Mother's Behavior and Knowledge in Preventing Stunting Through Breastfeeding Complementary Feeding to Children Aged 6-24 Months

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ABSTRACT

Parenting of babies and young children is the key to improving the survival of the child and encouraging growth. The method of collecting data by distributing questionnaires to 30 mothers who have babies of 6-24 months, the analysis carried out is mapping behavior and knowledge related to complementary foods and their correlation to stunting. Purposive sampling carries out the sampling technique. Based on the chi-square test, there was a relationship between respondents' knowledge and the condition of the baby with a smaller p value of 0.05, namely (p = 0.026). Based on the chi-square test, there was a relationship between respondents' attitudes and the condition of the baby with a p value smaller than 0.05, namely (p = 0.019). Based on the chi-square test, there was a relationship between the respondent's actions and the condition of the baby with a p value smaller than 0.05, namely (p = 0.004). Complementary foods for babies are already given to babies from a very early age (under the month), so the amount of nutrients that the baby needs is not in accordance with the needs of the child.

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INTRODUCTION

The role of nutrition in the human life cycle is very important. The age of 0-24 months is one of the phases that determine a person's survival in the future. The age of 0-24 months is a period of rapid growth and development so it is often termed as a golden period and a critical period. The golden period can be realized at this time, babies and children do not get food according to their nutritional needs, then it becomes a critical period that will interfere with the growth and development of babies and children [1]. A total of 130 million babies were born and as many as 4 million babies died in the first week of birth [1]. It is estimated that 45% of child deaths are caused by malnutrition each year. The government continues to strive to deal with the nutritional problem of toddlers because it affects the achievement of the Sustainable Development Goals (SDGs). The Minister of Health has issued a Regulation of the Minister of Health of the Republic of Indonesia Number 25
of 2014 concerning Child Health Efforts which shows the seriousness of the government in improving children's health.

Feeding babies and offspring is the key to improving the survival of the child and improving his growth. In the first 24 months of a child’s life is very important because optimal nutrition during this age will reduce the risk of chronic diseases and encourage child development. At 6 months of age, the baby's energy and nutritional needs begin to exceed those provided by breast milk, and additional food is needed to meet the needs of growth and development. Malnutrition will occur resulting in delays in the process of growth, brain development and decreased endurance. Therefore, malnutrition during toddlerhood will result in stunted or short toddler events [1]. Complementary foods (MP-ASI) are foods that are introduced from the age of 6-24 months to meet their nutritional needs [2]. In Indonesia, there are 6.7 million toddlers suffering from malnutrition due to incorrect complementary feeding (MP) of breast milk [3].

Based on the results of pre-research, it shows that the state of malnutrition of babies and children is caused by improper habit of giving complementary food. There are 50 children aged 6-24 months and 20 of them get complementary food in Bubun Village, Tanjung Pura District. However, complementary foods for breast milk have been given to babies from an early age (under 4 months), so the nutritional intake needed by the baby is not in accordance with their needs. In addition, mothers in Bubun Village, Tanjung Pura District, giving complementary food are more happy to see their children full and not fussy, limited in giving complementary food due to the family economy and lack of maternal knowledge that can be caused by stunting (short babies). Most of the breastfeeding is not in accordance with the established recommendations.

Based on this phenomenon, this research becomes urgent and has a feasibility study (feasibility). In addition, no similar studies have been found yet. So that the problem studied is how the mother's behavior and knowledge about giving complementary food to the baby. The specific purpose of this study is to determine the behavior and knowledge of breastfeeding complementary foods (MP-ASI) to prevent stunting.

Behavior is a response of oneself to an object around him [4]. Behavior is one of the factors that can affect the health of individuals, groups and also society. Behavior change does not always go through the above stages, If the acceptance of new behaviors or the adoption of behaviors through processes like this is based on knowledge, awareness of positive attitudes, then the behavior will be lasting. On the other hand, if the behavior is not based on knowledge and awareness, it will not last long [4]. Behavior includes attitudes and actions.

Knowledge is the result of knowing after a person in performing the sensing of a certain object. Sensing occurs through the five senses including the five humans, namely the sense of sight, sense of smell, sense of hearing, sense of taste, and sense of taste. Knowledge or cognitive is a very important domain in a person's actions (over behavior). Knowledge is also defined as information that is continuously required by a person to understand experience. Broadly speaking, it is divided into 6 levels of knowledge, namely knowing, understanding, application, analysis, synthesis, and evaluation [5].

Complementary Foods (Complementary Foods for Breast Milk), Supplemental breast milk (MPA) is a food or drink introduced by babies between the ages of 6 to 2 months and is useful to meet the nutritional needs of the baby. Complementary food is a transitional food derived from breast milk even when the baby is 2 months old and still breastfeeding. Complementary foods breast milk are gradually introduced to the baby in both shape and quantity depending on the baby's abilities. Feeding children with good complementary foods helps their development and growth and is essential for intellectual development and physical growth during this period [2].

The provision of complementary breast milk with insufficient nutrition in terms of quality and quantity has an impact on poor nutrition, especially stunting, especially in children under the age of 2 years. If not treated early, malnourished children will become human resources with low work productivity and at risk of developing non-communicable diseases [6].
Factors That Affect Mothers in Breastfeeding Children Aged 0-6 Months are mother’s work, income, education, knowledge, culture / ethnicity, support of health workers and myths and in-laws. Stunting is a nutritional status that is based on the anthropometric standard assessment of children’s nutritional status, the results of measurements fell at the threshold (Z-Score) of <-2 elementary schools to -3 elementary schools (short) and <-3 elementary schools (very short) [7]. Stunting is a chronic malnutrition condition caused by insufficient nutrient intake in the long term due to inadequate food supply. Growth retardation can occur from the womb and does not appear until the child is two years old [7]. Based on previous research, the prevalence of stunting or growth in the number of children decreased from 37.2% in Riskesdas 2013 to 30.8 (Ministry of Health of the Republic of Indonesia, 2018). Assessment of the nutritional status of children under 5 years old is usually carried out by anthropometric methods. In general, anthropometry involves measuring different body sizes and body composition at different ages and levels of nutrients. To see the imbalance of protein and energy intake. Some commonly used anthropometric indices are weight by age (BB/B), height by age (TB/U), weight by height (BB/TB) which is expressed as a deviation of degrees- units of type z (Z) [8].

RESEARCH METHOD

Based on pre-research, it was obtained that there was an inappropriate way of giving complementary food. The feasibility study product developed is to map the behavior and knowledge of mothers towards the provision of complementary food in babies 6-24 months. This study consists of 2 stages, namely stage 1 mapping behavior, then stage 2 is mapping maternal knowledge about complementary food and analyzing its effect on stunting.

This research is descriptive, which is a study conducted to describe or develop a phenomenon that occurs in society. This method aims to find out an overview of mothers’ knowledge and attitudes about giving breast-feeding to babies aged 6-24 months in Bubun Village, Tanjung Pura District in 2019. This research was carried out in Bubun Village, Tanjung Pura District. In this study, the population was all mothers who had children aged 6-24 months who were in Bubun Village, Tanjung Pura District, which amounted to 30 babies. The sample in this study was a saturated sample of 30 people. Data were collected using likert scale questionnaires according to the indicators on each variable. In this study the measurement aspect uses the Guttman scale which is a scale that is firm and consistent by providing affirmative answers such as answers and questions : right and wrong, agree and no, yes and no. This Guttman scale is generally made checklist (ü) with the interplay of assessment, if the correct score is 1 and if the wrong score is 0.

The data analysis in this study is as follows:

Univariate Analysis
This univariate analysis aims to describe the characteristics of each of the independent variables (knowledge, attitudes and actions of the mother) and the dependent variables (nutritional status of the toddler ). Such data is displayed in the form of a frequency distribution table.

Bivariate Analysis
This bivariate analysis aims to determine the relationship between two variables , namely independent variables (knowledge, attitudes and actions ) and dependent variables (nutritional status of children under five) by using chi-square test . This statistical test uses a significant level of p=0.05. Where if the value (p< 0.05) means that Ha is accepted and Ho is rejected indicating that there is a relationship between independent and dependent variables.

RESULTS AND DISCUSSIONS

The table of frequency distribution of respondents by age in table 1.
Table 1. Frequency Distribution of Respondents' Characteristics By Age

| Age (Years) | Sum (n) | Percentage (%) |
|-------------|---------|----------------|
| 22 - 28     | 13      | 26             |
| 29 - 35     | 23      | 46             |
| 36 - 42     | 9       | 18             |
| 43 - 49     | 5       | 10             |
| Total       | 50      | 100            |

Table 1 shows that the majority of respondents are mothers aged 29-35 years with a percentage of 46% or about 23 people out of 50 mothers who have babies 6-24 months and minorities who are 43-49 years old with a percentage of 10% or about 5 people out of 50 mothers who have babies aged 6-24 months.

Table 2. Frequency Distribution of Respondents' Characteristics By Education

| Education                  | Sum (n) | Percentage (%) |
|----------------------------|---------|----------------|
| Graduated from elementary  | 11      | 22             |
| Graduated from junior high | 19      | 38             |
| Finished High School       | 10      | 20             |
| Finished PT                | 10      | 20             |
| Total                      | 50      | 100            |

From table 2 showed that the majority of respondents are mothers who have a junior high school education level of about 19 people out of 50 mothers who have babies 6-24 months or 38% and minorities have a high school and college graduate education level with a total of 10 people out of 50 mothers who have babies 6-24 months.

Table 3. Frequency Distribution of Respondents' Characteristics By Occupation

| Work          | Sum (n) | Percentage (%) |
|---------------|---------|----------------|
| Employee      | 7       | 14             |
| Teacher       | 2       | 4              |
| Self employed | 5       | 10             |
| Farmer        | 13      | 26             |
| IRT           | 23      | 46             |
| Total         | 50      | 100            |

From table 3, it shows that the majority of respondents are mothers who work as housewives with a total of 23 people out of 50 mothers who have children aged 6-24 months with a percentage of 46% while mothers who work as only 2 people with a percentage of 4% of 50 mothers who have babies 6-24 months.

Table 4. Frequency Distribution of Respondents' Characteristics Based on Parity

| Parity         | Sum (n) | Percentage (%) |
|----------------|---------|----------------|
| Primipara      | 15      | 30             |
| Sekundipara    | 11      | 22             |
| Multipara      | 16      | 32             |
| Grandemultipara| 8       | 16             |
| Total          | 50      | 100            |

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Table 4 showed that the majority of respondents are mothers who have given birth up to 5 times with a percentage of 32% (about 16 people from mothers 50 mothers) who have babies 6-24 months. A minority of mothers who have given birth up to 6 times or more with a percentage of only 16% or about 8 out of 50 mothers who have babies 6-24 months:

| Table 5. Frequency Distribution of Infant Age Characteristics |
|------------------|---------|------|
| Age (Month)      | Sum (n) | Percentage (%) |
| 6 - 12           | 12      | 40    |
| 13 - 19          | 14      | 46.67 |
| 20 - 26          | 4       | 13.33 |
| Total            | 30      | 100   |

From table 5, it shows that the majority of infants' ages are 13-19 months with 14 babies or about 46.67% while the minority is babies aged 20-26 months with 4 babies and babies aged 6-12 months are about 12 babies or about 40%.

| Table 6. Frequency Distribution of Infant Age Characteristics |
|------------------|---------|------|
| Gender           | Sum (n) | Percentage (%) |
| Man              | 18      | 60    |
| Woman            | 12      | 40    |
| Total            | 30      | 100   |

From table 6, it shows that the majority of babies are male with 18 people or about 60% while female babies are 13 people or about 40%.

**Univariate Analysis**
The following is table 7 univariate analyses based on knowledge, cyclone, action and Stunting.

| Table 7. Frequency Distribution of Respondents Based on Knowledge, Attitudes, Actions |
|------------------|---------|------|
| No.              | Frequency | Sum (n) | Percentage (%) |
| 1                | Knowledge |         |       |
| Less             | 14        | 28    |
| Enough           | 25        | 50    |
| Good             | 11        | 22    |
| Total            | 50        | 100   |
| 2                | Attitude  |         |       |
| Negative         | 13        | 26    |
| Positive         | 37        | 74    |
| Total            | 50        | 100   |
| 3                | Action    |         |       |
| Less             | 13        | 26    |
| Enough           | 15        | 30    |
| Good             | 22        | 44    |
| Total            | 50        | 100   |
| 4                | Stunting  |         |       |
| Yes              | 3         | 10    |
| Not              | 27        | 90    |
| Total            | 30        | 100   |

Based on table 7 of the 50 mothers who have babies aged 6-24 months, in terms of knowledge about the provision of complementary foods (complementary foods) the majority are enough with a percentage of 50%, while the minority are mothers who are less aware of the provision of
complementary food. In terms of attitude, of the 50 mothers who have babies aged 6-24 months, majority have a positive attitude with a percentage of 74%, in terms of actions, the majority of mothers have good actions towards the provision of complementary food with a percentage of 44% and out of 30 babies, there are 3 babies who are stunted.

Bivariate Analysis
The bivariate analysis in this study is listed in table 8

| Respondent's Knowledge | Stunting | Total |
|------------------------|----------|-------|
|                        | Yes      | Not   |
| Sum (n)                | Percentage (%) | Sum (n) | Percentage (%) |
| Good                   | 0        | 11    | 11 |
| ...                    | 72,0     | 72,0  | 25 |
| Less                   | 13       | 7,15  | 14 |

Based on table 8, it can be seen the relationship between respondents’ knowledge and the condition of stunted babies, the sample was obtained from 50 samples with good knowledge, having a healthy baby condition (non-stunting). While, 72% of the knowledge of mothers who had enough knowledge of experiencing stunted baby conditions and the majority of knowledge of mothers who lacked complementary food had stunting baby conditions. Based on the chi-square test, there was a relationship between respondents' knowledge and the condition of the baby with a smaller p value of 0.05, namely (p = 0.026).

Table 9. The Relationship between Mother-Mother Attitudes and Baby's Condition

| Respondents' Attitudes | Stunting | Total |
|------------------------|----------|-------|
|                        | Yes      | Not   |
| Sum (n)                | Percentage (%) | Sum (n) | Percentage (%) |
| Negative               | 10       | 3     | 13 |
| Positive               | 0        | 37    | 37 |

Based on table 9, it can be seen the relationship between respondents' attitudes and the condition of stunted babies, the sample was obtained from 50 samples with a positive attitude, 100% did not experience stunted babies, while 76.92% of attitudes of mothers who had negative nsikap experienced stunting infant conditions. Based on the chi-square test, there was a relationship between respondents' attitudes and the condition of the baby with a p value smaller than 0.05, namely (p = 0.019).

Table 10. The Relationship between Mother-Mother’s Actions and the Baby’s Condition

| Respondents' Attitudes | Stunting | Total |
|------------------------|----------|-------|
|                        | Yes      | Not   |
| Sum (n)                | Percentage (%) | Sum (n) | Percentage (%) |
| Good                   | 0        | 22    | 22 |
| Enough                 | 3        | 13    | 15 |
| Less                   | 5        | 8     | 13 |

Based on the chi-square test, there was a relationship between the respondent’s actions and the condition of the baby with a p value smaller than 0.05, namely (p=0.004) (Table 10). According to Mufida [9] and Sefrina et al. [10], stating that from the age of six months, complementary foods for breastfeeding (MP-ASI) are given. In addition, to teaching babies healthy eating habits, complementary foods serve the dual purpose of meeting their nutritional requirements for optimal...
physical and psychomotor development. This objective can be successfully accomplished if a variety of food types, in addition to age-appropriate, quality, and quantity, are provided.

The role of parents, especially mothers, is very important in fulfilling child nutrition because children need parental attention and support in the face of very rapid growth and development. To get good nutrition requires good nutritional knowledge from parents in order to provide a balanced menu of choices. The level of nutritional knowledge of a person affects attitudes and behaviors in food selection [11]. Therefore, it is necessary to educate or provide information to parents, especially mothers, about good nutrition for children so that stunting does not occur. However, the results of this study are inversely proportional to the research of Maywita and Putri [12] showing that there is no influence on the level of education and knowledge of mothers with stunting events with an OR value = 1.9. In this case, it is not only the knowledge factor that is the problem with stunting events but there are other factors that affect children's nutrition so that stunting occurs.

Children with stunting nutritional status problems are influenced by various factors, determinants that affect stunting, including maternal factors: maternal nutritional status during pregnancy, maternal education level, breastfeeding factors, complementary breastfeeding factors (MP-ASI), infection factors, family economic factors and family environmental factors [13]. One of the growth and development problems in children is stunting, where stunting can lead to a decrease in the child's ability to socialize with the environment [14]. So that the elderly rang, has an important role in fulfilling the nutrition of toddlers because toddlers still need special attention in their development, especially the role of a mother as a figure who is most often with toddlers. If a mother has good knowledge, it will certainly affect a good attitude in fulfilling the nutrition of toddlers [15].

CONCLUSION
Based on the chi-square test, there was a relationship between respondents' knowledge and the condition of the baby with a smaller p value of 0.05, namely (p = 0.026). Based on the chi-square test, there was a relationship between respondents' attitudes and the condition of the baby with a p value smaller than 0.05, namely (p = 0.019). Based on the chi-square test, there was a relationship between the respondent's actions and the condition of the baby with a p value smaller than 0.05 i.e. (p=0.004).

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