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ORIGINAL RESEARCH

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## THE ROLE OF MATERNAL SUPPORT MOTIVATORS AND EXCLUSIVE BREASTFEEDING BEHAVIOR AT THE PUBLIC HEALTH CENTER IN YOGYAKARTA: A CORRELATIONAL STUDY

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### Abstract

**Background:** The target of exclusive breastfeeding decreased to 17% at the Pakualaman Health Center in Yogyakarta due to the barriers caused by the wrong perception regarding breastfeeding and returning to work. The roles of motivators in the promotion activity and exclusive breastfeeding reinforcements are expected to exchange experience among peers who have experienced of exclusive breastfeeding at maternal group activities.

**Objective:** To identify the correlation between the role of motivators in supporting maternal groups in providing exclusive breastfeeding and exclusive breastfeeding behavior.

**Methods:** This was a correlational study with cross-sectional design on 55 samples selected using purposive sampling technique. This study was conducted in women who had a > 6-23-month infant at Pakualaman Health Center in Yogyakarta Indonesia in 2017. Chi-square and multiple logistic regressions were used for data analysis.

**Results:** There was no significant correlation between the role of motivators in supporting maternal groups and exclusive breastfeeding behavior in mothers with 0-6-month infants ( $p = 0.631$ ). There was a significant correlation between the variable of access to information with the behavior of exclusive breastfeeding ( $p = 0.019$ ).

**Conclusion:** The role of motivators in supporting maternal groups has no significant relationship with exclusive breastfeeding behavior. It is suggested for midwives to increase the access of information among mothers, as information access has significant association with behavior of mothers in exclusive breastfeeding.

**Keywords:** maternal group; role of motivators; exclusive breastfeeding

### INTRODUCTION

Exclusive breastfeeding as the optimal nutrition is the advice of WHO based on epidemiological studies describing the benefits for infants and mothers ([American Academy of Pediatrics, 1997](#)). Research of systematic review conducted by ([Kramer et al., 2001](#)) mentioned only giving breast milk for six months by WHO recommendations can reduce morbidity caused by gastrointestinal infections

and no defects or delay during baby's growth and development. However, based on an evaluation conducted by the Global Breastfeeding Scorecard, there were only 40% of under 6-months infants who were exclusively breastfed evaluated from 194 countries ([World Health Organization, 2017](#)). Yogyakarta Province set a target of exclusive breastfeeding at 80% coverage in fluctuation.

In 2014 amounted to 54.9% rose to 69.4% in 2015, and 2016 decreased to 52.18%. The phenomenon of decline also occurred at Pakualaman health center that still amounted to 57.14% in 2016 ([Dinkes Kota Yogyakarta, 2015](#)).

The resistance of the decline phenomenon in exclusive breastfeeding coverage revealed by various studies using systematic review, including a lack of knowledge of mothers on exclusive breastfeeding, cultural factors, lack of social support from the surrounding environment which generates an attitude that does not support the implementation of exclusive breastfeeding ([Bevan & Brown, 2014](#); [Thulier & Mercer, 2009](#)). In addition, there are many wrong perceptions about the circumstances of breastfeeding including insufficient breast milk production, the mother or the baby getting sick, the mother having returning to work, and loss of confidence. These circumstances show that to implement exclusive breastfeeding mothers need more intensive support from the surrounding environment ([Brand, Kothari, & Stark, 2011](#); [Bunik et al., 2010](#); [Olang, Heidarzadeh, Strandvik, & Yngve, 2012](#); [Thomas et al., 2015](#)).

The mothers need a role model and the continued support from the surrounding environment such as the family and the community, especially those who have the same experience can provide motivation to increase the confidence of mothers to breastfeeding exclusively for the education of professionals itself, which is not adequate to build understanding in the implementation of exclusive breastfeeding ([Chola et al., 2015](#); [Dhandapany, Bethou, Arunagirinathan, & Ananthakrishnan, 2008](#)). MacArthur et al. explains that it is important to have support group activities as an effective promotional measure by sharing the information provided by colleagues of the experience and motivator who the mothers know and have experience in efforts to promote exclusive breastfeeding ([MacArthur et al., 2009](#)).

Promotional activities and strengthening measures to improve breastfeeding success are the exchange of experiences in the maternal support group activities, which are a model of social support from the community in Yogyakarta. The activity is guided by the motivator developed by professionals ([Mercy Corps Indonesia, 2008](#)). Mothers who follow the maternal support group guided by the motivator realized many benefits in the process of exclusive breastfeeding because they can communicate well, trust mutually, boost confidence, and their appreciation of the group members ([Bevan & Brown, 2014](#)). Mothers who follow this group more likely have three times chance to breastfeed exclusively ([Lakshmi, 2011](#)). Based on that description, the main formulation of this research is: "Is there any correlation between the role of motivator in supporting maternal groups with exclusive breastfeeding behavior?" This study was conducted to determine the correlation between the role of motivator in supporting maternal groups and exclusive breastfeeding behavior by mothers of >6-23-month infants.

## METHODS

### *Study design and setting*

This research was a correlational study with an analytic survey with a cross-sectional approach to examine the correlation between the role of motivator in supporting maternal groups and exclusive breastfeeding behavior of mothers. This study was conducted in women who had a > 6-23-month infant at Pakualaman Health Center in Yogyakarta in 2017.

### *Sample*

The research sample was determined using purposive sampling and got 55 respondents. The inclusion criteria of this study were mothers with > 6-23-month infants, and motivators in supporting maternal groups participated at least two times starting from pregnancy until the baby was six months and willing to become respondents by signing informed consent. Exclusion criteria were

mothers with 0-6-month infants or >6-23-month infants with unstable mental health conditions.

#### *Instrument*

The research instrument used a questionnaire consisting of three parts. The first was the demographic information related to age, education, past employment status and monthly income of the family that was modified from Scott, J.A., et al. ([Scott, Binns, Oddy, & Graham, 2006](#)). The second part was a questionnaire of the role motivator in supporting maternal groups of three component roles (informative role, the role of supportive and facilitative role) with Likert scale and this questionnaire was developed from basic guidebook of motivator breastfeeding ([IYCN Project, 2011](#); [Shovie, 2016](#)). The third part is the exclusive breastfeeding behavior questionnaire that was adopted and modified from Ismail, T and Sulaiman and Rizqiea ([Ismail & Sulaiman, 2010](#); [Shovie, 2016](#)); the questionnaires were tested by the construct validity of four experts, two of which were a pediatric doctors, midwifery coordinator of Public Health Center and Indonesian experts.

#### *Data analysis*

Chi-square test was to assess the correlation between the role of maternal support group motivator and the mother's behavior of exclusive breastfeeding, the significance test was done by using  $\alpha$  of 0.05 and CI. 95%. Logistic regression statistical tests used multivariable analysis to show the correlation between the dependent variable and external variables with independent variables after the discovery of their significance in the bivariable analysis.

#### *Ethical clearance*

This research has received an approval from Universitas Aisyiyah Yogyakarta by obtaining a letter of ethical clearance from Aisyiyah University Research Ethics Committee with number: 05/KEP-UNISA/IX/2017.

## RESULTS

**Table 1** shows the majority of respondents are largely made up by mothers aged 20-35 years, with the level of secondary education, and they are mothers who take care of the household. Most respondents also get monthly family income < Rp 1.572 million, as well as most information access obtained from midwives.

**Table 1** Frequency distribution of the characteristics of participants

Characteristics	Frequency (n)	Percentage (%)
<b>Age</b>		
Healthy Reproduction	36	65.45
Risky Reproduction	19	34.55
<b>Education</b>		
Higher education	14	25.45
Secondary Education	31	56.36
Basic Education	10	18.18
<b>Occupation</b>		
Worker	23	41.82
Non-Worker/Housewife	32	58.18
<b>Income</b>		
≥ Minimum Wage	22	40.00
< Minimum Wage	33	60.00
<b>Information Access</b>		
Maternal support group	23	41.82
Midwife	32	58.18

**Table 2** Frequency distribution of the role of motivators and exclusive breastfeeding behavior

Variable	Behavior of Exclusive breastfeeding		(n total = 55)
	Exclusive breastfeeding n (%)	Non-Exclusive breastfeeding n (%)	
<b>The role of maternal support motivator</b>			
Contributing	19 (70.37)	18 (64.29)	37
Not contributing	8 (29.63)	10 (35.71)	18

**Table 2** shows the majority of respondents who exclusively breastfeed also receive contributions from the motivators to follow the maternal support group for  $\geq 3$  times. While **Table 3** shows the value of  $p= 0.631(p>0.05)$ ,

which meant that  $H_0$  is accepted so that there was no significant correlation between the role of motivators and the behavior of exclusive breastfeeding in mothers with 0-6-month infants.

**Table 3** Correlation between the role of maternal support group motivator and behavior exclusive breastfeeding

Variable	Behavior of Exclusive breastfeeding				X <sup>2</sup>	P-value
	Exclusive breastfeeding		Non-exclusive breastfeeding			
	N	(%)	n	(%)		
<b>The role of motivator</b>						
Contributing	19	(51.35)	18	(48.65)	0.23	0.631
Not contribute	8	(44.44)	10	(55.56)		

**Table 4** Analysis of correlation of respondents' characteristic and exclusive breastfeeding behavior

Characteristics	Behavior of exclusive breastfeeding		X <sup>2</sup>	P-value
	Exclusive breastfeeding n (%)	Non-exclusive breastfeeding n (%)		
<b>Age</b>				
Reproductive Health	18 (66.67)	18 (64.29)	0.03	0.853
Reproductive Risk	9 (33.33)	10 (35.71)		
<b>Education</b>				
Higher Education	8 (29.63)	6 (21.43)	0.700	0.705
Secondary Education	15 (55.56)	16 (57.14)		
Basic Education	4 (14.81)	6 (21.43)		
<b>Jobs</b>				
Working	17 (62.96)	15 (53.57)	0.49	0.480
Not Working / housewife	10 (37.04)	13 (46.43)		
<b>Income</b>				
$\geq$ Minimum Wage	11 (39.29)	11 (40.74)	0.01	0.912
< Minimum Wage	16 (59.26)	17 (60.71)		
<b>Information Access</b>				
Maternal support group	7 (25.93)	16 (57.14)	5.50	0.019
Midwives	20 (74.07)	12 (42.86)		

**Table 4** shows the value of information access variable is statistically significantly correlated to the variable of the behavior of exclusive breastfeeding. **Table 5** shows no change in the value of OR and insignificant. Variable access to information is not confounding to the behavior of exclusive breastfeeding, but the

table shows that respondents who have access to information from Midwives are likely to have opportunities of exclusive breastfeeding 3.9 times greater than the respondents who have access to information from a maternal support group.

**Table 5** Logistic regression analysis of the correlation between the role of motivator and exclusive breastfeeding behavior

Variable	Unadjusted regression			
	Unadjusted Regression		Model 1	
	OR	(CI 95%)	OR	(CI 95%)
<b>Role Motivator</b>				
Contributing	1319	(0.426-4.090)	1.450	(0.438-4.801)
Not Contributing	1		1	
<b>Information Access</b>				
Midwife				3.903 (1.236-12.32)
Maternal Support Group			1	
AIC (%)		80.00		76.23

## DISCUSSION

Our findings show that there was no statistically significant correlation between the role of motivator and the behavior of exclusive breastfeeding. This study supports the results of previous research ([Ichsan, 2014](#)) stated that there was no significant difference in exclusive breastfeeding among mothers who followed the maternal support group from mothers who did not follow the maternal support group with a value of  $p = 0.820$  ( $p > 0.05$ ). According to that study, mothers who already had a lot of knowledge and a good attitude to follow the maternal support group could not guarantee that the mother would give exclusive breastfeeding for their babies for other factors.

Another research also mentioned that respondents who participated in the maternal support group less than three times might change the behavior of exclusive breastfeeding or otherwise. Mothers who followed the maternal support group  $< 3$  times had a chance of 0.94 times (CI95% 0:36 to 2:49) smaller than the mothers who followed maternal support group  $> 3$  times with a chance of 2 times (CI95% 1.00-3.85) for exclusive breastfeeding ([Lakshmi, 2011](#)).

Although the research of the role of maternal support group motivator shows no statistically significant correlation with the behavior of exclusive breastfeeding in a practical aspect, maternal support group motivator contributes to the implementation of exclusive breastfeeding. Findings of our study show that the majority of respondents who have received contributions from the maternal support group motivator implemented exclusive breastfeeding for 70.37%.

Things that cause insignificant correlation between the role of motivator and the behavior of exclusive breastfeeding in this study is providing solutions to exclusive breastfeeding problems which only given face-to-face to mothers who are having problems, so mothers who participated might not understand. Thus, the majority of mothers need midwife to provide a solution to their problem to implement exclusive breastfeeding.

Our logistic regression shows that access to information has a significant correlation to the formation of exclusive breastfeeding behavior with  $p = 0.001$  ( $p < 0.05$ ). Access to information that could make exclusive

breastfeeding behaviors was obtained from a health professional (midwife) that had the possibility of 3 times greater than the information obtained from community groups (the motivator in the maternal support group). This is in line with previous study stated that midwives as health professionals are able to improve the behavior of exclusive breastfeeding to provide care since the first month of pregnancy until delivery and provide concrete examples in carrying out the process of breastfeeding (Ekström & Thorstensson, 2015).

## CONCLUSION

There was no significant correlation between the role of motivators in supporting maternal groups and exclusive breastfeeding behavior in mothers with 0-6-month infants. There was a significant correlation between the variable of access to information with the behavior of exclusive breastfeeding.

### Declaration of Conflicting Interest

None declared.

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### Author Contribution

All authors contributed equally in this study.

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