







FACTORS AFFECTING EARLY COMPLEMENTARY FEEDING OF MOTHERS WITH BABIES AGED 0-6 MONTHS

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Abstract

Background: Exclusive breastfeeding for babies from 0 to 6 months of age and continued until 2 years of age can promote healthy growth and development. According to the WHO, in 2020, if a child receives complementary foods before 6 months of age, their growth will be delayed, and the risk of diarrhea is 17 times higher and the risk of upper respiratory tract infection is 3 times higher. The problem of this study is that the rate of early complementary food distribution for babies aged 0–6 months is still high. This study aims to determine factors affecting early complementary feeding for babies from 0 to 6 months of age. **Method:** The design of this research is descriptive with a cross-sectional approach. The research was carried out in July–September 2023 in Banaran Village, Kediri East Java, with a sample of 32 respondents consisting of mothers with babies aged 0–6 months who had been given early complementary feeding. Sampling is done by consecutive sampling. The variables in this study are factors that influence the provision of early complementary feeding for mothers with babies aged 0–6 months. Data was obtained through direct interviews with respondents using a questionnaire. **Results:** This study showed that the factors affecting early complementary feeding are socio-cultural factors with high category (81.3%), knowledge level factors with medium category (50%), personal factors with low category (87.6%) and promotional advertising for infant formula and baby food have medium category (71.9%). **Conclusion:** research results shows that the factors affecting early complementary feeding for babies from aged 0-6 months are socio-cultural factors, personal factors, and promotional advertising factors.

Keywords: Factors Affecting Early Complementary Feeding

INTRODUCTION

Breast milk is the best food for young babies because the ingredients in breast milk are the most perfect and natural. Exclusive breastfeeding from 0 to 6 months of age and continuing until 2 years of age can promote healthy growth and development (Nisa & Merben, 2023). After the first 6 months, babies should be supplemented with complementary foods. Complementary foods are transitional foods between breast milk and the family's diet. Feeding and providing

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complementary foods should be done gradually in form and quantity, depending on the child's digestive ability (Juliarti & Affriyani, 2019). Research from 42 developing countries shows that exclusive breastfeeding for 6 months is the public health intervention with the greatest positive impact in reducing child mortality by approximately 13% (Hamim, 2020). The infant mortality rate (IMR) has increased from 24 deaths per 1,000 live births (SDKI, 2017) to 16.85 deaths per 1,000 live births (Census, 2020). These results show a significant reduction, even exceeding the 2022 target of 18.6% deaths per 1,000 live births. This must be maintained to support the 2024 target of 16 deaths per 1,000 live births and 12 deaths per 1,000 live births by 2030. (Kemenkes RI, 2022). According to the WHO, in 2023, the exclusive breastfeeding coverage rate in Indonesia in 2022 was recorded at only 67.96%, compared to 69.7% in 2021. This shows that support is needed. More specialized support to increase coverage. (WHO, 2023).

Meanwhile, exclusive breastfeeding from 0 to 5 months has not increased and is stagnant at 52%. Hopefully, the exclusive breastfeeding coverage rate can reach over 70%. Exclusive breastfeeding is currently the only specific intervention target because, by 2022, this target has not yet been achieved. Research results show that exclusive breastfeeding in Indonesia has decreased in the past three months. It is true that mothers often return to work and don't reach their 0–5 month goal. Although many mothers may not be able to exclusively breastfeed their babies in the third month, it still takes a lot of effort to provide the best intervention, especially in the early stages of their baby's life. (Kemenkes RI, 2023).

Breastfeeding is very beneficial for babies and families, but exclusive breastfeeding in Indonesia is still not considered. In addition to the lack of awareness among mothers and their families, myths developed in society also affect breastfeeding (Haryati, et al., 2022). Exclusive breastfeeding coverage in Indonesia in 2022 was recorded at only 67.96%, compared to 69.7% in 2021, indicating the need for more intensive support as this coverage rate increases. (WHO, 2023). Kediri Town Health Department data on the achievement or scope of exclusive breastfeeding in Kediri Town health centers in 2023 is detailed in Table 1 as follows:



Table 1. Rate of Exclusive Breastfeeding at Kediri town Health Centers in 2023

Medical Center	Number of babies	Exclusively breastfeeding	Proportion of exclusive breastfeeding
Mrican	235	102	45,40%
Sukorame	598	267	44,64%
Campurejo	385	158	41,03%
Baluwerti	400	248	53,91%
Puskesmas wilayah utara	430	143	33,25%
Puskesmas wilayah selatan	345	133	38,55%
Pesantren I	322	138	42,85%
Pesantren II	461	146	31,67%
Ngletih	204	96	47,05%

Source : Dinkes Kediri, 2023.

Based on Table 1.1, it appears that the exclusive breastfeeding rate at some community health centers in Kediri town is still low or below the exclusive breastfeeding target of 80%. The exclusive breastfeeding rate at Banaran Village Health Center in Kediri Town also remains very low, at 25.8%. A preliminary study conducted on June 14, 2023, in Banaran village, Kediri town, showed that 23 mothers were breastfeeding, 19 of whom said they did not exclusively breastfeed until 6 months of age and are given complementary foods when their babies aged 3-4 months. Thus, the data obtained shows that the rate of babies 0–6 months old using complementary foods (MP-ASI) too early in Banaran village, Kediri town, is high.

According to respondents, the high rate of early complementary feeding (MPASI) use is due to a number of obstacles, which are erroneous myths that are still considered true by society or the ignorance of up to 5 mothers (26.3%), baby is not gaining weight up to 2 people (10.6%), the baby still seems hungry or continues to cry despite still breastfeeding up to 8 people (42.1%), and the preparation of the baby's digestive organs is considered ready receiving other foods was difficult for 3 people (15.8%), and because breast milk was difficult to come out of, 1 person (5.2%) cried while breastfeeding. This is the reason why the rate of improper use of MP-ASI remains high.

Exclusive breastfeeding can protect your baby from gastrointestinal infections. Mothers who do not exclusively breastfeed may increase the risk of infant death from diarrhea or other infections. Some studies show that exclusive

breastfeeding may not be optimal due to mothers' lack of understanding of the importance of exclusive breastfeeding, medical staff's lack of attention to its importance, and also due to environmental influences (Fitri & Shofiya, 2020) . It should be noted that introducing complementary foods too early can reduce the amount of breast milk consumed, and the baby may have digestive disorders or diarrhea. In addition, exclusive breastfeeding can reduce infant mortality. Because complementary feeding is introduced too early, it is not surprising that the mortality rate of babies aged 9 to 11 months in developing countries is 40% higher than that of breastfed babies. Meanwhile, babies under 2 months old reach a rate 48% higher than breastfed babies. It is emphasized that babies from 0 to 6 months of age should only be fed breast milk, unless the baby's mother has passed away. Alternative solutions that can be implemented include researching the possibility of providing breast milk to breastfeeding mothers, providing special infant formula for babies under 6 months of age without using rolled bottles. Then, after the baby is 6 to 12 months old, breastfeeding should still be given along with complementary feeding (Nisa & Merben, 2023). Based on the phenomenon of high rates of early complementary feeding (MP-ASI) use for babies aged 0–6 months, research can be conducted and is useful for respondents as an alternative.

METHODS

Based on the scope of the study using descriptive techniques, including field studies and cross-sectional designs, based on the presence or absence of treatment, including type of post-facto research, including quantitative descriptive designs. The population of this study included all mothers with babies aged 0-6 months who received early complementary feeding in Banaran village, Kediri town in 2023. The sample of this study included mothers with babies aged 0–6 months who received early complementary feeding and came to Posyandu in Banaran village, Kediri town, in 2023, for a total of 32 respondents. Sampling in this study uses non-probability sampling techniques, which are random sampling by consecutive sampling. The variables in this study are factors that influence the early provision of complementary feeding for mothers with babies aged 0-6 months. Data are obtained through direct interviews with respondents, the type of interview chosen



is a guided interview using a questionnaire. The tool used in this study is a questionnaire. The location of this study was conducted at Banaran village, Kediri town, from July to September 2023.

RESULT AND DISCUSSION

1. Sociocultural factors

The influence of sociocultural factors on the early provision of complementary foods can be seen in the following table:

Table 1. Distribution of Sociocultural Factors

Category	Frequency	Percentage(%)
High	26	81,3
Medium	4	12,5
Low	2	6,2
Total	32	100

Based on Table 1, that out of 32 respondents, the majority were 26 mothers (81.3%) believe that socio-cultural factors have a high category on factors affecting the early provision of complementary foods. This shows that socio-cultural factors are of high influence in mothers' attitudes towards giving babies complementary foods early or before 6 months of age in Banaran village, Kediri town. This was evidenced by 26 people (81.3%) who provided complementary foods for early breastfeeding because it is influenced by socio-cultural factors. Most mothers in Banaran village who feed their babies early complementary foods are housewives who should be exclusively breastfed. However many mother raising babies from 0 to 6 months old also believe in social customs, saying that if they do not give complementary foods immediately, their babies will not gain weight.

Thus, the high rate of early complementary feeding in Banaran village may be due to the influence of socio-cultural factors or long-standing customs. One of the issues that mothers are concerned about is the concept that babies can be fed Tim rice mixed with bananas from 3–4 months old, especially so that the baby can gain weight quickly and be healthy. People believe that it is necessary to give babies complementary foods before 6 months of age because they think that breast milk alone is not enough nutrition for babies and that babies will sleep well and not be picky eaters if given additional food.

The results of this study are consistent with the research of Aprilina et al. (2018), who found that the Chi-squared test results obtained p-value of 0.0000 ($<\alpha=0.05$), meaning H_0 is rejected and H_a is accepted, thus it can be concluded that there is a relational culture in providing early complementary foods in Pengalusan village, Mrebet subdistrict and Purbalingga District. Most mothers were influenced by cultural factors, up to 24 mothers (60.0%) gave their babies complementary feeding from the beginning. Culture can determine a person's attitudes and behavior when making decisions, especially regarding exclusive breastfeeding. (Aprilina & Rahmawati, 2018).

2. Knowledge factors

The influence of knowledge-level factors on early complementary feeding can be seen in the following table:

Table 2. Distribution of Knowledge Level Factors

Category	Frequency	Percentage (%)
High	7	21,9
Medium	16	50
Low	9	28,1
Total	32	100

Based on Table 2, it shows a medium category of knowledge about mothers' attitudes towards giving babies complementary feeding early or before 6 months of age in Banaran village, Kediri town; this has been proven by 16 people (50%).

This research result is consistent with the research of Yuliani (2019). The research results obtained from the chi-square statistical test, $p\text{-value} = 0.000 < \alpha (0.05)$, can be used to conclude that there is a significant difference in the correlation between knowledge and giving early complementary feeding with an OR value of 10.5, meaning mothers with low knowledge are 10.5 times more likely to introduce early complementary feeding than mothers with good knowledge. (Yuliani, 2019). The results of this study are consistent with Adelina et al.'s (2018) study showing that mothers with poor knowledge about early complementary feeding (83.3%) had a higher rate than mothers with good knowledge about early complementary feeding, up to 5 respondents (16.7%). The statistical test results obtained the value $p = 0.004$. This shows that there is a significant correlation between the knowledge variable and early complementary feeding. Therefore, the



hypothesis that there is a correlation between knowledge and early complementary feeding has been statistically supported. (Pratiwi & Sari, 2020)

3. Personal Factors

The influence of personal factors in providing complementary foods for early breastfeeding can be seen in the following table:

Table 3: Distribution of Personal Factors

Category	Frequency	Percentage (%)
High	2	6,2
Medium	2	6,2
Low	28	87,6
Total	32	100

Based on Table 3, it shows that individual factors are low or weakly related to mothers' attitudes towards introducing complementary foods early or before 6 months of age in Banaran village, Kediri town. This was proven by 28 people (87.6%).

The conditions do not affect the intake of complementary foods. From very early on, this situation is reinforced by the fact that the majority of mothers do not experience any problems with their personal conditions. The fear of losing women's attractiveness is not a top priority for mothers in Banaran village because the majority of respondents are housewives, and their husbands do not criticize their wives' appearance after labor and during breastfeeding. In addition, there are a number of other individual factors in early complementary feeding, one of which is that infant formula is the solution for feeding babies when they are left at home or when the mother leaves home for work. The mother feels that the breastmilk does not come out easily, making it difficult for the baby to suckle, and the baby continues to cry.

This statement is consistent with the research of Elis et al. (2020), who showed that the chi-square test result has a level of error (α) = 0.05 and a value of p of 0.000, in which p value < 0.05 or the hypothesis is rejected, which means there is an effect of lack of breast milk production on early complementary feeding in Majauleng Community Health Centre, Wajo Regency. This may happen because they think their breast milk supply is low. (Elis, et al., 2022).

4. Promotional Factors

The influence of promotional factors on infant formula and baby food in early complementary feeding can be seen in the following table:

Table 4. Distribution of Promotional Factors

Category	Frequency	Percentage (%)
High	5	15,6
Medium	23	71,9
Low	4	12,5
Total	32	100

Based on Table 4, it shows that the promotional advertising factors that encourage the use of infant formula and baby food are in the medium category in terms of mothers' attitudes towards giving early complementary feeding or before the baby is 6 months old. This is evidenced by the majority, 23 (71.9%) of those providing early complementary foods, being influenced by promotions or advertisements for infant formula and baby food for babies, sometimes even on the recommendation of medical staff. The convenience afforded by technological advances in baby food production, such as making powder and bottled milk, has encouraged mothers to replace breast milk with bottled milk or other complementary foods. Misleading promotional advertising for baby food products leads mothers to believe that the supplement is better than breast milk. Although promoting the addition of AA, DHA, ARA, etc., which are already in the composition of breast milk, in addition to having immune substances (antibodies) to increase the child's body's resistance, there are no substances in infant formula. The composition of breast milk will always adapt to the baby's needs from morning to night, from the first feeding, and will change with the breastfeeding process.

CONCLUSION, SUGGESTION

The conclusion of this study is that the factors influencing early complementary feeding are sociocultural factors, showing that the majority of 26 people (81.3%) have a high category or strong influence on early complementary feeding for babies aged 0–6 months. The level of knowledge about the factors shows that half of them, 16 people (50%), have a medium or moderate influence on early complementary feeding for babies aged 0–6 months. The personal



factor showed that almost all of them, 28 people (87.6%), had a low category on early complementary feeding for babies aged 0–6 months, and promotional advertising factors showed that the majority, specifically 23 people (71.9%), had a medium category or moderate influence on the early complementary feeding for babies aged 0–6 months in Banaran village, Kediri town.

In addition, health care workers should regularly and continuously provide health services and activities that support exclusive breastfeeding programs or provide age-appropriate complementary foods with the hope that this can change people's behavior for the better. It is hoped that future researchers will be able to develop further research to explore other factors that influence the early provision of complementary foods to mothers of babies aged 0-6 months. For mothers who are willing to accept the advice of health care providers on providing age-appropriate complementary foods, we can change the mother's behavior and habits to breastfeed only until 6 months old, and we hope that mothers will not be easily influenced by the many promotional advertisements on infant formula.

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