

The Relationship Between Mother's Level of Knowledge and Giving MP-ASI (Weaning Food) on Babies Under 6 Months

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Abstract:

Giving weaning food (MP-ASI) too early has many impacts on the health of babies, including diarrheal diseases. This is because the baby's digestive system is not ready to accept food other than breast milk, causing a reaction in the digestive system. This study aimed to analyze the relationship between a mother's level of knowledge and giving MP-ASI (weaning food) on babies under 6 months. This study uses an analytic design observational with an approach Cross-sectional. Data were taken from interviews and questionnaire sheets at Posyandu Kenanga Desa Labruk Lor, held in November 2022 with a total population of 32 mothers with babies aged 0-6 months and a sample of 32 respondents using the technique of total sampling. Data collection includes coding, editing, and tabulating. Bivariate analysis using uji Chi-Square shows $p\text{-value} = 0.001 < \alpha 0.05$ means a relationship exists between the mother's knowledge level and the provision of MP-ASI to infants under six months old. A correlation value of 0.543 means that the mother's level of knowledge has a strong relationship with the provision of MP-ASI to infants under 6 months old. The conclusion of the study, there is a relationship between the level of mother's knowledge and the provision of MP-ASI to infants under six months at Posyandu Kenanga Desa Labruk Lor in 2022. The suggestions are that research sites should conduct counseling activities related to exclusive breastfeeding and MP-ASI provision to increase mothers' knowledge.

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INTRODUCTION

Giving weaning food (MP-ASI) too early, at the age of under six months, indicates that the mother has failed to give exclusive breastfeeding, which also impacts the coverage rate of exclusive breastfeeding, which is still low. Early complementary breastfeeding is closely related to the decisions made by the mother. Giving MP-ASI too early has many impacts on the health of babies, including diarrheal diseases. This is because the baby's digestive system is not ready to accept food other than breast milk, causing a reaction in the digestive system (Utami, 2015).

The World Health Organization (WHO) stated that only about 40% of babies aged 0-6 months worldwide were exclusively breastfed in 2016, while 60% of other babies were found to have received MP-ASI when they were less than 6 months old; this illustrates that exclusive breastfeeding is still low while the practice of complementary feeding in various parts of the world is still high. The coverage of exclusive breastfeeding in Indonesia for babies < 6 months based on Indonesia's health profile in 2016 was 54.0%, while the national target of exclusive breastfeeding was 80% (Yusra et al., 2022).

Mother is one factor that influences providing supplementary food to infants, including knowledge, mother's health and occupation, health workers, culture, and socio-economic. Mothers' lack of knowledge about the benefits of exclusive breastfeeding is closely related to providing additional food to infants aged 0-6 months (Heryanto, 2017). Exclusive breastfeeding that is not optimal is caused by early complementary feeding. The low level of mothers' education about breastfeeding has resulted in mothers giving their babies bottled milk more often than being breastfed, and often their babies who are only 1 month old are given bananas or soft rice as additional breast milk (Baharudin, 2014). Various obstacles can arise during exclusive breastfeeding during the first six months of a baby's life. This causes infant malnutrition, which can lead to the child's death (Ludviah et al., 2023). In addition, not being optimal in breastfeeding in children can also increase the risk of stunting (Ardiana et al., 2021a). Prevention of these events is also important after the child is ready to receive age-appropriate nutrition (Ardiana et al., 2019).

Early complementary or complementary food for ASI (MP-ASI) given before six months has negative long-term and short-term impacts. The short-term negative impacts if the baby is given complementary food before six months include losing nutrition from breast milk, reducing the baby's suction ability, triggering diarrhea, and triggering anemia. Meanwhile, the long-term negative impacts if babies are given complementary foods before six months include obesity, hypertension, atherosclerosis, and allergies. The inaccurate timing of complementary feeding (MP-ASI) is caused by several reasons, one of which is because the mother is working (Savitri, 2016).

Efforts to reduce early complementary feeding behavior can be made by increasing the knowledge of mothers and families. Activities to increase this knowledge through counseling or health education so that mothers and their families understand the dangers, impacts, and risks of early complementary breastfeeding to infants. Providing information through health education can significantly impact community knowledge, such as using the peer group support method to increase public knowledge (Ardiana et al., 2021b).

The results of a preliminary study on 11 July 2022 with ten mothers who had babies aged 0-6 months during a visit to Posyandu Kenanga in Labruk Lor Village, it was found that 6 of them had given MP-ASI when their babies were less than six months old. Three out of ten other mothers give exclusive breastfeeding. When asked when the mother thought it was the right time to give MP-ASI to the baby, 3 out of 10 mothers said the right time to give MP-ASI > 6 months, while seven other mothers said MP-ASI could be given since the baby was five months old because the baby often crying from hunger. One of the mothers said they had been giving formula milk since birth. To know this phenomenon, this study aimed to analyze the relationship between mother's level of knowledge and giving MP-ASI (weaning food) on babies under 6 months.

METHOD

This research design uses analytic observational with a cross-sectional approach. The population in this study were all mothers with babies aged 0-6 months at Posyandu Kenanga, Labruk Lor village, with as many as 32 mothers. This research uses techniques of total sampling, namely, the sample size is equal to the total population, 32 respondents.

The inclusion criteria of respondents are willing to be respondents, mothers with children aged < 6 months who are breastfed or formula milk, and cooperative mothers. The instruments used in this study to record data on the level of knowledge and provision of MP ASI used questionnaires. Bivariate analysis using uji Chi-Square was used. This research was conducted in November 2022.

RESULT

Univariate Analysis

Table 1. Characteristics of Respondents based on Age, Education, Occupation, Parity, and Baby Age (n=32)

Variable	Frequency (f)	Percentage (%)
Age (years old)		
< 20	6	18.8
20 – 35	19	59.3
>35	7	21.9
Education		
Elementary school	6	18.8
Junior High School	15	46.8
Senior High School	8	25.0
College	3	9.4
Occupation		
Housewife	24	75.0
Private sector employee	6	18.8
Teacher	2	6.2
Parity		
Primipara	15	46.9
Multipara	17	53.1
Baby age		
1 Month	12	37.4
2 Months	6	18.8
3 Months	6	18.8
4 Months	8	25.0

Table 1 shows that of the 32 respondents, most were in the age range of 20-35 years, with 19 respondents (59.4%). Almost half have junior high school education, with 15 respondents (46.8%). Most respondents work as housewives, with 24 respondents (75%). Most respondents were multiparous, with 17 respondents (53.1%). Almost half of the respondents were 1 month old, with 12 respondents (37.5%).

Mothers' Knowledge Level and Giving MP-ASI (Weaning Food) on Babies Under 6 Months

Table 2. Mothers' Knowledge Level and Giving MP-ASI (Weaning Food) on Babies Under 6 Months (n=32)

Variable	Frequency (f)	Percentage (%)
Mothers' Knowledge Level		
Not good	10	31.2
Enough	15	46.9
Good	7	21.9
Giving MP-ASI (Weaning Food) on Babies Under 6 Months		
Yes	17	53.1
No	15	46.9

Table 2 shows that almost half of the respondents had sufficient mother knowledge, with a total of 15 respondents (46.9%). Most were given MP-ASI to infants under six months, with 17 respondents (53.1%).

Bivariate Analysis

Table 3. Correlation of Mothers' Knowledge Level and Giving MP-ASI (Weaning Food) on Babies Under 6 Months

Mother Knowledge Level	Giving MP-ASI to Babies Under 6 Months				Total	p-value
	Yes		No			
	f	%	f	%		
Not good	9	28.1	1	3.1	10	0.001
Good	8	25.0	7	21.9	15	
Enough	0	0	7	21.9	7	
Amount	17	53.1	15	46.9	32	

Table 3 shows the level of knowledge of mothers in the poor category of being given MP ASI at less than six months of age by nine respondents (28.1%), the level of knowledge of mothers in the category of sufficient not being given MP ASI at less than six months of age by one respondent (3.1%), the level 8 respondents (25%) had adequate knowledge of MP ASI under the age of 6 months, seven respondents (21.9%) had sufficient knowledge of mothers in the category of sufficient not given MP ASI o respondents (0%) were less than six months old and seven respondents (21.9%) had no MP ASI at the age of less than six months.

Statistical results using the Chi-Square test, the result is a p-value of 0.001; because the p-value < α (0.05), which means there is a relationship between the level of knowledge of the mother and the provision of MP-ASI at less than six months of age, with a contingency coefficient value of 0.543. This shows that mothers' knowledge is strongly related to the provision of MP ASI to infants under six months.

DISCUSSION

Knowledge Level of Mothers at Posyandu Kenanga Desa Labruk Lor in 2022

The measurement results, almost half of the respondents had a sufficient level of mother's knowledge, with a total of 15 respondents (46.9%). Knowledge is the result of knowing, and this occurs after someone has sensed as much as a certain object. Sensing occurs through the five human senses: sight, hearing, smell, taste, and touch. Most human knowledge is obtained through the eyes and ears (Notoatmodjo, 2007).

According to the researchers' assumptions, the respondents' characteristics that influence the level of knowledge are education. The results show that most of the respondents had elementary-junior high school education, as many as 21 respondents (65%). Education is an activity or learning process that occurs anywhere, anytime, and by anyone. Education can affect a person's knowledge. The higher a person's education level, the easier it is to receive information, so the better the knowledge. However, someone with low education does not necessarily have low knowledge. Mother's education will impact child protection and survival by providing adequate nutrition according to child growth and development. Mothers' education will need to be improved in handling family nutrition and their toddlers. the higher the level of formal education obtained, the higher the knowledge about giving appropriate MP-ASI (Damayanti & Iskandar, 2019). The more educated mothers are, the more mothers know about the dangers of giving weaning food (MP-ASI) too early (Ratnasari, et al., 2021). Formal education influences a mother's experience and knowledge. In addition, a higher level of education is more likely for a mother to carry out prevention related to giving weaning food (MP-ASI) too early (Septiani et al., 2020).

According to the researcher's assumptions, education is essential for a mother and greatly influences the mother's knowledge, especially in caring for babies and giving MP-ASI to babies. Mothers with higher education will have better knowledge of infant health and proper complementary feeding. The researcher assumes that one of the efforts that can be made to increase respondents' knowledge with non-formal education is the provision of education through health counseling which can be given in the formation of classes for mothers of toddlers. Health education is a health promotion medium that can influence one's knowledge.

Provision of MP ASI to Babies Less than six months old at Posyandu Kenanga Labruk Lor Village in 2022

The measurement results, the majority were given MP ASI to infants under six months old, with 17 respondents (53.1%). Complementary feeding is food or drink other than breast milk that contains nutrients given to babies during the weaning period (complementary feeding), namely when other food/drinks are given along with breastfeeding. MP ASI is a food transition from breast milk to family food. The introduction and administration of MP-ASI must be carried out in stages in form and quantity according to the baby's ability (Mufida et al., 2015).

According to the researchers' assumptions, in this study, giving MP ASI to infants aged less than 6 months was influenced by socio-cultural factors. The cultural influence of hereditary habits, namely 40 days after the birth of a baby, gives honey when it is new. Some give dates when it is born as well as several assumptions, such as giving MP-ASI as a solution for babies who are fairly active and fussy so that later they can sleep soundly, as a solution for mothers who don't have enough breast milk/lack breast milk, which is also a factor in giving formula milk too early.

Researchers assume that efforts can be made to change the culture of early complementary breastfeeding in the community with gradual and consistent health education involving parents of babies and their families and community leaders such as health cadres. Health Education will increase public knowledge. Parents with good knowledge about the importance of breastfeeding will only give breast milk until the baby is six months old; if the mother's knowledge is low, then she will give MP-ASI before the age of six months and assume that the baby will feel full.

The Relationship between Mother's Knowledge Level and Giving MP-ASI to Babies Less than 6 Months Old at Posyandu Kenanga in Labruk Lor Village in 2022

The measurement results show that the level of knowledge of mothers in the poor category is given MP ASI at less than six months of age by nine respondents (28.1%), the level of knowledge of mothers in the moderate category is not given MP ASI at less than six months by one respondent (3.1%), the level of knowledge of mothers in the category sufficient to be given MP ASI aged less than six months was eight respondents (25%), the level of knowledge of mothers in the category sufficient was not given MP ASI aged less than six months by seven respondents (21.9%), the level of knowledge of mothers in the good category was given There were seven respondents (21.9%) with MP ASI aged less than six months (0%) and the knowledge level of mothers in the good category was not given MP ASI aged less than six months.

The statistical result is a p-value of 0.001; because the p-value $< \alpha$ (0.05) means there is a relationship between the mother's knowledge level and the provision of MP-ASI at less than six months of age, with a contingency coefficient value of 0.543. This shows that mothers' knowledge is strongly related to providing MP ASI to infants under six months.

Complementary feeding should be given in stages regarding texture and number of portions. The thickness of the food and the amount must be adjusted to the skills and readiness of the baby to receive food. Texture of the food initially, the baby is given liquid and soft food; after the baby

can move the tongue and the chewing process, the baby can be given semi-solid food. Solid food is given when the baby has started teething. Food portions also gradually start from one spoon to gradually increase (Waryana, 2010).

According to the researchers' assumptions, most respondents with a poor level of knowledge did not give MP ASI to infants under six months old. However, there were still two respondents with sufficient knowledge not to give MP ASI to babies aged six months. According to the analysis, it is influenced by work factors. In this study, most respondents did not work or were housewives. So that mothers actively participate in counseling activities provided by health workers through Posyandu, recitation, and at the Health Center. So that it will add insight into the mother's knowledge in providing appropriate complementary food to her baby.

According to the researcher's assumptions, knowledge plays a major role in someone acting, in the sense that a person's level of knowledge has a good effect on the needs of both him and others. Mothers with a low level of dominant knowledge will be indifferent to the condition of their babies. If a mother with a good level of knowledge, the mother will be very concerned about her child's condition, from exclusive breastfeeding to complementary feeding, which will greatly impact the lives of her children.

CONCLUSION

Nearly half of the respondent's level of knowledge of mothers entered the sufficient category, and most mothers gave MP ASI to their babies when they were under six months old. It can be concluded that there is a relationship between the level of knowledge and the provision of MP ASI to infants under six months, mothers at Posyandu Kenanga, Labruk Lor Village, in 2022.

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CONFLICT OF INTEREST

No conflict of interest.

REFERENCES

- Ardiana, A., Afandi, A. T., Masaid, A. D., & Rohmawati, N. (2019). Utilization of agricultural products for the management and prevention stunting through empowering health Cadres in Jember District. *Dedicated Scholar*, 2(1), 9-14.
- Ardiana, A., Afandi, A. T., Rohmawati, N., & Masahida, A. D. (2021). Focus Group Discussion in Increasing Cadres' Knowledge to Conduct Counseling to the Community About Early Stunting Prevention. *Jurdimas (Journal of Community Service) Royal*, 4(3), 225-230.
- Ardiana, A., Afandi, A. T., Mahardita, N. G. P., & Prameswari, R. (2021). Implementation of peer group support towards knowledge level of mother with toddlers about stunting. *Pakistan J Med Heal Sci*, 15(1), 260-3.
- Baharudin. (2014). Correlation between mother's education level and complementary feeding to infants (0-6 months) at the Uteun Pulo Health Center, East Seunagan District, Nagan Raya Regency. *Aceh Poltekes Nursing Journal*.

- Damayanti, M., & Iskandar. (2019). *Mental Health Nursing Care*. Refika Aditama
- Heryanto, Eco. (2017). Factors Associated with Early Complementary Feeding. *Journal of Health Sciences Stikes Aisyah*.<http://ejournal.stikesaisyah.ac.id>
- Ludviah E, Wahyuningsih S, Widayati A, Sunanto. (2023). Effect of Oxytocin Massage on Breast Milk Production among Postpartum Mothers. *HTechJ*, 1(3), 327-34
- Mufida, L., Widyaningsih, T. D., & Maligan, J. M. (2015). Basic Principles of Complementary Food for Breast Milk (Mp-ASI) for Babies 6-24 Months: Literature Review. *Journal of Food and Agroindustry*, 3(4).
- Notoatmodjo, S. (2007). *Health Promotion and Behavioral Sciences*. Rineka Cipta
- Ratnasari, Y. E., Dewi, E. I., & Kurniyawan, E. H. (2021). Hubungan kecerdasan spiritual dengan stres pasien TB paru di Rumah Sakit Paru Jember. *Pustaka Kesehatan*, 9(2), 116-122.
- Savitri, A. (2016). *Super complete 365 days of MP-ASI*. Ld esegar.
- Septiani, A. N., Wuryaningsih, E. W., & Kurniyawan, E. H. (2020). Gambaran Distres Psikologis pada Petani Tembakau Di Kecamatan Kalisat Kabupaten Jember. *Pustaka Kesehatan*, 7(3), 152-157.
- Utami. (2015). *Exclusive Breastfeeding Smart Book*. Diva Press.
- Waryana. (2010). *Reproductive Nutrition*. Rihana Library
- Yusra, W., Rahmayani, R., & Yusran, M. (2022). Relationship between Mother's Knowledge and Early Complementary Breastfeeding for Infants Aged 0 to 6 Months in Pante Raya Village, Wih Pesam District, Bener Meriah Regency. *Serambi Saintia: Journal of Science and Applications*, 10(1), 30-37.