International Journal Of Health, Engineering And Technology (IJHET) E-ISSN 2829 - 8683
Volume 5, Number 1, May 2026, *Page. 569 - 572*
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Overview Of Vitamin A Supplementation Among Stunted Toddlers In The Working Area Of The Giligenting District Health Center, Sumenep Regency

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Abstract

Stunting is a chronic nutritional problem that remains high in Indonesia, including in Sumenep Regency. Stunting is caused by long-term nutritional deficiencies, recurrent infections, and micronutrient deficiencies, one of which is vitamin A. Vitamin A plays an important role in growth, immune function, and cellular metabolism. This study aimed to describe the administration of vitamin A supplementation among stunted toddlers in the working area of the Gili Genting Community Health Center, Sumenep Regency. This study used a descriptive observational method with a cross-sectional design. The study population consisted of 117 stunted toddlers based on 2024 data, and all were included as the research sample. Data collection was carried out using questionnaires and secondary data obtained from the Community Health Center. Data were analyzed descriptively. The results showed that most stunted toddlers were in the age group of 12–59 months, totaling 69 children, while those aged 6–11 months were 48 children. The highest distribution of stunted toddlers was found in Bringsang Village with 48 children. The coverage of vitamin A supplementation was still not optimal, where only 23.08% of toddlers received vitamin A capsules according to the recommended schedule of twice a year, 35.90% received it less than twice, and 41.03% never received vitamin A supplementation. The conclusion of this study indicates that the coverage of vitamin A supplementation among stunted toddlers in the working area of the Gili Genting Community Health Center is still low. Increased nutrition education for parents, strengthening of posyandu (integrated health service posts), and equitable distribution of vitamin A capsules are needed to support efforts to reduce the prevalence of stunting.

Keywords: Toddlers, Nutrition, Stunting, Supplementation, Vitamin A.

INTRODUCTION

Stunting is a condition of growth failure in children under five caused by chronic malnutrition over a long period, particularly during the first 1,000 days of life (the First 1,000 Days of Life/HPK). Stunting is characterized by a height-for-age value that is below −2 standard deviations based on child growth standards established by the World Health Organization. This condition not only affects a child's physical growth but also influences cognitive development, increases the risk of chronic diseases in adulthood, and reduces productivity in the future (Apriluana & Fikawati, 2018).

Stunting remains a serious public health issue in many developing countries, including Indonesia. According to reports from UNICEF, approximately one-quarter of children under five worldwide experience stunting due to chronic malnutrition and environmental factors that do not support optimal child growth. In Indonesia, the prevalence of stunting is still relatively high, although it has shown a decline in recent years. Health survey results indicate that stunting remains one of the major nutritional problems among children under five (Ministry of Health of the Republic of Indonesia, 2021).

The causes of stunting are multifactorial, including inadequate nutritional intake, recurrent infections, poor environmental sanitation, and insufficient intake of essential micronutrients for child growth (Andriani & Wirjatmadi, 2012). One important micronutrient for child growth is vitamin A. Vitamin A plays a role in cell growth processes, tissue development, and strengthening the immune system, making children more resistant to infectious diseases (Almatsier, 2016).

Vitamin A deficiency is still a public health problem in many developing countries. It can cause visual impairment, reduce immune function, and increase the risk of morbidity and mortality in children. Therefore, the Indonesian government has implemented a vitamin A capsule

supplementation program for children under five twice a year through health services such as integrated health posts (posyandu) and community health centers (puskesmas) (Elvandari et al., 2017).

The vitamin A supplementation program is one of the specific nutrition interventions proven effective in reducing morbidity and mortality among children in developing countries (Beaton et al., 1993). However, the implementation of this program in several regions is still not optimal due to various factors, such as lack of maternal knowledge, low community participation in posyandu activities, and limited access to health services.

Sumenep Regency is one of the regions in East Java Province that still faces stunting problems among children under five. Based on data from the Giligenting District Health Center, there are still a considerable number of stunting cases in the area. Therefore, research is needed to describe the implementation of vitamin A supplementation among stunted toddlers in the working area of the Giligenting District Health Center, Sumenep Regency.

This study aims to describe the provision of vitamin A capsules among stunted toddlers so that it can serve as an evaluation material for health programs in efforts to prevent stunting in the region.

RESEARCH METHODS

This study employed a descriptive observational method with a cross-sectional approach. The research was conducted in the working area of the Giligenting District Health Center, Sumenep Regency.

Population and Sample

The population in this study consisted of all stunted toddlers recorded in the health center's working area in 2024, totaling 117 children. The sampling technique used was total sampling; therefore, the entire population was included as the research sample.

The research data were obtained through:

- Primary data, collected through questionnaires administered to respondents.
- Secondary data, obtained from health center records regarding stunted toddlers and vitamin A supplementation.

The collected data were then analyzed descriptively to illustrate the characteristics of respondents and the frequency of vitamin A supplementation among stunted toddlers.

RESULTS AND DISCUSSION

Respondent Characteristics

Based on the results of the study conducted on 117 stunted toddlers in the working area of the Giligenting District Health Center, respondent characteristics were identified based on gender, age, and village area. The findings showed that there were 63 female toddlers and 54 male toddlers.

Based on age groups, stunted toddlers were dominated by those aged 12–59 months, totaling 69 children (58%), while those aged 6–11 months accounted for 48 children (42%). This age range represents a critical period in child growth, as nutritional needs increase to support physical and cognitive development. The distribution of stunted toddlers by village area showed that Bringsang Village had the highest number of cases, with 48 children (44%), followed by Gedugan Village with 36 children (30.5%), while other villages had smaller numbers.

Overview of Vitamin A Supplementation

The results showed that the coverage of vitamin A capsule supplementation among stunted toddlers was still not optimal. A total of 23.08% of toddlers received vitamin A capsules according to

the schedule (twice a year), 35.90% received them less than twice a year, and 41.03% never received vitamin A supplementation.

These findings indicate a gap between the government-established vitamin A supplementation program and its implementation at the community level. In fact, vitamin A supplementation is one of the specific nutritional interventions aimed at preventing micronutrient deficiencies and supporting child growth.

Discussion

Characteristics of Stunted Toddlers

The findings showed that most stunted toddlers were in the 12–59 months age group. This period is crucial for child growth, as rapid physical and cognitive development occurs alongside increased nutritional requirements. If these nutritional needs are not adequately met, children are at risk of experiencing growth disorders such as stunting (Apriluana & Fikawati, 2018).

In addition, micronutrients such as vitamin A play an important role in supporting child growth. Vitamin A contributes to protein synthesis, bone formation, and immune system function, helping protect the body from infections. A deficiency in vitamin A can inhibit cell growth and increase the risk of stunting in children (Almatsier, 2016).

Overview of Vitamin A Supplementation

The study results indicate that most stunted toddlers have not received vitamin A capsules according to the national program standard, which is twice a year. This suggests that the coverage of the vitamin A supplementation program in the study area still needs improvement.

Vitamin A supplementation is an important intervention in child health programs. It plays a role in enhancing the immune system, reducing the risk of infections such as diarrhea and respiratory tract infections, and supporting child growth and development (Elvandari et al., 2017).

Previous studies have also shown that regular vitamin A supplementation can reduce morbidity and mortality rates among children in developing countries (Beaton et al., 1993). Several factors contribute to the low coverage of vitamin A supplementation among toddlers, including lack of maternal knowledge, limited access to health facilities, and social and cultural factors influencing community perceptions of vitamin A supplementation (Sari et al., 2018; UNICEF, 2022).

Therefore, improving nutritional education for parents and strengthening integrated health service posts (posyandu) are important steps to increase vitamin A supplementation coverage among stunted toddlers.

CONCLUSION

Based on the results of the study, it can be concluded that the coverage of vitamin A supplementation among stunted toddlers in the working area of the Giligenting District Health Center, Sumenep Regency, is still relatively low. Most toddlers have not received vitamin A capsules according to the recommended schedule, which is twice a year. This condition indicates that the implementation of the vitamin A supplementation program has not been optimal. Therefore, efforts are needed to improve nutritional education for parents, strengthen integrated health service posts (posyandu), and ensure equitable distribution of vitamin A to support the prevention and reduction of stunting rates.

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