Vol. 6 No.1 (2024) Hal. 101-106
HealthCare Nursing Journal
available on : https://journal.umtas.ac.id/index.php/healtcare
e-ISSN : 2655-6812

Original Article

Normal Birth Weight And Exclusive Breastfeeding Are The Causes Of Good Nutritional Status Of Toddlers At Kubutambahan 1 Primary Health Care

Putu Wahyu Sri J Sandy[1*], Aditha Angga Pratama[1],
[1] Program Studi Keperawatan, Sekolah Tinggi Ilmu Kesehatan Buleleng, Indonesia

Article Information

Received: 11 Oktober 2023
Revised: 20 Oktober 2023
Accepted: 01 December 2023
Available online: 31 January 2024

Keywords

Birth, Weight, Exclusive Breastfeeding, Nutritional Status

Correspondence*

Phone: (+62)81246738813
E-mail: wahyuputu90@gmail.com

Website

https://journal.umtas.ac.id/index.php/healtcare/index

Doi

10.35568/healthcare.v6i1.4167

ABSTRACT

Nutrition status was very important role in children's growth and development. A child's good nutritional status will influence the child's development and their growth, especially in the first 1000 days of birth. The aim of this research is to analyze the relationship between nutritional status and exclusive breastfeeding on the nutritional status of babies. The method of this research used analytical observational with a cross sectional research design with a sample size of 74 respondents. The sampling technique used was purposive. The research instrument used a questionnaire. Multivariate research results show that there is a significant relationship between the variables of exclusive breastfeeding and birth weight history and the baby's nutritional status with a p value <0.05. The conclusion is that the factors of exclusive breastfeeding and a history of the baby's birth weight increase the risk of the baby's nutritional status becoming good.

INTRODUCTION

The aim of sustainable development goals is to eradicate poverty, hunger and live a healthy and prosperous life. The quality of a prosperous life will produce a healthy and happy family. According to the World Health Organization (WHO), there are 50 million thin children and 41 million fat children in the world out of 667 million children (Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI, 2013).

Indonesia is included in 17 countries, out of 117, that have three nutritional problems, namely stunting, wasting and

overweight in children under five, with a stunting rate of 36.4% in children under 5 years in 2012 (WHO, 2018). The prevalence of stunted toddlers throughout the world in 2011 was 165 million (26%) toddlers (UNICEF, 2017). World health statistics data released by WHO in 2018 monitored the Sustainable Development Goals (SDGs), about 29,6% stunting/shortness in the toddler group and toddlers (0-24 months) (20.1%) (WHO, 2010). The results of Basic Health Research (Riskesdas) in 2018 show that the percentage of malnutrition among toddlers aged 0-23 months in Indonesia is 3.8%, while the percentage of malnutrition is 11.4%. Furthermore, the percentage of very short and stunted toddlers aged 0-23 months in Indonesia in 2018 was 12.8% and 17.1%. The percentage of very thin and wasted toddlers aged 0-23 months in Indonesia in 2018 was 4.5% and 7.2% (Kemenkes Rl, 2018).

Many studies have proven that breast milk is important for optimal growth and development of babies. One of the journals that conducted this research was research from Sofyana which stated that the average change in neonate body length over 1 month (28 days) in neonates who were given exclusive breast milk was 1,078 cm, while neonates who were given non-exclusive breast milk was 1,008 cm. Breastfeeding with the exclusive method coverage in the world in 2020 was 44%, this result is an increase compared to 2019. Furthermore, in Indonesia, exclusive breastfeeding coverage is also still small and far from the target (Eidelman & Schanler, 2020). Furthermore, the results of the study showed that toddlers aged 6-24 months who were not exclusively breastfed were more likely to experience stunting by 30.7%, compared to toddlers who were exclusively breastfed with only 11.1% stunting. On the other hand, more babies who were exclusively breastfed had normal nutritional status (TB/U) (88.9%) compared to toddlers who were not exclusively breastfed (69.3%). These results show that there is a tendency for toddlers who are not exclusively breastfed to have a higher proportion of stunting. Furthermore, Susanty's research results support that the duration of breastfeeding is significantly related to the incidence of malnutrition (Susanty et al., 2012).

Previous research results found that birth weight is one of the risk factors was thought to predict the incidence of stunting. In Indonesia, the prevalence of toddlers with low birth weight (≤ 2500 gr) and a birth length of less than 48 cm in 2018 is quited high with details of the prevalence of toddlers with a low birth weight of 6.2% and the prevalence of toddlers with a birth length of less than 48 cm amounting to 22.7% (Kemenkes Rl, 2018).

According to the Ministry of Health in 2016, the factor causing stunting is malnutrition during pregnancy and after birth through the provision of breast milk and MPASI. Providing breast milk for less than 6 months and MP-ASI too early can increase the risk of stunting because the baby's digestive tract is not yet perfect so it is more susceptible to infectious diseases such as diarrhea and ARI. In Wahdah's 2015 research, children who were not exclusively breastfed had a risk of stunting 2 times greater than children who were given exclusive breast milk (Wahdah et al., 2015). Babies who are given exclusive breast milk can achieve optimal growth, development and health (Anggraeni et al., 2021)(WHO, 2010)

Currently, exclusive breastfeeding coverage at the Kubutambahan 1 Community Health Center is 70.4%, this is due to various reasons ranging from mothers not expressing breast milk to mothers not knowing how to implement exclusive breastfeeding. Various efforts have been made by the Health Service and Village Midwives, starting from providing additional food to the baby. At the Kubuta Community Health Center, we also found that there were still children with stunted nutritional status, which indicates that currently the nutritional status of babies under five in Kubutambahan 1 needs special attention. This indicates that researchers need to know the history of

exclusive breastfeeding and birth weight and nutritional status of toddlers at the Kubutambahan 1 Community Health Center.

METHOD

This research is a quantitative research with a cross sectional approach. The time for conducting the research is February-March 2023. This research was conducted at the Kubucepatan 1 Community Health Center.

The population of this study were all housewives who had babies and toddlers under 5 years. The minimum sample taken was in accordance with the sample size formula obtained, namely 74 respondents. The sampling method was carried out using non-probability sampling using purposive sampling. The independent variables in this study were birth weight and exclusive breastfeeding, while the dependent variable was nutritional status.

This research was carried out for 1 full month by distributing questionnaires to the sample according to the required variables including respondent characteristics, birth weight and exclusive breastfeeding. This research has received permission from the Buleleng Regency Licensing Service and an ethical feasibility test has been carried out at STIKES Buleleng with no 301/EC-KEPK-SB/XII/2023. The results of data collection are entered into the data tabulation via a master table that has been prepared. The results were then subjected to univariate and multivariate analysis using software.

RESULTS

The results of this study used respondents from mothers of babies who were given a questionnaire to see the characteristics, how their birth weight and the nutritional status of the baby. The results of univariate analysis related to respondent characteristics are shown in the table 1.

Tabel 1. Characteristic of respondent

Variable	f(%)
Age (Mean±SD)	27,05±6,8)
Age of baby (Mean±SD)	4,99±3,2
Work Status	
Laborer	5 (6,8)
Housewife	41 (55,4)
Trader	4 (5,4)
Farmer	4 (5,4)
Civil servant	10 (13,5)
Privat	10 (13,5)
Last Education	
Elementary School	14 (18,9)
Junior high school	15 (20,3)
Senior high school	35 (47,3)
College	10 (13,5)
Gender	
Man	45 (60,8)
Women	29 (39,2)
Wight of Birt	
Normal	61 (82,4)
LBW	13 (17,6)
Exclusive Breastfeeding	
Given	50 (67,6)
No	24 (32,4)
Nutritional status	
Normal	45 (60,8)
Lean	27 (36,5)
Bony	2 (2,7)

The results of the table above report that the average age of the mother is 27 years, then the average age of the baby is 5 months. Furthermore, most of the mothers were housewives (55.4%) and had a high school education (47.3%). Most of the babies assessed as respondents were mostly male, namely 60.8%. The results of univariate analysis reported that the majority of birth weights were normal, 82.4%, 67.6% were given exclusive breast milk. Meanwhile, the nutritional status of babies was mostly normal (67.6%). The results of the multivariate analysis can be seen in table 2 below.

Tabel 2. Bivariate analyze

Variabel	AOR	Nilai p	95% CI Lower	95% CI Upper
Exclusive breastfeeding	5,01	0,005	1,6	15,2
Weight of birt	2,1	0,02	1,1	6,46

The results of the multivariate analysis report that exclusive breastfeeding is a factor that can influence children's nutritional status. If exclusively breastfed, the risk is 5 times that of children with normal or good nutritional status (5.01, 95% CI 1.6-15.2). Furthermore, the normal birth weight factor 2.1 times increases the child's good nutritional status (1.2, 95% CI 1.2-6.4).

DISCUSSION

Respondent Characteristics

Age is an individual's age which is calculated from the time of birth until the birthday. The older you are, the more mature a person's level of maturity and strength will be in thinking and working. Society has the belief that someone who is more mature is more trustworthy in everything than someone who is less mature. This will come from experience and mental maturity. The results of this study found that the average mother's age was 27 years. These results are in line with previous research that the mother's age is in the range of 20-30 years (Hamid et al., 2020).

The results of this study found that the majority of mothers had at least a high school education. The same results were also found in previous research, namely that the majority generally had a high school education (Anggraeni et al., 2021). Education is any planned effort to influence other people, whether individuals, groups or society, through activities to provide and increase knowledge so that they do what is expected by educators. From this limitation, the elements of education are: input, namely educational targets (individuals, groups and communities) and educators (education actors), processes (planned efforts to influence other people), and output (increased knowledge so that they do what is expected) (Alhamid et al., 2021).

The work of mothers reported from the results of this study is that most are housewives. Previous research also reported the same results that housewives were also the dominant occupation among respondents (Hamid et al., 2020). A person's job greatly influences the process of accessing the information needed for an object, so it can be said that work is a medium used to access information to increase one's knowledge.

Relationship between Birth Weight and Nutritional Status

The results of this study found that there was a statistically significant relationship between the baby's birth weight and the baby's nutritional status. It's just that the strength of the relationship is low. Previous research results also reported that current nutritional status is also influenced by the baby's weight at birth (Rahayu et al., 2019). The body length of a toddler at birth describes the growth facing the toddler when he is in the mother's stomach. Low growth in the womb is at risk of experiencing malnutrition due to a lack of energy and protein suffered in the past which began with slowing or inhibiting fetal growth (Supariasa et al., 2012).

Children who are born low birth weigh (LBW) grow and develop more slowly than children who are born with a normal weight. Apart from that, the situation will be even worse if LBW babies receive less energy and nutritional intake, poor parenting patterns and often suffer from infectious diseases so that in the end LBW babies tend to have deficient or poor nutritional status. Previous research on the nutritional status of children aged 6-24 months showed that children born LBW had a 3.34 times risk of experiencing malnutrition. So there is a very high risk that a baby with a low/low birth weight will become a baby with a nutritional status of underweight or even very underweight (Sari & Maryanto, 2020).

The baby's birth weight and birth length have a risk that in the future it can cause the baby to experience problems in nutritional status, especially if there is no stimulus and it is not handled properly. Furthermore, the mother's nutritional status during pregnancy is also the initial spearhead

of the problem of the baby's birth weight which can lead to stunting or nutritional problems (Alfred, 2017).

Relationship between Exclusive Breastfeeding and Nutritional Status

The results of statistical analysis in this study found that there was a significant relationship between exclusive breastfeeding and the nutritional status of babies. These results are in line with previous research that nutritional status based on measurements of age and body length influences exclusive breastfeeding (Hamid et al., 2020). Food that is hygienic, cheap, easy to give, and easy for babies to get, one of which is giving breast milk. Choose only breast milk to give your baby for the first 6 months of life to be a healthy baby. Its dynamic composition and ability to adapt to the baby's needs makes breast milk the optimal nutritional intake for babies. Breast milk is plasma which has the same ion concentration so it is very safe for babies and babies also do not need any additional food for the first 6 months (Fikawati et al., 2015).

Various studies have concluded that exclusive breastfeeding can meet the baby's nutritional needs and support optimal growth and development so that it can influence the baby's nutritional status. Breastfeeding is recommended until the child is 2 years old. For babies aged 6-8 months, breast milk still meets 70% of their calorie needs, for babies aged 9-11 months it can meet 55% of their calories, while for babies aged 12-23 months it can meet 40% of their calories. This situation will significantly fulfill the food needs of babies up to 2 years of age (Rahayu et al., 2019). Babies aged 6-12 months who are exclusively breastfed have 0.44 times the risk of suffering from malnutrition compared to those who do not receive exclusive breast milk who have 2.3 times the risk of being malnourished6. Other research states that babies who are exclusively breastfed have 0.3 times the risk of suffering from malnutrition compared to babies who are not exclusively breastfed (Andriani et al., 2015). Research in Aceh shows that toddlers who are given exclusive breastfeeding mostly have normal nutritional status when compared to toddlers who do not receive exclusive breastfeeding (Al-Rahmad & Fadillah, 2016).

Breast milk has all the elements needed by babies so that its nutrition is very adapted to the baby's condition, except for mothers who experience poor nutritional conditions, which will affect the nutrition of the mother's breast milk given to the baby. In addition, breast milk is very easily digested by the baby's digestive system because it contains fat in the form of essential amino acids, saturated fatty acids, medium chain triglycerides and cholesterol in sufficient quantities according to what the baby needs and its age (Giri et al., 2013).

CONCLUSIONS AND RECOMMENDATION

There are a relationship between exclusive breastfeeding and normal birth weight with nutritional status where the results of this analysis are statistically significant with a p value <0.0001.

The suggestion for the future is that exclusive breastfeeding should be increased starting from early initiation of breastfeeding and direct breastfeeding. Apart from that, to reduce the occurrence of LBW, it is hoped that during pregnancy the mother will receive maximum service.

REFERENCES

Al-Rahmad, A., & Fadillah, I. (2016). Perkembangan Psikomotorik Bayi 6–9 Bulan berdasarkan Pemberian ASI Eksklusif. *Aceh Nutrition Journal*, *1*(2), 99–104.

Alfred, E. (2017). *.Hubungan Status Gizi Ibu Dengan Berat Dan Panjang Badan Bayi Baru Lahir Di Rumah Bersalin Widuri*.

Alhamid, S. A., Carolin, B. T., & Lubis, R. (2021). Studi Mengenai Status Gizi Balita. *Jurnal Kebidanan Malahayati*, *7*(1), 131–138. https://doi.org/10.33024/jkm.v7i1.3068

Andriani, R., Wismaningsih, E. R., & Indrasari, O. R. (2015). Hubungan Pemberian ASI

Eksklusif dengan Kejadian Status Gizi Kurang pada BalitaUmur1-5 Tahun. *Jurnal Wiyata*, *2*(1), 44–47. https://ojs.iik.ac.id/index.php/wiyata/article/view/35/35

Anggraeni, L. D., Toby, Y. R., & Rasmada, S. (2021). Analisis Asupan Zat Gizi Terhadap Status Gizi Balita. *Faletehan Health Journal*, *8*(02), 92–101. https://doi.org/10.33746/fhj.v8i02.191

Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI. (2013). *Hasil Rikesdas 2013*.

Eidelman, A. ., & Schanler, R. . (2020). Breastfeeding and the use of human milk. *Pediatric*, *129*(3). https://doi.org/https://doi.org/10.1542/peds.2011-3552

Fikawati, S., Syafiq, A., & Karima, K. (2015). *Gizi Ibu dan Bayi*. PT Raja Grafindo Persada.

Giri, M. K. W., Muliarta, I. W., & Wahyuni, N. D. S. (2013). Hubungan Pemberian ASI Eksklusif dengan Status Gizi Balita Usia 6-24 Bulan di Kampung Kajanan, Buleleng. *Journal Sains Dan Teknologi*, *2*(1), 184–192.

Hamid, N. A., Hadju, V., Dachlan, D. M., Jafar, N., & Battung, S. (2020). Hubungan Pemberian Asi Eksklusif Dengan Status Gizi Baduta Usia 6-24 Bulan Di Desa Timbuseng Kabupaten Gowa. *Jurnal Gizi Masyarakat Indonesia: The Journal of Indonesian Community Nutrition*, *9*(1), 51–62. https://doi.org/10.30597/jgmi.v9i1.10158

Kemenkes Rl. (2018). *Riset Kesehatan Dasar: Riskesdas*.

Rahayu, S., Djuhaeni, H., Nugraha, G. I., & Mulyo, G. E. (2019). Hubungan pengetahuan, sikap, perilaku dan karakteristik ibu tentang ASI eksklusif terhadap status gizi bayi. *AcTion: Aceh Nutrition Journal*, *4*(1), 28. https://doi.org/10.30867/action.v4i1.149

Sari, A. N., & Maryanto, S. (2020). The Correlation Between Birth Length, Birth Weight and Exclusive Breastfeeding with The Incidence Of Stunting in Children Age Group 7-24 Months in Wonorejo Village, Pringapus District, Semarang Regency. *Jurnal Gizi Dan Kesehatan*, *12*(27), 49–58. https://www.researchgate.net/publication/341726030

Supariasa, I. D. ., Bakri, B., & Fajar, I. (2012). *Penilaian Status Gizi dan Makanan*. EGC.

Susanty, M., Kartika, M., Hadju, V., & Alharini, S. (2012). Hubungan Pola Pemberian ASI dan MP ASI dengan Gizi Buruk pada Anak 6-24 Bulan di Kelurahan Pannampu Makassar. *Jurnal Media Gizi Masyarakat Indonesia*.

UNICEF. (2017). *Paket Konseling : Pemberian Makan Bayi dan Anak*.

Wahdah, S., Juffrie, M., & Huriyati, E. (2015). Faktor Risiko Kejadian Stunting Pada Anak Umur 6-36 Bulan Di Wilayah Pedalaman Kecamatan Silat Hulu, Kapuas Hulu, Kalimantan Barat. *Jurnal Gizi Dan Dietetik Indinesia*, *3*(2), 119–130.

WHO. (2010). *Pemberian Air Susu Ibu dan Menyusui Rekomendasi IDAI No : 002 / Rek / PP IDAI / XI / 2010*.

WHO. (2018). *World health statistics 2018: monitoring health for the SDGs, sustainable development goals*.