

THE EFFECTIVENESS OF USING E-BOOKLETS ABOUT COMPLEMENTARY FEEDING IN INCREASING THE KNOWLEDGE AND ATTITUDES OF MOTHERS OF BABIES IN SEMBAHE BARU VILLAGE

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ABSTRACT

Good nutritional intake will support rapid growth and development, whereas inappropriate nutritional intake will cause babies to experience malnutrition which will ultimately have an impact on increasing morbidity and infant mortality rates. Complementary breastfeeding is given in stages according to the child's age, starting from soft to soft form until the child gets used to family food. Low maternal knowledge and attitudes are factors related to incorrect provision of complementary breastfeeding. This research aims to determine the Effectiveness of Using E-Booklets about Complementary Feeding in Increasing the Knowledge and Attitudes of Mothers of Babies in Sembahe Baru Village. This research uses a quasi-experimental design (Quasy experiment) with a pretest-posttest research design without control group design. The population in this study were all mothers who had babies aged 6-11 months in Sembahe Baru Village. The sample size used was 44 people. The instruments used in this research were identity questionnaires, knowledge questionnaires, attitude questionnaires and booklets. Data analysis was carried out using the Wilcoxon test because the data was not normally distributed. The research results showed that the characteristics of respondents were more likely to be 20-35 years old (61.4%), more highly educated (56.8%), more likely to have parity ≤ 2 (65.9%). The average mother's knowledge score about complementary breastfeeding before using the E-booklet was 12.65, increasing after being given the E-booklet, namely 17.48. The average score of mothers' attitudes about complementary breastfeeding before using the E-booklet was 13.84, increasing after being given the E-booklet, namely 17.92. Research results show that the use of E-booklets is effective in increasing Mother's Knowledge (0.001) and Attitudes (0.001) in Providing complementary breastfeeding. It is recommended for Health officers in Sembahe Baru Village to provide education about complementary breastfeeding using e-booklet media because it is effective in increasing maternal knowledge and attitudes so that mothers of babies can apply it correctly in making and giving complementary breastfeeding.

Keywords: *complementary breastfeeding, E-booklet, knowledge, attitude*

INTRODUCTION

Infant age is a period of very rapid growth and development, so it is often referred to as the golden period which is also a critical period. Good nutritional intake will support

rapid growth and development, whereas inappropriate nutritional intake will cause babies to experience malnutrition which will ultimately have an impact on increasing morbidity and infant mortality rates. To achieve optimal growth and

development, according to WHO in its Global Strategy for Infant and Young Child Feeding, it recommends giving exclusive breast milk from birth until the baby is 6 months old and continued by providing complementary feeding since the baby is 6 months old. up to 24 months and continue breastfeeding until the child is 24 months or older (Boswell, 2021).

When a baby is 0-6 months old, breast milk intake (breast milk) occupies a very important position for the baby. Energy and other nutritional needs for babies can be met from breast milk. However, when a baby enters the age of 6 months, their needs increase, breast milk is only able to fulfill 2/3 of the baby's nutritional needs, so at this age babies need other foods to accompany breast milk (complementary breastfeeding) (Haiden, 2021). complementary breastfeeding is given in stages according to the child's age, starting from soft, soft form until the child gets used to family food (Daher, 2022). Proper and good use of breast milk and provision of complementary breastfeeding is the key to maintaining baby's nutrition until the age of 24 months. Because the rate of growth and development at the age of under 2 years will determine the growth and development process of children at the next age (Melo et.al, 2022).

Efforts to improve the health and nutritional status of infants/children aged 0-24 months through improving community behavior in providing food are an inseparable part of efforts to improve overall nutrition

(Tampaj, 2019). The practice of feeding infants and children (IYCF) Optimization is an effective intervention in improving children's health status and reducing child mortality (Zogara, 2021). The IYCF gold standard, namely Early Initiation of Breastfeeding (IMD), Exclusive Breastfeeding, complementary breastfeeding, Breastfeeding until the age of 2 years is highly recommended because it can reduce child mortality and improve the mother's quality of life (Purba, 2023).

Age 6-9 months is a critical period in the development of eating skills. If during this period the baby is not trained to eat increasingly dense and coarse foods, then at a later age the baby will only be able to eat liquid or soft foods and will not be able to accept family food and will cause eating problems. At the age of 6-9 months, complementary breastfeeding is started to be given to develop appetite and also to train motor development, namely biting and chewing skills (Lutter, CK, 2021).

According to Heryanto (2017), there are factors that can influence breastfeeding too early, namely knowledge, adequacy of breast milk, work and family support (9). This is supported by research conducted by Pamarta (2018) regarding maternal predisposing factors regarding the accuracy of providing complementary breast milk (complementary breastfeeding) in Sukoharjo Regency which states that there is an influence of mother's knowledge ($p = 0.000$) and attitude ($p = 0.000$) towards

accuracy of giving complementary foods for breast milk.

A person's level of knowledge influences attitudes and behavior in choosing food which will ultimately influence the nutritional condition of the individual concerned. Attitude is a positive or negative feeling or mental state that is always prepared, studied and regulated through experience which has a special influence on a person's response to objects, people and circumstances (Desiyanti, 2021). Interventions carried out can be in the form of education to increase mothers' knowledge regarding toddler nutrition, especially regarding signs. illness in children, feeding schedule for toddlers, types of nutritious food, types of balanced food and the benefits of food for toddlers. The use of media in providing education is expected so that targets can increase their knowledge, which is then expected to lead to changes in behavior in a positive direction in the health sector (Apriliyanti, 2021). The media that will be used in this research is ebooklets.

The e-booklet media was chosen because the information included is complete and easy to understand, the design is attractive, and easy to carry anywhere. According to research conducted by Dewi (2022), it showed that there was an increase in mothers after being given counseling interventions using booklet media, where the complementary breastfeeding giving pattern category was good, before being given nutrition education by 12.9%,

increasing to 29%. The results of a preliminary survey conducted on 10 mothers of babies in Sembahe Baru Village, it was found that 60% were giving complementary breastfeeding incorrectly and this was thought to be due to mothers' low knowledge and attitudes about MP-ASI. Based on the background above, it is necessary to carry out research entitled The Effectiveness of Using E-Booklets about Complementary Feeding in Increasing the Knowledge and Attitudes of Mothers of Babies in Sembahe Baru Village.

METHOD

This research uses a quasi-experimental design (Quasy experiment) with a pretest-posttest research design without control group design. The population in this study were all mothers who had babies aged 6-11 months in Sembahe Baru Village. The sample size used was 44 people. The inclusion criteria in this study were mothers aged 6-22 months at the posyandu, having an Android cellphone, being able to communicate well, being able to write and read, having at least elementary school (SD), and being willing to be a respondent. Exclusion criteria included moving residence, illness or death, and the mother being a posyandu cadre.

The instruments used in this research were identity questionnaires, knowledge questionnaires, attitude questionnaires and booklets. Knowledge scores are measured with a questionnaire of 20 questions and attitudes are also measured with a questionnaire of 20 questions. Knowledge scores for correct answers are given a score of 1 while wrong answers are given a score of 0. Attitude scoring, answers to agreeing questions are given a score of 1 while

answers for disagreeing are given a score of 0. Data collection in the first stage was carried out by pre-test. After completion, respondents were given an E-booklet to read for 2 weeks. The second stage was a post-test. The knowledge and attitude

variables were tested for normality, then the Paired Samples T Test was carried out if the data was normally distributed and the Wilcoxon Sign Test if the data was not normally distributed.

RESULT AND DISCUSSION

The results of the univariate analysis in Table 1 show that the majority of respondents were 20-35 years old, namely 27 people (61.3%), the majority of respondents had higher education, namely 25 people (56.8%), and the majority of respondents had parity ≤ 2 people, namely 29 people (65.9%)

Table 1. Characteristics of Respondents in Sembaha Baru Village

Characteristic of Respondent	n	%
Age		
<20 years old	5	11.4
20-35 years old	27	61.3
>35 years old	12	27.3
Education		
Low	19	43.2
High	25	56.8
Parity		
≤ 2 people	29	65.9
>2 people	15	34.1
TOTAL	44	100.0%

The results of the univariate analysis in Table 2 show that the level of knowledge of respondents before the intervention were more respondents who had bad knowledge, namely 31 people (70.5%) while after the intervention there were more respondents who had good knowledge, namely 35 people (79.5%).

**Table 2. Respondents' Knowledge Level Before and after Intervention
(Using Complementary Breastfeeding E-Booklet)**

Knowledge	Before Intervention		After Intervention	
	n	%	n	%
Good	13	29.5	35	79.5
Bad	31	70.5	9	20.5

The results of the univariate analysis in Table 3 show that the attitudes of respondents before the intervention had more negative attitudes, namely 25 people (56.8%), while after the intervention more respondents had positive attitudes, namely 35 people (79.5%).

Table 3. Respondents' Attitudes Before and after Intervention (Using Complementary Breastfeeding E-Booklet)

Attitude	Before Intervention		After Intervention	
	n	%	n	%
Positive	19	43.2	35	79.5
Negative	25	56.8	9	20.5

The research results in table 4 show that there has been a change in mothers' knowledge about giving complementary foods in a positive direction. This can be seen from the mean value which increased at the pretest (12.65) and at the posttest (17.48) with a difference of 4.83. The results of statistical analysis show that the use of E-booklets is effective in increasing mothers' knowledge about giving MP-ASI ($p < 0.05$). Table 4. Also shows that there has been a positive change in mothers' attitudes regarding giving complementary foods. This can be seen from the mean value which increased at the pretest (13.84) and at the posttest (17.92) with a difference of 4.08. The results of statistical analysis show that the use of E-booklets is effective in improving mothers' attitudes towards providing MP-ASI ($p < 0.05$).

Table 4. shows the effectiveness of using e-booklets in increasing mothers' knowledge and attitudes in Complementary Breastfeeding

Variabel	Mean Score	Selisih Mean	p-value
Pengetahuan			
Before Intervention	12,65	4,83	0,001
After Intervention	17,48		
Sikap			
Before Intervention	13,84	4,08	0,001
After Intervention	17,92		

Education carried out using e-booklet media can change mothers' knowledge because mothers see explanations and pictures in the media that have been shared via each mother's cellphone so that she can look at, and learn about MP ASI wherever and whenever she wants. According to WHO (2019), most of a person's knowledge is obtained through the sense of hearing (ears) and the sense of sight (eyes).

According to Notoatmodjo (2018) approximately 75% of human knowledge is obtained through the eyes, while the rest is through other senses. By using e-booklets, more information is conveyed through the eyes, so the information will be more easily received by mothers.

These results are in line with research conducted by Setyawati et al. in 2016

regarding an e-booklet-based nutrition education model to increase the nutrition knowledge of mothers of toddlers, concluded that the nutrition and health education treatment provided using booklets was statistically proven to be able to increase mothers' knowledge ($p>0.05$). The research is also in line with research by Marfuah et al. In 2021, regarding efforts to increase mothers' knowledge about complementary foods with nutritional education through booklets, it showed that there was an increase in knowledge about complementary feeding patterns, where the category of Complementary Breastfeeding feeding patterns was good, before nutrition education was given, it was 12.9%, increasing to 29%.

Factors that influence the knowledge and practice of giving complementary foods to toddlers are the source of information, age, education and mother's occupation. The information obtained can have a short-term influence resulting in changes or increased knowledge, meaning that the education given to mothers about the correct provision of Complementary Breastfeeding increases the mother's knowledge about giving Complementary Breastfeeding and breaks the mother's beliefs about the myths that circulate and become beliefs for mothers (Ibrahim, 2022).

Another influencing factor is the mother's age, where according to Lestiarini (2020) a person's age will influence a person's ability to perceive and think about the information provided. The older you get, the more a person's understanding and thinking patterns develop. Age influences changes in knowledge because it influences the speed of mothers in receiving information, mothers who are still in the young adult age

category receive and digest new information more quickly compared to mothers who are in the middle adult category. The average age of mothers in the young adult category is still in their productive age and allows them to be able to capture the information provided and recall it. This can also influence how mothers respond to the information they receive in the future (Nurhasanah, 2022).

Education can change the mother's knowledge about providing Complementary Breastfeeding correctly in a more positive direction, namely increasing the mother's knowledge because the material presented is the basic material that mothers need in feeding toddlers and will influence the growth and development of toddlers (Purba, 2023).

CONCLUSION

The research results showed that the characteristics of respondents were more likely to be 20-35 years old (61.4%), more highly educated (56.8%), more likely to have parity ≤ 2 (65.9%). The average mother's knowledge score about Complementary Breastfeeding before using the E-booklet was 12.65, increasing after being given the E-booklet, namely 17.48. The average score of mothers' attitudes about Complementary Breastfeeding before using the E-booklet was 13.84, increasing after being given the E-booklet, namely 17.92. Research results show that the use of E-booklets is effective in increasing Mother's Knowledge (0.001) and Attitudes (0.001) in Providing Complementary Breastfeeding. It is recommended for Health officers in

Sembahe Baru Village to provide education about Complementary Breastfeeding using e-booklet media because it is effective in increasing maternal knowledge and attitudes so that mothers of babies can apply it correctly in making and giving Complementary Breastfeeding.

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