

Conference Paper

Prevalence of Malnutrition in Kendari City, Southeast Sulawesi, Indonesia

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Abstract.

Less than 5 age period is a stage that emphasizes attention to growth and development. In 2013, WHO reported that about 99 million children under the age of 5 suffer from malnutrition, of which 67% are in Asia and 29% in Africa.³ Currently, the main public health issue in Indonesia is nutritional problem where the body experiences disturbances in nutrients necessary for growth, development and doing activity. This study uses various data from the Indonesian government. Data on cases of malnutrition and stunting were obtained from the Kendari City Health Office from 2017 to 2020. The conclusion is that most cases of malnutrition in Kendari were stunting cases. In 2018 it was 46.99% and the lowest was in 2020, of which 0.80% with the largest coverage areas were in the Nambo Public Health Center and the Abeli Public Health Center, which are in the coastal areas. The age range is from 0-59 years old. The prevalence of malnutrition, short toddlers, and thin toddlers are found in women.

Keywords: malnutrition, Southeast Sulawesi, Indonesia

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1. INTRODUCTION

Under five-aged period is a stage that emphasizes of the importance of attention to improve growth and development. Toddler is a golden age period because of the rapid growth and physical development of the child's raw and advanced motor (Elizabeth, 2006). Along with the learning process, children move around a lot and explore to fulfill their curiosity. The prevalence of children in this subsection of nutrition discussed related to the nutritional status of toddlers and efforts to prevent and handle nutritional problems, e.g., exclusive breastfeeding for infants aged up to 6 months, breastfeeding vitamin A capsules for toddlers 6-59 months, giving blood-supplementing tablets to pregnant women and adolescent girls, as well as providing additional food to pregnant women with Chronic Energy Deficiency (CED) and underweight toddlers. The measurement of nutritional status is based on World Health Organization standards (WHO, 2005) which has been regulated by the Minister of Health decree number

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1995/Menkes/SK/XI/2020 concerning anthropometric standards for assessing children's nutritional status. According to these standards, the nutritional status of toddlers can be measured based on three indicators, including weight index by age (W/A), height index by age (H/A), and weight index by height (W/H).

Nutrition deficiency is a nutritional status based on the weight index by age (W/A). In the year 2017, it was found at 0.8%, 0.06% in 2018, it increased to 0.72% in 2019, and went down to 0.32% in 2020, in which malnutrition data was not available. Short or stunting is nutritional status based on the height index by age (H/A). The percentage of short toddlers aged 0-59 months was 23.46.99%, 0.12%, and 0.80% in 2017, 2018, 2019, and 2020 respectively. The underweight category is a nutritional status based on the weight index by height (W/H). The percentage of underweight toddlers aged 0-59 months in 2017 was 0.13%, in 2018 it was 2.12%, in 2019 was 2.90%, and in 2020 it decreased to 0.14%.

This study aims to obtain an overview of nutrition deficiency and malnutrition by categories which are based on weight, height, and coverage of cases of malnutrition in the health center of subdistricts in Kendari City. Therefore, preventive measures can be carried out earlier to prevent the increased of malnutrition cases in the region.

2. METHODOLOGY OF THE STUDY

Southeast Sulawesi Province, with the capital city of Kendari, astronomically located in the southern part of the equator, between 3°54'40" and 4°5'05" South Latitude and geographically surrounds Kendari Bay which consists of 11 subdistricts and 15 public health centers. This study uses various data in Indonesia. The 2017-2020 data series on malnutrition cases were obtained from the Kendari City Health Office.

3. RESULT OF THE STUDY

Figure 1. shows that in 2017 and 2018, the number of stunting toddlers aged 0-59 months increased, the peak of prevalence was in 2018 as 49.99% compared to nutrition deficiency toddlers and underweight toddlers. However, it significantly decreased in 2019 and 2020. The prevalence of underweight toddlers remained exist in 2019.

The results of this study found that the prevalence by gender was almost balanced in 2018 and 2019 at 89.23% and 80.4% respectively. The finding showed that in 2017, 2018, and 2019, the prevalence was more in women than men. However, the opposite trend in 2020, where men had led in number of cases at 52.79 %.

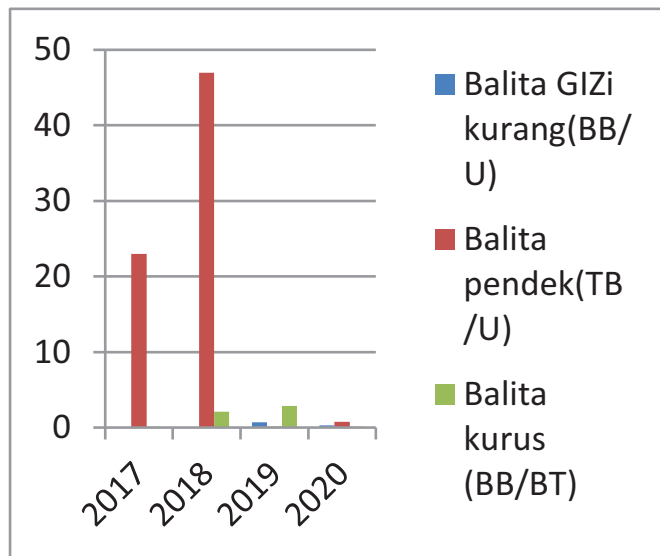


Figure 1: Number of nutrition deficiency, short toddlers (H/A) and underweight toddlers (W/A).

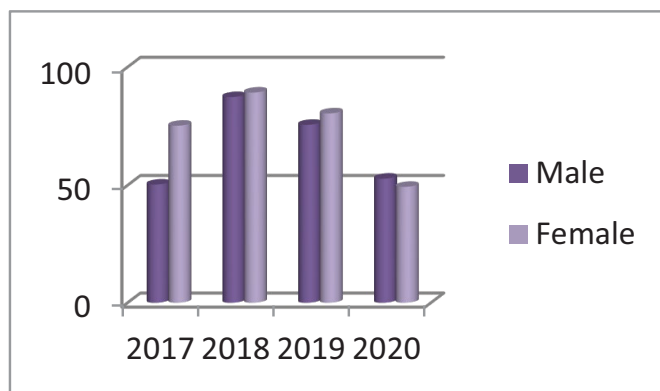


Figure 2: Data of nutrition deficiency, underweight toddlers, and short toddlers by gender.

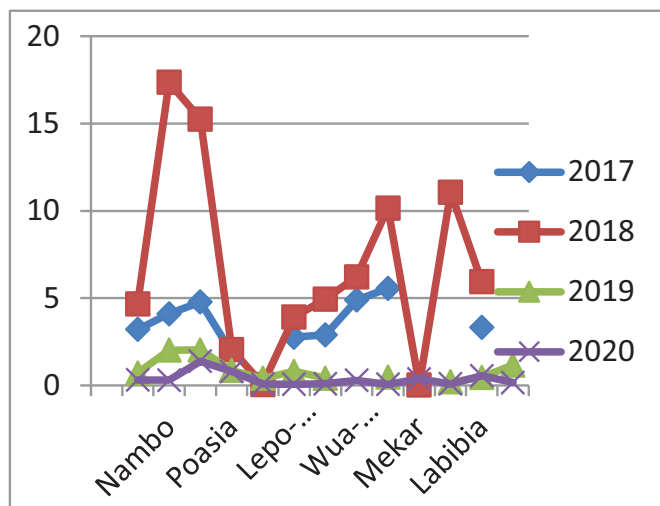


Figure 3: Data on coverage of prevalence of nutrition deficiency percentage by subdistricts and or public health center.

This study found that in 2018 the highest percentage of nutrition deficiency for short toddlers and underweight toddlers was in Nambo and Abeli PublicHealth Centers. In the year 2018, the prevalence of nutrition deficiency at Abeli Public Health Center was 15,25 %, and at Nambo Public Health Center was 17,35%,

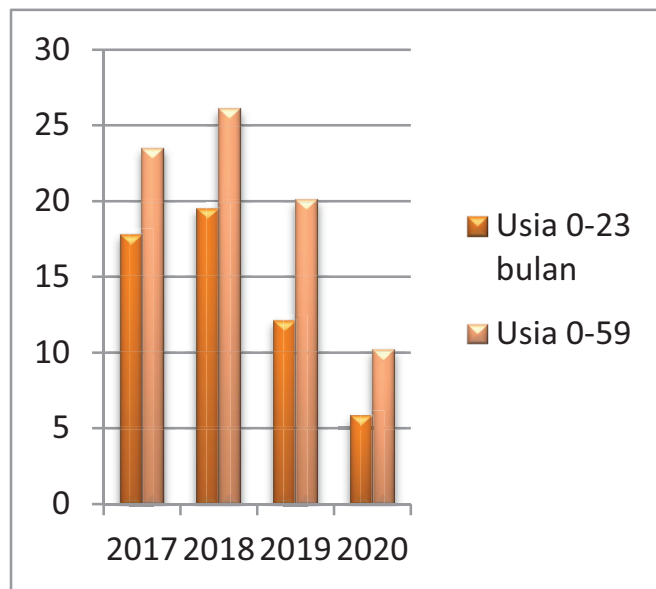


Figure 4: Data on nutrition deficiency by age (0-23 and 0-59 months).

Based on research, toddlers aged 0-59 months in 2017-2020 experienced the most cases of nutrition deficiency, the highest percentage was in 2018 which was 26.10% and the lowest in 2020 was 10.25%.

4. DISCUSSION

Based on the results of the 2018 Basic Health Research (Riskesdas) of Ministry of Health and several articles, showing that 17.7% of infants under 5 years old (toddlers) still experience nutritional problems. This figure consists of toddlers who are malnutrition by 3.9% and those who suffer from nutrition deficiency by 13.8%. The prevalence of the deficiency cases in Kendari City fluctuated in 2018, there was an increase for stunting under five children by 46.99% and it decreased in 2019 which was 012%, and in 2020, it was 0.8%. The age of toddlers was mostly 0-59 months in in 2018 which is 26.10%. And the lowest is in 2020 by 10.25%. The distribution of prevalence by the health centersindictaed that the most cases found in the Nambo and Abeli health centers. These areas are in coastal, stunting casesare influenced by socio-economic factors and community knowledge on clean and healthy lifestyle (PHBS) and healthy environment.

Weighing toddlers is very important for an early detection of both nutrition deficiency and malnutrition cases..

5. CONCLUSION

The nutritional status of children under five in the city of Kendari was still increasing in fluctuating prevalence, but there was a decline in 2019-2020. The highest was stunting or short toddlers in 2018 which was 46.99% and the lowest in 2020 was 0.8% with ages 0-59 months. The distribution area for stunting cases was coastal areas, e.g., Nambo and Abeli. In 2019, the percentage in Abeli was at 0.81% and Nambowas 0.71%. Weighing toddlers is very important for an early detection of both nutrition deficiency and malnutrition cases.

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