Health Research Ethics Commission (KEPK) Health Polytechnic of HealthMinistry Yogyakarta with letter number LB.01.01/KE-02/XX/444/2017.

RESULTS

The results on socio-demographic characteristics showed that 59,5% mothers working on private workplace, their mean age was 28 years old; and mean age of their infants at the point of interview was 10 months. In total, we approached 84 respondents met the inclusion criteria, about 67,9% of working mothers reported to have practiced exclusive breastfeeding and 32,1% of them did not. The majority of working mothers had good knowledge on exclusive breastfeeding(53,6%);reported that they had available facilities for exclusive breastfeeding (58,3%);had a working duration of ≤8 hours/day (51,2%);were supported by their husband (53,6%); and 52.4% said they were supported by health providers. Meanwhile those who had a positive attitude towards exclusive breastfeeding were 50% (Table 1).

Table 1. Frequency Distribution of Exclusive Breastfeeding, Knowledge, Attitude, Facility's Availability, Duration of Work, Husband's Support, Health Provider's Support

Variable		n	%
Exclusive Breastfeeding			
Exclusive		57	67,9
Non-exclusive		27	32,1
	Total	84	100
Knowledge			
Good		45	53,6
Enough		19	22,6
Less		20	23,8
	Total	84	100
Attitude			
Supportive		42	50
Less supportive		42	50
	Total	84	100
Facility's Availability			
Available		49	58,3
Not avaialble		35	41,7
	Total	84	100
Duration of Work			
≤8 hours/day		43	51,2
>8 hours/day		41	48,8
	Total	84	100
Husband's Support			
Supportive		45	53,6
Less Supportive		39	47,6
	Total	84	100
Health Provider's Support			
Supportive		44	52,4
Less Supportive		40	47,6
	Total	84	100

Bivariate analysis showed that knowledge (p=0,033), attitude (p=0,035), facility's availability (p=0,006), duration of work (p=0,000), husband's support (p=0,01), and health provider's support (p=0,000) wereassociated with exclusive breastfeeding (Table 2).

Tabel 2. The Association between Knowledge, Attitude, Facility's Availability, Duration of Work, Husband's Support, Health Provider's Support with Exclusive Breastfeeding

Variable	Exclusive Breastfeeding						p-*value*
	Exclusive		Non-exclusive		Total		
	n	%	n	%	n	%	
Knowledge							
Good	36	80	9	20	45	100	
Enough	11	57,9	8	42,1	19	100	0,033
Less	10	50	10	50	20	100	
Total	57	67,9	27	32,1	84	100	
Attitude							
Supportive	33	78,6	9	21,4	42	100	0,035
Less supportive	24	57,1	18	42,9	42	100	
Total	57	67,9	27	32,1	84	100	
Facility's Availability							
Available	39	79,6	10	20,4	49	100	0,006
Not avaialble	18	51,4	17	48,6	35	100	
Total	57	67,9	27	32,1	84	100	
Duration of Work							
≤8 hours/day	37	86	6	14	43	100	
>8 hours/day	20	48,8	21	51,2	41	100	0,000
Total	57	67,9	27	32,1	84	100	
Husband's Support							
Supportive	36	80	9	20	45	100	0,01
Less Supportive	21	53,8	18	46,2	39	100	
Total	57	67,9	27	32,1	84	100	
Health Provider's Support							
Supportive	38	86,4	6	13,6	44	100	0,000
Less Supportive	19	47,5	21	52,5	40	100	
Total						100	

Variables that can be included into multivariate analysis are variables which in bivariate analysis have p value <0.25 such as knowledge, attitude, facility's availability, duration of work, husband's support, and health provider's support. The results showed that respondents who worked ≤8 hours/day were 8.6 times more likely to exclusively breastfeed than those who worked >8 hours/day (p = 0,001). Meanwhile working mothers who supported by health workers are 9.2 times more likely to practice exclusive breastfeeding compared to working mothers who had less support from health providers.

The most dominant variable affecting exclusive breastfeeding is health provider's support with p-*value* 0,000 (Table 3). The probability of a working mother to provide exclusive breastfeeding is 90%. It means that if a working mother has a duration of work ≤8 hours/day and supported by health providers, then a working mother is 90% more likely to give exclusive breastfeeding.

Table 3. The Result of Multivariate Analysis

Variable	B	Wald	df	Sig.	Exp(B)	(CI 95%)
Duration of work	2,149	12,047	1	0,001	8,575	(2,548 – 28,854)
Health provider's support	2,218	12,911	1	0,000	9,191	(2,741 – 30,820)
Constanta	-1,142	5,803	1	0,016	0,319	

DISCUSSION

The percentage of exclusive breastfeeding in this study is still above the national target of exclusive breastfeeding (39%) but the percentage is smaller than the percentage of exclusive breastfeeding in DIY (71.6%).[2] In some previous studies many have mentioned that exclusive breastfeeding percentage on working mothers is low, such as Tan (2011) states that only 25.3% of working mothers practiced exclusive breastfeeding.[5] The study by Astuti (2010) found that only 5.1% of working mothers gave exclusive breastfeeding.[9]

Meanwhile Abdullah's research (2012) found that 62.5% working mothers practiced exclusive breastfeeding.[10] This results are in line with the results of our study which found that the percentage of exclusive breastfeeding on working mothers is higher than those who not providing exclusive breastfeeding. This might be due to the average of working mother's age in this study is 28 years, which the age is still included in reproductive age (20-35 years). A woman at reproductive age can perform multiple roles, such as a wife, mother, and worker because it can be balanced with good physical strength and not easily tired.

The bivariate analysis found that there was a significant relationship between knowledge and exclusive breastfeeding on working mother. Notoatmodjo (2007) stated that knowledge is a guide in composing someone's actions (overt behavior).[7] The acceptance of new behaviors or adoption of behaviors will be more sustainable when based on knowledge. A positive relationship between knowledge and exclusive breastfeeding behavior can be proved in this study that 80% of working mother with good knowledge succeeds in giving exclusive breastfeed.[7]

Although most of working mothers are often expected to be well-informed, there are findings regarding their knowledge that warrants further interventions. For instance when asked about how to breast feed, how to squeeze milk and how to properly store breast milk, 42%, 44%, 74% and 33% respectively could not answer correctly. Perhaps, health care providers should educate mothers more on these aspects so as create awareness regarding lactation management to working mothers as a health promotion strategu which inadvertently may increase rates of exclusive breastfeeding among workinng mothers.

The result of bivariate analysis shows that there is a significant relationship between attitude and exclusive breastfeeding.The results of this study are in line with Abdullah's (2012) study which found that there is a significant relationship between maternal attitude and exclusive breastfeeding.[10] Sarwono (1997) in Maulana's book (2009) states that attitude is not the same as behavior and behavior does not always reflect someone's attitude, but attitudes can cause patterns of specific ways of thinking that can affect the actions and behavior of society.[11]

The attitude of working mothers about exclusive breastfeeding can be interpreted as the attitude of working mother individually in response to exclusive breastfeeding. In this study about 78.6% of working mother with supportive attitude successfully gave exclusive breastfeeding. Health providers can take advantage of this working mother's attitude to increase exclusive breastfeeding rates. Health providers only need to assist and support working mothers in the form of emotional support, providing the right information among others.

Indicator of facility's availability variable in this study consists of facilities at work and personal facilities owned by each working mother. In the test of the relationship between facility's availability and exclusive breastfeeding it was found that there was a significant relationship between the facility's availability and the exclusive breast feeding on working mother. Rizkianti, et al (2014) found that breast milk facility's availability is an enabling factor that plays a role in exclusive breastfeeding.[8]

Although a workplace does not have special breastfeeding facilities or breastfeeding's room, this does not decrease aworking mother's enthusiasm to

squeeze/breastfeed her baby because there are other rooms that are adequate enough to use. According to previous research, the more available private facilities such as breastfeeding plastic and cooling bag are, the greater the chances of working mothers being able to provide exclusive breastfeeding.[10]

In this study, we found that there is a relationship between a husband's support and exclusive breastfeeding. This is similar to findings by Astuti (2013)[4] and Kurniawan (2013)[9]. Astuti (2013) found that there is a significant relationship between the role of the husband and exclusive breastfeeding. The results of research by Kurniawan (2013) at RS Muhammadiyah Lamongan stated that husband's support encourages the success of exclusive breastfeeding.IDAI (2009) states that success in giving exclusive breastfeeding on working mothers is very dependent on the environment, among this being the husband's support. When a mother gets support from her surroundings, she can comfortably feed and take care of her child while working.[14]

In the multivariate analysis, there only two variables related to exclusive breastfeeding are duration of work and health provider's support. Working mothers who spent ≤8 hours/day at work were 8.6 times more likely to exclusively breastfeed compared to working mothers with a duration of work >8 hours/day. The results of this study are in line with Amin, R et al (2011)[12] who found that the flexible time working mothers to breastfeeding was associated with exclusive breastfeeding process, but the results were not in line with Abdullah's (2012) [10] study which stated no significant association between duration of work while leaving the baby with exclusive breastfeeding.

The length of working time may affect exclusive breastfeeding because the longer the mother spends at work, the longer she leaves the baby at home so that the mother can not breastfeed her baby.[13] The mother's limitations to breastfeeding makes the mother feel worried that she is unable to fulfill the needs of the baby so that working mother chooses to give other types of food when she is not home otherwise known as early weaning.

This study found 86.4% of working mothers who weresupported by health providers succeeded in providing exclusive breastfeeding, whereas 52.5% of working mothers who were less supported by health workers did not succeed in providing exclusive breastfeeding. Research at the Serpong Subdistrict Community Health Center found a significant relationship between the role of health providers and exclusive breastfeeding[9]which is in line with our study. Support from professionals in health sector is essential for mothers, and even education about the importance of breastfeeding should be given from the time the mother begins attending the antenatal clinic.[14] Health providershave a duty to accompany a breastfeeding motherto get through the breastfeeding period, including providing support whenever a mother has breastfeeding problems.

Our studyhas some limitations.The recall method that we used was bound by the ability of respondents to memorize their practice on breastfeeding andalso the used of purposive sampling may not warrant the generalization because only respondents that eligible with our criteria was included in this study.

CONCLUSION

Nearly 7 out of 10 working mothers in Umbulharjo subdistrict, Yogyakarta City, Indonesia practiced exclusive breastfeeding. The factors associated with this practice are the time amount of time spent away at work and health provider's support; the latter being the most significant factor.

RECOMMENDATION

Considering that the health provider's support was the most significant determinant of exclusive breastfeeding, we do recommend that midwives and other health providers

should increase their efforts in offering support to working mothers during their maternity leave so as to maximize uptake of exclusive breastfeeding practices. This can be done through health promotion and education, so that by the time the mother returns to work, they are already psychologically prepared to continue with exclusive breastfeeding. Therefore, it is necessary for the midwife and related health providers to have maternal data including the type of work and maternity leave duration.

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REFERENCES

1. WHO. Global Nutrition Targets 2025: Breastfeeding policy brief. 2014[cited 27 Jan17]. Available from:http://www.who.int/
2. Kementerian Kesehatan RI. Profil Kesehatan Indonesia 2015. Jakarta: Kementerian Kesehatan RI; 2016
3. WHO. Exclusive breastfeeding under 6 months: Data by country.2015 [cited 27 Jan 17]. Available from:http://apps.who.int/
4. Kurniawan, B .Determinan Keberhasilan Pemberian Air Susu Ibu Eksklusif. Jurnal Kedokteran Brawijaya. 2013; 27(4).
5. Tan, KL. Factors Associated with exclusive breastfeeding among infants under six months of age in peninsular Malaysia. International Breastfeeding Journal [serial on the Internet]. 2011 [cited 20 Nov 16]; 6(2): [about 7 p.]. Available from: http://www.internationalbreastfeedingjournal.com/content/6/1/2.
6. Yi-Chun, C., Ya-Chi, W., Wei-Chu, C. Effects of work-related factors on the breastfeeding behavior of working mothers in a Taiwanese semiconductor manufacturer: a cross-sectional survey. BMC Public Health [serial on the internet].June 2006 [cited 20 Nov 16]; 6(160):[about 8 p.]. Available from http://www.biomedcentral.com/1471-2458/6/160. doi:10.1186/1471-2458-6-160.
7. Notoatmodjo, S. Promosi Kesehatan dan Ilmu Perilaku.Jakarta: Rineka Cipta; 2007.
8. Rizkianti, et al. Analisis Faktor Keberhasilan Praktik Pemberian ASI EksklusifDi Tempat Kerja Pada Buruh Industri Tekstil Di Jakarta. Buletin Penelitian Kesehatan. 2014; 42(4).
9. Astuti, I. Determinan ASI Eksklusif Pada Ibu Menyusui. Jurnal Health Quality. 2013; 4(1).
10. Abdullah, GI. Determinan Perilaku Pemberian Air Susu Ibu Eksklusif pada Ibu Pekerja. Kesmas: Jurnal Kesehatan Masyarakat Nasional. February 2013 [cited 30 Nov 16]; 7(7). Available from: http://jurnalkesmas.ui.ac.id/kesmas/article/download/27/28.
11. Maulana, H. Promosi Kesehatan. Jakarta: EGC; 2013.
12. Amin, R., et al. Work related determinants of breastfeeding discontinuation among employed mothers in Malaysia. International Breastfeeding Journal [serial on the internet]. 2011 [cited 20 Nov 16]; 6(4). Available from: http://www.internationalbreastfeedingjournal.com/content/6/1/4.
13. Roesli, U. Mengenal ASI Eksklusif. Jakarta: Tribus Agriwidya; 2009.
14. IDAI. Indonesia Menyusui.Jakarta: Badan Penerbit IDAI; 2009.