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THE RELATIONSHIP OF COMPLEMENTARY FEEDING (MP-ASI) AND EXCLUSIVE BREAST MILK WITH NUTRITIONAL STATUS IN TODDLERS

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ABSTRAK : HUBUNGAN MP-ASI DAN ASI EKSKLUSIF DENGAN STATUS GIZI PADA BALITA

Latar Belakang Berdasarkan laporan dari Riskesdas tahun 2018, prevalensi status gizi menurut (BB/U) pada anak umur 0-23 bulan (Baduta), daftar status gizi di Indonesia yaitu 3,8% mengalami gizi buruk, 11,4% mengalami gizi kurang, 82% mengalami gizi baik dan 2,7 % mengalami gizi lebih. Tujuan diketahui hubungan MP-ASI serta riwayat ASI eksklusif dengan status gizi pada balita 12-59 bulan di Wilayah Kerja Posyandu Melati Desa Candimas Tahun 2022.

Metode Jenis penelitian menggunakan kuantitatif, desain *Survei Analitik* dengan pendekatan *cross sectional.* Sampel dalam penelitian ini adalah responden usia 12-59 bulan sebanyak 415 anak dengan menggunakan rumus slovin didapat 204 responden. Teknik sampling *purposive sampling.* Analisa data univariat dan bivariat menggunakan uji *chi square*.

Hasil Pemberian MP-ASI dengan kategori tidak MP-ASI dini sebanyak 165 ibu (80,9%). ASI Eksklusif dengan kategori ASI Ekslkusif sebanyak 156 balita (48,5%). Status gizi balita usia 12-59 bulan dengan kategori status gizi baik sebanyak 145 responden (71,1%).Hasil analisa menggunakan *chi-square,* didapat (*P-Value=0,000 <α0,05*) maka dapat disimpulkan terdapat hubungan pemberian MP-ASI dengan status gizi pada balita 12-59 bulan di Wilayah Kerja Posyandu Melati Desa Candimas Tahun 2022. Hasil analisa menggunakan *chi-square.*

Kesimpulan terdapat hubungan pemberian MP-ASI dengan status gizi pada balita 12-59 bulan di Wilayah Kerja Posyandu Melati Desa Candimas Tahun 2022.Memberikan ASI eksklusif dan MP-ASI yang tepat usia dan kebutuhan untuk mendukung tumbuh kembang dan tercapainya status gizi baik pada bayi.

Saran Meningkatkan upaya pencegahan terhadap kejadian penyakit infeksi dengan menjaga kebersihan diri dan lingkungan sekitar bayi.

Kata Kunci : ASI Eksklusif MP-ASI, ,Balita ,Status gizi

ABSTRACT

Background Based on a report from Riskesdas 2018, the prevalence of nutritional status according to (BB/U) in children aged 0-23 months (Baduta), the list of nutritional status in Indonesia is 3.8% experiencing malnutrition, 11.4% experiencing malnutrition, 82 % experienced good nutrition and 2.7% experienced excess nutrition. Purpose:

The Purpose to know the relationship between MP-ASI and a history of exclusive breastfeeding with nutritional status in toddlers 12-59 months in the Melati Posyandu Work Area Candimas Village in 2022.

Method This type of research uses quantitative, analytical survey design with a cross sectional approach. The sample in this study were respondents aged 12-59 months as many as 415 children using the Slovin formula obtained 204 respondents. The sampling technique is purposive sampling. Analysis of univariate and bivariate data using chi square test.

Results The provision of MP-ASI with the category of not early MP-ASI was 165 mothers (80.9%). Exclusive breastfeeding with exclusive breastfeeding category was 156 toddlers (48.5%). Nutritional status of children aged 12-59 months with good nutritional status category as many as 145 respondents (71.1%). The results of the analysis using chi-square, obtained (P-Value = 0.000 < α0.05) it can be concluded that there is a relationship between complementary feeding and nutritional status in toddlers 12-59 months in the Work Area of Posyandu Melati Candimas Village in 2022. The results of the analysis used chi-square, obtained (P-Value = 0.000 < 0.05) it can be concluded that there is a relationship between complementary feeding and nutritional status in children under five years of age 12-59 months in the Working Area of Posyandu Melati Candimas Village in 2022. Conclusion: Exclusive breastfeeding and complementary feeding - Breast milk that is appropriate for age and needs to support growth and development and achieve good nutritional status in infants.

Suggestion Increase prevention efforts against the incidence of infectious diseases by maintaining personal hygiene and the environment around the baby.

Keywords : Exclusive Breastfeeding MP-ASI,Nutritional Status,Toddler

INTRODUCTION

Provision of balanced nutrition can affect the nutritional status of children, especially during the first two years of life. Lack of fulfillment of nutrients during this period, will cause permanent growth and development disorders. Exclusive breastfeeding, inappropriate complementary feeding and the incidence of infectious diseases affect nutritional status. (Nuril Aiffa D, 2017)

Based on a report from Riskerdas in 2018, the prevalence of nutritional status according to (BB/U) in children aged 0-23 months (Baduta), the list of nutritional status in Indonesia is 3.8% experiencing malnutrition, 11.4% experiencing malnutrition, 82 % experienced good nutrition and 2.7% experienced excess nutrition. (Rikerdas National Report 2018)

The World Health Organization or the World Health Organization (WHO) recommends that newborns receive exclusive breastfeeding (without additional food) for 6 months. One of the reasons is because breast milk contains balanced nutrition. (Irwana Anasta Putra, Rizky AR, 2014)

Breast milk is of superior nutritional value. The composition of nutrients contained in breast milk is very precise and ideal for child growth and development. Exclusive breastfeeding is breastfeeding without other additional food and drink until the age of 6 months. Non-exclusive breastfeeding is breastfeeding with food or other additional drinks before the age of 6 months. According to WHO, infants are recommended to be exclusively breastfed until the age of 6 months. After the first 6 months, breastfeeding is continued along with complementary feeding to complement breast milk nutrition until the baby is 2 years old. (Cika Irlia Azzahra, 2013)

The benefits of exclusive breastfeeding for infants include complete nutrition, increase endurance, increase mental and emotional intelligence that is stable and spiritually mature followed by good social development, is easy to digest and absorb, has a composition of fat, carbohydrates, calories, protein and vitamins, protection from infectious diseases, allergy protection because breast milk contains antibodies, provides intelligence and nerve stimulation, improves health and intelligence optimally (Mufdlilah, 2017).

Exclusive breastfeeding in Indonesia is still far from expectations. Nationally, the coverage of infants receiving exclusive breastfeeding in 2017 was 61.33%. However, this figure has not reached the target of exclusive breastfeeding coverage set by the government, which is 80% (Kemenkes, 2018). This is due to the lack of public knowledge about the importance of exclusive breastfeeding, babies who have been given additional food before the age of 6 months and the lack of nutrition from breastfeeding mothers so that milk production decreases.

Infants who must be given only breast milk are newborns up to the age of 6 months, without being given other additional food, however, after the baby is 6 months old, babies need to be given additional food other than breast milk. Another factor that causes stunting is the provision of supplementary food that is not strong, in this case the provision of complementary feeding (MP-ASI). MP-ASI given late can cause the baby to experience iron deficiency due to not getting enough nutrients. The inhibition of growth in children due to a lack of iron intake during the toddler period if it lasts for a long time will result in stunting, it is necessary to pay attention to the provision of complementary feeding so that toddler nutrition is fulfilled (Hanum, 2019).

From the results of Zulmi's research (2019) cThe Relationship Between Exclusive Breastfeeding and the Nutritional Status of Toddlers in the Working Area of the Warung Gunung Public Health Center in 2018. The results of the univariate analysis showed that under-fives who were malnourished and undernourished were used as a case sample of 20 (33.33%) toddlers and those who had good nutrition were made the control group. as many as 40 (66.67%) toddlers, almost half (38.33%) toddlers are not given exclusive breastfeeding. The results of the bivariate analysis showed that there was a relationship between a history of exclusive breastfeeding and the nutritional status of children under five (pvalue = 0.00) OR = 8.04..

METHODS

This type of research uses quantitative, analytical survey design with a cross sectional approach.The sample in this study were respondents aged 12-59 months as many as 415 children using the Slovin formula obtained 204 respondents. The sampling technique is purposive sampling.

Complementary breastfeeding and exclusive breastfeeding use secondary data taken from the Buku KIA, while the nutritional status of toddlers is measured by height compared to age. Analysis of univariate and bivariate data using chi square test.

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RESULTS

Characteristics of Respondents

Table. 1

Characteristics	F	%
Age		
At risk<20 and>35 yrs	27	13.2
No Risk 20-35 yrs	177	86.8
Education		
D3	11	5.4
S1	11	5.4
Senior High School	144	70.6
Junior High School	38	18.6
Work		
Laborer	44	21.6
IRT	96	47.1
Employee	2	1.0
civil servant	19	9.3
Self-employed	43	21.1

Based on table 1 above, it can be concluded that the characteristics of mothers based on the highest percentage of age are not at risk (20 to 35 years) as many as 177 respondents (86.8%). The highest education is SMA as many as 144 respondents (70.6%). The most occupations are housewives as many as 96 respondents (47.1%).

Based on table 2 above, it can be concluded that the nutritional status of toddlers in the Working Area of Posyandu Melati Candimas Village in 2022 of 204 toddlers as many as 11 toddlers (5.4%) with poor nutritional status, 145 respondents (71.1%) with good nutritional status, and 48 respondents (23.5%) with more nutritional status.

Table 2

Nutritional status	F	%
Malnutrition	11	5.4
Good Nutrition	145	71.1
More Nutrition	48	23.5

Table 3

Exclusive breastfeeding	F	%
Exclusive breastfeeding	156	76.5
No Exclusive Breastfeeding	48	23.5

Based on table 3 above, it can be concluded that exclusive breastfeeding in the Work Area of Posyandu Melati Candimas Village in 2022 in 204 toddlers as many as 156 toddlers (48.5%) with exclusive breastfeeding, as many as 48 toddlers (23.5%) not exclusive breastfeeding.

Table 4
Distribution of the Frequency of Giving MP-ASI in the Working Area of Posyandu Melati, Candimas Village in 2022

MP-ASI	F	%
No Early MP-ASI	165	80.9
Early MP-ASI	39	19.1

Based on table 4 above, it can be concluded that the provision of MP-ASI in the Posyandu Melati Work Area Candimas Village in 2022 to 204 toddlers without early MP-ASI as many as 165 mothers (80.9%) and early MP-ASI as many as 39 mothers (19, 1%)

Table. 5

Exclusive breastfeeding	Nutritional status						Total		*P-value*
	Less		Well		More				
	N	%	N	%	N	%	N	%	
Exclusive breastfeeding	7	3.4	143	70.1	6	2.9	156	76.5	0,000
No Exclusive Breastfeeding	4	2.0	2	1.0	42	20.6	48	23.5	

Based on table 5 above, it can be concluded that infants who are exclusively breastfed and undernourished are 7 respondents (3.4%), under-fives who are exclusively breastfed and have good nutritional status are 143 respondents (70.1%), under-fives who are exclusively breastfed and have good nutritional status over nutrition as many as 6 respondents (2.9%). Toddlers who are not exclusively breastfed and have poor nutritional status are 4 respondents (2.0%), toddlers who are not exclusively breastfed and have good nutritional status are 2 respondents (1.0%), toddlers who are not exclusively breastfed and overnutrition status are 42 respondents (20.6%).

The results of the analysis using chi-square, obtained (P-Value = 0.000 < 0.05) it can be concluded that there is a relationship between exclusive breastfeeding and nutritional status in children under five 12-59 months in the Work Area of Posyandu Melati Candimas Village in 2022.

Table. 6

MP-ASI	Nutritional status						Total		*P-value*
	Less		Well		More				
	N	%	N	%	N	%	N	%	
No Early MP-ASI	11	5.4	144	70.6	10	4.9	165	80.9	
Early MP-ASI	0	0.0	1	0.5	38	18.6	39	19.1	

Based on table 6 above, it can be concluded that there are 11 respondents (5.4%), who are not early MP-ASI and good nutritional status 144 respondents (70.6%), 10 respondents (4.9%). Toddlers who had early MP-ASI and poor nutritional status were 0 respondents (0.0%), toddlers who were MP-ASI early and had good nutritional status were 1 respondent (0.5%), toddlers who received MP-ASI early and nutritional status were more as many as 38 respondents (18.6%).

The results of the analysis using chi-square, obtained (P-Value = 0.000 < 0.05) it can be concluded that there is a relationship between the provision of complementary feeding and the nutritional status of toddlers 12-59 months in the Work Area of Posyandu Melati Candimas Village in 2022.

Discussion

Toddlers who are exclusively breastfed and undernourished are 7 respondents (3.4%), under-fives who are exclusively breastfed and have good nutritional status are 143 respondents (70.1%), under-fives who are exclusively breastfed and have more nutritional status are 6 respondents (2, 9%). Toddlers who are not exclusively breastfed and have poor nutritional status are 4 respondents (2.0%), toddlers who are not exclusively breastfed and have good nutritional status are 2 respondents (1.0%), toddlers who are not exclusively breastfed and overnutrition status are 42 respondents (20.6%).

The results of the analysis using chi-square, obtained (P-Value = 0.000 < 0.05) it can be concluded that there is a relationship between exclusive breastfeeding and nutritional status in children under five 12-59 months in the Work Area of Posyandu Melati Candimas Village in 2022.

In line with the opinion expressed by Maryunani (2015) Exclusive breastfeeding is giving only breast milk for six months without any additional fluids, such as formula milk, oranges, honey, tea water, water and without giving other additional foods, such as bananas, milk porridge, biscuits, porridge or team rice.

After the baby is six months old, then the baby is given complementary foods with breast milk and breast milk is still given until the baby is 2 years old or more.

In line with research conducted by Zulmi, D (2019) The Relationship Between Exclusive Breastfeeding and the Nutritional Status of Toddlers in the Work Area of the Warunggunung Public Health Center in 2018 The results of the univariate analysis that under-fives experiencing malnutrition and malnutrition were used as case samples as many as 20 (33.33%)) toddlers and those with good nutrition were used as a control group (66.67%) under five, almost half (38.33%) under five were not given exclusive breastfeeding. The results of the bivariate analysis showed that there was a relationship between the history of exclusive breastfeeding and the nutritional status of children under five (pvalue = 0.027) OR ASI 8.04.

In the opinion of researchers,Breast milk also has lower levels of calcium, phosphorus, sodium, and potassium than formula, while higher levels of copper, cobalt and selenium. The content of breast milk is in accordance with the needs of the baby so that it can maximize the baby's growth including height. Based on this, it can be ascertained that the baby's needs are met, and the baby's nutritional status will be normal in both height and weight if the baby is exclusively breastfed.

Exclusive breastfeeding is a risk factor for malnutrition in infants because there is a significant effect, where infants who do not receive exclusive breastfeeding have a risk of experiencing adverse events. Breast milk contains quite complete nutrition, breast milk also contains antibodies or immune substances that will protect toddlers against infection. This causes infants who are breastfed to be less susceptible to disease and can play a direct role in the nutritional status of children under five. In addition, breast milk is adapted to the digestive system because it contains digestive enzymes so that nutrients are quickly absorbed.

According to researchers, the better the exclusive breastfeeding, which is done by the mother for her child, the better the nutritional status of the child. And conversely, the less exclusive breastfeeding is carried out by mothers for their children, the worse the nutritional status of children.

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This happens because breast milk is the best food for babies because it contains all the nutrients in an ideal ratio and contains immune power. Breast milk also contains many hormones that play a role inregulation of metabolism and body composition with adiponectin hormone content. This hormone has various functions, one of which is regulation of metabolism and suppressor of inflammation related to infant weight and protection against infection during exclusive breastfeeding (Larasati, 2018).

The Relationship of Complementary Feeding and Nutritional Status to Toddlers 12-59 Months in the Working Area of Posyandu Melati Candimas Village in 2022

Toddlers who did not MP-ASI early and nutritional status were less than 11 respondents (5.4%), toddlers who did not MP-ASI early and good nutritional status were 144 respondents (70.6%), toddlers who did not MP-ASI early and over nutritional status as many as 10 respondents (4.9%). Toddlers who had early MP-ASI and poor nutritional status were 0 respondents (0.0%), toddlers who were MP-ASI early and had good nutritional status were 1 respondent (0.5%), toddlers who received MP-ASI early and nutritional status were more as many as 38 respondents (18.6%).

The results of the analysis using chi-square, obtained (P-Value = 0.000 < 0.05) it can be concluded that there is a relationship between the provision of complementary feeding and the nutritional status of toddlers 12-59 months in the Work Area of Posyandu Melati Candimas Village in 2022.

This is in line with the theory put forward by the Indonesian Ministry of Health (2019) so that the baby's growth is according to age. WHO/UNICEF recommends four important things that must be done, namely firstly giving breast milk to the baby immediately after birth, secondly giving only breast milk (exclusive breastfeeding) from birth to 6 months, thirdly providing complementary foods (MP-ASI) from the age of 6 months to 24 months, all four continue to breastfeed until the age of 24 months or more. The recommendation emphasizes that socially and culturally MP-ASI should be made from food that is cheap and easy to obtain in the local area (indigenous food).

In line with Nupriyanti's research (2019)Factors Affecting the Nutritional Status of Toddlers in Posyandu Kunir Putih 13 Working Areas of the Umbulharjo I Public Health Center, Yogyakarta City 2015. The results of the analysis showed that there were influences on parenting, infectious diseases, food intake, food security, environmental health, exclusive breastfeeding, education, level of knowledge, occupation, income, number of family members with nutritional status of children under five with p <0.05 and food intake were the most dominant factors affecting the nutritional status of children under five with values of B = 0.313 and p = 0.027.

According to researchers, babies aged 0-6 months only need breast milk as the main nutrient. After 6 months, complementary foods (MP-ASI) can be given. Babies aged > 6 months require complementary feeding as additional nutrition for optimal growth. One of the problems in feeding infants is the cessation of breastfeeding and early complementary feeding.

MP-ASI too early can cause the child to drink less breast milk and the mother to produce less breast milk, making it more difficult to meet nutritional needs. Children who receive less breast milk have a higher risk of infection, sometimes the MP-ASI given is often watery so that it is easy for the baby to eat so that it makes the stomach full, so that the nutrients they get are less than breast milk. Unfulfilled nutrition can lead to nutritional problems (WHO, 2010).

CONCLUSION

There is a relationship between exclusive breastfeeding and nutritional status in toddlers 12-59 months, The results of the analysis using chi-square, obtained (P-Value = 0.000 <α0.05).

SUGGESTION

Providing exclusive breastfeeding and complementary feeding that is appropriate for the age and needs to support growth and development and the achievement of good nutritional status in infants. Increase prevention efforts against the incidence of infectious diseases by maintaining personal hygiene and the environment around the baby.

REFRENCES

Achadi, L. A. (2012). *The First Thousand Days of a Child's Life. Presented at a One Day Seminar in Context of the 60th National Nutrition Day. FKM UI, March 2012 Depok.*

Aini, K. (2019). *Relationship between Kek and Stunting Incidents in Baduta Age 6-24 Months in the Work Area of Pabelan Health Center, Pabelan District, Semarang Regency in 2019*.

Anugraheni, H. S., & Kartasurya, M. I. (2012). Risk Factors for Stunting in Children aged 12-36 Months in Pati District, Pati District. *Journal of Nutrition College*, *1*.

Arifin, Nadiyah, Briawan, & Martianto, D. (2014). Risk factors for stunting in children aged 0-23

months in the Provinces of Bali, West Java, and East Nusa Tenggara (NTT). *Pediatric Nephrology*, *9*(2), 125–132.

Arikunto, & Suharsimi. (2010). *Research Procedure A Practical Approach*.

Arisman, M. B. (2010). *Nutrition in life*. http://dx.doi.org/10.1016/j.pharmthera.2017.02.018

Awanis, H. (2021). *Pengaruh TerapI Foot Massage Dan Aromaterapi Lavender Terhadap Intensitas NyerI Rheumatoid Arthritis (RA) Pada Lansia di Wilayah Kerja Puskesmas Jembatan Kecil Tahun 2021*. Politeknik Kesehatan Kemenkes Bengkulu.

Cynthia, C., Suryawan, I. W. B., & Widiasa, A. S. (2019). The relationship between exclusive breastfeeding and the incidence of stunting in children aged 12-59 months at the Wangaya Hospital in Denpasar. *Journal of Meditechnical Medicine*, *25*(1), 29–35.

Fatonah. (2010). Nutrition and Health for Pregnant Women. *Journal of Pediatrics*.

Fitri, L., & Ernita, E. (2019). Drug-related problem in children with chronic kidney disease. *Journal of Midwifery Sciences*, *8*(1), 19–24.

Hey, & Endah. (2015). The Relationship between Nutritional Status and Fine Motor Development at 3-5 Years Old at Miri Health Center – Sragen. *Journal of Health*.

Kemenkes. (n.d.). *Decree of the Minister of Health of the Republic of Indonesia No. 1995/Menkes/SK/XII/2014*.

Kemenkes. (2016). *Malnutrition Status in Children.*

Kemenkes. (2021). Malnutrition Status in Children. *Journal of Nutrition College*.

Margawati. (2012). *Risk Factors for Stunting Events in Toddlers Age 24 - 36 Months in East Semarang District*.

Notoatmodjo, & Soekidjo. (2018). Nursing Methods and Research. In *Rineka Cipta*. Octarina. (2013). *Risk Factors for Stunting in Toddlers (24-59 Months) In Sumatra*. *8*(3). Proverawati, A., & Ismawati, C. (2010). *Low Birth Weight*.

Rochani, S. K. M. (2018). Stop Stunting With Nutrition Counseling. Jakarta : Spreader Plus. *Jurnal Promosi Kesehatan Indonesia*.

Sjahmien, & Moehji. (2017). Fundamentals of Nutrition. In *Kemang Library*.

Sudirman, N. A. (2022). Relationship between exclusive breastfeeding and complementary feeding with the incidence of stunting in toddlers 6-24 months. *Teaching and Teacher Education*.

Sukarni, & Icesmi, K. (2019). Pregnancy Childbirth and Postpartum. In *Nuha Medika*.

Supariasa. (2012). Nutritional Status Assessment. In *EGC*.

Unicef. (2021). *Child Nutritional Status*

Widiastity, W., & Harleli, H. (2021). Relationship between the provision of complementary feeding to the incidence of stunting in toddlers aged 6–24 months at the Soropia Health Center. Nursing Care and Health Technology Journal (NCHAT), 1(2), 81-86.