

IDENTIFICATION OF NUTRITIONAL STATUS BASED ON INDICATORS OF BB/U, TB/U AND BB/TB

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ABSTRAK : IDENTIFIKASI STATUS GIZI BERDASARKAN INDIKATOR BB/U, TB/U DAN BB/TB

Latar Belakang: Masa balita merupakan masa darurat dalam usaha mewujudkan sumber daya manusia yang berkualitas. Sepertiga dari seluruh anak dibawah usia lima tahun mengalami berat badan yang kurang. Prevalensi tertinggi masalah gizi terdapat pada negara berkembang. Kurang gizi terjadi dalam 26 negara di seluruh dunia.

Tujuan: mengidentifikasi status gizi balita berdasarkan indikator BB/U, TB/U dan BB/TB.

Metode: Metode penelitian ini yaitu penelitian deskriptif dan dilaksanakan di Puskesmas Narmada Kabupaten Lombok Barat. Sampel dalam penelitian ini adalah 156 Balita usia 6-24 bulan. Data yang di ambil dalam penelitian ini adalah data sekunder, diolah secara univariat, dan disajikan dalam bentuk tabel distribusi frekuensi.

Hasil: Hasil penelitian ini didapatkan dari 156 responden yaitu di dapatkan bahwa status gizi bayi usia 6-24 bulan berdasarkan indeks BB/U memiliki berat badan kurang sebanyak 79 (50,6%), status gizi bayi usia 6-24 bulan berdasarkan indeks TB/U memiliki panjang badan normal sebanyak 84 (53,8%) dan status gizi bayi berdasarkan indeks TB/BB memiliki status gizi kurang sebanyak 85 (54,5%).

Kesimpulan: Berdasarkan hasil identifikasi, ditemukan bahwa terdapat variasi status gizi pada pasien yang datang ke puskesmas. Data menunjukkan adanya persentase yang cukup tinggi pada kategori gizi kurang, dengan beberapa kasus gizi buruk.

Saran: Puskesmas diharapkan dapat meningkatkan program deteksi dini dan pemantauan status gizi secara berkala, serta memberikan edukasi tentang pola makan yang seimbang. Kerja sama dengan pihak terkait juga perlu ditingkatkan untuk mendukung perbaikan status gizi masyarakat

Kata Kunci: Balita, Status Gizi

ABSTRACT

Background: Toddlerhood is an emergency period in efforts to realize quality human resources. One third of all children under the age of five are underweight. The highest prevalence of nutritional problems is in developing countries. Malnutrition occurs in 26 countries worldwide.

Purpose: to identify the nutritional status of toddlers based on BB/U, TB/U and TB/BB indicators.

Method: This research method is descriptive research and was conducted at the Narmada Health Center, West Lombok Regency. The sample in this study was 156 toddlers aged 6-24 months. The data taken in this study were secondary data, processed univariately, and presented in the form of a frequency distribution table.

Results: The results of this study were obtained from 156 respondents, namely that the nutritional status of infants aged 6-24 months based on the BB/U index had a body weight of 79 (50.6%), the nutritional status of infants aged 6-24 months based on the TB/U index had a normal body length of 84 (53.8%) and the nutritional status of infants based on the TB/BB index had a nutritional status of 85 (54.5%).

Conclusion: Based on the identification results, it was found that there were variations in nutritional status in patients who came to the health center. The data showed a fairly high percentage in the category of malnutrition, with several cases of severe malnutrition.

Suggestion: The health center is expected to improve the early detection program and monitoring of nutritional status periodically, as well as provide education about a balanced diet. Cooperation with related parties also needs to be improved to support improvements in the nutritional status of the community

Keywords: Toddlers, Nutritional Status

INTRODUCTION

Infant mortality is defined as the number of deaths of infants under 1 year of age per 1,000 births that occur in a year. This figure is often used as a reference to assess the good or bad economic, social, and environmental conditions in a country. Nationally, the Infant Mortality Rate (IMR) has decreased from 24 deaths per 1,000 Live Births (SDKI, 2017) to 16.85 deaths per 1,000 Live Births (Population Census, 2020). These results show a significant decline, even exceeding the target in 2022, which is 18.6% deaths per 1,000 Live Births. This must be maintained to support the target in 2024, namely 16 deaths per 1,000 Live Births and 12 deaths per 1,000 Live Births in 2030.

Based on the results of the 2016 Sample Registration System (SRS) of the Research and Development Agency for Health, the three main causes of infant mortality are complications of intrapartum events (28.3%), respiratory and cardiovascular disorders (21.3%) and LBW & Premature (19%) (SDKI, 2017). Meanwhile, based on Maternal Perinatal Death Notification (MPDN) data dated September 21, 2021, the top three causes of infant mortality are LBW (29.21%), Asphyxia (27.44%), Infection (5.4%) with the highest place/location of death being in Hospitals (92.41%) (Directorate of Nutrition and Maternal and Child Health, 2023). In addition, the high infant mortality rate in Indonesia is caused by diarrhea at 6%, pneumonia at 29%, meningitis at 3% and dengue fever at 2% (Kemenkes RI 2018 2019)

West Nusa Tenggara is a province with high infant mortality rates. Based on the results of the Long Form SP2020, the infant mortality rate in NTB decreased significantly from 48 per 1000 live births in the 2010 Population Census to 24.64 per 1000 live births in the Long Form SP2020. The increase in the percentage of infants who received complete immunization and the increase in the average duration of breastfeeding made infants more able to survive. Based on data from the NTB Provincial Health Office, it has been reported that there were 859 cases of infant mortality. The highest number of deaths occurred in East Lombok district, namely 243 cases of death and Central Lombok 158 cases of infant death, the most common causes of death were LBW and Asphyxia (NTB health profile, 2022).

The world is currently still facing the problem of hunger and malnutrition. According to the Food and Agriculture Organization (FAO) report, the number of people suffering from malnutrition in the world reached 768 million people in 2020, up 18.1% from the previous year of 650.3 million people. The increase in people suffering from malnutrition is due to increasingly poor access to food in several regions

of the world, especially Asia and Africa. This is inseparable from the Covid-19 pandemic that has hit since early 2020. Based on region, the number of people suffering from malnutrition in Asia is the largest, namely 418 million people in 2020. In detail, there are 305.7 million people suffering from malnutrition in South Asia. Then, 48.8 million people suffer from malnutrition in Southeast Asia. The population suffering from malnutrition in West Asia and Central Asia is 42.3 million people and 2.6 million people respectively. The World Health Organization (WHO) said that malnutrition is one of the dangerous threats to the health of the world's population. Malnutrition is estimated to be the leading cause of 3.1 million child deaths each year (Kementerian Kesehatan RI 2020).

Based on the 2018 Riskesdas data, malnutrition in children in Indonesia has a prevalence of 13.8%, while in the 2013 Riskesdas data, the prevalence was 13.9%, meaning that there was only a 0.1% decrease in the prevalence of malnutrition in the last 5 years. So this problem is a problem that must be considered by health workers and the local government. The prevalence of nutritional problems in Indonesia based on the results of the 2018 Riskesdas, there were 17.7% cases of malnutrition in toddlers and this number consisted of 3.9% malnutrition and 13.8% malnutrition from the prevalence of toddlers aged 0-59 months according to the nutritional status of the BB/U index in 2018. Riau Province has data on malnutrition of 4.3% and malnutrition of 14.00%, based on the TB/U index, very short 10.3% and short 17.1%, based on the BB/TB index, very thin 4.2% and thin 8.0% (Ministry of Health, 2018). The results of the 2022 Indonesian Nutritional Status Survey (SSGI) illustrate that there has been a decline and also an increase in the trend of the nutritional status of Indonesian toddlers over the past year. The nutritional status of toddlers in question is Stunting (H/A), Wasting (W/H), Underweight (W/A) and Overweight (W/A). The decline in the stunting rate to 21.6%, decreased by 2.8% compared to 2021, which was 24.4%. The decline in the overweight rate to 3.5%, decreased by 0.3% compared to 2021, which was 3.8%. This decline is still far from the target considering the efforts of local governments which always prioritize toddlers with malnutrition for intervention so that they do not become malnourished. Meanwhile, the trend of increasing nutritional status of toddlers occurred in the nutritional status of wasting, increasing by 0.6% from 2021, namely 7.1% to 7.7% in 2022, and in the nutritional status of underweight, increasing by 0.1% from 2021, namely 17.0% to 17.1% in 2022.

At the provincial level, the trend in toddler nutritional status in NTB Province is respectively; stunting 32.7% (11.1%), wasting 8.7% (1%), underweight 24.2% (7.1%) and overweight 2.1% (-1.4%). Of the 4 types of toddler nutritional status, there are still 3 types of toddler nutritional status in NTB Province that exceed the set national target, namely stunting, wasting and underweight. The results of the 2022 Indonesian Nutrition Status Survey (SSGI)(Gizi 2022) illustrate that 4 of the categories of toddler nutritional status, it can be seen that in NTB, 3 of them still show trends that exceed national standards, namely stunting, wasting, and underweight. The trend in toddler nutritional status in 2022 in 10 districts/cities in NTB can be seen as follows; Dompu Regency with 4 categories of toddler nutritional status that exceed the national target, Mataram City, Central Lombok Regency, Bima Regency, Bima City, West Sumbawa Regency with 2 categories of toddler nutritional status each that exceed the national target, and East Lombok Regency with 1 category of toddler nutritional status that exceeds the national target. One district in NTB, namely Lombok Island, with a prevalence of toddler nutritional status that continues to be in the top 5 of the 3 categories of toddler nutritional status throughout NTB Province. The district is West Lombok Regency with a prevalence of short height in 5th position, a prevalence of thin nutrition in 4th position and a prevalence of overnutrition in 1st position.

Infant nutritional status is influenced by many factors. In its classification, infant nutritional status is influenced by intrinsic and extrinsic factors, which include genetics, hormones, intrauterine life. While those included in extrinsic factors are nutritional intake, morbidity, diet, and environmental influences. Therefore, these factors must be considered in improving infant nutritional status. Not only from nutritional intake, but other factors such as diet and morbidity need to be considered.

Efforts to reduce the impact caused by the problem of infant nutritional status, researchers are interested in identifying the magnitude of the problem of nutritional status in infants in West Lombok Regency, West Nusa Tenggara (NTB).

RESEARCH METHODS

The method used in this study is descriptive, which is to find out an accurate picture of the nutritional status of toddlers aged 6-24 months. This study will be conducted in the working area of the West Lombok Regency Health Center in November 2024. The population in this study were all toddlers aged 6-24 months in the working area of the West

Lombok Regency Health Center. The sample in this study was some toddlers aged 6-24 months who had been determined according to the research criteria as many as 156. Data collection carried out in this study uses secondary data. Secondary data in this study are data on the number of mothers who have babies aged 6-24 months in 2024 in the working area of the Narmada Health Center, West Lombok Regency.

RESEARCH RESULTS

Respondent Characteristics

Table 1
Frequency Distribution of Characteristics of Mothers of Toddlers

Mother Characteristics	Frequency (n)	Presentation %
Education		
- Primary School	8	5,1
- Junior High School	26	16,7
- Senior High School	84	53,8
- Bachelor	38	24,4
Job		
-Housewives	65	41,6
-bussinesman	43	27,6
-Farmer	25	16,0
-Privat worker	15	9,6
-Teacher	8	5,2
Exclusive breastfeeding		
-yes	96	61,5
-No	60	38,5

Source: Secondary data, 2023

Based on the table above, it can be seen that the majority of respondents with the highest level of education, namely high school, are 84 (53.8%) respondents, respondents with the most jobs as housewives are 65 (41.6%) respondents, while respondents who have a history of exclusive breastfeeding are 96 (61.5%) respondents.

Based on the table above, it can be seen that the nutritional status of infants aged 6-24 months based on the BB/U index in the Narmada Health Center work area, some of the respondents are underweight, as many as 79 (50.6%) respondents.

Tabel 2
Frequency Distribution of Nutritional Status of Infants Aged 6-24 Months in the Narmada Health

Center Working Area in 2024 Based on the BB/U Index

Nutritional Status	Frequency (n)	Presentation %
Underweight	79	50,6
Normal weight	77	49,3

Tabel 3
Frequency Distribution of Nutritional Status of Infants Aged 6-24 Months in the Working Area of Narmada Health Center in 2024 Based on Height/Age Index

Nutritional Status	Frequency (n)	Presentation %
Stunted	72	46,2
Normal	84	53,8

Based on the table above, the nutritional status of toddlers aged 6-24 months is obtained based on the TB/U index in the Narmada Health Center work area, some of the respondents have normal body length as many as 84 (53.8%) respondents.

Table 4
Frequency Distribution of Nutritional Status of Infants Aged 6-24 Months based on BB/TB in the Narmada Health Center work area in 2024

Status Gizi	Frekuensi	Persent
Malnutrition	85	54,5
Normal	71	45,5

Based on table 4, the nutritional status of toddlers aged 6-24 years old based on the BB/TB index in the Narmada Health Center work area, some respondents have poor nutritional status, as many as 85 (54.5%) respondents.

DISCUSSION

According to table 2, it is found that the nutritional status of infants aged 6-24 months based on the BB/U index in the Narmada Health Center work area, some of the respondents are underweight as many as 79 (50.6%) respondents. In table 3, the nutritional status of infants aged 6-24 months based on the TB/U index in the Narmada Health Center work area, some of the respondents have normal body length as many as 84 (53.8%) respondents, while in table 4, the nutritional status of infants based on the TB/BB index in the Narmada Health Center

work area, some respondents have underweight as many as 85 (54.5%) respondents.

According to (Octaviana and Ramadhani 2021). Infants are the age group that most often suffers from nutritional problems or disease infections. This is due to the lack of knowledge of mothers in meeting the nutritional needs of children. It should be noted that in infancy is a stage of rapid development and growth if it is not supported by balanced nutrition, the child will experience nutritional problems (Rotttie, 2017).

This is confirmed by the theory of Herissa et al (2019). Nutritional status is influenced by various factors. Directly includes nutritional conditions influenced by two factors, food intake consumed and the presence of infection or disease, while indirectly between the nutritional value of food, the presence or absence of additional food and the mother's knowledge or habits of nutrition. Other factors can also affect the nutritional status of infants. One factor in the nutritional status of infants is parental education, the nutritional status of infants is closely related to the menu served by the mother at home because this affects the mindset and healthy living behavior of the family and infant, if the mother's education is low, then the way of knowing healthy living and how to maintain the cleanliness of food and drinks is not or is not well understood (Mufida et al., 2015).

This study is in line with Linda's study, 2017 entitled "Factors Affecting the Nutritional Status of Toddlers in the Work Area of the Payung Sekaki Health Center" The results of the study showed that 40.5% of respondents had a low level of education. The level of education can affect a person's mindset and knowledge. Education is a process of changing the knowledge, attitudes and behavior of parents or the community to realize good nutritional status for their toddlers. The higher a person's education, the better their knowledge, attitudes and behavior will be. The level of education is one of the factors that determines how easy it is for someone to absorb and understand the nutritional knowledge they obtain. Because the mother's education level affects the quality and quantity of food given to her toddler. The results of the statistical test showed that there was an effect of education on the nutritional status of toddlers (P value 0.019). According to the researcher's assumption, education affects the nutritional status of toddlers because the higher a mother's education, the better her knowledge, the better the mother's knowledge of nutrition will affect the way the mother provides food to her toddler so that the fulfillment of toddler nutrition will be met (Suryani 2017). The best food intake for children

aged <12 months is breast milk and complementary feeding because it plays an important role in increasing the child's weight, body weight is the result of an increase or decrease in all tissues in the body including bones, brain, fat, and other body fluids (Masruro, 2015). Research conducted by Lastanto (2015) that mothers who exclusively breastfeed with poor toddler nutritional status are 11 people (35.5%) and mothers who do not exclusively breastfeed with poor toddler nutritional status are 19 people (65.5%). The results of research conducted by Laelatunnisa (2016) were obtained from 92 toddlers, toddlers who are still breastfed with good nutritional status are 58.3%, toddlers who are no longer breastfed with good nutritional status are 9.2%. The results of the statistical test were carried out using the chi square test and a p-value of 0.116 was obtained, so it can be concluded that there is no relationship between the history of breastfeeding and the nutritional status of toddlers (Carolin, Saputri, and Silawati 2020).

CONCLUSION

Based on the identification results, it was found that there were variations in nutritional status in patients who came to the health center. The data showed a fairly high percentage in the category of malnutrition, with several cases of severe malnutrition. Factors such as age, gender, education level, and socioeconomic status have a significant influence on the nutritional status of patients. These factors need to be considered in efforts to improve the nutritional status of the community around the health center.

The health center is expected to improve early detection programs and regular monitoring of nutritional status, as well as provide education on a balanced diet. Cooperation with related parties also needs to be improved to support improvements in the nutritional status of the community.

SUGESTION

The research team would like to thank the Narmada Community Health Center, West Lombok Regency, which has given permission to collect data for this research.

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