

# The Effectiveness of Explanation Methods of Lectures and Poster Media on Stunting Knowledge in Eligible Woman in Aceh Jaya Regency

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## Abstract

Nutritional status is a condition caused by a balance between nutrient intake from food needed for body metabolism. The aim was to determine the effectiveness of knowledge about stunting before or after counseling the lecture method and poster media for women of childbearing age in Alue Ambang Village, Teunom District, Aceh Jaya Regency. The type of this research is *Quasi-experimental design* with pre-test and post-test designs. The population of this study amounted to 250 people. The sample in this are 154 people. The data were tested with the Wilcoxon test. The research conducted, it is known that counseling using the lecture method and poster media regarding knowledge of stunting in women of childbearing age is considered very effective, it can be seen from the level of knowledge of women of childbearing age about stunting after being given counseling their knowledge increases compared to before being given counseling. P Value  $0.000 < 0.05$ , which means statistically it shows there is a difference in increasing knowledge of lecture method counseling and poster media about stunting knowledge in women of childbearing age. It is recommended that health workers and Integrated Health Center cadres use the lecture method and poster media in conducting counseling.

**Keywords:** Nutritional Status; Lecture Method; Media Poster; Stunting; Eligible Woman.

## Introduction

Nutritional status is a condition caused by a balance between nutrient intake from food and the nutritional needs needed for body metabolism. Everyone requires a different intake of nutrients between individuals, this depends on the person, gender, body activities in a day, and weight (Amalia F, 2018). A person's Nutritional Status shows how much the physiological needs of the individual have been met. The balance between the incoming nutrients and the nutrients needed for optimal health is important. When a person's nutritional needs are fulfilled to support the daily needs of the body and any increase in metabolic needs, the individual will achieve optimal nutritional status (Siti Andina Rachmayani, 2018).

According to UNICEF data in 2017, there are 92 million (13.5%) under-fives in the world underweight, 151 million (22%/) under-fives experience stunting and 51 million (7.5%) under-fives experience wasting. Most of the toddlers in the world who experience underweight, stunting, wasting come from the continents of Africa and Asia (Sugiyono, 2017).

The incidence of toddlers or commonly called stunting is one of the nutritional problems experienced by toddlers in the world today. In 2017, 22.2% or around 150.8 million children under five in the world experienced stunting (Hawi et al, 2020). However, this figure has decreased when compared to the stunting rate in 2000, which was 32.6%. In 2017, more than half of the world's stunted children came from Asia (55%) while more than a third (39%) lived in Africa. Of the 83.6 million stunted children under five in Asia, the highest proportion came from South Asia (58.7%) and the lowest proportion in Central Asia (0.9%). (Risksdas, 2018).

The results of the Basic Health Research survey (Risksdas, 2018) show that Aceh has the third highest prevalence of stunting in children under five in Indonesia, which is 37.3% compared to the national average of only 30.8%. The prevalence of stunting in Aceh is much higher than the provinces of Papua, Maluku and other provinces in Eastern Indonesia. The higher stunting rate occurs in children under two years, where Aceh is ranked first with the highest prevalence of stunting (37.9%) compared to the National

prevalence rate of only (29.9%).

Stunting in toddlers should get attention because it can cause stunted physical growth, mental development, and health status in children. Recent studies have shown that stunting in children is associated with poor school performance, low levels of education and low incomes as adults. Stunting cases in children can be used as a predictor of the low quality of a country's human resources. Stunting causes poor cognitive abilities, low productivity and increases the risk of disease resulting in long-term losses for the Indonesian economy (Rachmawati *et al.*, 2021)

Stunting is closely related to the level of education. According to Riskesdas, it shows that the incidence of stunting is largely influenced by the income and education of parents who are low, especially mothers. This is in line with research conducted in Mexico that mother's education is very important in relation to nutritional knowledge and fulfillment of family nutrition, especially children, because mothers with low education, among others, will find it difficult to absorb nutritional information so that children are at risk of stunting. education level of mothers with stunting (Rachmawani, 2018)

## Methods

This research method uses quantitative methods. This type of research is *Quasy Experiment* with pre-test and post-test (Notoatmodjo, 2012). In this case, it is to find out a description of the knowledge of women of childbearing age about stunting in *Alue Ambang*, Aceh Jaya Regency. This research was conducted in *Alue Ambang*, Aceh Jaya Regency. The research was conducted on November 9, 2021, namely conducting a pre-test, on November 18, 2021 conducting counseling, and on November 18, 2021 conducting a post-test. The population is the entire object under study. The population in this study were 250 women of childbearing. The sample is part of the population. The formula used to determine the number of samples is using the *Slovin formula*. After using the formula calculation, a sample of 154 women of childbearing age will be used as respondents.

## Result

**Tabel 2.** Frequency Distribution of Respondents Knowledge About Stunting in *Alue Ambang*, Aceh Jaya Regency

Knowledge	Pre Test		Post Test	
	N	(%)	N	(%)
Good	38	24,7	101	65,6
Enough	66	42,9	51	33,1
Less	50	32,5	2	1,3

Total	154	100	154	100
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Source: *Primary Data (Processed in 2021)*

Based on the table above, it shows that the pre-test knowledge of respondents who have good knowledge are 38 respondents (24.7%), respondents who have sufficient knowledge are 66 respondents (42.9%) and respondents who have poor knowledge are 50 respondents (32.5). While the post test showed that respondents who have good knowledge are 101 respondents (65.6%), respondents who have sufficient knowledge are 51 respondents (33.1%), and respondents who have poor knowledge are 2 respondents (1.3%).

**Tabel 3.** Uji Wilcoxon

Variable	N	Mean	P Value
Pre Test_Knowledge	154	13,06	
Post Test_Knowledge	154	16,36	0,000

Source: *Primary Data (Processed in 2021)*

From the results of the *Wilcoxon test* on the effectiveness of teaching lectures and media posters about knowledge of stunting in women of childbearing age in *Alue Ambang* Village, 154 respondents found that the average post test score (16.36) was higher than the average score. the average pre-test (13.06) and it is known that P-Value:  $0.000 < 0.05$ , it means that statistically there is a difference in knowledge of stunting in women of childbearing age before (pre-test) and after (post-test).

## Discussion

Based on table 2, the lecture method counseling and poster media about stunting knowledge in women of childbearing age in *Alue Ambang*, Aceh Jaya Regency as many as 154 respondents, it is known that the average post-test score (16.36) is higher than the the average pre-test (13.06) and it is known that P-Value:  $0.000 < 0.05$ , which means statistically it shows that there are differences in stunting knowledge in women of childbearing age in *Alue Ambang*, Aceh Jaya Regency. As for the post-test results, several questions that increased in number were answered correctly compared to incorrect answers, namely questions about the definition of stunting, when a baby should be breastfed, nutrition needed for pregnant women in an effort to prevent stunting, stunting can be prevented, pregnant women who are chronically deficient in energy. , limited ante natal care services for pregnant women, septic tank distance as an effort to prevent stunting, anemic adolescent girls who are at risk for later giving birth to stunting children, consuming blood-added tablets, and whether stunting can be handled.



While the questions that decreased in number were answered correctly compared to incorrect answers, namely questions about the meaning of exclusive breastfeeding, first given complementary feeding, weighing infants and toddlers at the Integrated Health Center to prevent stunting, actions in preventing stunting, immunization, stunting prevention measures, reproductive health, action in stunting prevention, clean water sanitation. In addition, there are questions which, when answered before counseling, can be answered by women of childbearing age but after counseling women of childbearing age cannot. For this reason, one way to increase one's knowledge is by providing education through counseling using the lecture method and poster media. Health counseling is a health education activity, which is carried out by spreading messages, instilling confidence so that people are not only aware, know and understand, but are willing and able to carry out recommendations related to health (Al Rahmad & Almunadia, 2017).

The lecture method is an oral narrative of learning materials and is a combination of memorization, discussion and question and answer methods. According to Muhaimin, et al, the lecture method is a combination of memorization, discussion and question and answer methods (Jehudin, 2016).

Posters are one of the most visible graphic media as a medium for delivering messages. Graphic media is a visual media that presents facts, ideas, and ideas through words, sentences, numbers, and various symbols or pictures. This media has the function of channeling messages from the source of the message to the recipient of the message, attracting attention, clarifying the presentation of ideas, illustrating facts that are quickly forgotten so that they are easy to remember if illustrated graphically or through a visualization process, simple and easy to manufacture (Megawati, 2017).

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respondents' knowledge for the level of good knowledge from 56% (pretest) to 70% (posttest). Based on the t-test obtained p value  $0.000 < 0.05$ . This means that health promotion actions influence increasing respondents' knowledge about hypertension.

It is also supported by previous research conducted by Jehudin (2016) about "the effectiveness of poster media and audio-visual (video) on mother's knowledge about pulmonary TB (a case study in Winong Village, Pati District, Pati Regency)", based on the results of the study, the value obtained was significant P value  $0.000 < 0.05$  so there is a significant difference in respondents' knowledge about pulmonary TB before and after counseling using audio-visual media (Video).

This research is also supported by research conducted by Dian, E.N.W & Suryani. P. (2019) show that the contribution of family functions, knowledge, and attitudes in children under five with stunting" with the results of the study showing that there is no relationship between family function and nutritional status ( $P = 0.553$ ,  $r = 0.053$ ), but knowledge ( $P = 0.004$ ,  $r = 0.249$ ) and attitudes ( $P = 0.000$ ,  $r = 0.637$ ) has a relationship with nutritional status. Family knowledge and attitudes determine the nutritional status of stunted children. Regarding "Back From guide on the side to sage on the stage? The effect of teacher-led teaching methods and student activation on student learning in higher education" This field study compares the effectiveness of teacher-led teaching methods and student activation. Experts on 80 courses were combined with self-report data from 1713 students who attended the courses. Controlling student interest at the individual level and for course format, homework, and initial interest at the course level, two-level pathway with number of teacher-guided methods and student activation as predictors, and student final interest, subjective learning, and accepted academic competency development as criteria – all mediated by student cognition – reveal the opposite effect of the two methods. The teacher-led method trains by increasing students' cognitive interaction, interest, learning achievement, and development of academic competence, while the student activation method tends to show a negative effect.

This research is also supported by research conducted by Nuryanto (2017) about the influence of comic media on eye health knowledge in children" with the results of the research conducted a significant value of P value  $0.005 < 0.05$  then  $H_a$  is accepted, meaning that there is a difference between the level of students' knowledge of eye health before being given health education with comic media and after being given health education with comic media.

In addition, it is also supported by previous research conducted by Fischer (2019) regarding "nutrition education for pregnant women to prevent stunting in the class of pregnant women" with the results of the research conducted obtaining significant values for knowledge and attitudes P value of each respectively 0.000 and 0.003 <0.05, based on this it can be concluded that there is a significant effect of giving pregnant women classes on increasing knowledge and attitudes about stunting prevention.

It can be concluded that the lecture method counseling and poster media about stunting is one way to find out the planned increase in knowledge of individuals, groups and communities from not knowing about stunting so that they know, and from not knowing how to prevent stunting so that they know. The change in knowledge after being given counseling on the lecture method and poster media about stunting in women of childbearing age was very significant. This change occurred due to several factors, including the provision of lecture method counseling and poster media about stunting, delivered clearly and in detail, not long-winded so that women of childbearing age receive clear information, counseling interventions using the lecture method and poster media about stunting where and media used to clarify the idea or message conveyed, besides that it can also recall what has been conveyed through the poster media. The material delivered through the lecture method is exactly the same as the questions on the pretest and posttest questionnaires, so that women of childbearing age can immediately understand and answer the posttest questions correctly, the information provided is in accordance with the needs of women of childbearing age about stunting so that at the time of the intervention, counseling was given to the lecture method and media. Posters of women of childbearing age enthusiastically hear, see and read the information presented by researchers.

## Conclusion

From the results of the study on the Effectiveness of Lecture Methods and Media Posters on Stunting Knowledge in Women of Childbearing Age in Alue Ambang Village, Teunom District, Aceh Jaya Regency, it can be concluded that Counseling using the lecture method and poster media regarding knowledge of stunting in women of childbearing age in Alue Ambang Village, Teunom District, Aceh Jaya Regency is considered very effective, it can be seen from the level of knowledge of women of childbearing age about stunting after being given counseling their knowledge increases compared to before being given counseling.

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## Author Contribution and Competing Interest

Contributing authors for this research are interested in Formal analysis and Validation data and compiling the manuscript.

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