Research article

Knowledge of Supplementary Foods on Behavior in Infants 0-6 Months in Sigenti Village, Parigi Mautong Regency Central Sulawesi Province

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ABSTRACT

Background: One of the problems that are often encountered in the community is the provision of additional food to infants before the baby is 6 months old. There is a community habit to give rice, bananas at the age of a few days, there is a danger, because the digestive tract in infants is not yet perfect. **Method:** The design of this research is correlational research with cross sectional approach. Respondents were taken by accidental sampling technique. The population studied were all mothers of infants 0-6 months in Sigenti Village with a sample of 30 mothers. Results: The results were analyzed using the Spearman Rank statistical test. The results showed that knowledge about food additives was known to almost all respondents in the Good category as many as 25 (83%) respondents. Behavior in Infants 0-6 Months, it is known that almost all respondents are in the Good category as many as 23 (77%) respondents. The results of data analysis show that the significance level is $0.000 \le 0.05$ so that H0 is rejected and H1 is accepted. **Conclusion:** There is a Relationship between Knowledge of Supplementary Food and Behavior in Infants 0-6 Months in Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province.

I. Introduction

Mother's behavior in providing additional food, both in terms of timeliness, type of food, and amount of food is determined by the mother's knowledge of additional food. Mother's level of knowledge about nutrition is very important in improving the nutritional status of the family, especially the nutritional status of their children. Starting from determining, selecting, processing to presenting the daily nutritional menu (Almatsier, 2016). However, at the age of 0-6 months, babies do not need food or drink other than breast milk. This means that the baby only gets mother's milk without the addition of other fluids, either formula milk, honey, tea water. Babies are also not given other solid foods such as bananas and mashed rice, porridge, milk, biscuits, rice and others. The most important thing in giving additional food to babies is what food should be given, when it is given and in what form the food is given to the baby so that there is no disturbance in the growth and development of the baby (Nilawati, 2016).

The World Health Organization (WHO) (2018), noted that the number of mothers in the world who provide supplementary food under the age of 2 months includes 64% of total infants, 46% of infants aged 2-3 months and 14% of infants aged 4-6. month (WHO, 2018). The Indonesian Health Demographic Survey (IDHS) in 2018 only 8% of Indonesian babies who received exclusive breastfeeding for six months, and only 4% of infants who were breastfed within one hour of birth and breastfeeding coverage

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The IDHS (2018) also explained that 55% were exclusively breastfed without any additional food until they were <4 months old and 40% were exclusively breastfed for <6 months, while exclusive breastfeeding was only 14% until the baby was 4-5 months old. (IDHS, 2018). BPS Central Sulawesi Province (2019) shows that exclusive breastfeeding is around 13% while supplementary feeding continues to increase threefold in the last 5 years (BPS Central Sulawesi Province, 2019).

Data from the Central Sulawesi Provincial Health Office stated that during 2018 out of a total of 11.01 babies examined, 10,071 babies were given additional food before they were 6 months old. Meanwhile, data from the Parigi Mautong Health Service obtained data on the coverage of supplementary feeding before the baby was 6 months old by 61.93%. In Sigenti village, which is the area of the Parigi Health Center, there are 55 babies aged 6-12 months. 72.7% (40 infants) were given additional food before the age of 6 months, the remaining 27.3 (15 infants) were given additional food after the age of 6 months.

The results of a preliminary study conducted by researchers on November 11-16, 2019 In Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province, with interviews with 10 baby mothers, it was found that 5 mothers said they knew about giving additional food to babies such as the amount of food given, type of food and frequency. supplementary feeding for infants. So that the behavior of the mother does not give additional food to the baby before the baby is 6 months old. However, 3 baby mothers said that the culture that existed in the community where giving additional food to babies such as bananas, rice where the culture was already attached to the community so that it became a supporter of the behavior of mothers giving additional food to babies before the baby was 6 months old. 2 baby mothers said that their busy work caused family members to provide additional food for babies because of the work of mothers who worked from morning to evening (Results of Preliminary Study with Interviews with Respondents in Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province, 2019).

Factors that influence the behavior of family members in giving additional food to babies include the family having beliefs that are motivated by cultural aspects that babies will be fussy if only given exclusive breastfeeding for 6 months, so family members decide to give additional food to babies less than 6 months old. Environmental factors affect the process of entering knowledge into different individuals in the environment. This happens because of the reciprocal interaction or which is responded to as knowledge by each individual. The low knowledge of the baby's mother and family members about the impact of providing additional food to babies (Juwono, 2016). Notoatmodjo (2017), explains that knowledge is the appearance of the results of knowing and occurs after someone has sensed a certain object. If the parent partner has good knowledge about the importance of breastfeeding, then the behavior will be better in giving only breastfeeding until the baby is 6 months old, on the contrary if the parent partner does not have adequate knowledge then the behavior of the parents does not understand the importance of breastfeeding, it can it is said that as long as their baby is full, so that additional food is given too early (Dheny, 2016).

Therefore, to increase mother's knowledge about when to give additional food, in this case, health workers, especially midwives, are expected to be able to provide explanations to parents about the efforts that can be made to provide stimulus to their children, so that the child can grow and develop well. Midwives as "educators" this role is carried out by helping the baby's mother in increasing the level of health knowledge, so that there is a change in the behavior of the baby's mother after health education is carried out. Given the importance of mother's knowledge about providing age-appropriate supplementary food, health workers, especially midwives, must provide counseling to mothers and families.

The purpose of this study was to determine the relationship of knowledge about complementary foods to the behavior of giving additional food to infants 0-6 months in Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province.

II. METHODS

The design of this research is correlational research with cross sectional approach. Respondents were taken by accidental sampling technique. The population studied were all mothers of infants 0-6 months in Sigenti Village with a sample of 30 mothers. The independent variable studied was Knowledge of Supplementary Foods and the Dependent Variable was Behavior in Infants 0-6 Months. The results were analyzed using the Spearman Rank . statistical test.

III. RESULTS

Table 1. Demographic Data

Age (Years)	Frequency	Percentage (%)
<25	4	13
25-35	23	77
> 35	3	10
Education		
Elementary School	6	20
Junior High School	9	30
Senior High School	15	50
Occupation		
Farmer/ Housewife	18	60
Entrepreneur	8	27
Private	4	13
Knowledge of supplementary food		
Less	2	7
Enough	5	10
Good	25	83
Supplementary feeding behavior		
Less	2	6
Enough	5	17
Good	23	77

Table 2. Spearman Rank Statistic Test Results

Variable	Significance Level
Knowledge of Supplementary Food	0.000
Supplementary Feeding Behavior	

The results of data analysis show that the significance level is 0.000 < = 0.05 so that H0 is rejected and H1 is accepted, thus there is a relationship between Knowledge about Supplementary Foods and Behavior in Infants 0-6 Months in Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province.

IV. DISCUSSION

Knowledge of Supplementary Food for 0-6 Months Infants in Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province

Based on table 4.4 Knowledge of Supplementary Food in Infants 0-6 Months in Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province, it is known that almost all respondents in the Good category are as many as 25 (83%) respondents. This is supported by the results of the questionnaire that the impact of giving additional food to infants aged 0-6 months too early (before the baby is 6 months old) poses a risk to the growth and development of children and can cause digestive disorders/diarrhea. In addition, a child does not need additional food for infants aged 0-6 months and is only exclusively breastfed without other additional foods. The results of this study are in line with Rafika's research (2017), in his research article saying that there is a relationship between knowledge and education with early complementary feeding. The study also found 3 respondents in the sufficient category. This is due to the knowledge of mothers who tend to feel sorry for the baby if the baby is fussy and does not breastfeed so that they are given additional food in the form of porridge, bananas. The results of the

study also found 2 respondents in the less category. This is due to the lack of information and the inactivity of mothers under five in attending the posyandu so that the information obtained about additional food is minimal.

The results of this study are in line with Ginting's research. D, Sekarwana. N, Sukandar. H (2012) on the Effect of Mother's Internal and External Factors Characteristics on Early Breastfeeding for Babies <6 Months Age in the Work Area of the Barusjahe Health Center Karo Regency, North Sumatra Province, obtained a p value of <0.001 meaning that there is a relationship between mother's knowledge and early complementary feeding. in infants <6 months of age. According to Setyaningsih (2010), knowledge has a positive impact on breastfeeding mothers who provide complementary foods on time. On the other hand, the lower the knowledge of breastfeeding mothers, the lower the knowledge about giving the right MP-ASI to babies. Knowledge of additional food is knowledge of additional food given to infants aged 6 months to 24 months. The role of MP-ASI is not at all to replace breast milk, but only to complement breast milk (Yenrina, 2018).

Notoatmodjo (2017) states that there are three factors that influence knowledge, namely predisposing factors, enabling factors, and reinforcing factors. Predisposing factors include knowledge and attitudes of the community towards health, traditions and beliefs of the community on matters related to health, the value system adopted by the community, education level, socio-economic level. In addition, it is influenced by the attitude and behavior of health workers as one of the reinforcing factors for the behavior of giving additional food to infants 0-6 months. Knowledge plays an important role in determining behavior because knowledge will form beliefs which in turn will provide perspective to humans in preparing for reality, providing a basis for decision making and determining behavior towards certain objects.

According to the researcher's opinion, knowledge of a mother is needed in the care of her child, in terms of giving and providing food, so that a child does not suffer from malnutrition. However, a mother must also know that supplementary feeding must be given to infants aged > 6 months so that there is no impact or risk on the baby's growth and development. Besides that, health workers also increase public knowledge by socializing and collaborating with health cadres and community leaders about the provision of MP-ASI in the form of guidance counseling directed to mothers who have babies aged 0-6 months so as to increase knowledge and awareness about complementary foods. (MP-ASI).

Behavior in 0-6 Months Infants in Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province

Based on table 4.5 Behavior in Infants 0-6 Months in Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province, it is known that almost all respondents in the Good category are 23 (77%) respondents. This is supported by the results of the questionnaire that the mother's behavior does not provide additional food such as soft food porridge, milk and fruit juice in infants aged 0-6 months. The mother's behavior is to exclusively breastfeed the baby. The study also found 5 in the sufficient category. This is supported by the behavior of the baby who is fussy so that the mother gives additional food to the baby in the form of rice, porridge, bananas. The results of the study also found 2 respondents in the less category. This is due to the influence of local customs and traditions that provide additional food to infants before the age of 6 months, so that the behavior of mothers of toddlers participates in providing additional food to infants 0-6 months.

Kartika (2017), said that babies aged 6 months, in addition to breastfeeding, babies can begin to be given complementary foods (MP-ASI), this is at the age of over 6 (six) months babies already have reflexes in chewing through better digestion, and followed by the fulfillment of nutritional needs. Things that must be considered related to infant feeding are the timeliness of giving, frequency, type, amount of food ingredients, and how to make it. Inappropriate infant feeding habits, such as feeding too early or too late, insufficient food and a lack of frequency have an impact on infant growth. 3 Babies up to the age of 6 months, the need for nutrients can be met through exclusive breastfeeding However, after that age (6 months and above), the nutritional needs of infants are no longer sufficient by breastfeeding alone,

but must be given additional food that functions as complementary food. Giving MP-ASI that is not enough will have problems with the growth and development of children.

Behavior is what organisms do, both which can be observed directly or indirectly. Behavior and behavioral symptoms that appear in the activities of these organisms are influenced by genetic (hereditary) and environmental factors. Behavior is the result of the relationship between the stimulus or stimulus and the response or response. Health behavior is a response of a person or organism to stimuli related to illness and disease, health care systems, food, and the environment. The important thing in health behavior is the problem of forming and changing behavior (Notoatmodjo, 2017). Lestari (2016), said that the behavior of giving additional food is to give other foods besides breast milk to fill the gap between nutritional needs and the amount obtained from breast milk when the baby is > 6 months old. The behavior of providing adequate supplementary food in terms of quality and quantity is important for the physical growth and development of children's intelligence which is increasing rapidly during this period (Sari, 2017). In the opinion of the researcher, the better the mother's knowledge, the better her behavior in giving additional food to the baby.

The risk of giving additional food early is that the baby is more susceptible to disease, makes it difficult for the mother to maintain milk production, the process of breaking down food juices is not perfect so surgery must be carried out due to blockage of the gastrointestinal tract, and makes the baby malnourished because the frequency of breastfeeding the baby will decrease so that do not get the nutrients they should get from breast milk. Giving MP-ASI that is not in accordance with the age and needs of the baby can have an impact on the health and nutritional status of the baby (Ambarwati, 2012). In the opinion of researchers that mothers who have babies play an important role in preventing inappropriate supplementary feeding. In addition, the cadres at Posyandu also need to promote health education for mothers so that the behavior of giving additional food to infants 0-6 months can be given appropriately.

The Relationship of Knowledge About Supplementary Foods To Behavior In Infants 0-6 Months In Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province

The results of data analysis show that the significance level is 0.000 < = 0.05 so that H0 is rejected and H1 is accepted, thus there is a relationship between knowledge about food supplements and behavior in infants 0-6 months in Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province. Notoatmodjo (2017) says that a person's knowledge will greatly affect the mindset of something that will ultimately affect behavior change. The higher a person's knowledge, the more likely he is to pay attention to health problems for himself and his family. So it can also be interpreted that the higher the mother's knowledge, the better the tendency not to give complementary feeding to infants < 6 months.

The relationship between mother's knowledge about supplementary food and the behavior of giving additional food to infants 0-6 months is the better the mother's knowledge about additional food where the mother understands about when is the right time to give additional food, the types of supplementary food and the pattern of giving additional food to the baby. The knowledge possessed by the mother underlies the mother's behavior in providing additional food to her child. Provision of additional food will affect consumption and have an impact on improving the nutritional status of children. This is as stated by Notoatmodjo (2017) that a person's knowledge has an impact on a person's behavior based on that knowledge.

Nilawati (2016), said that at the age of 0-6 months, babies do not need food or drinks other than breast milk. This means that the baby only gets mother's milk without the addition of other fluids, either formula milk, honey, tea water. Babies are also not given other solid foods such as bananas and mashed rice, porridge, milk, biscuits, rice and others. The most important thing in giving additional food to babies is what food should be given, when it is given and in what form the food is given to the baby so that there is no interference with the baby's growth and development.

According to the researcher's opinion, mothers of toddlers already know about additional food for infants 0-6 months, which is evidenced by the results of research that knowledge and behavior of mothers

of toddlers are in the good category. This is also supported by mothers being able to understand the timing of supplementary feeding, the benefits of supplementary feeding if given in a timely manner and the correct processing of additional food. However, to always improve information about infant health, mothers must always seek health information, especially about additional food, such as actively participating in counseling at integrated service posts, and seeking information from radio, television, and newspapers. There is a need to increase the frequency of counseling regarding the provision of appropriate additional complementary foods by cadres at the local Posyandu so that the provision of additional food is not dominated by habits that are rooted from generation to generation.

V. CONCLUSION

Knowledge of Supplementary Food for Infants 0-6 Months In Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province, it is known that almost all respondents in the Good category are as many as 25 (83%) respondents.

Behavior in Infants 0-6 Months In Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province, it is known that almost all respondents in the Good category are 23 (77%) respondents.

There is a relationship between knowledge about supplementary food and the behavior of giving additional food to infants 0-6 months in Sigenti Village, Parigi Mautong Regency, Central Sulawesi Province with a significance level of $0.000 \le 0.05$.

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