THE RELATIONSHIP BETWEEN MATERNAL BEHAVIOR IN FEEDING AND NUTRITIONAL STATUS OF INFANTS 6-24 MONTHS OLD IN MARISA SELATAN VILLAGE OF MARISA SUB-DISTRICT, POHUWATO REGENCY

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ABSTRACT

The nutritional status of an infant and toddler is caused by the habit of parenting in daily life. It is also caused by eating habits or complementary foods that are not appropriate and not appropriate to the needs of infants and toddlers, especially children under 2 years. The present study aims to determine the relationship between maternal behavior in feeding the babies with the nutritional status of infants 6-24 months old in Marisa Selatan Village, Marisa District, Pohuwato Regency.

The research method is cross-sectional because in this study the independent and dependent variables were observed at the same time. The research techniques carried out are surveys and direct observations in the field.

The results show that most of the maternal knowledge in feeding the babiesis in the sufficient category, namely 39.3%, most of the maternal attitudes in feeding the babiesare in the positive category of 51.2%, and some of the maternal practices in feeding the babies with the category are less 70.2%. Most of the children aged 6-24 months have normal nutritional status, namely 65.5%. There is a relationship between the maternal knowledge of feeding the babies with the nutritional status of the child, there is no relationship between the maternal attitude in feeding the babies and the nutritional status of the child, and there is no relationship between the maternal practice of feeding and the nutritional status of the child.

Keywords: mother behavior, feeding, nutritional status

INTRODUCTION

The state of nutritional status of an infant and toddler is caused by the habit of parenting in daily life. As well as eating patterns or complementary foods that are not appropriate and not appropriate to the needs of infants and toddlers, especially children under 2 years.

In infants under the age of 2 years it is very important to pay attention to complementary feeding, this sometimes creates problems for the community because it is too early or too late in providing complementary foods so that it affects the condition of these infants. In addition to complementary feeding, breastfeeding that is not suitable for the age of the community, it also affects the nutritional status of children, both in terms of frequency of provision, number of meals for children or portions. The texture and variety of food can also affect the child's condition [1].

According to the Global Nutrition report in 2018, it shows that the nutritional problems of children under five in the

world are currently included in the Triple Burden category, including the prevalence of wasting (underweight) 7.5%, stunting (short) 22.2%, and underweight under five, 5.6%. The 2018 National Health Research and Development Agency report from the Indonesian Ministry of Health shows that the nutritional status of children under five includes the prevalence of wasting (underweight) 10.2%, stunting (short) 30.8%, and overweight 8.0%.

The results of the 2018 Basic Health Research showed that the nutritional status of children under five in Gorontalo Province included the prevalence of wasting (underweight) 14.40%, stunting (short) 32.50%, and overweight 5.43%. For Pohuwato District, the nutritional problem was very thin and underweight, 18.17% higher than North Gorontalo District 16.85%, Gorontalo City 12.3%, Boalemo 12.04%, and Gorontalo District 9.91%.

The report of the Pohuwato District Health Office shows that in October 2019 the number of children aged 6-24 months was 4,307 children, 38 children (0.88%) of whom were Under the Red Line (BGM), and 65 children were under (1.51%). Furthermore, for the South Marisa Puskesmas area with the number of children aged 6-24 months, namely 84 people, 4 children (4.76%) of whom were BGM and those experiencing malnutrition and malnutrition were 17 children (20.2%) or the highest in Pohuwato Regency.

Data from Marisa Selatan Village, Marisa District, Pohuwato Regency, the total population is 1712 men and 1737 women. The number of families is 999 people and the number of children under five is 68 people. The majority of jobs in South Marisa village are Civil Servants and Farmers.

The results of a preliminary survey conducted on October 20, 2019 in Marisa Selatan Village, Marisa District, Pohuwato Regency, of the 10 people interviewed showed 5 people (50%) mothers behaved poorly in breastfeeding and 4 people (40%) of them stated that they had given food to their child, 1 person (10%) stated that they had not given breast milk since the baby was 2 months old on the grounds that there was no longer enough breast milk. The provision of complementary foods for 5 children under five (50%) is in the poor category, 3 of them stated that sometimes feeding the toddlers did not consider or pay attention to the nutritional content of the food to be given, while 2 people gave food according to the frequency of food in adults that is, by the appropriate amount. The nutritional status of the children was measured by 6 people (60%) in the category of normal body weight 60% and very underweight and underweight 4 people (40%).

From the explanation of the case above, the writer is interested in conducting research on the relationship of mother behavior in giving food to children aged 6-24 months with nutritional status in Marisa Selatan Village, Marisa District, Pohuwato Regency.

RESARCH METHODOLOGY

The research method is cross sectional (cross-sectional) because in this study the independent and dependent variables were observed at the same time (period). This study design aims to explain about child feeding behavior and its relationship with nutritional status. The research techniques carried out are surveys and direct observations in the field. This research was conducted from June 2020 to July 2020 in Marisa Selatan Village, Marisa District, Pohuwato Regency. The population in this study were all children aged 6-24 months in Marisa Selatan Village, Marisa District, Pohuwato Regency amounting to 84 people and a

total sample of 84 toddlers. Data analysis used univariate and bivariate analysis.

FINDINGS

General description of the location

Marisa Selatan Village is included in the Marisa District with the following boundaries: North is bordered by Marisa Utara Village, South is bordered by Pohuwato Village and East Pohuwato, East is bordered by Palopo Village, and in the West is bordered by Marisa River / Duhiadaa District The population of Marisa Selatan Village in 2018 according to BPS data (2019), totaled 2,972 people, consisting of 1,495 male residents and 1,477 female residents, with 864 families and an average number of family members as many as 3 family members.

Univariate Analysis

1. Age

Table 1.
Respondents' Age

Age	N	%
<20 Tahun	4	4,8
20-35 Tahun	67	79,8
>35 Tahun	13	15,5
Total	84	100,0

Source: Data processed (2020)

Based on the table above, it shows that of the 84 respondents, most were 20-35 years old, namely 67 respondents (79.8%) and some were <20 years and> 35 years.

2. Education

Table 2.
Education

Education	N	%
Not graduated from Primary Schoold	5	6,0
Graduated from primary school	18	21,4
Graduated from junior high school	18	21,4
Graduated from senior high school	30	35,7
Graduated from university	13	15,5
Total	84	100,0

Source: Data processed (2020)

Based on the table above, it shows that of the 84 respondents, most of them have graduated from high school education level, namely 30 respondents (35.7%) and some with tertiary education levels, junior high schools, elementary schools and have not graduated from elementary school.

3. Jobs' description

Table 3.
Jobs' Distribution

Job	N	%
Have a job	23	27,4
No have job	61	72,6
Total	84	100,0

Source: Data processed (2020)

Based on the table above, it shows that of the 84 respondents, most of them were not working, namely 61 respondents (72.6%) and some were working.

4. Infants' age

Table4.
Infants' age

Age	N	%
6 months	1	1,2
7-9 months	22	26,2
10-12 months	16	19,0
13-24 months	45	53,6
Total	84	100,0

Source: Data processed (2020)

The table above shows that out of 84 children, most were 13-24 months, namely 45 children (53.6%) and some were 7-9 months, 10-12 months and 6 months.

5. Infants' gender

Table5.
Infants' gender

Gender	N	%
Boys	38	45,2
Girls	46	54,8

Total	84	100,0

Source: Data processed (2020)

The table above shows that of the 84 children, most of them were female, namely 46 children (54.8%).

6. Breastfeeding

Table6.

Breastfeeding distribution

Infants' age	N	%
Yes	26	31,0
No	58	69,0
Total	84	100,0

Source: Data processed (2020)

The table above shows that out of 84 children, most of them are currently not breastfed, namely 58 children (69.0%).

7. Maternal knowledge

Table7.

Maternal knowledge

Knowledge	N	%
Good	20	23,8
Enough	33	39,3
Less	31	36,9
Total	84	100,0

Source: Data processed (2020)

Based on the table above, it shows that of the 84 mothers, most of them had sufficient knowledge of food giving, namely 33 mothers (39.3%), and the rest were in the poor category, namely 31 thousand (36.9%), and the good category was 20 mothers (23 , 8%).

8. Maternal attitudes

Table8.

Maternal attitude

Maternal attitude	N	%
Negative	41	48,8
Positive	43	51,2
Total	84	100,0

Source: Data processed (2020)

Based on the table above, it shows that out of 84 mothers, "most of them had a positive food feeding attitude, namely 43 mothers (51.2%), and the rest were in the negative category, namely 41 mothers (48.8%).

9. Breastfeeding activities

Table9.

Breastfeeding activities

Activity	N	%
Good	9	10,7
Enough	16	19,0
Less	59	70,2
Total	84	100,0

Source: Data processed (2020)

Based on the table above, it shows that out of 84 mothers, most of them did the practice of giving food in the poor category, namely 59 mothers (70.2%), and the rest were in the sufficient category, namely 16 mothers (19.0%), and the good category was 9 mothers (10.7%).

10. Infants' Nutritional Status

Table10.

Infants' Nutritional Status

Status Gizi	N	%
Weight is less	10	11,9
Weight is little	8	9,5
Normal	55	65,5
Risk weight	11	13,1
Total	84	100,0

Source: Data processed (2020)

The table above shows that of the 84 children, most of them are normal nutritional status, namely 55 children (65.5%), and the rest with very underweight nutritional status are 10 children (11.9%), and 8 are underweight (9 , 5%), there was even a risk of overweight, namely 11 children (13.1%).

Bivariate Analysis

1. Relationship between maternal knowledge and infants' nutritional status

Table 11.

Relationship between maternal knowledge and infants' nutritional status

Knowledge	Nutritonal status		Total	Sig.
	Good	Less		
Good	17(85,0	3(15,0	20(100	p=0,0

	%)	%)	%)	02
Enough	25 (75,8%)	8 (24,2%)	33 (100%)	
Less	13 (41,9%)	18 (58,1%)	31 (100%)	
Total	55 (65,5%)	29 (34,5%)	84 (100,0%)	

Source: Data processed (2020)

The table above shows that of the 20 mothers who have good knowledge in giving food, most of them have children with good nutritional status (normal), namely 17 children (85.0%), of the 33 mothers who have sufficient knowledge in giving food, Most of them had children with a good (normal) nutritional status, namely 25 children (75.8%), and of the 31 mothers who had poor knowledge in the category of poor nutrition, most had children with poor nutritional status (very poor, insufficient and more) namely 18 children (58.1%).

The result of statistical test shows that the p-value is 0.002 less than 0.05, so it can be concluded that there is a relationship between maternal knowledge in feeding with the nutritional status of children in Marisa Selatan Village, Marisa District, Pohuwato Regency.

2. Relationship between feeding and infants' nutritional status

Table 12.
Relationship between feeding and infants' nutritional status

Attitude	Nutritional status		Total	Sig.
	Good	Less		
Positive	30 (69,8%)	13 (30,2%)	43 (100%)	p=0,3
Negative	25 (61,0%)	16 (39,0%)	41 (100%)	97
Total	55 (65,5%)	29 (34,5%)	84 (100,0%)	

Source: Data processed (2020)

The table above shows that of the 43 mothers who have positive attitude in giving food, most of them have children with good nutritional status (normal), namely 30 children (69.8%), and of the 41 mothers who have negative attitudes in giving food. Most of them have children with good nutritional status (normal), namely 25 children (61.0%).

The statistical test results showed that the p-value is 0.397, which is greater than 0.05, so it can be concluded that there is no relationship between mother's attitude in giving food and the nutritional status of children in Marisa Selatan Village, Marisa District, Pohuwato Regency.

3. Relationship between maternal breastfeeding activities and infants' nutritional status

Table 13.
Relationship between maternal breastfeeding activities and infants' nutritional status

Practice	Nutritional status		Total	Sig.
	Good	Less		
Good	6 (66,7%)	3 (33,3%)	9 (100%)	
Enough	10 (62,5%)	6 (37,5%)	16 (100%)	p=0,9
Less	39 (66,1%)	20 (33,9%)	59 (100%)	61
Total	55 (65,5%)	29 (34,5%)	84 (100,0%)	

Source: Data processed (2020)

The table above shows that of the 9 mothers who practice good category of feeding, most of them have children with good nutritional status (normal), namely 6 children (66.7%), out of 16 mothers who practice in the provision of adequate food, Most of them had children with good (normal) nutritional status, namely 10 children (62.5%), and of the 59 mothers who practiced in the poor category of food, most had children with good (normal) nutritional status, namely 39 , 1%).

The statistical test results show that the p-value is 0.961, which is greater than 0.05, so it can be concluded that there is no relationship between maternal practice in feeding and children's nutritional status in Marisa Selatan Village, Marisa District, Pohuwato Regency.

DISCUSSIONS

Maternal Breastfeeding

The results showed that of the 84 mothers, most of them had sufficient knowledge of feeding, namely 39.3%, and the rest were in the poor category, namely 36.9%, and good category, 23.8%.

The knowledge of mothers in giving food to children aged 6-23 months, from the results of the study showed that the average respondent answered in the good category, namely 77.9%, but there are still incorrect answers, namely that thick porridge is given to children aged 12 months meals, children aged 11 months are given 2 complete meals, and children aged 6 months cannot yet be given complementary foods with breast milk.

According to the Indonesian Ministry of Health, feeding babies and children starts from birth without additional food and only breastfeeding. After the child is 6 months old, he is given complementary foods with a frequency of 2 to 3 meals plus breast milk every day. Children 9-12 months of age are given 3-4 complete meals, children 9-12 months are given ½ (half) to ¾ (three quarters) of a 250 ml bowl, thick porridge is given to children aged 6-9 months, given should be varied so that children do not get bored, and before preparing food, mothers wash their hands first [2].

The results showed that of the 84 mothers, most of them had a positive attitude of feeding, 51.2%, and the rest with a negative category of 48.8%. The positive attitude shown by the mother in giving food to children aged 6-23 months is every meal, children aged 9 months are given 3 full tablespoons, a variety of food is given to children 6-23 months, and before preparing food, mothers wash their hands thoroughly. first. Meanwhile, the negative attitude shown by the mother in giving food to children aged 6-23 months is complementary food. Breastmilk is given before the child is 6 months old, complete food is given 2 times to children aged 11 months, and children aged 12 months are given thick porridge to every meal.

According to the Ministry of Health of the Republic of Indonesia that feeding to infants and children starts at exactly 6 months of age, complete feeding of 9-24 months of age is given 3-4 times a day, the size of feeding for children aged 6-9 months is 2-3 full tablespoons, food given to children aged 12-24 months is given in the form of sliced family food, a variety of foods are given from the age of 6-24 months, and in preparing food mothers wash their hands first [3].

The results showed that of the 84 mothers, most of them did the practice of giving food in the poor category of 70.2%, and the rest were in the sufficient category of 19.0%, and 10.7% in the good category.

The practice of giving food to children aged 6-23 months, from the results of the study showed that there were still inappropriate practices, namely giving the frequency of complete feeding, the size of feeding, and the form of food that was not suitable for the child's age.

According to the Ministry of Health of the Republic of Indonesia that feeding to infants and children starts at exactly 6 months of age, complete feeding of 6-9 months 2-3 times and 9-24 months of age is given 3-4 times a day. -9 months 2-3 full tablespoons, age 9-11 months ½ cup, and age 12-24 months ¾ cup, food given to children aged 6 months in the form of thick porridge, 6-9 months given crushed food, age 9-11 months are given chopped family food, and 12-24 months olds are given in the form of sliced family food [2].

Infants' Nutritional Status

The results showed that most children aged 6-24 months had normal nutritional status, namely 65.5%, and the rest with nutritional status were 11.9% very

underweight, and 9.5% underweight, and there was even a risk of overweight. 13.1%.

The state of a person's nutritional status can be assessed from a person's food intake or nutritional intake according to their body needs. Children with poor nutritional status are caused by insufficient nutritional intake, this is the result of a lack of nutritional intake and excessive activity [4].

In nutritional problems, there are two factors that lead to nutritional problems, namely direct factors where this nutritional problem occurs due to food intake that is not in accordance with the body's needs. Meanwhile, the indirect factors are influenced by diseases that can cause disturbances in the absorption of nutrients by the body [4].

Relationship between Maternal Breastfeeding and Infants' Nutritional Status

The results showed that there was a relationship between maternal knowledge in providing food with the nutritional status of children in Marisa Selatan Village, Marisa District, Pohuwato Regency, this can be seen from the results of statistical tests with a p-value of 0.002 less than 0.05.

The results of this study are in line with the results of research conducted by Atikah which explains that there is a relationship between the knowledge of mothers in breastfeeding and complementary feeding with the growth of 6-24 months of baduta as measured by the indicators of weight / age and height / age in Kestalan Village, Surakarta City].

The results of this study are different from the results of research conducted by Lestari which shows that there is no relationship between maternal knowledge about toddler food and nutritional status of children under five in Malangjiwan Village, Colomadu District, Karanganyar Regency [6].

Recommendations for infant and child feeding according to the Indonesian Ministry of Health must pay attention to various aspects, including age, frequency of feeding, number of meals, food texture (thickness / consistency) variations, active / responsive feeding, and hygiene. In conducting counseling on feeding babies and children, a mother's knowledge is seen from what has been and has been done in feeding, after that the mother is directed by showing a picture that is in accordance with the problem of feeding, so that the decision is made by the mother herself [2].

The results showed that there was no relationship between maternal attitudes in giving food and children's nutritional status in Marisa Selatan Village, Marisa District, Pohuwato Regency, this can be seen from the results of statistical tests with a p-value of 0.397 greater than 0.05. The results of this study are in line with the results of research conducted by Lestari which showed that there was no relationship between maternal attitudes about toddler food and nutritional status in Malangjiwan Village, Colomadu District, Karanganyar Regency [6].

Recommendations for infant and child feeding according to the Indonesian Ministry of Health must pay attention to various aspects, including age, frequency of feeding, number of meals, food texture (consistency), variety, active / responsive feeding, and hygiene. In conducting counseling on infant and child feeding, if a mother knows how to feed babies and children according to age, what needs to be done is to provide encouragement, so that the mother is motivated to try something new to know [2].

The results showed that there was no relationship between the mother's practice of feeding and the nutritional status of children in Marisa Selatan Village, Marisa

District, Pohuwato Regency, this can be seen from the statistical test results with a p-value of 0.961 which is greater than 0.05.

The results of this study are in line with the results of research conducted by Mardiana which showed that there was no relationship between feeding practices and the nutritional status of toddlers in Joho Village, Mojolaban District, Sukoharjo [7].

The results of this study were different from the results of research conducted by Atikah which showed that there was a relationship between the mother's practice of breastfeeding and complementary feeding with the growth of 6-24 months of baduta as measured by the indicators of BB / U and PB / U in Kestalan Village, Surakarta City [5]].

Recommendations for infant and child feeding according to the Indonesian Ministry of Health must pay attention to various aspects, including age, frequency of feeding, number of meals, food texture (consistency), variety, active / responsive feeding, and hygiene. Changing a person's behavior is not easy, a mother who has been motivated to try something she just knows, is given chancellery to solve problems about feeding and needs an agreement so that the mother adopts new behaviors and finally keeps these behaviors so that they become part of daily and normal habits. [3].

CONSLUSIONS

Knowledge of mothers with sufficient category was 39.3%, 36.9% poor category, and 23.8% good category. Attitudes of mothers with positive categories 51.2%, and 48.8% negative categories. Maternal practice with a less category 70.2%, 19.0% sufficient category, and 10.7% good category. In the nutritional status, most of them have normal nutritional status, namely 65.5%, some have a risk of overweight, namely 13.1%, 11.9% very underweight, and 9.5% underweight. There is a relationship between maternal knowledge in feeding and children's nutritional status. There is no relationship between mother's attitude in giving food and children's nutritional status. There is no relationship between maternal feeding practices and children's nutritional status.

REFERENCES

[1] Wahyuni dan Wahyuningsih. 2016. PemberianMakan Pada Bayi dan Anak denganKenaikanBerat Badan BayiDi KabupatenKlaten.*Temu Ilmiah Hasil Penelitian dan Pengabdian Masyarakat*.

[2] Kemenkes RI, 2014.*Panduan Fasilitator, Modul Pelatihan Konseling: Pemberian Makan Bayi Dan Anak*. Kementerian Kesehatan RI. Jakarta.

[3] Kemenkes RI. 2019.*Pedoman Pelatihan Konseling Pemberian Makan Bayi Dan Anak*. Kementerian Kesehatan RI. Jakarta.

[4] Pari'i, Sugeng, dan Titus. 2017 *Bahan Ajar Gizi: Penilaian Status Gizi*. Pusat Pendidikan SDM Kesehatan, Badan Pengembangan dan Pemberdayaan SDM Kesehatan. Jakarta.

[5] Atikah. 2017. HubunganPerilaku Ibu DalamPemberian ASI dan MP-ASI denganPertumbuhanBadutaUsia 6-24 Bulan (Studi di KelurahanKestalan Kota Surakarta. *Jurnal Kesehatan Masyarakat (e-Journal) Volume 5 Nomor 3*

[6] Lestari, P. 2015. HubunganPengetahuandan Sikap Ibu tentangMakananBalitaterhadap Status GiziBalita di DesaMalangjiwanKecamatanColomaduKabupaten Karanganyar. *Skripsi Naskah Publikasi.*

[7] Mardiana, D. N. 2018. Hubungan Praktik Pemberian Makan dengan

Status Gizi Balita di Desa Joho Kecamatan Mojolaban. *Skripsi.* *Universitas Muhammadiyah Surakarta*