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The Impact of Stunting on Children's Quality: A Literature Review

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ABSTRACT

Background: Child stunting remains a priority child health issue in many countries, especially in low-income families. Stunting not only affects a child's physical growth, but also has a wide-ranging impact on quality of life, including mental, social, and cognitive development.
Purpose: This study aims to review the quality of life of stunted children in poor family settings through literature reviews from various journals.
Methods: The research method used is a literature review, where relevant journals are selected and analyzed to deepen the understanding of the link between stunting and children's quality of life in poor families.
Results: The study results show that stunted children tend to have a lower quality of life than non-stunted children, especially in physical health, psychological well-being, and social participation. The main causes of the low quality of life of stunted children in poor families include limited access to health services, lack of nutritional intake, and lack of socio-economic support. Based on these results, comprehensive and integrative interventions from the government and related parties are needed to improve the quality of life of stunted children, especially through improving access to nutrition, health services, and education for poor families.
Conclusion: The conclusions of this study emphasize the importance of a multidimensional approach in addressing the impact of stunting on children's quality of life.

Keywords: *Stunting; Quality of Life; Children; Poor Families; Literature Review*

INTRODUCTION

Nutritional imbalance in children significantly contributes to the prevalence of stunting, a persistent nutritional issue in Indonesia today(Sutarto et al., 2018). Stunting is characterized by chronic malnutrition that begins in utero and continues through the critical first two years of life, commonly referred to as the First 1000 Days of Life (HPK) (Sutrio & Lupiana, 2019). Adequate food intake, especially nutrient-rich foods, is essential for developing brain tissue and overall health, making proper nutrition a cornerstone in preventing stunting. Assessing a child's nutritional status is vital for identifying stunting early. They are defined as a condition where a child's growth is below the expected standard; stunting results in a height-for-age measurement below the -2 or -3 standard deviation (SD) threshold, according to the Ministry of Health (Kemenkes, 2018). Stunted children are often shorter than their peers and face physical, cognitive, and emotional developmental challenges.

Stunting is not unique to Indonesia but is a global public health issue. According to WHO data from 2019, approximately 144 million children worldwide under the age of five are stunted, accounting for 21.3% of the global population in this age group. Asia and Africa contribute the majority of cases, with Asia accounting for 54% and Africa 40%. Within Asia, South Asia bears the highest burden, with 55.9% of stunted children, while Central Asia has the lowest proportion (0.8%) (WHO, 2020). If these trends persist, projections estimate that by 2025, the number of stunted children will reduce slightly to 127 million, highlighting the slow progress in tackling this problem. In Indonesia, stunting remains a pressing issue, with poverty and inadequate nutrition being the primary causes. Poverty exacerbates food insecurity, preventing families from meeting the nutritional needs of their children, which in turn fuels the cycle of malnutrition. The effects of stunting are far-reaching. In the short term, stunted children face increased morbidity and impaired physical and cognitive development (WHO, 2023). Over the long term, stunting compromises survival by reducing intellectual capacity, productivity, and economic

potential. Adults who were stunted as children often experience limited job opportunities, contributing to the perpetuation of poverty (Sutrio & Lupiana, 2019)).

The adverse effects of stunting extend beyond individuals to the broader societal level. A nation's productivity and economic growth can be hindered by the reduced capabilities of its workforce, driven by a generation affected by stunting. The condition is also linked to increased risks of obesity, non-communicable diseases, and mortality in later life. Addressing stunting is thus not only a health priority but also an essential factor in enhancing human resource quality and achieving sustainable development. Stunting arises from a combination of factors, including inadequate nutritional intake, poor hygiene, and frequent illnesses due to poor sanitation. Parental knowledge and practices also play a significant role. Chronic poverty remains a major driver, limiting access to nutritious food, clean water, education, and healthcare services necessary for a child's growth and development ((UNICEF, 2020; WHO, 2020)
Efforts to address stunting must involve multidimensional strategies. Improving maternal nutrition during pregnancy, promoting exclusive breastfeeding, and ensuring the timely introduction of complementary feeding are critical steps during the first 1,000 days of a child's life. Education campaigns to enhance parental awareness and government programs to address poverty and food insecurity can also have significant impacts.

Stunting poses a formidable barrier to global human development. The issue is particularly concerning in regions like Indonesia, where a significant proportion of children remain affected. According to UNICEF, over half of all stunted children reside in Asia, and approximately 36% live in Africa. These figures underline the geographical disparity in the prevalence of stunting and its association with socioeconomic conditions. The cyclical relationship between stunting and poverty creates a substantial challenge for governments. Families with stunted children face increased healthcare costs and reduced income potential, perpetuating poverty. This cycle negatively impacts a country's Human Development Index (HDI), a measure of national progress in health, education, and income. Addressing stunting is thus not only a moral imperative but also an economic necessity for nations aiming to improve their HDI (Unicef, 2024).

MATERIALS AND METHODS

The method used is a literature review, focusing on articles published in the last 10 years. The approach used in this study is to analyze each article related to the theme of the role of family support in health promotion to improve children's quality of life. The data obtained are then analyzed and combined with relevant references. Scientific arguments support the information. This study examines four in-depth articles according to the objectives desired by the researcher and is supported by relevant theoretical foundations.

RESULTS

The results of the review literature search with all keywords entered, 28 articles were obtained and re-selected which covered the quality of life of children with stunting under five and 4 articles were obtained.

Tabel 1. Article Description

No	Article Name & Title	Themes discussed	Article source
1	Nagwa Farag Elmighrabi, Catharine A. K. Fleming, dan Kingsley E. Agho. Factors Associated with Childhood Stunting in Four North African Countries: Evidence from Multiple Indicator Cluster Surveys, 2014–2019 *Nutrients* 2024, *16*(4), 473;	Underlying factors: socio-economic factors, health service factors and household environmental factors. Direct factors: food intake factors and child health factors.	https://doi.org/10.3390/nu16040473
2	Rahut D, Mishra R, Bera S. *Nutrition*. Geospatial and environmental determinants of stunting, wasting, and underweight: Empirical evidence from rural South and Southeast Asia (2024) Nutrition Volume 120	Determining geospatial and environmental implications of child malnutrition	https://doi.org/10.1016/j.nut.2023.112346
3	Muhammed A. K. Al-Mansoob dan Muhammed S. A. Masood The Relationship between Stunting and Some	The influence of gender, area of residence, age group, current school enrollment, poverty status, and income	https://doi.org/10.1155/2018/5619178

	Demographic and Socioeconomic Factors among Yemeni Children and Adolescents 29 August 2018	wealth index quintile variables on the prevalence of stunting among Yemeni children and adolescents.	
4	Jumhur, J. (2024). The effect of economic growth and poverty on stunting in Indonesia. Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah, 11(6), 433 - 448.	This study examines the impact of the growth of the Gross Regional Domestic Product (GRDP) in the primary, secondary, and tertiary sectors and the level of rural poverty on stunting in Indonesia.	https://doi.org/10.22437/ppd.v11i6.26871

DISCUSSION

The results of the study showed that poverty did not have a significant effect on stunting in 34 provinces in Indonesia during the period 2019-2022. This finding is of concern because Indonesia has very wide geographic and social diversity, which allows the impact of poverty on children's health and nutrition to differ in each region. One of the main reasons why poverty does not always have a significant impact on stunting is the existence of access to adequate health services, such as integrated health posts and immunizations, which can help maintain children's nutritional status and health even though families are in difficult economic conditions. Effective health programs can be balanced in dealing with family economic limitations (Permenkes, 2020).

In addition to health access, parental knowledge and awareness of nutrition and child health also play an important role. Families with higher levels of education tend to be more able to adopt practices that support optimal child growth, even in less supportive economic conditions. This finding is in line with (Jumhur's research 2024), which states that economic development indicators do not always have a direct effect on stunting incidence. In the study, the relationship between the prevalence of rural poverty and stunting incidence in Indonesia did not show a statistically significant correlation. However, a different view was expressed by Elmighrabi et al., (2024) and (Rahut et al., 2024), who stated that poverty has a positive correlation with growth disorders in children. They stated that the level of family wealth greatly affects the ability to obtain nutritious food and other essential needs that are important for children's health. (Al-Mansoob & Masood, 2018) also found that children from poor households have a higher risk of stunting compared to children from non-poor households, with proportions of 52.8% and 47.7%, respectively.

Stunting as a National Health Problem

Stunting is not only a physical problem but also has serious long-term impacts on children's physical, cognitive, and social development. In Indonesia, stunting is one of the main indicators used to measure the quality of children's health. Based on data from the Indonesian Ministry of Health in 2020, the prevalence of stunting in Indonesia reached 27.7% (Rosita, 2021). This figure shows that almost one in three children in Indonesia experience stunting, which has the potential to inhibit their optimal growth and development. Children who experience stunting are at higher risk of facing various health problems, such as susceptibility to infection, cognitive impairment, low academic achievement, and the risk of chronic diseases such as diabetes and heart disease in adulthood. In addition to the health impacts, stunting also places a large economic burden on the country. Children who experience stunting tend to have low productivity, which ultimately affects their contribution to the economy.

The importance of this problem has encouraged the government, health organizations, and researchers to continue to make various prevention and handling efforts. These efforts involve cross-sectors, such as health, education, nutrition, and community empowerment. However, to overcome stunting effectively, a deep understanding of the causal factors is needed, including economic influences, access to health services, and family behavior and education. Poverty and large family size have a positive relationship with the incidence of stunting in children. Children from economically disadvantaged families are at greater risk of stunting due to limited access to nutritious food and basic necessities that support health. In addition, children from large families are also more susceptible to stunting due to limited resources for adequate care and less than optimal distribution of attention. Malnutrition in children under five is more severe in these conditions, especially in communities without social security or support for low-income families. These findings are consistent with previous research, which shows that high caregiver-

to-child ratios in large families can affect the quality of care, feeding, hygiene, and stimulation needed for healthy growth (Elmighrabi et al., 2024).

The Relationship between Stunting and Children's Quality of Life

Stunting has been shown to have a significant impact on children's quality of life. Research shows that stunting affects various aspects of quality of life, such as physical, emotional, social functions, and the total score of children's quality of life. In children aged 2-4 years, the results of the study showed a significant relationship between stunting and children's quality of life, with a p-value of 0.000.

Research by Prendergast and Humprey (2014) and Onis and Branca (2016) supports these findings, where stunting is associated with linear growth failure that increases the risk of morbidity, mortality, and loss of physical and cognitive potential. Children with stunted growth often face irreversible neurocognitive developmental limitations, making it difficult for them to make optimal use of learning opportunities.

In addition, the quality of life of children is also influenced by many factors, such as government policies, environmental conditions, family socioeconomic status, and parental education. Children's nutritional status is one of the important indicators in determining their quality of life. Children with good nutritional status have a better quality of life than children with poor nutritional status.

External Factors and the Role of Parents

External factors, such as family income, also affect children's quality of life. This study found that children from families with incomes below the minimum wage were 1.7 times more likely to experience poor quality of life compared to children from families with higher incomes. Research by (Rahut et al., 2024) also supports this finding, where higher family economic levels are associated with increased attention to children's health, including the ability to access better treatment and nutrition. The role of parents, especially mothers, is also an important factor. Children of working mothers are 1.6 times more likely to experience problems in quality of life compared to children of unemployed mothers. However, unemployed mothers must still be able to provide sufficient stimulation to their children because more than time is needed if it is accompanied by quality interaction.

CONCLUSIONS

Stunting is a serious problem that not only affects children's physical growth but also their overall quality of life. Although poverty is not always directly related to stunting, economic factors still play an important role in supporting access to nutrition and health services. In addition, parental knowledge and behavior are also major factors that influence children's growth and development. To overcome stunting, a comprehensive approach involving various sectors is needed, such as improving health services, empowering family economy, nutrition education, and programs that support early stimulation for children. The government also needs to strengthen programs aimed at increasing public awareness of the importance of nutrition and children's health.

Through collaboration between the government, health organizations, and the community, it is hoped that the prevalence of stunting in Indonesia can decrease significantly. This will not only improve the quality of life of children but also contribute to the development of quality human resources in the future

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REFERENCES

Al-Mansoob, M. A. K., & Masood, M. S. A. (2018). The Relationship between Stunting and Some Demographic and Socioeconomic Factors among Yemeni Children and Adolescents. *Advances in Public Health*, *2018*, 1–6. https://doi.org/10.1155/2018/5619178

Elmighrabi, N. F., Fleming, C. A. K., & Agho, K. E. (2024). Factors Associated with Childhood Stunting in Four North African Countries: Evidence from Multiple Indicator Cluster Surveys, 2014–2019. *Nutrients*, *16*(4), 473. https://doi.org/10.3390/nu16040473

Jumhur, J. (2024). The effect of economic growth and poverty on stunting in Indonesia. *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah*, *11*(6), 433–448. https://doi.org/10.22437/ppd.v11i6.26871

Kemenkes. (2018). *Mengenal Stunting dan Gizi Buruk. Penyebab, Gejala, Dan Mencegah*.

Permenkes. (2020). *PERATURAN MENTERI KESEHATAN REPUBLIK INDONESIA*.

Rahut, D. B., Mishra, R., & Bera, S. (2024). Geospatial and environmental determinants of stunting, wasting, and underweight: Empirical evidence from rural South and Southeast Asia. *Nutrition*, *120*, 112346. https://doi.org/10.1016/j.nut.2023.112346

Sutarto, Diana Mayasari, & Reni Indriyani. (2018). *Stunting, Faktor Resiko dan Pencegahannya*. *5*(1), 540–545.

Sutrio, S., & Lupiana, M. (2019). Berat Badan dan Panjang Badan Lahir Meningkatkan Kejadian Stunting. *Jurnal Kesehatan Metro Sai Wawai*, *12*(1), 21. https://doi.org/10.26630/jkm.v12i1.1734

UNICEF. (2020). SITUASI ANAK DI 2020 INDONESIA. In *United Nations Children's Fund (UNICEF)* (pp. 1–78). UNICEF Indonesia.

Unicef. (2024, June 6). *Kemiskinan Pangan Anak: Kekurangan gizi pada anak usia dini*. Unicef.

WHO. (2020). *World health statistics*.

WHO. (2023). *Levels and trenhs in child malnutrition*.