



THE RELATIONSHIP BETWEEN KNOWLEDGE AND EARLY WEANING OF BREASTFEEDING

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ABSTRACT

Introduction: Exclusive breastfeeding is recommended for the first six months of life and may be continued until the child is two years old, providing numerous benefits for the mother, baby, family, and nation. However, not all mothers breastfeed for the full six months, a practice known as early weaning. This study aims to analyze the relationship between mothers' knowledge and early weaning practices. This study aims to analyze the relationship between knowledge and early weaning of breastfeeding. **Methods:** This quantitative analytical study was conducted in May 2024 at the Kebomas Community Health Center. A total of 44 mothers with children aged 6–24 months who met the inclusion criteria were selected using purposive sampling. Data on mothers' knowledge regarding breastfeeding and early weaning were collected using a structured questionnaire and analyzed using the chi-square test with SPSS. **Results:** The findings indicate a relationship between mothers' knowledge and early weaning practices in the Kebomas Community Health Center working area. **Conclusions:** Breastfeeding has positive effects on mothers, babies, families, and the nation. If early weaning is practiced by many mothers who lack knowledge about breastfeeding, these benefits may be lost. Education and counseling for pregnant women, continued through the postpartum period, are needed to prevent early weaning.

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INTRODUCTION

Breast milk is a fluid that contains many benefits and is useful for the growth and development of infants (Wulandari et al., 2023). Exclusive breastfeeding means that babies are given breast milk immediately after delivery, without a schedule and without additional food, including a drop of water, until the baby is six months old (Dahniar et al., 2021). Weaning is the decision to stop breastfeeding a child gradually or immediately (Nugroho, 2011). WHO (2003) states that weaning means starting to give additional food in addition to breast milk after six months. Many cases of mothers weaning their children too early occur in babies aged 0 to 6 months. Pambudi and Christijani (2017) stated that mothers who decide to stop breastfeeding and stop giving breast milk to babies under six months old are mothers who practice early weaning.

Early weaning is often done by mothers who do not understand breastfeeding. Mothers who are knowledgeable about breastfeeding and understand the appropriate timing for weaning greatly influence weaning decisions (Marmi, 2012). Exclusive breastfeeding has many benefits, such as strengthening the baby's immune system, improving the child's intelligence, helping the child's growth, and strengthening the emotional bond between mother and baby. Early weaning causes babies to get sick more easily, experience stunted growth, and

become more susceptible to infections and diarrhea (Pertiwi et al., 2022). In addition to causing adverse effects on infants, weaning also has adverse effects on mothers, such as an increased risk of diabetes mellitus, metabolic syndrome, ovarian cancer, and breast cancer (Pambudi and Christijani, 2017).

According to WHO (2022), only half of six-month-old babies received less than 67.96% exclusive breastfeeding in 2022. According to the Indonesian Health Survey in 2023, only 68.6% of babies aged 0–5 months received exclusive breastfeeding in Indonesia. Based on data from BPS, the rate of exclusive breastfeeding in East Java Province reached 72.68% in 2023. According to the 2019 East Java Provincial Health Profile, 78.9% of infants under six months of age in Gresik Regency received exclusive breastfeeding. Data from the Kebomas Community Health Center show that 76.7% of infants aged 0–6 months received exclusive breastfeeding. The number of children receiving exclusive breastfeeding is still below the target. The national target for exclusive breastfeeding coverage for infants under six months of age is 80% (Susilaningsih, 2013). Based on the results of a survey conducted at the integrated health post (posyandu) on five mothers who had babies aged 6–24 months, two mothers practiced early weaning because they did not produce breast milk and were working.



Weaning must be done at the right time and with the correct technique. Incorrect weaning is caused by various factors, one of which is a lack of knowledge. Weaning should be done gradually, but many mothers wean immediately due to limited knowledge. Mothers are more likely to exclusively breastfeed their children if they have sufficient knowledge (Herman et al., 2021). A well-informed mother greatly influences the timing of weaning because she has access to information about the proper weaning process (Audina & Fitri, 2019). Weaning too early can have many negative impacts, such as reduced bonding between mother and baby, the emergence of infectious diseases, increased incidence of diarrhea, decreased nutrition, and allergic reactions that cause vomiting, rashes, and itching (Putri, 2019).

Mothers have various reasons for weaning. Therefore, as healthcare workers, we need to educate mothers about the correct, gradual weaning process and the appropriate timing for weaning after six months. This can broaden their knowledge of proper weaning practices and reduce premature weaning (Ati, 2019).

Referring to the aforementioned phenomenon and considering the importance of maternal knowledge regarding early weaning, it is necessary to identify the relationship between maternal knowledge and early weaning to improve mothers' understanding of weaning, especially in the Gresik area. Therefore, the authors are interested in conducting a study entitled "The Relationship Between Maternal Knowledge and Early Weaning in the Kebomas Gresik Community Health Center Work Area."

MATERIALS AND METHODS

This research is quantitative with a correlational analysis design. It uses a cross-sectional approach, which is a method of collecting data at one point in time (Arikunto, 2013). This study was conducted in the Kebomas Gresik Community Health Center Working Area, and the research period took place in May 2024.

RESULTS

The results of this study describe the frequency distribution of mothers' knowledge about exclusive breastfeeding, early weaning, and the relationship between mothers' knowledge and early weaning in the working area of the Kebomas Community Health Center.

Table 1. Characteristics respondent based on Age, Education, Work, and Child Age of Mothers in the Working Area of the Kebomas Gresik Community Health Center

Age	Frequency (F)	Percentage (%)
<20	0	0.0
20-35	36	81.8
>35	8	18.2
Education	Frequency (F)	Percentage (%)
Elementary School	0	0.0
Junior High School	0	0.0
Senior High School	23	52.3
College	21	47.7

The population in this study consisted of 50 mothers with children aged 6–24 months in the Kebomas Gresik Community Health Center Working Area. The sample included 44 mothers who met the inclusion and exclusion criteria, selected using purposive sampling techniques. The inclusion criteria were mothers with children aged 6–24 months, mothers willing to participate in the study, and mothers present at the posyandu. The exclusion criteria included mothers with mental disorders. There are two variables in this study, namely independent and dependent variables. The independent variable is mothers' knowledge, while the dependent variable is early weaning.

The research instruments used in this study were knowledge and early weaning questionnaires. The questionnaire was adapted from Ramadhani (2019) and modified by the researcher. Validity test results showed an *r* table value of 0.5760, and reliability test results showed a Cronbach's alpha value of 0.773, indicating good reliability. The knowledge questionnaire consisted of 10 questions using a Guttman scale, where respondents selected multiple-choice answers; a correct answer scored 1, and an incorrect answer scored 0. The weaning questionnaire consisted of one question using a Likert scale, where respondents selected "yes" or "no"; answering "yes" scored 1, meaning they did not practice early weaning, while answering "no" scored 0, meaning they practiced early weaning.

Data analysis in this study used univariate and bivariate analyses. The univariate analysis focused on the maternal knowledge variable. Bivariate analysis was used to determine the relationship between the independent and dependent variables so that conclusions could be drawn. In this study, the bivariate analysis was conducted using the Chi-square test. This research received ethical clearance under approval number: 178/EC/KEPK-S1/06/2024.

Work	Frequency (F)	Percentage (%)
Housewife	31	70.5
Private	7	15.9
Self-employed	0	0.0
Civil Servants	6	13.6
Child Age	Frequency (F)	Percentage (%)
6-12	20	45.5
13-24	24	54.5
Total	44	100

Source: Primary Data from Research Results 2024

Based on Table 1, the frequency distribution by age shows that almost all mothers are aged 20–35 years, totaling 36 people (81.8%). The frequency distribution based on education shows that most mothers have a high school education, totaling 23 people (52.3%). The frequency distribution based on occupation shows that the majority of mothers are housewives, totaling 31 individuals (70.5%). The frequency distribution based on the age of the child shows that most mothers have children aged 13–24 months, totaling 24 individuals (54.5%).

Table 2. Characteristics respondent of Mothers' Knowledge in the Working Area of the Kebomas Gresik Community Health Center

Knowledge	Frequency (F)	Percentage (%)
Good	13	29.5
Enough	11	25.0
Not Enough	20	45.5
Total	44	100

Source: Primary Data from Research Results 2024

Based on Table 2, the frequency distribution of knowledge in the Kebomas Community Health Center Working Area in 2024 shows that almost all mothers have insufficient knowledge, with 20 people (45.5%), while a small number of mothers have sufficient knowledge, with 11 people (25%).

Table 3. Characteristics respondent of Early Breastfeeding Weaning in the Working Area of the Kebomas Gresik Community Health Center

Breastfeeding (weaning)	Frequency (F)	Percentage (%)
Early Weaning	23	52.3
Not Early Weaning	21	47.7
Total	44	100

Source: Primary Data from Research Results 2024

Based on Table 3, the frequency distribution of weaning in the Kebomas Community Health Center Working Area in 2024 shows that most mothers practiced early weaning, totaling 23 mothers (52.3%), while almost half of the mothers did not practice early weaning, totaling 21 mothers (47.7%).

Table 4. Relationship between Mothers' Knowledge and Early Weaning from Breast Milk in the Working Area of the Kebomas Gresik Community Health Center

Knowledge	Early Weaning				Total	
	Weaning		No Weaning		F	%
	F	%	F	%		
Good	2	15.4	11	84.6	13	100
Enough	4	36.4	7	63.6	11	100
Not Enough	17	85.0	3	15.0	20	100
Total	23	52.3	21	47.7	44	100

Pearson chi square P:0,000

Source: Primary Data from Research Results 2024

Based on Table 4, the frequency distribution of the relationship between mothers' knowledge and early weaning in the Kebomas Community Health Center Working Area shows that almost all mothers who practiced early weaning had poor knowledge, totaling 17 people (85%), while a small number of mothers who practiced early weaning had good knowledge, totaling 2 people (15.4%). The results of the chi-square test indicate a significant relationship between maternal knowledge and early weaning in the Kebomas Community Health Center service area ($p = 0.000$), analyzed using SPSS 24.0 for Windows.

DISCUSSION

This discussion addresses mothers' knowledge about exclusive breastfeeding, early weaning, and the relationship between mothers' knowledge and early weaning in the Kebomas Community Health Center work area.

Mothers' Knowledge About Exclusive Breastfeeding

Based on the results of the study in Table 2, it was found that most mothers had insufficient knowledge. This finding is supported by research conducted by Sartono and Utaminingrum (2012), which also found that most mothers have insufficient knowledge about exclusive breastfeeding. Knowledge is everything that humans know based on their own experiences, and that knowledge increases through experience (Budiman & Riyanto, 2013).

Knowledge or cognitive aspects influence a person's attitudes and actions (Notoatmodjo, 2010). The role of mothers is very important in providing exclusive breastfeeding to their babies; therefore, knowledge about exclusive breastfeeding is also very important. Mothers will understand the importance of providing exclusive breastfeeding to their children if they have good knowledge about its benefits (Herman et al., 2021). Mothers' understanding of exclusive breastfeeding is related to their level of education (Listyo, 2015). This study found that most mothers had a high school education. Low or insufficient education can affect a person's attitude toward something, resulting in insufficient knowledge (Rahmawati, 2017). People with higher education are generally more receptive to and acquire new knowledge more easily, which can change their behavior and attitudes in daily life (Notoatmodjo, 2010).

The researchers believe that knowledge is influenced by education. Therefore, mothers who lack knowledge should receive education from health workers, as well as through print and electronic media, to provide information about the importance of exclusive breastfeeding.

Early Weaning

Based on the results of the study in Table 3, it was found that most mothers practiced early weaning, which is consistent with the results of the study by Ati (2019).

The term weaning is used to describe the transition phase in which infants continue to be breastfed while gradually beginning to consume solid foods (Manalu, 2008). Early weaning occurs when mothers stop breastfeeding before six months (Pambudi & Christijani, 2017). Weaning babies too early can have adverse effects such as reduced bonding between mother and child, an increased risk of infectious diseases, increased diarrhea, decreased nutrition, and the onset of allergic reactions (Putri, 2019).

Work is one of the factors contributing to early weaning, as most mothers are stay-at-home mothers or housewives. Based on the study by Dahniar et al. (2021), employment status influences the likelihood of weaning infants under 6 months of age. Research by Herman et al. (2021) also supports this finding, showing that babies who are exclusively breastfed by working mothers experience differences in breastfeeding practices. According to Okawary (2015), working mothers usually have higher education levels, more job opportunities, and environments that serve as sources of knowledge and experience, both directly and indirectly (Budiman & Riyanto, 2013).

According to the researchers, even though most mothers have a high school education, being housewives limits their access to information and experiences related to early weaning and the importance of exclusive breastfeeding. Their busy schedules with household responsibilities as wives and mothers further reduce opportunities to seek additional knowledge and guidance about proper weaning practices.

The Relationship between Mothers' Knowledge and Early Weaning in the Kebomas Community Health Center Working Area

The results of the study in Table 4 show that there is a relationship between mothers' knowledge and early weaning in the Kebomas Community Health Center working area. This finding is consistent with the research conducted by Ramadhani (2019), which also found a relationship between maternal knowledge and early weaning.

Knowledge is one of the factors that influence early weaning. Knowledge is the result of perceiving and understanding something; it is what humans know through experience (Mubarak, 2011). Knowledge plays a very important role. A mother's knowledge about breastfeeding has a significant influence on the success of the breastfeeding process (Ramadhani, 2019). Well-informed mothers strongly influence the timing of weaning because they have access to information about the proper weaning process (Audina & Fitri, 2019). When it comes to weaning, knowledge is crucial, as knowledgeable mothers will wean their children at the right time, while less knowledgeable mothers may decide to wean when they feel insecure or simply believe

it is time to do so (Triwibowo & Basuki, 2015), or because they have to return to work (Dahniar et al., 2021).

According to the researchers, knowledge about the importance of exclusive breastfeeding and the effects of early weaning is essential for mothers to understand. Health workers need to educate mothers so that they comprehend the importance of exclusive breastfeeding and normal weaning, which should be done gradually and at the appropriate time by introducing solid foods after the baby reaches 6 months of age. Breastfeeding can also be continued until the child is 2 years old.

CONCLUSIONS

Breastfeeding has positive impacts on mothers, babies, families, and the nation. If early weaning is practiced by the majority of mothers who also lack knowledge about breastfeeding, its benefits will be lost. Education and counseling are needed for pregnant women and should continue throughout the postpartum period to prevent early weaning.

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AUTHORS' CONTRIBUTIONS

NII contributed to study design and concept, questionnaire design, data collection, result analysis, and data interpretation.

AM contributed to study design and concept, data acquisition, result analysis, data interpretation, manuscript drafting, correspondence, and final approval of the version to be published.

AP contributed to study design and concept, result analysis, data interpretation, manuscript drafting, and final approval of the version to be published.

LF contributed to result analysis, data interpretation, manuscript drafting, and final approval of the version to be published.

ES contributed to result analysis, data interpretation, manuscript drafting, and final approval of the version to be published.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest in this research.

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