

DESCRIPTIVE ANALYSIS OF ADOLESCENT KNOWLEDGE ABOUT STUNTING

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ABSTRACT

Handling stunting cases is still a major focus in Indonesia. Stunting as a public health problem related to chronic malnutrition in children has become an important issue in Indonesia, especially among adolescent age groups who can contribute to the prevention of stunting in the future. This study aims to determine the description of adolescent knowledge about stunting. This study uses a quantitative descriptive approach with a survey through a questionnaire. The population of all class X students at MAN Kota Tegal was 467 people. Determination of the sample using the Slovin formula, the number of research samples was 215 people. Inclusion criteria: Class X students, aged between 15-16 years and willing to be a research respondent. Data were analyzed univariately. The results showed that most of the respondents were in the moderate category as many as 100 people (46.5%). In the category of good knowledge level as many as 82 people (38.1%) and the category of poor knowledge level as many as 33 people (15.3%). The level of knowledge of adolescents related to stunting still needs to be improved. Most respondents already understand the general knowledge of stunting, but lack understanding related to the long-term impact of stunting, how to prevent stunting in adolescence and specific nutritional handling of stunting in the family.

Keywords: Adolescent, Knowledge, Stunting

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INTRODUCTION

In order to prepare Indonesia for the golden generation in 2045, many things still need attention from various aspects. One aspect that still concerns all circles is the high incidence of stunting in Indonesia (Rahayu et al., 2022). According to the World Health Organization (WHO) related to the estimation of malnutrition in children (Joint Child Malnutrition Estimates) there are several indicators including stunting, wasting, overweight and underweight which describe the amount and excess nutrition in children. By 2022, there will be 148.1 million (22.3%) stunted children under the age of 5 who are too short for their age. The incidence of wasting, children who are too thin compared to their height, is 45 million. About 13.7 million children under the age of 5 will be severely wasted by 2022. In contrast, there are overweight conditions where 37 million children are overweight compared to their height, or

5.6% of all children under 5 years of age who are overweight in 2022 (WHO, 2024).

Stunting is a condition of failure in child growth and development caused by malnutrition, recurrent infections and poor parenting in children under 5 years of age (60 months). The incidence of height and weight gain is not in accordance with age (Wijaya & Annisa, 2023). Based on Basic Health Research (Riskesdas) 2023 data, the prevalence of stunting in Indonesia in children under 5 years of age is 21.6% (Kementerian Kesehatan, 2024).

The problem of stunting in Indonesia requires handling from upstream to downstream where stunting prevention is one of the focuses of the Indonesian government and various parties to achieve the target of reducing stunting rates by 14% by 2024. The prevalence of stunting in Indonesia has decreased every year, but the reduction rate is still above the limit set by WHO, which is below 20% (Kemenkes, 2023).

All people from all walks of life are expected to know information related to stunting as early as possible, because this condition has a serious effect on the growth and development of children. It even has an effect on their future offspring. One way to minimize and prevent is to provide information or health education to prospective parents who will care for children, in this case starting from adolescence, they have received good information related to stunting (Aini Rahmah et al., 2023).

Malnutrition that occurs in mothers or expectant mothers is strongly influenced by the nutrition obtained from the fetal period, infancy to toddlerhood. Nutritional status in adolescence is one of the factors that has a tremendous impact on the process of pregnancy and the welfare of the baby. Efforts made to prevent stunting are given to all levels of society, starting from pregnant women, birth mothers, toddlers, school-age children, and adolescents. Adolescents are the next generation of the nation, so they must have good knowledge related to stunting in order to prepare for the preconception period. Adolescents who do not get good nutritional intake are feared to give birth to children with stunting conditions (Nugraha Prabamurti et al., 2020).

Efforts to reduce stunting need to be done upstream to reduce the prevalence of stunting in order to prevent the negative impacts that will be caused in the future. The occurrence of stunting in children is caused by the health conditions of pregnant women and when the mother is a teenager. Adolescents are a group that is quite vulnerable to health problems (Rosita Murti Pratiwi et al., 2022).

The purpose of this study was to determine the description of adolescent knowledge related to stunting. Urgency of research the high rate of stunting in Indonesia must be immediately suppressed. Efforts that can be made begin with detecting the level of knowledge about stunting, especially to the adolescent age group.

METHODS

This research method is a descriptive study with a survey through a questionnaire to all class X students at MAN Kota Tegal which aims to

determine the level of knowledge of adolescent about stunting. The research was conducted in January 2025 with the total population being all class X students totaling 467 people. Determination of the sample using the Slovin formula, the number of research samples was 215 people. Inclusion criteria: Class X students, aged between 15-16 years and willing to be a research respondent. The questionnaire was carefully designed with 15 questions covering various aspects of knowledge about stunting, including definitions, causes, impacts, and prevention methods. The questionnaire was tested through validity and reliability tests. The validity test using pearson product moment on the knowledge questionnaire about stunting obtained a validity value of 0.531 - 0.695. The instrument reliability test was carried out using Cronbach Alpha with a reliability of 0.751 so that the questionnaire was said to be reliable. Data were analyzed univariately for frequency distribution.

RESULTS

Table 1 Distribution Characteristics of Respondent

Characteristics of responden	n	%
Age		
15 Years	117	54,4
16 years	98	45,6
Total	215	100
Gender		
Male	94	43,7
Female	121	56,3
Total	215	100

Based on Table 1, it is known that the age of respondents consists of an age range of 15-16 years, where the highest age at the age of 15 years is 117 students (54.4%) and respondents aged 16 years are 98 students (45.6%). The gender of the respondents was mostly female at 112 students (56.3%) and male respondents at 94 students (43.7%).

Table 2 Knowledge of Responden

Knowledge	n	%
Good	82	38,1
Enough	100	46,5
Not enough	33	15,3
Total	215	100

Based on Table 2, it is known that most of the respondents' level of knowledge included in the moderate category as many as 100 people (46.5%). In the category of good knowledge level as many as 82 people (38.1%) and the category of poor knowledge or not enough level as many as 33 people (15.3%).

Table 3 Knowledge about Stunting

Questions	True (n)	False (n)
What do you know about stunting?	161 (74,8)	54 (25,1%)
Child stunting is caused by	186 (86,5%)	29 (13,4%)
Stunting in children is	199 (92,6%)	16 (7,4%)
Here are one of the characteristics of stunting children	208 (96,7%)	7 (3,3%)
One of the short-term effects of stunting is	179 (83,3%)	36 (16,7%)
One of the long-term impacts of stunting is	100 (46,5%)	115 (53,5%)
At which age can stunting in children be clearly seen?	153 (71,1%)	62 (28,9)
According to the family, specific nutritional handling of stunting can be done by	74 (34,4%)	141 (65,6%)
According to the family, handling stunting-sensitive nutrition can be done one of them by	160 (74,4%)	55 (25,6%)
The following is one of the	126 (58,6%)	89 (41,4%)

activities that can contribute to reducing the incidence of stunting		
In preventing children from becoming stunted, parents should provide the following activities		
Stunting prevention management should be carried out during	198 (92,1%)	17 (7,9%)
Can stunted children return to normal?	149 (69,3)	66 (30,9%)
Chronic malnutrition in the first 1000 days of a child's life can lead to	169 (78,6%)	46 (21,4%)
What is the best way to prevent stunting in adolescence?	182 (84,7%)	33 (15,3%)
	69 (32,1%)	146 (67,9%)

Based on Table 3, it is known that there are 15 questions given to respondents through the questionnaire. The most questions answered correctly were questions related to the characteristics of stunting, which is 208 respondents (96.7%). There were 3 questions that were mostly answered incorrectly by respondents, which is questions related to the long-term effects of stunting as many as 115 people (53.3%), specific nutrition handling of stunting in the family as many as 141 people (65.6%) and how to prevent stunting in adolescence as many as 146 people (67.9%).

DISCUSSION

The age range of respondents in this study was class X students aged between 15-16 years. The most age in the age range of 15 years as much as 117 peoples (54,4%) and the age range of 16 years as much as 98 peoples (45,6%). There were 121 female (56,3%) and 94 male (43,7%). A person's age greatly affects the level of knowledge possessed. The higher a person's level of education, the easier it will be to get and

receive knowledge or information. The high school level is categorized as a high level of education in the adolescent age range before entering adulthood and becomes the initial stage in determining identity (Ulfiatun Hasanah & M. Rizal Permadi, 2020).

Stunting is a condition of impaired growth and development/chronic malnutrition in children in the first 1000 days of life. Malnutrition in stunting cases occurs from the time the baby is in the womb and in the early period after the child is born, or in the first 1,000 days of life. But stunting only becomes apparent after the child is two years old (Adyani & Realita, 2023). Stunting can impact intelligence levels, susceptibility to disease, and reduced productivity (Mediani, 2020). In children with normal growth, their brain cells are well developed with long branches (Malinda et al., 2022). In stunted children, the brain cells develop limited, abnormally branched, and have shorter branches than normal children. This affects the child's intelligence level (Mulidah et al., 2022).

From this research, it was found that the level of knowledge of class X students about stunting still needs to be improved, although there are 82 students (38,1%) whose knowledge of stunting is in the good category. Most respondents still lack understanding related to the long-term impact caused by stunting cases. They already understand general knowledge about stunting, but they are still not aware of the serious impacts of stunting. The serious impacts of stunting include impaired child growth and development, suboptimal posture in adulthood, shorter height than people of the same age, increased risk of obesity and susceptibility to non-communicable diseases such as hypertension, heart disease, diabetes, cancer, and others (Lestari et al., 2023). Another impact is having slower cognitive development compared to their peers (Lina et al., 2022).

In addition to the lack of understanding regarding the long-term impact of stunting, respondents also lacked understanding regarding how to prevent stunting in adolescence. Most respondents answered that the way to prevent stunting in adolescence is by doing regular exercise, but there is a more

effective way, which is by giving and consuming blood supplementation tablets. The provision of blood supplement tablets aims to prevent cases of anemia. Anemia is a condition where haemoglobin (Hb) levels in the blood are less than normal which differs according to age group, gender and physiological conditions (Putri Engla Pasalina et al., 2023).

Physiologically, cases of anemia occur when the level of haemoglobin that involves oxygen to the tissues is deficient/decreased (Mursyidah Halim Baha et al., 2021). Anemia that occurs in women of childbearing age is closely related to poor reproductive function, high maternal mortality rates during childbirth, increased cases of low birth weight babies and the occurrence of intrauterine malnutrition (Nuriah Armah et al., 2021).

This is in line with the results of research conducted by Zulaikha (2022) that there is a relationship between the incidence of anemia and the incidence of stunting cases in Indonesia and other countries. This is due to the condition of haemoglobin deficiency or anemia. Pregnant women who suffer from anemia will cause a reduced appetite, so that it will have an impact on impaired fetal nutritional intake while in the womb, which will cause fetal growth disorders and increase the incidence of babies born with low body weight and length (Fatma Zulaikha et al., 2022).

Pregnant women with a history of anemia have a greater risk factor for giving birth to children with stunting than pregnant women who do not have a history of anemia. The fulfillment of iron needs starting during adolescence, the health status of adolescents will be to prepare for adulthood and be ready to reproduce healthy (Putri Engla Pasalina et al., 2023). Adolescent age groups with anemia will have a high risk of pregnancy, childbirth and the postpartum period and will be more likely to give birth to children with stunting incidents (Mursyidah Halim Baha et al., 2021).

Adolescents need to get health education or information related to the importance of consuming nutritious food, implementing a clean and healthy lifestyle in daily life, and providing information related to the dangers if they often

eat junk food fast food. Because the nutritional content in fast food is less or even non-existent. More than 50% of respondents answered questions related to the handling of stunting-specific nutrition in the family by providing additional food (PMT) to pregnant women and providing exclusive breastfeeding. This answer is not correct, because there is something even more effective, which is by providing high-protein foods (meat, chicken, fish). Protein is a molecule found in all living cells and is needed by the body. Protein has a unique role that cannot be replaced by other nutrients, which is to build and maintain cells and body tissues, useful for the growth and repair of cells. Sufficient protein will be able to perform its function well for the growth process (Canny Nur Chastity & M. Shoim Dasuki, 2017).

Concrete collaborative efforts are needed between schools, health facilities and students' families in improving adolescents' knowledge related to stunting. It is necessary to take a holistic approach so that adolescents' knowledge related to stunting can be effective. Adolescents do not just stop at general knowledge, but have a deep understanding or knowledge related to stunting and what is needed to prevent it. Concrete collaborative efforts are needed between schools, health facilities and students' families in improving adolescents' knowledge related to stunting. It is necessary to take a holistic approach so that adolescents' knowledge related to stunting can be effective. Adolescents do not just stop at general knowledge, but have a deep understanding or knowledge related to stunting and what is needed to prevent it.

CONCLUSION

The results showed that most of the respondents were in the moderate category as many as 100 people (46.5%). In the category of good knowledge level as many as 82 people (38.1%) and the category of poor knowledge level as many as 33 people (15.3%). The level of knowledge of adolescents related to stunting still needs to be improved. Most respondents already understand the general knowledge of stunting, but lack understanding related to the

long-term impact of stunting, how to prevent stunting in adolescence and specific nutritional handling of stunting in the family. The level of knowledge of adolescents related to stunting can be increased by providing education. Education can be done at school through brainstorming or discussions about health, especially about stunting. Adolescents who understand the long-term impact of stunting may be more motivated to maintain a healthy diet and support friends and family in stunting prevention efforts. How to prevent stunting in adolescents and address specific nutrition in the family is by eating nutritious food, taking blood supplement tablets, exercising, maintaining hygiene.

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