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THE RELATIONSHIP BETWEEN THE LEVEL OF MATERNAL KNOWLEDGE ABOUT MP-ASI AND THE NUTRITIONAL STATUS OF BADUTA AT THE AGE OF 6-24 MONTHS IN THE WORKING AREA OF THE PADANG PANYANG HEALTH CENTRE, KUALA PESISIR DISTRICT, NAGAN RAYA REGENCY IN 2024.

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Abstract

A 6-month-old baby requires complementary feeding (MP-ASI) to meet nutritional needs and support growth and development. The mother's knowledge of proper MP-ASI provision influences the baby's nutritional status, including types, composition, and feeding methods. The nutrition received will directly affect the baby's growth. This study aims to analyze the relationship between maternal knowledge of MP-ASI and the nutritional status of babies aged 6-24 months in the working area of Padang Panyang Health Center, Kuala Pesisir District, Nagan Raya Regency. This quantitative study uses an analytical observational method with a cross-sectional design and Purposive Sampling technique. Ninety-three mothers with children aged 6-24 months were selected as samples. Data was collected using a questionnaire to assess maternal knowledge and anthropometric measurements to evaluate nutritional status. The data were analyzed using the Chi-Square test, showing a significant result ($p=0.006$, $p<0.05$). The results showed that 55.9% of mothers had sufficient knowledge, 34.4% had poor knowledge, and 9.7% had good knowledge. Additionally, 80.6% of babies had normal nutritional status, while 19.4% had abnormal nutritional status, indicating a strong relationship between maternal knowledge and the nutritional status of babies. Mothers with a better understanding of MP-ASI provision tend to have children with better nutritional status.

Keywords: ***Maternal Knowledge, Nutritional Status, MP-ASI***

INTRODUCTION

A baby is a child who has just been born. According to the Indonesian Ministry of Health Regulation (Permenkes, 2014), a baby is a child aged 0-12 months, while a toddler is 12-59 months. Babies and toddlers still depend on their mothers to meet their nutritional needs for food and drink, which supports their body nutrition (Septriani et al., 2019). The nutrition consumed by the body affects a person's physical condition and determines their nutritional status. Nutritional status is an indicator of physical condition assessed based on the nutritional content of consumed foods (Perda Bupati Nagan Raya, 2022). Nutritional status is categorized into three types: undernutrition, normal nutrition, and overnutrition (Mardalena, 2021).

According to UNICEF (2022), 4.5 million children under five suffer from acute malnutrition (wasting) globally. Based on the 2023 Indonesian Health Survey (SKI), the % of children aged 0-59 months experiencing wasting is 6.4%. Meanwhile, according to the 2022 Indonesian Nutrition Status Survey (SSGI), the % of children aged 0-59 months experiencing wasting is 7.7%. This indicates an improvement in Indonesia's nutritional status. In Aceh Province, the percentage of children under five experiencing wasting is 9.8% (SKI, 2023). In Nagan Raya Regency, the percentage is 8.6% (SSGI, 2022).

Mothers' nutrition knowledge is an important factor influencing a child's nutritional status. This knowledge includes understanding nutritional needs and the ability to apply them in daily life. Mothers with good nutritional knowledge tend to have positive behaviors in meeting their child's nutritional needs, improving feeding patterns, supporting growth and development, and achieving optimal nutritional status. Thus, good knowledge contributes to children's optimal growth and development (Rettob & Adnani, 2023). A mother's knowledge about breastfeeding and complementary feeding (MP-ASI) significantly affects a baby's nutritional status. Exclusive breastfeeding is recommended until six months of age, followed by appropriate complementary feeding to meet the additional nutritional needs of children aged 6-24 months. Poor knowledge can result in early or late introduction of complementary feeding, which risks impairing development or causing malnutrition (Andriani, 2018).

Complementary feeding should contain balanced nutrition such as protein, carbohydrates, fats, vitamins, and minerals and be given gradually according to the child's age. According to the Indonesian Pediatric Society (IDAI, 2018), the caloric needs of complementary feeding are 200 kcal/day for ages 6-9 months, 300 kcal/day for 9-12 months, and 550 kcal/day for 12-23 months.

Research by Rahmania et al. (2022) involving 56 mothers with children aged 6-24 months showed that 53.6% of mothers had good knowledge, and 73.2% of children had normal nutritional status. Research by Sitorus et al. (2023) on 42 mothers with babies aged 6-12 months found that 61.9% provided appropriate complementary feeding, with 54.8% of children having good nutritional status and 7.1% undernourished. Conversely, among the 38.1% who provided inappropriate complementary feeding, 2.4% of children were severely malnourished, 23.9% undernourished, and 11.8% well-nourished (p-value 0.001). This concludes that complementary feeding is associated with a child's nutritional status.

In a preliminary survey of 10 mothers with children aged 6-24 months at Padang Panyang Health Center, four mothers had good knowledge, one moderate, and five poor. Based on anthropometric measurements of babies' nutritional status using weight-for-height indicators, five babies had normal weight, three were underweight, and two were overweight. This study aims to determine mothers' knowledge about complementary feeding for babies aged 6-24 months, assess babies' nutritional status using anthropometric indicators, and analyze the relationship between mothers' knowledge of complementary feeding and the nutritional status of babies aged 6-24 months at Padang Panyang Health Center, Nagan Raya.

METHOD

The study is quantitative, with an observational analytic research design and a cross-sectional approach. According to Harlan (2018), observational analytic research examines the relationship between two or more variables where the collected data is analyzed. This research was conducted in the working area of the Padang Panyang Community Health Center in the Kuala Pesisir sub-district of Nagan Raya Regency, specifically in the villages of Arongan, Kuala Tuha, Kuala Trang 1, Kuala Trang 2, and Kubang Gajah, from October to December 2024.

The study population consisted of 150 children aged 6-24 months within the working area of the Padang Panyang Community Health Center. The sample was selected using a purposive sampling method. The Lemeshow formula (1990) determined the sample size, resulting in 93 children as research subjects. The research instruments comprised four parts: 1. Consent Form: A statement ensuring the mothers' willingness to participate as respondents. 2. Demographic Questions: Covering the mother's name, address, education, occupation, age, the child's name, age, and gender, filled out by the respondents with short answers. 3. Knowledge Questionnaire: Assessing mothers' knowledge about complementary feeding (MP-ASI), modified from several sources, with 20 multiple-choice questions. The scoring was based on the percentage of correct answers (good: 76-100%, moderate: 56-75%, poor: ≤55%). 4. Nutritional Status Instrument: This includes an observation sheet for child data and measurements of weight and height using child scales and an infantometer.

$$n = \frac{N.Z^2{}_{1-d/2.P.q}}{d^2(N-1) + Z^2{}_{1-d/2.P.q}}$$

Lemeshow formula (1990)

Data processing and analysis were performed using Microsoft Excel 2010, the Statistical Program for Social Sciences (SPSS) version 25.0 for Windows, and WHO Anthro. The data were tested using frequency distribution with univariate analysis for maternal knowledge and nutritional status. In contrast, bivariate analysis was used to examine the relationship between maternal knowledge of complementary feeding and the nutritional status of children aged 6-24 months. This was conducted using the chi-square test with a confidence level of 95%.

RESULTS AND DISCUSSION

1. Characteristics of Informants

Table 1. Distribution of Informant Characteristics

Characteristic |	Frequency	Percentage %
Mother's Age		
18-29 Years	18	19.1
30-35 Years	45	48.4
36-45 Years	30	31.9
Education		
Elementary School	2	2.2
Junior High School	11	11.8
Senior High School	68	73.1
Higher Education	12	12.9
Occupation		
Teacher	1	1.1
Housewife	87	93.5
Nurse	1	1.1
Private Sector	4	4.3
Toddler's Age		
6-12 Months	71	76.3
13-24 Months	22	23.4
Jenis_KelaminGender		
Male	56	60.2
Female	37	39.8
Total	93	100.0

Source: Primary Data Informants, 2024

The frequency distribution of subject characteristics, including the child's age (in months), gender, mother's age, education, and occupation. The total number of respondents in this study is 93. Most children were aged 6-12 months, 71 (76.3%), and most were male, totaling 56 (60.2%). Most mothers were aged 30-35 years, totaling 46 (48.4%), with most having a senior high school education, totaling 68 (73.1%). Additionally, most mothers were housewives, totaling 87 (93.5%).

2. Mother's Knowledge About Complementary Feeding (MP-ASI)

Table 2. Mother's Knowledge Level

Maternal Knowledge	Frequency	Percentage (%)
Good	9	9.7
Moderate	52	55.9
Poor	32	34,4
Total	**93**	**100**

Source: Primary Data, 2024

Based on 20 question points in the mother's knowledge questionnaire, Based on the distribution table of maternal knowledge, it was found that 9 mothers (9.7%) had good knowledge, 52 mothers (55.9%) had moderate knowledge, and 32 mothers (34.4%) had poor knowledge. This data indicates that most mothers with toddlers aged 6–24 months in the working area of Padang Panyang Public Health Center, Kuala Pesisir District, Nagan Raya Regency, have a moderate level of knowledge. These findings align with research by Haryanti et al. (2023), which revealed that most mothers, 42 (68.9%), had moderate knowledge.

Maternal knowledge about infant feeding is crucial in determining appropriate nutritional sources for children. This aligns with Regulation of the Minister of Health No. 33 of 2012, emphasizing that an ideal infant feeding pattern includes proper implementation of Early Initiation of Breastfeeding (IMD), exclusive breastfeeding, appropriate complementary feeding (MP-ASI), and continued breastfeeding until 24 months.

Adequate knowledge about infant feeding can motivate and guide mothers to implement correct feeding practices, positively impacting the improvement of the child's nutritional status (Turrahmi & Sufriani, 2021).

Providing appropriate complementary feeding (MP-ASI) for toddlers aged 6–24 months is critical in supporting their growth and development. However, limited knowledge about this practice is often found among mothers who have completed formal education up to high school. A study by Sari (2024) revealed that although many mothers have formal education backgrounds, not all understand the correct practices for providing MP-ASI. This is due to various factors, including a lack of specific information received during formal education, which does not adequately develop insights on the subject. Formal education often provides only general foundational knowledge, not practical skills or understanding related to child health.

Another study conducted in Telaga Biru District, Gorontalo Regency, found that the level of maternal education does not always correlate with knowledge about MP-ASI. This study showed that although some mothers had high school education, their understanding of proper MP-ASI practices was more influenced by specific information obtained through health counseling, informational media, and direct experience (Misnati, 2015).

Moreover, social and environmental factors play a crucial role. A lack of supportive environments, such as limited interaction with healthcare workers or restricted access to information sources like books and online media, can hinder mothers from understanding the importance of proper MP-ASI practices. According to research by Katmawanti (2023), mothers who actively participate in Posyandu programs or receive health counseling tend to have better knowledge than those who rely solely on formal education. While high school education provides a vital foundation, it must be complemented with specific educational interventions, such as health counseling programs focused on MP-ASI. With accurate information, mothers can understand the importance of appropriate timing, types of food, and preparation methods to meet their child's nutritional needs.

Lack of knowledge and information contributes to unmet nutritional needs in children, which can affect their nutritional status. Limited understanding of nutritional requirements impacts how mothers prepare food for their children, including food types, preparation methods, and presentation. Poor food choices can lead to nutritional issues in children, either due to deficiencies or imbalances in nutrient intake (Widad, 2021).

3. Nutritional Status of Toddlers

Table 3. Nutritional Status of Toddlers

Nutritional Status	Nutritional Status	Percentage (%)
Normal	75	80,6
Abnormal	18	19,4
Total	**93**	**100**

Source: Primary Data, 2024

Based on the nutritional status distribution table for toddlers aged 6–24 months, it was found that 75 toddlers (80.6%) had good nutritional status, 10 toddlers (10.8%) were undernourished, 5 toddlers (5.4%) were overnourished, and 3 toddlers (3.2%) were severely malnourished.

This indicates that the majority of toddlers aged 6–24 months in the working area of Padang Panyang Public Health Center, Kuala Pesisir District, Nagan Raya Regency, had good nutritional status, with overnourishment and severe malnourishment being the least prevalent conditions. These findings are consistent with the study by Yuliana and Melyani (2019), where most infants had good nutritional status, with 20 infants (66.7%) categorized as such. This is also in line with the research by Mahardhika et al. (2018), which showed that most infants (56) had good nutritional status, representing 82.4% of the sample.

Good nutritional status is crucial in supporting children's growth and development, enabling them to achieve optimal maturity. According to the World Health Organization (WHO), more than half of infant and toddler deaths

are caused by nutritional issues. Undernourished children have a 13 times higher risk of mortality compared to children with normal nutritional status (UNICEF, 2017).

4. The Relationship Between Mother's Knowledge of Complementary Feeding (MP-ASI) and Nutritional Status in Children Aged 6-24 Months

Tabel 4. Hubungan Pengetahuan Ibu tentang pemberian makanan pendamping air susu ibu (MP-ASI) dengan Status Gizi Pada bayi usia 6-24 bulan

Mother'sKnowledge	**Status Gizi Nutritional Status**				**Total**		**P-*Value***
	Normal		**Abnormal**				
	N	**%**	**N**	**%**	**N**	**%**	
Good	9	100	0	0	9	100	
Adequate	46	88,5	6	11,5	52	100	**0,006**
Poor	20	62,5	12	37,5	32	100	
Total					**93**	**100**	

Source: Primary Data, 2024

Based on the results of this study, it was found that most mothers with good knowledge had toddlers with good nutritional status. Among nine mothers with good knowledge, all nine toddlers had good nutritional status (12%) (normal). Meanwhile, out of 52 mothers with moderate knowledge, 46 toddlers (61.3%) had good nutritional status (normal), and six toddlers (33.3%) had abnormal nutritional status. On the other hand, 33 mothers with poor knowledge had 20 toddlers (26.7%) with good nutritional status (normal) and 12 toddlers (66.7%) with abnormal nutritional status.

Mothers' knowledge about complementary feeding (MP-ASI) can be assessed through various aspects, such as the quality and quantity of MP-ASI provided, including frequency, timing, variety, portion, texture, and nutritional content. This aligns with the study by Syahrin et al. (2020), which showed that children given MP-ASI at least three times daily, in appropriate portions for their age, with the correct texture, and starting at ≥6 months old, tend to have good nutritional status. Conversely, children receiving MP-ASI fewer than three times daily, in inappropriate portions, or starting before six months of age tend to have inadequate or excessive nutritional status.

A child's nutritional status is closely related to the mother's level of knowledge. This is because a mother's knowledge significantly influences how nutrition is provided to the child. Various factors can influence this knowledge, including education, access to information through mass media, socio-cultural and economic conditions, experience, environment, and age (Azizah, 2023).

Data analysis using the Chi-Square test indicated a relationship between mothers' knowledge level and the nutritional status of toddlers aged 6–24 months in the working area of Padang Panyang Public Health Center, Kuala Pesisir District, Nagan Raya Regency. This was demonstrated by a p-value of 0.006 ($p<0.05$), indicating that the null hypothesis (H0) was rejected and the alternative hypothesis (Ha) was accepted. Thus, there is a significant relationship between mothers' knowledge and toddlers' nutritional status in the working area of Padang Panyang Public Health Center.

This finding aligns with the research by Zirva et al. (2022), which found a significant relationship between mothers' knowledge about MP-ASI and the nutritional status of toddlers aged 6–24 months in the working area of Syamtalira Bayu Public Health Center, North Aceh Regency, with a p-value of 0.001 ($p<0.05$), indicating Ha was accepted and H0 was rejected.

Similar research by Mirayanti (2023) also showed a significant relationship between mothers' nutritional knowledge and toddlers' nutritional status, with a p-value of 0.000 ($p<0.05$). Further support was obtained from Widad's study (2021), which found a p-value of 0.025 ($<\alpha=0.05$), also rejecting H0 and concluding a significant relationship between mothers' knowledge and children's nutritional status in Pandean Village Posyandu, Probolinggo.

According to Devriany (2021), parental education is a critical factor influencing children's nutritional status. Educated parents are more receptive to external information about proper parenting practices, including providing

nutrition, maintaining children's health, and ensuring their overall development. Broader knowledge and appropriate behavior support the formation of good parenting practices. Devriany's (2021) study noted that 95.5% of mothers with good knowledge about the "Isi Piringku" (My Plate) concept had toddlers with normal nutritional status. Similarly, Ayuningtyas et al. (2021) supported these findings, reporting a p-value of 0.000 (<0.05), indicating a significant relationship between mothers' knowledge levels and toddlers' nutritional status. Their research concluded that mothers with better knowledge and education are more likely to understand how to meet their children's nutritional needs and prepare nutritious meals for their families, especially their children.

CONCLUSION

The level of maternal knowledge about complementary feeding (MP-ASI) is closely related to the nutritional status of children aged 6-24 months. Mothers with good knowledge tend to have children with normal nutritional status, while inadequate knowledge increases children's risk of abnormal nutritional status. Factors such as education, access to information, socio-cultural aspects, and experience influence the level of maternal knowledge. A good understanding of complementary feeding, including frequency, portion size, texture, and nutritional content, supports achieving optimal nutritional status in children. Nutrition education and improved access to information help mothers meet their children's nutritional needs, promoting healthy growth and development.

REFERENCES

Andriani, R.,Kartasurya, M. I., & Sri Achadi Nugraheni, S. A. (2018). Pemberian Biskuit Sandwich Meningkatkan Berat Badan Ibu Hamil Berisiko Kurang Energi Kronis. *Manajemen Kesehatan Indonesia*, 6(2), 132 - 136.

Ayuningtyas, G.,Hasanah, U., & Yuliawati, T. (2021). Hubungan Tingkat Pengetahuan Ibu Dengan Status Gizi Balita. *Nursing Analysis: Journal Of Nursing Research*, 1(1), 15 - 21.

Azizah, N. (2023). HUBUNGAN TINGKAT PENGETAHUAN IBU TENTANG GIZI DENGAN STATUS GIZI BALITA 6-24 BULAN (Studi Observasi di Wilayah Puskesmas Wonosalam 2 Demak). Undergraduate thesis, Universitas Islam Sultan Agung Semarang.

Devriany, A. (2021). Peningkatan Pengetahuan Anak Sekolah Dasar Tentang Dampak Jajan Sembarangan Bagi Kesehatan. *Poltekita: Jurnal Pengabdian Masyarakat*, 2(2), 35 - 40.

Harlan, J. & Sutjiati, R. (2018). *Metodologi Penelitian Kesehatan.* Jakarta: Gunadarma.

Haryanti , R. S., Wijayanti, & Syarifah. (2023). Analisis Pengetahuan Ibu Tentang Status Gizi Dengan Kepatuhan Pemantauan Pertumbuhan Balita. *Media Publikasi Penelitian*, 21(1), 68 - 73.

Ikatan Dokter Anak Indonesia (Idai). (2018). *Pemberian Makanan Pendamping Air Susu Ibu (Mpasi).* Retrieved From Idai: Https://Www.Idai.Or.Id/Artikel/Klinik/Asi/Pemberian-Makanan-Pendamping-Air-Susu-Ibu-Mpasi (diakses, 2024-10-10)

Katmawanti, S., Paramita, F., Kurniawan, A., Samah, D. A., Adisa, M. D., Hafizhah, N. A., Zahro, D. W. A., & Pahlevi, R. (2023). Penerapan manajemen asi eksklusif dan MP-ASI kepada masyarakat Kelurahan Temas Kota Batu. *Jurnal Pengabdian Kepada Masyarakat*, 3(1), 21 - 29.

Kemenkes. (2022). *Hasil Survei Status Gizi Indonesia (SSGI).* Kementerian Kesehatan.

Mahardhika, F.,Malonda, N. S. H., & Kapantow, N. H. (2018). Hubungan Antara Usia Pemberian Makanan Pendamping Asi (MP-ASI) Pertama Kali Dengan Status Gizi Anak Usia 6-12 Bulan Di Wilayah Kerja Puskesmas Kombos Kota Manado. *Kesmas: Jurnal Kesehatan Masyarakat Universitas Sam Ratulangi*, 7(3), 1 - 6.

Mardalena, I. (2021). *Dasar-Dasar Ilmu Gizi Konsep Dan Penerapan Pada Asuhan Keperawatan.* Bantul: Pustaka Baru Press.

Mirayanti, D. M. (2023). Hubungan Tingkat Pengetahuan Ibu Tentang Gizi. Undergraduate Thesis, Institut Teknologi Dan Kesehatan Bali.

Misnati. (2015). Hubungan Tingkat Pendidikan Dan Pengetahuan Ibu Dengan Pemberian Mp-Asi Pada Anak 6-24 Bulan Di Desa Ulapato A Kecamatan Telaga Biru Kabupaten Gorontalo. *Journal Health and Nutritions*, 1(2), 32 - 40.

Perda Bupati Nagan Raya. (2022). *Rencana Aksi Daerah Pangan Dan Gizi (Rad-Pg) Kabupaten Nagan Raya Tahun 2021-2025.* Nagan Raya.

Permenkes. (2014). *Peraturan Menteri Kesehatan Nomor 25 Tahun 2014 tentang Upaya Kesehatan Anak.* Jakarta: Kementerian Kesehatan.

Rahmania, S., Habibi, A., & Rayatin, L. (2022). Pengetahuan Ibu Hamil Mengenai Mpasi Dengan Status Gizi Anak Usia 6-24 Bulan. *Jurnal Jkft*, 7(2), 130 - 135.

Rettob, K. K. & Adnani, H. (2023). Pengetahuan Ibu Balita Tentang Gizi Dan Pola Pemberian Makan Dengan Status Gizi Balita. *Health Sciences And Pharmacy Journal*, 7(1), 36 - 42.

Sari, A., & Ningsih, N. K. &. (2024). Faktor-Faktor Yang Berhubungan Dengan Pemberian Asi Eksklusif Di Posyandu Permata I Dan Ii Desa Parit Kec. Sungai Gelam. *Jurnal Ilmu Kesehatan*, 12(2), 228 - 238.

Septriani. (2019). Hubungan Pengetahuan Ibu Tentang Pemberian MP-ASI Dengan Status Gizi Bayi Pada Usia 6-12 Bulan Di Bpm Nihayatur Rohmah Desa Kuningan Kabupaten Blitar. Masters Thesis, Stikes Patria Husada Blitar.

Sitorus, F., Anita, S., & Bancin, D. (2023). Hubungan Pemberian MP-ASI Dengan Status Gizi Anak 6-12 Bulan Di Kelurahan Gedung Johor Medan (The Relationship Between The Of MP-ASI And The Nutritional Status Of Children 6-12 Months In Kelurahan Gedung Johor Medan). *Jurnal Kesmas Untika Luwuk: Public Health Journal*, 14(1), 1 - 6.

Survei Kesehatan Indonesia (Ski). (2023). *Ski 2023 Dalam Angka.*

Syahrin , M. A.,Hadju, V., & As'ad, S. (2020). Pola Pemberian Asi Dan Pemberian Mpasi Dengan Status Gizi Anak Usia 12-23 Bulan. *Jurnal Riset Kesehatanpoltekkes Depkes Bandung*, 12(2), 335 - 339.

Turrahmi , L., & Sufriani. (2021). Gambaran Pengetahuan Dan Perilaku Ibu Tentang Pemberian Makan Bayi Di Banda Aceh. *Nursing Journal*, 12(1), 57 - 64.

Unicef. (2017). *Adolescents And Young People Unicef Data.* United Nations Children's Fund.

Unicef. (2022). *Gizi*. Retrieved from Unicef: https://www.unicef.org/indonesia/id/gizi (diakses, 1-12-2024)

Widad, S. (2021). Hubungan Tingkat Pengetahuan Ibu Dengan Status Gizi Balita Usia 6-59 Bulan Di Posyandu Desa Pandean Probolinggo. *Health Research Journal*, 2(1), 72–78.

Yuliana, & Melyani. (2019). Perbedaan Status Gizi Antara Bayi Usia 0-6 Bulan Dengan Pemberian Asi Secara Eksklusif Dan Tidak Secara Eksklusif Di Puskesmas Kampung Dalam Tahun 2018. *Jurnal Kebidanan*, 9(1), 341 - 347.

Zirva, A., Zara, N., & Akbar, M. K. (2022). Hubungan Tingkat Pendidikan Dan Pengetahuan Ibu Mengenai MP-ASI Dengan Status Gizi Balita Usia 6 Sampai 24 Bulan Di Wilayah Kerja Puskesmas Syamtalira Bayu. *Jurnal Kedokteran Dan Kesehatan Malikussaleh*, 1(1), 13 - 21.