

Mentoring with e-booklet on duration of exclusive breastfeeding

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Abstract

In Indonesia, Infant Mortality Rate IMR are highest in 2013. One of prevention efforts to reduce infant mortality rate is Exclusive Breastfeeding. Lack of Exclusive Breastfeeding is one of the problems in Indonesia. Malang has nutrition problem of Complementary feeding practice before six month old. Nutrition education about Exclusive Breastfeeding should be carried out to support Exclusive Breastfeeding practice. E-booklet is modification from booklet with a easily language punctuated by images and has visual messages in cellular mobile phone expected to increase Exclusive Breastfeeding practice. This study aims to Analyze the Effects of Mentoring on Duration of Exclusive Breastfeeding Implementation. This research design uses Quasi Experiment with Posttest Only Control Group Design. This research was conducted in the working area of Puskesmas Kepanjen Malang Regency. The number of samples of this study were 42 pregnant women who would give birth in April - June 2017, divided in to control and treatment groups. Mann-Whitney statistical results showed that there was difference in duration of Exclusive Breastfeeding ($p=0,000$) in the control and treatment group. The conclusion of this research is that Mentoring with E-Booklet gives positive effect to duration of Exclusive Breastfeeding.

Keywords: mentoring, e-booklet, exclusive breastfeeding

Introduction

One of the health problems in Indonesia is infant mortality. The infant mortality rate in developing countries, especially Indonesia, is still high. According to the East Java Health Profile 2013, the infant mortality rate in Indonesia in 2012 was 32 per 1,000 live deaths, the infant mortality rate in East Java was 40 per 1,000 live births (Risksedas, 2013). The factor for the high Infant Mortality Rate (IMR) is the low coverage of exclusive breastfeeding. A total of 136.7 million babies, babies born worldwide and only 32.6% of them are exclusively breastfed in the first 6 months (Depkes, 2014). Based on data from Risikesdas in 2013, infants who get exclusive breastfeeding in Indonesia are only 15.3%. Exclusive breastfeeding coverage in 2015 in East Java was 73.8% and in Malang Regency was 64.89% (Kabupaten Malang, 2013). Coverage of exclusive breastfeeding in 2016 at the Kepanjen Health Center was 74.69% (Puskesmas Kepanjen, 2016). Based on the achievement data, it is still problematic because the achievement target of exclusive breastfeeding are 80% (Depkes, 2018). The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) have recommended several things to increase exclusive breastfeeding coverage, are providing opportunity for Early Initiation of Breastfeeding is carried out less than 1 hour (WHO, 2009).

Early Breastfeeding Initiation failure is caused by several factors, among others, the mother's lack of knowledge about the importance of Early Breastfeeding Initiation. The attitude of mothers who reject the implementation of Early Breastfeeding Initiation along with the lack of family support and health workers, the lack of adequate health facilities, and government policies that do not support the implementation of Early Breastfeeding Initiation. The mother lacks confidence to do Early Breastfeeding Initiation so that the baby will lose a source of food that is very important for his life (Helen, 2007). A mother often lacks knowledge and understanding of correct lactation management such as, the importance of breastfeeding, how breastmilk comes out, how to position breastfeeding, and good positioning and correct (Proverawati, 2010). These obstacles can be overcome with assistance. This form of assistance is carried out by giving attention, conveying messages, encouraging, inviting, providing solutions, delivering assistance, giving advice, referring, mobilizing and collaborating (Depkes, 2006). The results of the study show that the nutrition assistance program can improve the parenting patterns and nutritional status of malnutrition toddlers at 3 months after assistance (Ayu, 2008). Studies show that booklet media is effective in improving infant feeding practices (Putri, 2016). E-Booklet is a modification of the booklet by prioritizing visual messages and is packaged in easy-to-understand electronic media (mobile phones) (Suhardjo, 2003). This study aims to Analyze the Effects of Mentoring on Duration of Exclusive Breastfeeding Implementation.

Methods

This research is a Quasi Experimental research using the Posttest Only Control Group Design. The independent variable is mentoring, the dependent variable is the duration of exclusive breastfeeding (Sugiyono, 2007). This research will be conducted in the Kepanjen Health Center working area which is divided into two groups, namely the treatment group (Panggungrejo, Kepanjen, Dilem, and Ngadilangkung villages) and the control group (Mojosari, Jatirejoyoso, Curungrejo, Sukoraharjo villages). Subjects used was 42 mothers using purposive sampling technique. Divided into two groups, namely 21 mothers in the treatment group and 21 mothers in the treatment group (Sastroasmoro, 2011). Data collection on subject characteristics including age, position of children, mother's education, work of mothers and husbands, and family income using a questionnaire. The measurement of IMD implementation uses a checklist and the duration of exclusive breastfeeding uses the FFQ and observation (Prahesti, 2013). Step of research shows in figure 1.

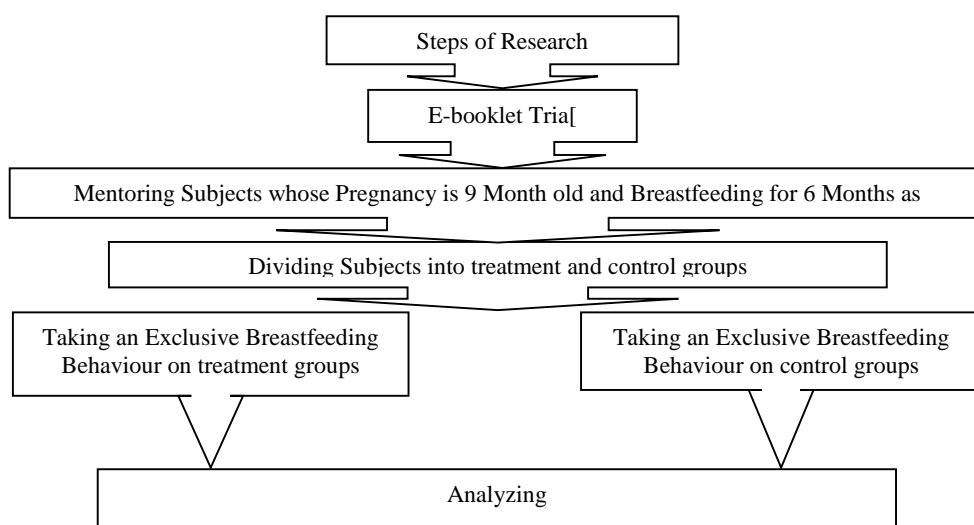


Figure 1.Steps of Research

The author implements ethics that must be adhered to in conducting research, bearing in mind that health research will have a direct relationship to humans. Respondent's consent to follow the incident by placing an informed consent order / consent form. Health research ethics carried out include *Right to full disclosure, Signing of Inform concent, Anonymity, and Confidentiality*. Univariate analysis was carried out on each variable using a frequency distribution table to produce a frequency distribution and the percentage of each variable. Data normality uses the Saphiro Wilk test. The bivariate analysis used the Mann Whitney test to test the difference in the duration of exclusive breastfeeding because the data were not normally distributed (Dahlan, 2013).

Results

The factors that can influence exclusive breastfeeding include the characteristics of the subject. Subject characteristics include: mother's age, mother's latest education, mother's parity, maternal occupation, husband's work and socioeconomic conditions display in table 1. The subjects of this study were 42 mothers consisting of the treatment group (21) and the control group (21). Most of the maternal age in the treatment group, namely the age of 20-29 years, was 10 people and the control group was 12 people. Most of the parity level of mothers in the treatment group (9 mothers) and the control group (10 mothers) was the 2nd child. The parity level of the 2 in the treatment group was higher than the control group. Most of the mother's education in the treatment group and the control group is Senior High School. Most of the family income in the treatment group and the control group is lower than the UMK.

Table 1. Distribution of Subjects Characteristics

Variabel		Treatment		Control	
		N	%	N	%
Mother's age	20–39 Years	20	95,23	20	95,23
	≥ 40 Years	1	4,76	1	4,76
	Total	21	100,00	21	100,00
Parity	First	8	38,10	3	14,29
	≥ Second	13	61,90	18	85,71
	Total	21	100,00	21	100,00
Mother's Education	Primary School (PS)	3	14,29	2	9,52
	Junior High School (JHS)	4	19,05	5	23,81
	Senior High School (SHS)	9	42,86	13	61,90
	Academy	2	9,52	0	0,00
	Not Advanced PS	1	4,76	0	0,00
	Not Advanced JHS	2	9,52	1	4,76
Total	21	100,00	21	100,00	
Family Income	Lower than UMK	17	80,95	16	76,19
	Higher than UMK	4	19,05	5	23,81
	Total	21	100,00	21	100,00

Table 2. Distribution of Early Breastfeeding Initiation

Variabel	Category	Treatment		Control	
		N	%	N	%
Early Breastfeeding Initiation	Yes	13	61,90	12	57,14
	No	8	38,10	9	42,86
	Total	21	100,00	21	100,00

Table 2 shows the distribution of the implementation of Early Breastfeeding Initiation in the treatment group and the control group. The number who performed of Early Breastfeeding Initiation in the treatment group amounted to 13 people, higher than the control group which amounted to 12 people. The number who performed Early Breastfeeding Initiation in the treatment group amounted to 13 people, higher than the control group which amounted to 12 people.

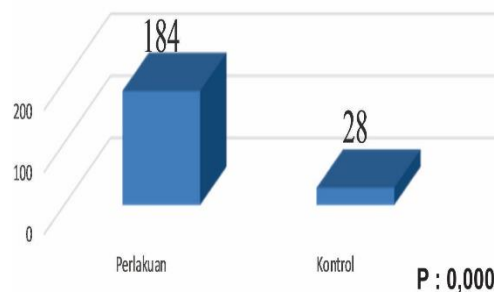


Figure 2. The Effect of Mentoring to Duration of Exclusive Breastfeeding

Figure 2. shows the results of the effect mentoring to duration of exclusive breastfeeding. The Mann Whitney test was used to compare the duration of exclusive breastfeeding in the treatment and control groups. There was a significant difference in exclusive breastfeeding in the treatment group longer than the control group ($p = 0.000$).

Discussion

Most of the maternal age in the treatment group, are 20-29 years, was 10 people and the control group was 12 people. A young mother's age has an effect on her immature psychological state, so that she is still unstable in facing existing problems (Hurlock, 2008). A young mother still needs guidance and support from family to foster self-confidence. According to Purnamawati's research, it shows that there is no significant relationship between maternal age and exclusive breastfeeding (Purnamawati, 2007). Most of the parity level of mothers in the treatment group (9 mothers) and the control group (10 mothers) was the 2nd child. The parity level 2nd in the treatment group was higher than the control group. Parity greatly affects a person's acceptance of information where the more experiences a mother has, the easier acceptance will be. Experience is an event that a person has experienced in interacting with his/her environment and can influence behavior that is carried out (Pariani, 2007). Most of the mother's education in the treatment group and the control group is Senior High School. According to Sari, the factors that influence the level of knowledge in general are age, environment, socio-culture, education, experience. Education is an activity or learning process to develop or improve certain abilities so that educational goals can stand on their own. The level of education can determine whether a person is easy to absorb and understand the knowledge they acquire, in general, the higher a person's education the better the knowledge (Sari, 2012). According to Ramlah S's research, the level of high school and tertiary education is 28 people each, which means that pregnant women allow them to easily grasp the information provided and be able to recall it (Ramlah, 2008).

Most of the subject work in the treatment group and control group is entrepreneur. Working mothers can have negative consequences if the individual experiences fatigue and ultimately leads to stress (Carlson, 2007). Working breastfeeding mothers have strenuous activities if the mother does not get support and stress will affect the release of breast milk. The results of research conducted by Tarwaka proved that workload can increase work stress (Tarwaka, 2012). Most of the husband's occupation in the treatment and control groups is non government employee. Family support, especially husbands can determine the success or failure of breastfeeding, because the husband's support will create a feeling of

comfort in the mother so that it will affect milk production and increase enthusiasm and comfort in breastfeeding. This support is carried out by providing motivation that mothers can successfully breastfeed their babies well (Mila, 2007). The results of Ramdani's research (2010) show that there is a relationship between the husband's role and exclusive breastfeeding. The husband's private job will affect breastfeeding support because the husband will spend more time outside the home than inside the house (Ramdani, 2010). A husband who works outside the home can also provide assistance and support to a wife who is breastfeeding, including sharing information about breastfeeding. and the importance of exclusive breastfeeding through social media with the hope that some information is compatible with their needs at home (Afifah, 2007).

Most of the family income in the treatment and control groups is lower than the UMK. The economic level of the family is one of the determining patterns of breastfeeding. According to research by Afifah (2007), the income factor greatly supports exclusive breastfeeding. The influence of western culture, urbanization and technological advances have caused a shift in the socio-cultural values of society (Afifah, 2007). Breastfeeding babies is considered not modern and places mothers in a lower position compared to upper class mothers. The rapid development of the formula milk industry with various promotions in the mass media can lead to misunderstanding. The increasing in income also increases the percentage of spending including substitute foods for breast milk so that mothers tend not to exclusively breastfeed. The lower socio-economy of the UMK can affect the purchasing power of subjects towards formula milk so that mothers prefer breastfeeding their babies instead of buying formula milk (Lipse, 2007). The success of the Early Breastfeeding Initiation practice is also influenced by health workers who help mothers during childbirth. According to Roesli 2008, one of the factors that influence the success of Early Breastfeeding Initiation is the mother's perception of a midwife who helps deliveries (Roesli, 2008). According to Tarigan's research, the support of health workers who help deliveries is a reinforcing factor for exclusive breastfeeding for babies (Tarigan, 2012).

Interviews were also conducted with health workers who assisted the mother's delivery process. Based on the results of interviews with health workers who assisted the process of implementing Early Breastfeeding Initiation in the treatment group, it was found that the reason for not implementing Early Breastfeeding Initiation was that the baby had not had time to find the mother's nipple, so it was said to have failed in practicing Early Breastfeeding Initiation. Babies who crawl for 30 minutes and are placed under the mother's breast are also said to fail in Early Breastfeeding Initiation practice, because the position in placing the baby is not correct. Interviews were also conducted with health workers who assisted in the delivery process in the control group, who found that the reason for not carrying out Early Breastfeeding Initiation was that the baby had not had the chance to find the mother's nipple, and the condition of the mother who was bleeding had to be referred to the hospital. The success of the Early Breastfeeding Initiation practice is also influenced by health workers who help mothers during childbirth. There is an effect of mentoring using E-Booklet media to mothers on the length of exclusive breastfeeding. The distribution of the duration of exclusive breastfeeding, in the successful category, the treatment group amounted to 13 people, higher than the control group of 1 person. The failure factor of exclusive breastfeeding is the lack of role of health workers and socio-culture. Health services have a big role in the success of mothers to implement exclusive breastfeeding. This can be started during antenatal care, namely how health services can provide quality antenatal care to pregnant women, which in turn has an impact on the success of mothers to breastfeed, especially breastfeeding exclusively (Sabati, 2015).

The culture that exists in society, such as providing complementary foods with early breastfeeding, also affects the success of breastfeeding (Peter, 2005). Based on in-depth interviews with mother A in the treatment area, researchers obtained information about one of the factors for the failure of exclusive breastfeeding in treatment. The subject gave birth at the maternity clinic A, when the breastmilk had not yet come out, the health officer gave formula milk. "... *habis lahiran air susu saya*

tidak mau keluar mbak dan anak saya di bawa mbak-mbak yang bantu bu bidan dimandikan trus anak saya diberi susu formula dulu mbk untuk sementara...". Sabati's research states that health workers have a positive impact on breastfeeding mothers who breastfeed exclusively (Sabati, 2015).

Based on in-depth interviews with S mother in the control area, the researcher got information about one of the factors for the failure of exclusive breastfeeding in the control area. The subject said that according to the culture in the community around the subject, it is okay for a newborn to be given formula milk because the mother's milk is only a little and if the baby has been given honey and a little banana for a few days. *“...setelah babaran anak saya di kasih susu formula dan beberapa hari saya ibu saya disuruh netesin madu mbk di mulutnya dan dikerikan pisang karena pada pertama lahir anak saya besar mbak kalau tidak begitu nanti ndak tuso mbak,,,”* the surrounding community and also the role of health workers who do not support exclusive breastfeeding. It is supported by Ngwang's research, that breastfeeding mothers provide additional water and food to their babies before the age of 6 months. Mother's supporting factors in providing early complementary breastfeeding are due to culture (Peter, 2005).

The role of health workers is a driving factor for the success of exclusive breastfeeding because their support is in the form of practices that can be applied in everyday life. Culture is an inhibiting factor for the success of exclusive breastfeeding because of the role of parents in guiding their children (Tarigan, 2012). Increasing the success of exclusive breastfeeding must receive support from all parties. There is an effect of mentoring using E-Booklet media to mothers on the length of exclusive breastfeeding. E-Booklet as a modification of the booklet by prioritizing visual messages and packaged in easy-to-understand electronic media (cell phones) (Suhardjo, 2003). Mentoring is carried out from the time the mother is 9 months pregnant, until the breastfeeding process lasts for 6 months. This is supported by Asma Misbach's research conducted at Sokoto State Nigeria in 2011 which found that the practice of exclusive breastfeeding decreased in mothers with low education and needed to improve information provision and develop support systems for maternal care including mentoring (Misbach, 2011).

Conclusions

The E-Booklet does not affect to practice of early breastfeeding initiatif. There were more Mothers (59,52%) who practiced early breastfeeding initiatif in this study than Asma Misbach's research (20%) in Nigeria on 2011. There is an effect of assistance with E-Booklet media on the duration of exclusive breastfeeding ($p = 0.000$). The treatment group gave exclusive breastfeeding longer than the control group. The results of this study can be evidence-based practice in improving breastfeeding programs for babies, so that problems with IMD and exclusive breastfeeding can be handled properly.

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