



Laurentius Juan Wicaksono, Dimas Tri Anantyo,
Julian Dewantiningrum, Bambang Hariyana

THE EFFECT OF BREASTFEEDING EDUCATION AMONG POSTPARTUM MOTHERS ON EXCLUSIVE BREASTFEEDING PRACTICE ONE MONTH AFTER DELIVERY

Laurentius Juan Wicaksono^{1*}, Dimas Tri Anantyo², Julian Dewantiningrum³,
Bambang Hariyana⁴

¹ Undergraduate Student of Faculty of Medicine, Diponegoro University

² Lecturer, Department of Pediatrics, Faculty of Medicine, Diponegoro University

³ Lecturer, Department of Obstetrics and Gynecology, Faculty of Medicine, Diponegoro University

⁴ Lecturer, Department of Public Health, Faculty of Medicine, Diponegoro University

* Corresponding author: laurentiusj29@gmail.com

ABSTRACT

Background: Exclusive breastfeeding is a standart of care for newborn. In 2017 within area of Semarang City, only 19,5% women who practiced exclusive breastfeeding .One of the problems was low level of mother's knowledge because lack of breastfeeding education especially by the health services institutions. The aim of the study is to asses the effect of breastfeeding education among postpartum mothers on exclusive breastfeeding practice in one month after delivery. **Method:** A quasi experimental study design was conducted among postpartum mother in purposively selected health institutions of Semarang city. All eligible women were placed into intervention (n=25) and control (n=25) group. The intervention group received standart education with educational media and control group received standart education only which lasts for 15 minutes. Data were collected through interviewer-administered questionnaire at one month after education session. **Results:** The number of mothers who practiced exclusive breastfeeding for a month was greater in intervention group than the control group (p=0,025). The level of knowledge also greater in intervention group (p=0,016). Also, there were no significant relationship between age, working status, maternal parity and exclusive breastfeeding while there was significant relationship between maternal education and exclusive breastfeeding practice. **Conclusion:** Breastfeeding education with educational media increases the mother's knowledge about exclusve breastfeeding and practice of exclusive breastfeeding up to 1 month.

Key words : breastfeeding education, exclusive breastfeeding

INTRODUCTION

Breastfeeding is the most natural feeding in infancy. Human milk contains nutritions and defensive factors which is very beneficial for optimal growth for infants. Exclusive breastfeeding is a term that mother should only give breastfeed for their babies without giving other complementary feeding for the first six months.¹ WHO also recommends exclusive breastfeeding practice for 6 months and continued breastfeeding for two years or more to meet their babies evolving

nutritional requirements to achieve optimal growth, development, and health. According to Indonesia Health Profile in 2017, nationally, mother who practiced exclusive breastfeeding reached 61,33%. In contrast, only 19,5% mother who practiced exclusive breastfeeding in Semarang City, Central Java.²

There are various reasons for low breastfeeding rate in Semarang City. Lack of mother's knowledge about benefit of breastfeeding and mother's sociocultural are important factors behind it. Education



support about importance of breastfeeding has been shown to be effective intervention to increase rate of exclusive breastfeeding.³ Various studies have investigated the effect of breast feeding education on exclusive breastfeeding practice. However, there has never been studies that tried to know whether breastfeeding education on postpartum mother affected exclusive breastfeeding practice for the first month. The aim of the study is to assess the effect of breastfeeding education among postpartum mother on exclusive breastfeeding practice in the first month after delivery.

METHOD

A quasi experimental study design was conducted in selected health institution of Semarang City from June 2019 to September 2019 in Diponegoro National Hospital Semarang. The sample size was determined using the formula for the difference between 2 proportion. This formula gave a sample size of 25 for each group divided into intervention and control group. The intervention group received standard education with educational media (*booklet*) and control group received standard education only which lasts for 15 minutes. A post test questionnaire was prepared by reviewing materials on the topics with some modification to determine exclusive breastfeeding practice and maternal knowledge about exclusive breastfeeding.

Data were collected through interviewer-administered questionnaire at one month after education session. Data entered and analyzed using SPSS software package afterward. Descriptive analysis was made for socio demographic characteristic of the sample, such as maternal age,

educational status, working status, and maternal parity. Maternal age divided into lower than 20 years old, 20-35 years old, and more than 35 years old. Mother's education background divided into low (elementary school or lower), moderate (junior to senior high school), and high (more senior high school). Working status divided into working and not working and maternal parity divided into primipara and multipara. *Chi-square* test was used to test significant difference in proportion of categorical variables between two groups. The result was presented using appropriate frequencies and proportions and a *p* value <0,05 was considered statistically significant.

Ethical clearance was obtained from Medical Faculty of Diponegoro University Research Ethics Commission, no.114/EC/KEPK/FK-UNDIP/IV/2019. Informed consent was obtained from participants after explaining the objectives of the study. The right of the subject whether to participate in the study or to withdraw from the study was respected.

RESULTS

Characteristics of mother like maternal age, level of education, working status, and parity were shown in table 1. There were no statistically relationship between age, working status, maternal parity and exclusive breastfeeding ($p < 0,05$) while there was significant relationship between maternal education and exclusive breastfeeding practice ($p > 0,05$). The relationship between characteristics of sociodemographic and obstetric mother and exclusive breastfeeding practice showed in table 2.



Table 1. Sociodemographic and obstetric characteristics of mothers in Diponegoro National Hospital June – September 2019-10-12

Variable	n	(%)
Age		
< 20	3	(6)
20 – 35	41	(82)
> 35	6	(12)
Educational status		
Low	5	(10)
Moderate	38	(76)
High	7	(14)
Working status		
Not working	35	(70)
Working	15	(30)
Parity		
Primipara	26	(52)
Multipara	24	(48)
Exclusive breastfeeding		
Yes	36	(72)
No	14	(28)
Level of knowledge		
Good	34	(68)
Bad	16	(32)

The exclusive breastfeeding practice and good level of knowledge higher in intervention group while lower exclusive breastfeeding practice and good level of

knowledge in control group. Relationship between both control and intervention group on mother's knowledge and exclusive breastfeeding practiced showed in table 3.

Table 2. Relationship between sociodemographic and obstetric characteristics of mothers to exclusive breastfeeding practice in the first month

Variable	Exclusive breastfeeding				p [¥]
	Yes		No		
	n	(%)	n	(%)	
Age					
< 20	2	(66,7)	1	(33,3)	0,796
20 – 35	29	(70,7)	12	(29,3)	
> 35	5	(83,3)	1	(16,7)	
Educational status					
Low	1	(20)	4	(80)	0,009
Moderate	28	(73,7)	10	(26,3)	
High	7	(100)	0	(0)	
Working status					
Not working	27	(77,1)	8	(22,9)	0,304
Working	9	(25)	6	(42,9)	
Parity					
Primipara	19	(73,1)	7	(26,9)	1,00
Multipara	17	(70,8)	7	(29,2)	

¥ : Chi square



Table 3. Relationship between control and intervention group on mother's knowledge and exclusive breastfeeding practice in the first month after intervention

Variable	Level of knowledge				p [¥]	Exclusive Breastfeeding				p [¥]
	Good		Bad			Yes		No		
	n	(%)	n	(%)		n	(%)	n	(%)	
Breastfeeding education										
control group	13	(52)	12	(48)	0,016	14	(56)	11	(44)	0,025
intervention group	21	(84)	4	(16)		22	(68)	3	(12)	

¥ :Chi square

Table 3 shows that there is a significant relationship between breastfeeding education in both group on level of knowledge of mothers and exclusive breastfeeding practice.

Breastfeeding education were tested for the association with the exclusive breastfeeding in the first month. The study showed that there was more mother who practiced exclusive breastfeeding in intervention group which got standart education with media than control group which only got standart education. The study also showed significant association between breastfeeding education and exclusive breastfeeding practice in the first month ($p=0,016$, $p<0,05$).

DISCUSSION

In this study, the efect of breastfeeding education was studied on exsclusive breastfeeding practice in the first month. There was significantly more mother who practiced exclusive breastfeeding in the first month in intervention group than control group. The study also found that there was a significant association between breastfeeding education and exclusive breastfeeding practice in the first month. Similar results on this study were seen by other study. Previous study in Semarang showed that breastfeeding education increased a number of mother who succesfully practiced exclusive

breastfeeding.⁴ Imdad et al. also concluded that breastfeeding promotion significantly affected exclusive breastfeeding practiced.⁵ Another study was conducted in Jambi also support this study with the result that breastfeeding education significantly associated with exsclusive breastfeeding attitude.⁶

This study emphasizes that breastfeeding education is very useful. Every oppurtunity of education should be availed by health care workers to promote exclusive breastfeeding. Homevisit, meeting session, and growth monitoring session are good timing oppurtunity to share some information and doing individual counseling.⁷ The usage of educational media, such as booklet also should be considered. Health educational media play an important role in delivering health information. Principally, the knowledge existed in human being is captured or received through human senses. The more human senses used to receive information, the more knowledge obtained.⁸ Furthermore, the more knowledge of mother about exclusive breastfeeding can lead to successfull exclusive breastfeeding practice.

Another finding in this study is the educational status of mother can affect the exclusive breastfeeding practiced while maternal age, working status, and parity not affect the exclusive breastfeeding practiced. Statistically, there is a significant association



between educational status and exclusive breastfeeding practiced ($p=0,09$). Educational status is one of the factors that contributes to successful exclusive breastfeeding. The data showed that the higher educational status of the mothers, the more likely the mother gives exclusive breastfeeding. Similar results were obtained in study done by Mardeyanti and Wiwin et al. that concluded mother educational status had significant influence.^{9,10} Mothers with lower educational status would have difficulty to understand about information given.¹¹

Maternal age, working status, and parity not affect the exclusive breastfeeding practiced in this study. It is known that reproduction organ are mature at the age of 20-35 years. However, there also many factors that contributed to the failure of exclusive breastfeeding at the age of 25-35 years, such as sociocultural, lack of knowledge about exclusive breastfeeding in mothers, and incessant promotion of formula milk.¹² Another study reported that there is no significant association between maternal age and exclusive breastfeeding practice.¹³ As for working status not significantly associated with exclusive breastfeeding practice because in the first month after delivery, working mother had a compensation to time off for 1,5 month.¹⁴ As with maternal age, parity not affect the exclusive breastfeeding practice because of other factors that contributed to the failure of breastfeeding practice. This findings supported by previous study that found there is no significant effect of maternal parity on exclusive breastfeeding practice.¹⁵

Based on findings, it is recommended for every mothers to be encouraged about exclusive breastfeeding by giving proper education about the importance of exclusive breastfeeding to

promote exclusive breastfeeding in every health facilities. Some limitation of this study was the limited time for the study so follow up was done in the first month and longterm follow up is needed.

CONCLUSION

This study concludes that breastfeeding education with educational media for postpartum mother can increase the knowledge and exclusive breastfeeding rate in the first month after delivery.

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Laurentius Juan Wicaksono, Dimas Tri Anantyo,
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