

RELATIONSHIP KNOWLEDGE AND ATTITUDE TOWARDS STUNTING PREVENTION IN ADOLESCENT GIRLS

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ABSTRACT

Indonesia possesses the second highest prevalence of stunting globally, surpassed only by Cambodia. Stunting is a pervasive problem that impacts not only infants and expectant mothers but even teenagers. Teenage females should be educated about the perils of stunting, including its indications, and the most effective strategies to prevent it by adopting healthful eating habits. Ensuring that adolescent girls do not develop anemia is a vital first measure in effectively avoiding stunting. The prevalence of stunted growth among babies and the occurrence of early marriages remain significantly high in Purbalingga Regency. Adolescents must improve their understanding and reproductive health in order to prevent stunting. The objective of this study is to investigate the correlation between the knowledge and attitudes of teenage girls in the Purbalingga Regency region about the prevention of stunting. This study employs a quantitative research design, a cross-sectional method, with a sample size of 75 female adolescents in Senior High School. The research findings demonstrate a robust correlation between the level of knowledge and the attitudes of teenage females in the context of preventing stunting. The correlation coefficient value of 0.675 and the significance value of 0.000, which is less than 0.01, clearly indicate this.

KEYWORDS

Knowledge, attitude, stunting, adolescent.



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INTRODUCTION

Approximately 162 million children below the age of five have stunting, a significant obstacle to their individual development. Currently, stunting is an ongoing nutritional issue that impacts individuals worldwide. According to research conducted by UNICEF, WHO, and the World Bank, it is projected that around 149.2 million children under the age of five, which accounts for 22% of the global population, would be affected by stunting in the year 2020. If this issue remains unresolved in the near future, projections for 2025 indicate that there will be a staggering 127 billion children experiencing stunted growth (World Health Organization, 2014). Moreover, the survey revealed that 41% of infants in Africa and 53% of toddlers in Asia have stunting. From 2000 to 2020, there has

been a global decline in the prevalence of stunted children under the age of five, with the number decreasing from 203.6 million to 149.2 million (WHO, 2021).

Indonesia has the second-highest rate of stunting globally, behind Cambodia. Based on Indonesia's Riskesdas statistics, the percentage of toddlers experiencing stunted growth or severe stunted growth was 36.8% in 2007, increased to 37.2% in 2013, and subsequently decreased to 30.8% in 2018 (Depkes RI, 2018). The incidence of stunting among toddlers is quite high, standing at 21.6% or 5.33 million, as indicated by data from the Indonesian Nutrition Status Study (SSGI) in 2022 (Kemenkes RI, 2022). Although there has been a decrease in the prevalence of stunting in Indonesia, it still exceeds the 20 percent benchmark set by the World Health Organization (WHO) (Kemenkes RI, 2018). In 2020, Central Java Province ranked fourth in terms of stunting cases, behind Papua, East Nusa Tenggara, West Java, and East Java (Kemenkes RI, 2020).

Stunting is a pervasive issue that impacts not just young children and expectant women, but even teenagers. The prevention of stunting often begins throughout adolescence. It is important to educate adolescent girls about the hazards of stunting, its indicators, and the most effective methods to prevent it through the adoption of nutritious eating habits. Ensuring that future mothers do not have anemia throughout their adolescence years is the initial and crucial measure in effectively preventing stunting (Kemenkes RI, 2016).

According to the 2020 population census estimates, persons born between 1997 and 2012, known as Indonesia's Generation Z, account for 27.943 percent of the country's total population. Based to the 2018 Riskesdas figures, 25.7 percent of adolescents aged 13 to 15 have a nutritional status that is classified as short or very short, while the same is true for 26.9 percent of those aged 16 to 18. The stunting rates in Purbalingga Regency for the years 2023 and 2024 are 11.58% and 11.2% respectively, indicating a rather high prevalence (DKK Kab. Purbalingga, 2024). The statistical data on early weddings in Purbalingga Regency in 2024 indicates a total of 173 instances (Kementrian Agama Kab. Purbalingga, 2024). The data indicates that there is an urgent requirement to improve the nutritional condition of Indonesian adolescents (Kemenkes RI, 2019). If a woman does not consume sufficient food from her teenage years onwards, there is a risk that she may give birth to malnourished children in the future. Subsequently, her offspring would imitate her dietary patterns, initiating a harmful cycle. The initiation of the cycle begins with the health of adolescent females. Addressing stunting should start with early childhood. It is desirable that they maintain a healthy diet as they will ultimately assume the role of parents. Therefore, this research focuses on the relationship between knowledge and attitudes of adolescent girls in the prevention of stunting in the Purbalingga district.

RESEARCH METHOD

This study uses a cross-sectional approach and is quantitative in nature. A questionnaire employing a Likert scale was sent directly to respondents in order to ascertain the link between the attitudes and knowledge of teenage girls about the prevention of stunting. The study, which was carried out in August 2024 at Senior High Schools inside the Purbalingga Regency, was approved ethically by the Dr. Moewardi Regional General Hospital's health research ethics committee under the reference number 1.530/VI/HREC/2024. All female students in the tenth, eleventh, and twelve grades make up the study's population. A sample size of 75 individuals was picked from Senior High Schools in the Purbalingga Regency using the stratified cluster random selection approach using the Lemeshow formula, with 15 respondents chosen from each school. A questionnaire with 22 knowledge questions and 17 attitude statements was used to collect

data. The validity and reliability of the questionnaire have been examined. Univariate analysis is used in this study to characterize the respondent characteristics. Next, the Spearman's Rank test was used to do a bivariate data analysis.

RESULT AND DISCUSSION

Characteristics of Respondents

Table 1. Frequency Distribution of Respondent Characteristics in Purbalingga district area

No	Variable	f	%
a. Age			
1	14 years old	7	9,3
2	15 years old	47	62,7
3	16 years old	15	20
4	17 years old	5	6,7
5	18 years old	1	1,3
Total		75	100
b. Class Level at Senior High School			
1	Class X	65	86,7
2	Class XI	2	2,7
3	Class XII	8	10,7
Total		75	100
c. Number of Siblings			
1	0 people	12	16
2	1 people	31	41,3
3	2 people	24	32
4	3 people	5	6,7
5	4 people	2	2,7
6	5 people	1	1,3
Total		75	100
d. Number of Family Members In One House			
1	2 people	9	12
2	3 people	15	20
3	4 people	34	45,3
4	5 people	10	13,3
5	6 people	5	6,7
6	7 people	2	2,7
Total		75	100
e. Availability of Iron Tablets (Fe) Every Week			
1	No	48	64
2	Yes	27	36
Total		75	100

Description: Precessed 2024 Reasearch Data

The chart above indicates that 47 respondents, or 62.7 percent, are 15 years old, which is the most common age of respondents. Of the responders, 65 (86.7%) are in the tenth grade, which is the highest amount. Four family members (45.3%) make up the largest number of household members, although one sibling (41.3%) is the most typical number. Furthermore, 48 respondents, or 64 percent, do not use iron supplements (Fe).

Research Variabel Data

Table 2. Frequency Distribution of Research Variabel Data in the Senior High Schools in the Purbalingga Regency

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge	75	66	110	94,99	12,175
Attitude	75	51	85	74,77	7,178

Description: Precessed 2024 Reasearch Data

The knowledge variable has a mean value of 94.99, whereas the attitude variable has a mean value of 74.77, according to Table 2. The lowest and maximum values for knowledge are 66 and 110, respectively. In contrast, the attitude scale has a minimum value of 51 and a maximum value of 85.

Bivariate Analysis

Table 3. Relationship Knowledge And Attitude Towards Stunting Prevention In Adolescent Girls

			Knowledge	Attitude
Spearman's rho	Knowledge	Correlation Coefficient	1,000	.675
		Sig. (2-tailed)		,000
		N	75	75
	Attitude	Correlation Coefficient	.675	1,000
		Sig. (2-tailed)	,000	
		N	75	75

Description: Precessed 2024 Reasearch Data

Table 3 demonstrates a high positive correlation coefficient of 0.675, indicating that teenage girls' views toward stunting prevention improve with more knowledge. The knowledge and attitude variables have a significant or meaningful association, as indicated by the significance value of 0.000, which is less than 0.01.

In the era of digitalization 5.0, knowledge can be acquired through various sources such as social media, posters, and other media. Additionally, education on the significance of consuming nutritious food and iron supplements, as well as health promotions conducted by city and provincial health departments, play a crucial role in addressing stunting among teenage girls. Repeating the results obtained from studies done on teenagers is anticipated to enhance the conduct of teenage females in preserving their well-being. The non-compliance of adolescent females is influenced by the inadequate provision of education and health promotion by schools in partnership with nearby community health centers, which would offer instruction on the consequences of stunting for adolescent females. Additionally, the lack of motivation among adolescent females to seek supplementary information or perspectives from media or other sources contributes to this issue. Prior studies suggest that participants possess a high level of understanding as a result of reproductive health education provided in schools in conjunction with the local Health Office and community health centers. This education promotes adherence to the use of Iron (Fe) tablets (Savitri et al, 2021).

According to the conducted study, it is established that there are several factors that either promote or impede the intake of iron supplements tablets among teenage girls. These elements include personal characteristics, sociopsychological factors, school rules and commitments, and the quality of the iron pills offered. Personal characteristics that impact the usage of iron supplements pills among teenage females encompass knowledge, motivation, self-efficacy, and attitudes. Adolescent girls' strong understanding of the advantages of iron supplements and anemia, as well as their effects, is a key motivator for them to take iron pills. On the other hand, a limited understanding among teenage girls regarding the meaning, reasons, consequences, and indications of anemia; the proper way to consume iron tablets; and the potential dangers associated with not taking iron supplements might impede their willingness to utilize these supplements. For instance, there are teenage females who exhibit hesitancy in taking iron supplements due to their belief that it is inappropriate to eat them during menstruation. The limited awareness among adolescent females may stem from inadequate exposure to information on anemia and the iron supplements they are provided, such as through educational institutions and healthcare

professionals, as well as a dearth of accessible health-related resources (Silitonga, et al., 2023).

The ingestion of iron supplement pills in teenage females is positively associated with internal drive, high self-efficacy, and a happy attitude (Apriningsih et al., 2020). Conversely, the sensation of good health or the belief that iron supplements are unnecessary might impede the consumption of these pills among teenage females (Alfiah, et al., 2020). Research conducted in South Jakarta has revealed a notable correlation between attitudes and the intake behavior of iron pills among teenage females during menstruation. Similarly, a study conducted in Semarang discovered a correlation between self-efficacy beliefs and perceived advantages with adherence to the ingestion of iron tablets (Anisa et al., 2022). Both motivation and efficacy have the potential to impact behavior. The perception of anticipated advantages is also a robust indicator of behavior. Consequently, if teenage females see no necessity to ingest iron supplements due to the absence of potential benefits, the consumption of iron pills may diminish (Prabandari et al, 2022). Furthermore, a considerable number of adolescent females neglect to use iron supplements due to forgetfulness (Seminar et al., 2020).

The sociopsychological factor is another influential aspect that affects the usage of iron supplements among teenage girls. The sociopsychological elements that influence teenage females include parental and peer influences. Parents have a substantial influence on the adherence of teenage females to taking iron supplements. Insufficient parental understanding and beliefs about anemia and iron pills might impact the compliance of teenage females in taking these supplements, since parents may forbid their daughters from eating them. A study conducted in East Java and East Nusa Tenggara revealed that some parents prohibit their adolescent daughters from taking iron supplements due to apprehensions about potential adverse effects, the potential for elevated blood pressure in teenage girls, and the likelihood of developing a reliance on the medication. In contrast, parents who offer assistance, such as by reminding or supervising the intake of iron supplements, can promote adherence to iron tablet use among adolescent females (Nurjanah et al., 2023).

Adolescent females may be more inclined to take iron supplementation pills if they are surrounded by classmates who also use them (Seminar et al., 2020). On the other hand, the presence of classmates who are unwilling to take iron supplementation pills might impede the acceptability of the iron supplementation program among teenage females (Silitonga et al, 2023). Friends can be a sociopsychological element that has the potential to impact a person's behavior. In addition, being a teenage girl who serves as a peer leader in the iron tablet supplementation program at school, responsible for distributing iron tablets, is also recognized for promoting the uptake of iron tablets among teenage females. Peer pressure can impact an individual's inclination to participate in a specific action. Being appointed as a peer educator in the iron tablet supplementation program might exert social influence, motivating teenage females to adhere to the use of iron pills (Prabandari et al, 2022).

One of the factors that influence knowledge is age. Most of the respondents are in middle adolescence, specifically fifteen years old, and are still learning about cognitive maturity. Other factors, such as experience, also greatly influence a person's knowledge. Attitude is a reaction or response that remains concealed from an individual towards a stimulus or object. A person's attitude towards an object consists of feelings of support or favor and feelings of disapproval or neutrality towards that object. One of the factors that influence attitude is experience (Dharmastuti, 2017). Respondents have diverse experiences in obtaining information about reproductive health, resulting in different attitudes among adolescent girls.

This means that someone who has a supportive attitude usually possesses good knowledge. Meanwhile, someone who has a non-supportive attitude typically has less knowledge as well. Thus, teenage girls who have good knowledge about reproductive health will have a supportive attitude towards stunting prevention. This is in line with Notoatmodjo's opinion, that a person who has a supportive attitude usually possesses good knowledge. Meanwhile, a person who has a non-supportive attitude typically has less adequate knowledge (Notoatmodjo, 2014).

Factors that influence attitudes include personal experiences, the influence of others, cultural influences, mass media, educational institutions, and religious institutions. Someone who gains experience in obtaining reproductive health information will be able to determine what is good and what is not in socializing. The factor of experience leaves a strong impression, as attitudes are formed when experiences occur in emotionally charged situations. Experiences influence the perception of social stimuli. Responses will become the foundation for the formation of attitudes. To receive a response, one must have experience related to the psychological object in question (Azwar, 2016).

In this era of globalization, sources of reproductive health information largely come from the internet, which makes it easy for everyone to access. The advancement of communication media technology, along with external factors such as uncontrolled social interactions without parental guidance, has led teenagers to feel free to do whatever they desire. In the research by Misrina and Safira in 2020, it was shown that there is a significant relationship between the knowledge of adolescent girls and premarital sexual behavior, with a p-value of 0.037.

CONCLUSION

The findings of this study demonstrate a robust association (correlation coefficient of 0.675) between the knowledge and attitudes of teenage females in preventing stunting. Expanding the scope of this study in the future by augmenting the sample size and incorporating additional factors like parental support and peer support would provide a deeper understanding of the involvement of teenage females in preventing stunting.

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