



Community Behaviour in Stunting Prevention in Leuwigoong Village, Leuwigoong Sub-district Garut Regency

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Abstract. This research is motivated by secondary data showing that Indonesia's stunting rate is high. Garut Regency is one of the regions that have the highest stunting rate in West Java and ranks third in Indonesia. Leuwigoong Village, Leuwigoong District is one area that received special attention from the Garut Regency Government because it has a high stunting rate. The purpose of this study was to determine the description of community behavior in preventing stunting. The study was conducted with a descriptive survey of the population of pregnant women, parents with children under five, and adolescents aged 15–18 years. The results showed that stunting was caused by behavioral problems, namely the regulation of diet/nutrition for pregnant and lactating mothers, child-rearing, and poor sanitation. These conditions indicate that community behavior towards stunting prevention is still lacking, which is indicated by the lack of public knowledge about stunting; lack of access to information for prospective parents, pregnant women, breastfeeding mothers, and parents/families with children 6 months – 24 months and 3 – 5 years; Posyandu cadres do not provide specific counseling related to behavior to optimize children's growth and development; and still limited learning media. Recommendations from this study are the importance of increasing public understanding of stunting and its prevention as well as increasing the ability of academics to provide education to students and the public in general regarding stunting so that changes in community behavior in preventing stunting can be carried out massively.

Keywords: stunting · behavior · prevention

1 Introduction

The problem of stunting is a priority to be addressed and has become one of the targets of the Sustainable Development Goals (SDGs) agenda, namely the second target of "finding sustainable solutions to eliminate hunger and all forms of malnutrition by 2030 and achieve resilience food". Currently, the number of children under five in Indonesia who experience stunting is still in the high category. In 2013, the prevalence of stunting in children under five in Indonesia reached 37%, while in 2018 it decreased to 30.8% (UNICEF, 2020). Although within 5 years, the stunting rate has decreased, the number is still high. The number of children under five years of age (toddlers) experiencing stunting

is 8.4 million children, or 1 in 3 children under five in Indonesia experiencing stunting. They are not only from poor families but also from prosperous families (BAPPENAS & UNICEF, 2017). Several research results show that stunting is caused by community behavior problems, especially related to poor diet, parenting, and environmental maintenance. Prendergast & Humphrey (2014) revealed the causes of stunting in developing countries through a chart called the stunting syndrome chart as in Fig. 1.

The green arrow describes the cycle in the First 1000 Days of Life or 1000 HPK, where stunting is usually responsively prevented and given intervention. The yellow arrow represents the stage from the age of 2 years to the middle of childhood or the age of 5 years. At this stage, the child's growth begins to look, unlike the average child. In addition, other syndromes that can be seen at this time are child cognition and child immunity. Even so, this is still difficult to see clearly. Meanwhile, the small yellow arrows indicate the intervention of women-to-be mothers. Maintaining health before pregnancy will prevent stunting in children born. While the red arrow is a time or period that cannot or is difficult to provide intervention.

Based on this description, the best time for stunting prevention interventions is during the 1000 HPK period. To overcome the stunting problem, the Government has established a national strategy to accelerate stunting prevention which is carried out through a multi-sectoral approach by involving all stakeholders in an integrated manner from the central, regional, to village levels. The multi-sectoral approach is not limited to the health sector alone, but also the sectors of nutrition, drinking water and sanitation, care, social protection, and food security.

West Java Province is one of the provinces that is a priority for stunting interventions. From the West Java stunting map, the results of the Nutrition Status Monitoring (PSG) in

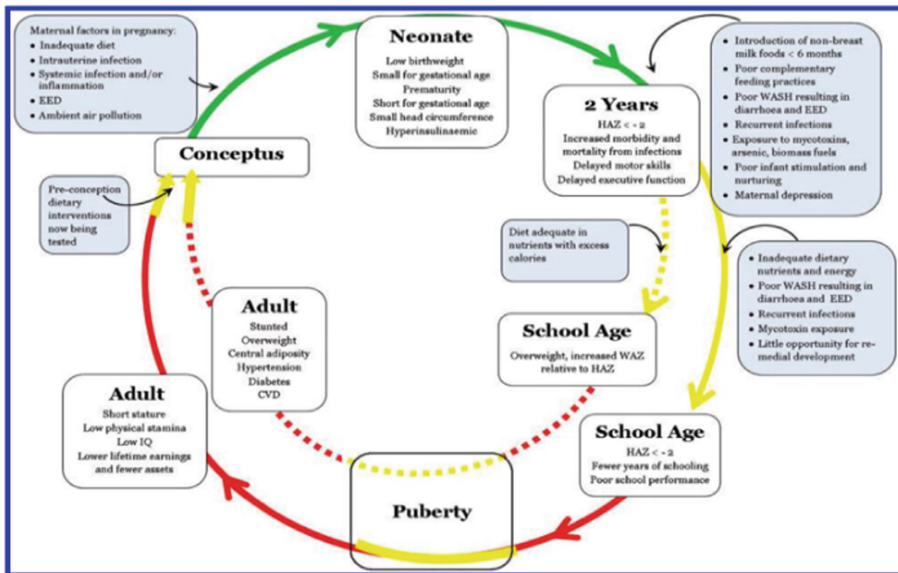


Fig. 1. Stunting Syndrome

2017 show that Garut Regency is included in the red zone with a stunting prevalence of 43.2%. Thus, in 2018 Garut Regency was included as one of 13 regencies/cities in West Java that received stunting interventions from the Central Government in collaboration with the Regional Government.

Based on this background, a study was conducted on community behavior in preventing stunting. The research was conducted in Leuwigoong Village, Leuwigoong District, Garut Regency. The reason for choosing this location is because Leuwigoong Village is an area that has a high stunting rate in Garut Regency. In 2017, 21.7% of toddlers, or a total of 228 children experienced stunting. For this reason, the Garut Regency Government has designated Leuwigoong Village as an intervention village for stunting management. Although interventions have been carried out, stunting cases in this village are still quite high.

Research on community behavior in preventing stunting is focused on how people behave in maintaining their diet (especially for pregnant women and complementary foods for children over 6 months to 2 years), caring for children under five, and maintaining environmental cleanliness. The research targets are community leaders, pregnant women, breastfeeding mothers, caregivers, and young women. This research is expected to contribute to the development of science related to stunting, as well as to the development of strategies to change people's behavior in stunting prevention.

2 Method

This study was conducted using a descriptive method aimed at obtaining an overview of how the behavior of the community in preventing stunting in Leuwigoong Village, Leuwigoong District, Garut Regency. Some of the operational definitions defined in this study are:

- a. Behavior is defined as the knowledge, attitudes, and actions of the community in preventing stunting;
- b. The communities in this study are posyandu cadres, pregnant women, nursing mothers, caregivers, and young women in Leuwigoong Village;
- c. Stunting prevention is knowledge, attitudes, and actions to prevent stunting in terms of eating patterns, parenting, and maintaining personal and environmental hygiene.

Considering that this research was conducted during a pandemic, researchers were faced with several obstacles in determining the sample and collecting data. Therefore the research sample was taken with non-probability with an accidental sampling technique. This technique makes it easier for researchers to find respondents in the field. Based on certain criteria, the researcher conducted interviews with the research targets, namely: 1) pregnant women, 2) breastfeeding mothers, 3) caregivers for toddlers, and 4) young women. Based on accidental sampling, data were obtained from 80 respondents consisting of 20 respondents each for each target. In addition, to complete the data, in-depth interviews were also conducted with five posyandu cadres who are active in stunting prevention.

Data collection techniques used in this study were structured interviews and in-depth interviews. Structured interviews using instruments that have been prepared and have

been piloted. While in-depth interviews refer to guidelines that contain the main topics that must be explored by selected informants, namely posyandu cadres. The data analysis technique used in this research is quantitative and descriptive qualitative data analysis. The data obtained from the initial stage were analyzed descriptively to obtain an overview of knowledge, attitudes, and efforts made to prevent stunting problems. This information was obtained from posyandu cadres. Furthermore, the results of the survey on the knowledge, attitudes, and behavior of adolescents, pregnant women, nursing mothers, and caregivers of children, were analyzed using quantitative analysis techniques. The two data were then analyzed to obtain information about community behavior in preventing stunting.

3 Result and Discussion

The results of this study are in accordance with the theory about the relationship between knowledge and attitudes. Knowledge is one of the factors that influence the formation of a person's attitude. Based on experience and research, if a person has good knowledge then he will also have good behavior. Likewise, knowledge about stunting prevention will influence a person's attitude or behavior in preventing stunting. If a person's knowledge in preventing stunting is good then the attitude shown by that person will also do things that can prevent stunting and vice versa if the knowledge is lacking then the attitude is also lacking in carrying out behaviors that can prevent stunting.

3.1 Characteristics of Respondents

Information on community behavior in stunting prevention was obtained from 80 respondents consisting of 20 pregnant women, breastfeeding mothers, caregivers and other caregivers, and adolescents (35% junior high school, 65% high school). In general, all genders of respondents are female, including other caregivers. If the child should have the right to be cared for by the father and mother, then the value found in Leuwigoong Village is that the care is carried out by the mother while the father earns a living. Six other caregivers became respondents, namely her aunt, grandmother, and sister.

Based on 40 respondents aged children being cared for, most of them are children over 24 months, which is 34.96%, while 26.83% of children still have to get exclusive breastfeeding. Judging from the experience of caring for children, as many as 67.33% of respondents have experienced caring for children over 24 months. In general, they are mothers who have more than one child. The experience of parenting is something that influences how parents/caregivers build their children's personalities from an early age.

3.2 Knowledge About Stunting Prevention

This section describes the knowledge of pregnant women, breastfeeding mothers, caregivers, other caregivers, and adolescent respondents in Leuwigoong Village about stunting prevention. The question asked regarding the knowledge of adolescents about stunting is what they know about stunting. Several alternative answers related to this knowledge are: a) stunting means a state of malnutrition/malnutrition in children, b) disproportionate growth of children, and c) a state of malnutrition/malnutrition in pregnant women.

No	Respondent	Knowledge about Stunting Prevention	
		Know	Don't Know
1.	Pregnant Women, Breastfeeding Mothers, and Caregivers	40,00%	60,00%
2.	adolescent	19,05%	80,95%

3.3 Attitudes Towards Stunting Prevention

Although the results of the study showed that the knowledge of adolescent respondents about stunting was still low, the attitudes of adolescent respondents in Leuwigoong and Rancepato Villages showed that they had a positive attitude toward stunting. This happens because attitude is a view according to adolescents which in this case can still be different from the knowledge possessed by the teenager. Adolescent attitude towards stunting is the tendency of the teenager to agree or disagree with the statement submitted. Several statements related to attitudes that were asked to adolescent respondents included:

- Adolescents who know about stunting will tend to avoid the risk of giving birth to stunting children.
- Giving birth at a young age (under 20 years) will be at risk of giving birth to stunting children.
- Consuming blood-boosting tablets for anemic adolescents regularly can prevent stunting children from giving birth.
- Regular exercise for adolescents in the future can prevent the birth of stunting children.
- Consuming food with balanced nutrition is recommended for adolescents to avoid the risk of giving birth to stunting children.
- Smoking and drinking alcohol are behaviors that can be risky for adolescents/mothers.

3.4 Behavior in Stunting Prevention

Consumption Pattern Behavior of Pregnant Women and Breastfeeding Mothers. The problem of stunting is influenced by low access to food in terms of quantity and quality of nutrition and often does not vary. The term “Fill My Plate” with balanced nutrition needs to be introduced and familiarized in everyday life. From the results of the study, it is known that as many as 52.20% of pregnant women know that good consumption pattern behavior can prevent stunting, and more than 69% of breastfeeding mothers and caregivers do not know about consumption pattern behavior, even as many as 100% of other caregivers do not know about consumption patterns in stunting prevention.

The Behavior of How to Cook Children’s Food based on Mealtime. The best food for children is food that is processed by the family themselves, in this case, the mother because quality and cleanliness are guaranteed. From the research results, more than 70% of mothers in Leuwigoong Village cook their food in the morning, afternoon, and evening.

3.5 Teen Behavior

About Marriage Intention. One of the causes of high stunting cases in Indonesia according to the World Health Organization (WHO) is due to early marriage. Early marriage causes underage couples to be unprepared regarding adequate nutritional intake during pregnancy, psychological maturity, and reproductive organs, as well as knowledge about correct parenting. More than 70% of adolescents in Leuwigoong Village have plans to get married at the age of more than 20 years.

Consumption Pattern Behavior. One of the causes of stunting is influenced by behavioral aspects, especially poor parenting practices in feeding infants and toddlers. Therefore, education about reproductive health and nutrition for adolescents as the forerunner of the family is very important. From the results of the study, it is known that the consumption pattern of 81% of adolescents in Leuwigoong Village does not meet balanced nutrition.

4 Conclusion

Stunting indicated by the Garut District Health Office is the term short stature body condition in children under two years of age compared to children of that age in general. Based on the stunting criteria, two areas are the research locations, namely in locations that have received the intervention and have not intervened related to stunting in Garut Regency. The results of the study revealed that the knowledge, attitudes, and behavior of the primary group, namely pregnant women, nursing mothers, and caregivers in general still need to be improved. Meanwhile, young women have not been touched by stunting prevention efforts and this will be at risk of increasing stunting rates in the future. Behavior change strategies need to be continuously implemented to increase the knowledge and skills of stakeholders to 1) Fulfill balanced nutrition for adolescent girls, pregnant women, and breastfeeding mothers; 2) Use healthy latrines; 3) Maintain personal and environmental hygiene; and 4) Conduct a campaign to reduce the rate of marriage at an early age. Based on the results of the study, the follow-up plans that need to be carried out are: 1) Increasing public understanding about stunting and its prevention through training provided directly to the community and stakeholders in the village/kelurahan area. 2) Improving the ability of academics in providing education to students and the public in general regarding stunting and its prevention.

References

- Aguayo, VM, Nair, R., Badgaiyan, N., Krishna, V.: Determinants of stunting and poor linear growth in children under 2 years of age in India: An in-depth analysis of Maharashtra's comprehensive nutrition survey. *Maternal & child nutrition* 12, 121-140 (2016).
- Angdembe, MR, Dulal, BP, Bhattarai, K., Karn, S.: Trends and predictors of inequality in childhood stunting in Nepal from 1996 to 2016. *International journal for equity in health* 18(1), 1-17 (2019).
- Beal, T., Tumilowicz, A., Sutrisna, A., Izwardy, D., Neufeld, L. M.: A review of child stunting determinants in Indonesia. *Maternal & child nutrition* 14(4), e12617 (2018).

- Beal, T., Le, D. T., Trinh, T. H., Burra, D. D., Huynh, T., Duong, T. T., ... Jones, A. D.: Child stunting is associated with child, maternal, and environmental factors in Vietnam. *Maternal & child nutrition* 15(4), e12826 (2019).
- Cetthakrikul, N., Topothai, C., Suphanchaimat, R., Tisayaticom, K., Limwattananon, S., Tangcharoensathien, V.: Childhood stunting in Thailand: when prolonged breastfeeding interacts with household poverty. *BMC pediatrics* 18(1), 1-9 (2018).
- Choliq, I., Nasrullah, D., Mundakir, M.: Prevention of Stunting in Medokan Semampir Surabaya Through Food Modification in Children. *Humanism: Journal of Community Service* 1(1), 31–40 (2020).
- Hati, F. S., Pratiwi, A. M.: The Effect of Education Giving on The Parent's Behavior About Growth Stimulation in Children with Stunting. *NurseLine Journal* 4(1), 12-20 (2019).
- Hidayat, T. S., Fuada, N.: Relationship of Environmental Sanitation, Morbidity and Nutritional Status of Toddlers in Indonesia. *Journal of Nutrition and Food Research* 34 (2), 104–113 (2011).
- Hossain, M., Choudhury, N., Abdullah, K. A. B., Mondal, P., Jackson, A. A., Walson, J., Ahmed, T.: Evidence-based approaches to childhood stunting in low and middle income countries: a systematic review. *Archives of Disease in Childhood* 102(10), 903-909 (2017).
- Manggala, A. K., Kenwa, K. W. M., Kenwa, M. M. L., Jaya, A. A. G. D. P., Sawitri, A. A. S.: Risk factors of stunting in children aged 24-59 months. *Paediatrica Indonesiana* 58(5), 205-212 (2018).
11. Mataram, I. K. A.: Stunting cause factors in the village of traditional Bali. *International Research Journal of Engineering, IT and Scientific Research* 3(2), 157-164 (2017).
- McGovern, M. E., Krishna, A., Aguayo, V. M., Subramanian, S. V.: A review of the evidence linking child stunting to economic outcomes. *International journal of epidemiology* 46(4), 1171-1191 (2017).
- Prendergast, A. J., Humphrey, J. H., The stunting syndrome in developing countries. *Pediatrics and International Child Health* 34(4), 250–265 (2014).
- Rahmawati, A.: Factors Associated with Parents' Knowledge of Stunting in Toddlers. *Journal of Nurses and Midwifery* 6(3), 389–395 (2019).
- Satriawan, E.: National Strategy for the Acceleration of Stunting Prevention 2018–2024. Jakarta: National Team for the Acceleration of Poverty Reduction (TNP2K). (2018).
- Simamora, V., Santoso, S., Setiyawati, N.: Stunting and Development of Behavior. *International Journal of Public Health Science* 8(4), 427-431 (2019).
- Titaley, C. R., Ariawan, I., Hapsari, D., Muasyaroh, A., Dibley, M. J.: Determinants of the stunting of children under two years old in Indonesia: a multilevel analysis of the 2013 Indonesia Basic Health Survey. *Nutrients* 11(5), 1106 (2019).

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