The Influence of Access Information on Early MP-ASI Provision to Babies 0-6 Months in the Coastal of Amondo Puskesmas Working Area, South Konawe Regency

Misdayanti Misdayanti*[1], Mayurni Firdayana Malik[2], Yuyuk Mayanti[3]

[1,2] Avicenna Institute of Technology and Health, Southeast Sulawesi, Indonesia
[3] UPTD Amondo Health Center, South Konawe Regency, Southeast Sulawesi, Indonesia
smisdayanti@gmail.com[1], maymalik08@gmail.com[2], yuyukmayanti623@gmail.com[3]

Abstract. During the first six to twenty-four months of a baby's life, it is common practice to supplement breast milk with an additional meal or drink known as complementary food for breast milk (MP-ASI). Babies' digestive systems grow at different rates, thus the amount of MP-ASI given to them should be adjusted accordingly. The population still often experiences the side effect of gastrointestinal problems caused by administering MP-ASI at an early stage. In order for the baby's digestive system to adjust to the new food type—whether it's liquid, soft, soft, or solid—MP-ASI must be introduced gradually. In coastal communities in the Amondo Health Center Working Area, South Konawe Regency. This study aims to examine the impact of maternal access information on the provision of early MP-ASI to infants aged 0-6 months. This research uses a cross-sectional analytical observational study. Of the moms surveyed, 171 had infants between the ages of 0 and 12 months. A questionnaire is used as the tool. The Chi-Square test was used for bivariate data analysis in a univariate fashion. In coastal settlements in the Amondo Health Center Working Area, South Konawe Regency, there is a notable correlation between the practice of giving early MP-ASI to newborns 0-6 months old and access to information (p-value of $0.000 < \alpha$ (0.05)). The mother's access information affects the success of giving suitable MP-ASI. Because moms can't easily get their information, their knowledge is severely limited, and they act in line with what they know. The accessibility (or lack thereof) of healthcare services is one example of how the behavioral dimension elucidates the role of environmental variables.

Keywords: Early Breast Milk Complementary Foods, Access Information, Coastal Areas

1. Introduction

From six months to twenty-four months of age, infants who are breastfed get what is called "complementary food for breast milk," or MP-ASI. The provision of MP-ASI must be adjusted to the development of the baby's digestive system. According to the WHO Global Data Bank (2020), only 44% of babies received exclusive breastfeeding between the 2015-2020 time period [1]. In 2021, 53.2% of newborns under 6 months received MP ASI, whereas in 2022, this percentage decreased to 48.9% according to

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the Indonesian Nutritional Status Survey [2]. Exclusive breastfeeding and breastfeeding for 2 years are highly recommended as intervention efforts to reduce the deaths of neonates, infants and children as well as the basis for child development and growth.

Feeding babies under 6 months old solid food, known as MP-ASI, is not recommended due to their immature digestive system [3]. Giving MP-ASI too early can cause digestive system disorders and this still often occurs in the community. In order for the baby's digestive system to adjust to the sort of food that was first liquid, soft, soft, solid, MP-ASI must be given gradually.

Data from the South Konawe District Health Office profile for 2022 reveals that the coverage of exclusive breastfeeding remains below the national objective of 80% and the national average of 52.3%, at 46.7%. [4]. In 2022, statistics from the Amondo Community Health Center revealed that out of 155 newborns, only 88 (or 56.7%) got exclusive breast milk. The incorrect supply of MP-ASI is one of the reasons exclusive breastfeeding is not accomplished. Only breast milk should be given to infants ages 0 to 6 months, without any other meal. [5]. Breastfeeding newborns seldom produces breast milk, thus there is a considerable chance of contamination when MP-ASI is given too early. One such risk is the development of gastroenteritis, which can be fatal for them [6]. [7] Compared to newborns that receive early MP-ASI before the age of 4 months, those who are exclusively breastfed have better average monthly weight gain. Babies may develop this development condition if the MP-ASI they receive is deficient in calories and micronutrients like zinc and iron.

One of the factors that influences the accuracy of providing complementary breast milk (MP-ASI) is the source of information. Inaccuracy in giving MP-ASI can be overcome with good access to information. One of the roles of health workers is to carry out health promotion, especially regarding providing appropriate MP-ASI. This health promotion really needs to be carried out from the moment the mother enters pregnancy, especially for young mothers who are giving birth for the first time because a mother who is giving birth for the first time is usually more protective of her baby.

2. Method

This research utilizes a cross-sectional approach with an analytical observational study. South Konawe Regency in Southeast Sulawesi is home to the Amondo Health Center Working area, which is where the research was carried out. Research participants were 117 mothers whose children were between the ages of 0 and 12 months. The study took place in the summer of 2023. A simple random sample method was used in the experiment. The information gathered for this study came from in-depth interviews conducted with participants using a pre-designed questionnaire. The Chi-Square test and other forms of univariate and bivariate statistical analysis are used.

3. Results and Discussion

a. Respondent Characteristics

Table 1. Frequency Distribution of Respondent Characteristics

Respondent Characteristic	Category	Frequency	%
Mother's education level	High	9	7,7
	Medium	59	50,4
	Low	49	41,9
Mother's job	Doesn't work	114	97,4
	Work	3	2,6
Child's gender	Man	51	43,6
	Woman	66	56,4

The data in Table 1 indicates that most mothers possess a secondary education, with 59 respondents accounting for 50.4%. In terms of job characteristics, there are significant differences between working and non-working mothers. Mothers who did not work were 114 respondents (97.4%), while mothers who worked were 3 respondents (2.6%). Gender of the baby Most of the gender was female, namely 66 babies (56.4%).

b. Description of Dependent Variable (Early MP-ASI Provision)

The respondent's provision of MP ASI is determined by the age at which the infant begins to consume food or beverages, as shown in table 2 according to the research findings.

Table 2. Age of Children Given MP-ASI in the Amondo health Center Work Area, South Konawe regency

Children Given MP-ASI	Frequency (n)	Percentage (%)
< 1 month	6	5,1
1 months	8	6,8
2 months	18	15,4
3 months	12	10,3
4 months	18	15,4
5 months	23	19,7
6 months	32	27,4
Amount	117	100

The research findings indicate that most respondents provided complementary breast milk (MP-ASI) to infants prior to them reaching 6 months of age. The comparison of children's ages when provided with MP-ASI is depicted in the graph above. 5.1% of newborns under 1 month old are given complementary feeding (MP-ASI). At 1 month, the rate was 6.8%, at 2 months it was 15.4%, at 3 months it was 10.3%, at 4 months it was 15.4%, at 5 months it was 19.7%, and at 6 months it was 27.4%. The survey revealed that 72.6% of newborns received the largest amount of supplementary meals before reaching 6 months of age. Scientific consensus suggests that introducing complementary foods to the diet of healthy full-term babies between 4 and 6 months of age is safe and unlikely to cause adverse health effects, both short-term (such as infections and weight issues) and potentially long-term (like allergies and

obesity). It is recommended to introduce gluten-containing foods by 6 months of age [8].

Table 3. Types of MP-ASI given to Babies Aged 0-5 Months in the Amondo Community Health Center Working Area, South Konawe Regency

Type of Food/Drink	Frequency (n)	Percentage (%)
Water, starch water, coconut water, honey	17	14,5
Banana, Porridge, Fruit	1	0,9
Formula Milk	90	76,9
Other	9	7,7
Amount	41	100

Before 6 months of age, newborns are mostly fed formula milk (90%), followed by honey (17%), various quick meals including Milna (9%), and banana kerok (1%). From the results of interviews with several respondents, they said that the reason for giving formula milk was because there was little breast milk coming out, with the condition of the nipples sinking and the nipples being flat, making it difficult for the baby to breastfeed. Meanwhile, giving honey is a custom or tradition of each tribe that has been carried out for generations. Many infant feeding practices in Indonesia are still not in accordance with the general practice, especially in rural areas.

Table 4. Providing MP-ASI in the Amondo Health Center Working Area, South Konawe Regency

Giving MP-ASI	Frequency (n)	Percentage (%)
Not giving early MP-ASI	32	27,4
Provide Early MP-ASI	85	72,6
Amount	41	100

Based on research results, the majority of mothers provide early MP-ASI to babies aged 0-6 months, namely 72.6%. There are various factors that become obstacles in giving exclusive breast milk which causes early provision of MP-ASI, one of which is the shape of the mother's breasts with sinking nipples and flat nipples which makes breastfeeding difficult for the baby. The shape of the breast greatly influences the success of breastfeeding because if there are abnormalities in the mother's nipples, the baby's mouth will have difficulty attaching well, sucking and swallowing breast milk [9]. Apart from that, the reason that is often found is that mothers give babies MP-ASI early because the baby doesn't feel full and is always fussy. According to Anies in [10].

The Center for Nutrition and Food study and Development's study indicates that partly breastfed newborns are more prone to experiencing diarrhea, coughs, colds, and fever compared to mostly breastfed babies. As a baby gets older, the frequency of diarrhea, coughs and colds and fever will increase [11]. Providing early food/drinks to

babies in the coastal areas of the Amondo Health Center Working Area is motivated by various reasons, starting from maternal education which influences the lack of knowledge, especially about the timing of giving food/drinks (MP-ASI) to babies, promotion and giving formula milk. which has become a lifestyle so that mothers consider formula milk to be much better than breast milk. Cultural traditions passed down through generations also have a role in the practice of feeding infants at a young age.

c. Overview of Independent Variables

Distribution of Information Access

The variable access to information about providing MP-ASI consists of several question items, namely whether the mother has ever heard or seen a message or received information about MP-ASI, what materials have she received/seen/heard, where did she get the information, and sources of information. The research findings indicated that a significant number of respondents were unaware of certain question items, including information about the benefits of MP-ASI for babies, the requirements for MP-ASI, the stages of giving MP-ASI, and the consequences of introducing MP-ASI early.

The variable access to information is grouped into three, namely good, sufficient and poor access to information. The results of this grouping can be seen in Table 5.

Table 5. Distribution of Information Access in the Amondo Health Center Working Area, South Konawe Regency

Information Access	Frequency	Percentage
Good	20	17,1
Enough	24	20,5
Less	73	62,4
Amount	117	100

Results of the survey indicated that 62.5% of participants lacked adequate access to knowledge about giving MP-ASI. Health workers do not effectively communicate certain information about MP-ASI, including its purpose, requirements, stages, and early impact, resulting in 20.5% of respondents having inadequate access to this information. Respondents' replies indicate that only a small number of moms are aware of the appropriate age for newborns to start receiving MP-ASI. Only 17.1% of respondents had adequate access to information on MP-ASI.

Correlation Analysis of Information Access to Early MP-ASI Provision

The research found that women who had access to knowledge but chose not to give their newborns MP-ASI early were 50% less likely to be successful than moms who had access to information but chose to give their babies MP-ASI early. On the other hand, compared to women who have access to enough knowledge but choose not to

give their newborns early MP-ASI, the percentage of moms who do not give their babies early MP-ASI is 43.8%. Beyond that, 83.5% of moms with limited access to information give their newborns MP-ASI early on. Check out table 6 for all the info.

Table 6. Access to Information on Providing Early MP-ASI in the Working Area of the Amondo Health Center, South Konawe Regency

Access Information	Providing MP-ASI				Total		P Value
	Doesn't Give		Give		n	%	
	n	%	n	%			
Good	16	50	4	4,7	20	17,1	0,000
Enough	14	43,8	10	11,8	24	20,5	
Not Enough	2	6,3	71	83,5	73	62,4	
Amount	32	27,4	85	72,6	117	100	

The association between access to information and delivering early MP-ASI to newborns aged 0-6 months is shown by the variable having a value of $p = 0.000$ ($p<0.05$), as shown by the results of bivariate analysis. Most moms with limited access to information have a high potential to give their newborns early MP-ASI, according to the cross-tabulation table. This demonstrates that the effectiveness of exclusive breastfeeding and early administration of MP-ASI may be effectively carried out when pregnant and nursing women are provided with greater and more comprehensive information about the procedure. Because more information can influence awareness which ultimately influences behavior in accordance with the knowledge they have.

The research findings indicate that most participants reported being informed about MP-ASI. The goals of this study are to determine when it is safe to start MP-ASI for babies, why it is beneficial for infants, what is required to administer MP-ASI, how to introduce MP-ASI, and what happens thereafter. The respondents do not have enough information on the possible effects of MP-ASI on infants 0-6 months of age, the necessary components for MP-ASI, or the steps to administer MP-ASI. Sources of information regarding MP-ASI were obtained from health workers (midwives, doctors, nutrition officers) at *Posyandu* and during classes for pregnant women and a small part was obtained from the mass media (internet).

[12] the majority of the information-receiving respondents correctly provided MP-ASI. Research at the Lokbatu Community Health Center Work Area in 2020 found that the precision with which MP-ASI was administered to newborns was correlated with the availability of knowledge about the procedure. Health workers and health facility administrators must educate mothers or family members about the importance of timely introduction of complementary feeding, starting from pregnancy check-ups through the exclusive breastfeeding period and transitioning to complementary feeding at 6 months of age. Health personnel offering information regarding MP-ASI helps in giving suitable MP-ASI. Additionally, interviews with many respondents revealed that they started administering early complementary feeding to their infants due to insufficient breast milk production. To prevent this, offer comprehensive instruction and information to moms about milk management throughout pregnancy classes. Due to the fact that breast milk is generated by the mother's body throughout

pregnancy, particularly in the last trimester. The formation of breast milk begins at 16-22 weeks of gestation and will continue to be produced until the baby and placenta are born.

One of the factors that influences the accuracy of providing complementary breast milk (MP-ASI) is the source of information. Inaccuracies in providing MP-ASI can be overcome with good access to information, integrated healthcare center is one of the community's access points to obtain information related to MP-ASI. The public gets information at the integrated healthcare center and classes for pregnant women through outreach and counseling by Health officers at the public health center. Access to good information can have an impact on providing appropriate complementary foods for breast milk. Proper provision of MP-ASI involves introducing the taste and texture of food according to the baby's age so that the baby's digestion can adapt gradually, and reduces the risk of the baby getting diarrhea. The positive impact of providing MP-ASI correctly is supporting the development of motor skills, training the baby's fine motor skills, training sensory sensitivity, increasing the body's immunity which can help children avoid illness and even death.

One of the roles of health workers is to carry out health promotion, especially regarding providing appropriate MP-ASI. This health promotion really needs to be carried out from the moment the mother enters pregnancy, especially for young mothers who are giving birth for the first time because a mother who is giving birth for the first time is usually more protective of her baby. Mothers are sometimes easily influenced by various provocations both from within the family and from outside or their environment, which makes mothers less motivated to breastfeed their babies. Mothers who receive good information about breastfeeding are not easily influenced. Therefore, since pregnancy, mothers need to be provided with information about the benefits and advantages of breastfeeding, the impact of early feeding, lactation management, and so on.

The success of providing appropriate MP-ASI is influenced by the mother's access to information. Mothers' lack of access to information also diminishes their knowledge, causing them to act in accordance with the facts they do learn. Due to the behavioral dimension's explanation of how supportive factors appear in the physical world, the presence or absence of medical facilities or other facilities (access to information).

4. Conclusion

The findings indicate that early MP-ASI for infants aged 0 to 6 months in coastal communities in the Amondo Health Center Working Area, South Konawe Regency, is significantly correlated with information access (p-value of 0.000 < α (0.05). The success of providing appropriate MP-ASI is influenced by the mother's access to information. Mothers' lack of access to information also diminishes their knowledge, causing them to act in line with the facts they do learn. Since the behavioral dimension clarifies how supportive elements appear in the physical environment, the accessibility of medical services—or lack thereof—and other facilities (information access). Increase health promotion efforts, especially regarding providing appropriate

MP-ASI intensively through direct communication with the community by involving husbands, family (mother/mother-in-law) to control socio-cultural factors so that they do not affect mothers.

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