

# Video Effect for the Prevention of Knowledge Increasing Stunting in State High School 1 Children in Topoyo Central Mamuju

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## Abstract

The purpose of this study was to find the influence of video compared to videos plus and increase knowledge for the prevention of stunting in the State high school students in Topoyo Central Mamuju. The research was conducted on February 1, 2018 until February 1, 2019. The research in State High School Topoyo Central Mamuju regency of West Sulawesi province. The population of this study were all male and female students at State High School Topoyo totaling 710 people. While the control sample by using a ratio of 1 : 1 the number of control samples as much as 171 respondents. So the total sample of 171 + 171 = 342 respondents. Knowledge changes from pre-test to post test after intervention by watching videos and video learning material plus 1000 HPK and prevention of stunting among children under five had an influence (the measurement result  $p = 0.000$ ); then tested in the control group did nothing to influence the control group ( $p = 0.713$  measurement results); and the use of video plus in learning there is no difference between the video and the video plus (the measurement result  $p = 0.640$ ). It is recommended that pWhat Knowledge society about the golden period of life known as the first 1,000 days of life needs to be established early to the students so that Central Mamuju Regency Health Office, needs to create a joint program with the school so that the students' understanding as the nation becomes more qualified generation.

**Keywords:** Knowledge, Stunting, HPK. Pregnant woman

## Introduction

Based on data from the Global Nutrition Report, Indonesia is onranking top 15 from behind<sup>1-3</sup>. So that Indonesia is considered as the 15th worst in the world after Madagascar stunting<sup>2-4</sup>. Sequence worst stunting in the world the following are: Timor Leste amounted to 57.7 percent, Madagascar amounted to 49.2 percent, Guatemala amounted to 48.0 percent, Pakistan amounted to 45.0 percent, Lao People's Democratic amounted to 43.8 percent, Republic Mozambique amounted to 43.1 percent, Nigeria amounted to 43.0 percent, Malawi amounting 42.4 percent, the Central African Republic by 40.7 percent, amounting to 40.4 percent of Ethiopia, Chad amounted to 38.7 percent, India by 38.7 percent, amounting to 38.5 percent of Mali and Indonesia is rated fifteen world with stands at 36.4 percent<sup>5</sup>.

One third of children stunted in the world is India, and children in rural areas worst affected<sup>6-8</sup>. The determinants of stunting among children in rural indigenous and odisha jharkhand, India, requires intervention and treatment<sup>9,10</sup>. The World Health Organization (WHO) reported that a total of 49.2% of children were chronically malnourished in Madagascar<sup>11</sup>, Placing the country suffered the highest prevalence of stunting in the world. Short children as a result of chronic malnutrition, causing adverse consequences of short-term and long-term if not addressed at an early age<sup>6</sup>, Short-term risks are susceptible to various infectious diseases such as diarrhea and pneumonia due to a weakened immune system<sup>12</sup>. Toddlers with nothing short category stood at 52.0 percent. This means that there are approximately 48.0 percent of children under five in West Sulawesi who suffered stunting. It shows much higher than the national average there is difference in numbers about

10.2 percent compared to 37.2 pesen national stunting<sup>13</sup>.

Learning media is the messenger technology that can be used for learning purposes. So learning media is a tool that can be used for learning. The types of instructional media according to taxonomy Leshin, et al (in Arsyad, 2002: 79-101) are as follows: (a) human-based media is the medium used to transmit and communicate the role or information; (B) print-based media is most commonly known are textbooks, handbooks, workbooks or exercises, journals, magazines and loose sheets; (D) visual-based media (image) in this case plays a very important in the learning process in schools; (D) based audiovisual media combines the use of sound require additional work to produce it; (E) a computer-based media choose different functions in the field of education and training, the computer acts as a manager in the learning process, known as the

Computer Managed Instruction (CMI). This research “The Effects of Increasing Knowledge Against the video for the prevention of stunting among children under five in State High School Topoyo in Central Mamuju.” This study used a quasi-experimental or quasi-experimental.

### Materials and Method

The research design uses “Quasy-Experiment”, namely pre-test and post-test with control group design. The research was conducted at the date of February 1, 2018 until the date of April 1, 2019. The research in State High School Topoyo Central Mamuju regency of West Sulawesi province. The population of this study were all male and female students at State High School Topoyo Central Mamuju Regency, which amounted to 710 people. By using proportional random sampling. Total sample of 171 respondents totaled treatment and control sample as many as 171 respondents.

### Results and Discussion

**Table 1. characteristics of Respondents**

characteristics n		Intervention group		Control group	
		%	n	%	
Gender	Man	53	31.0	121	70.8
	woman	118	69.0	50	29.2
	total	171	100	171	100
Age (Years)	16 years	12	7.0	20	11.7
	17 years	113	66.1	91	53.2
	18 years	46	26.9	60	35.1
	total	171	100	171	100
Education Parents	Elementary School	89	52.0	101	59.1
	Junior High School	36	21.1	19	11.1
	Senior High School	34	19.9	50	29.2
	PT	12	7.0	1	0.6
	total	171	100	171	100
Parents' job	farmer	125	73.1	150	87.7
	Government Employes	9	5.3	11	6.4
	entrepreneur	37	21.6	10	5.9
	total	100	100	171	100

The table above shows that respondents aged 17 years more than other respondents as many as 113 respondents (66.1%). More female respondents than male respondents as many as 118 respondents (69.0%). Parental education more respondents completed primary school (primary school) other than as many as 89 respondents (52.0%). Respondents' parents work more farmers than other jobs as many as 125 respondents (73.1%).

To determine the student's absorption associated with this video presentation, first pre-test on two groups. The first group is called the group of cases and the second group is called a control group. The case group targeting State High School 1 Topoyo. The number of students as many as 710 people. By using the formula Slovin obtained a sample of 171 people. In applying these samples using the technique of proportional sampling conducted in 18 classes. Each member of a representative sample in each class taken at random, but still consider the representation of the sexes. At the time of randomization to enroll students who are elected to the sample in each

class. Members of the sample is what will be the target of experimentation as follows: (a) first, follow the pre-test by answering a questionnaire distributed to each class in accordance with a list of predetermined sample; (B) second, watch video learning material 1000 HPK on the first day and watch the instructional video with 1000 HPK material accompanied by explanations of the teacher / instructor (in this experiment researchers who act as teachers / instructors) on the second day. Intervention / treatment on the first day done in four classes with each set schedule so as not to interfere with the learning process. Intervening on the second day was also performed on four classes to organize their own schedule; (C) third, following the post-test twice. Post the first test done after the intervention / treatment on the first day (watch the video) and the first post-test is also done post-intervention / treatment on the second day (watch video plus explanations of teachers / instructors). Post second test carried out on the fifth day post-intervention / treatment performed on each class based on the target that the research samples.

### Research Result

**Table 2. Student Knowledge Level Before and After Intervention in Central Mamuju Regency, West Sulawesi, 2018**

Group	Knowledge	Measurement results				p
		Pre Test		Test Post		
		n	%	n	%	
intervention Video	Well	131	76.6	19	87.1	0,000
	Less	40	23.4	22	12.9	
	Total	171	100	171	171	
Control	Well	128	74.9	37	21.6	0.672
	Less	43	25.1	134	78.4	
	Total	171	100	171	100	

Table 2. showed that the intervention group Pre Test measurement results with both categories of 131 (76.6%) and the category is less by 40 (23.4%); while the measurement results of Post Test with both categories of 149 (87.1%) and the category is less by 22 (12.9%); while the value of  $p = 0.000$ , which means that there is the effect of the intervention to the

respondent in improving knowledge in the prevention of stunting in State High School 1 Topoyo Central Mamuju regency of West Sulawesi province. The control group Pre Test measurement results with both categories of 128 (74.9%) and the category is less by 43 (25.1%); while the measurement results of Post Test with both categories by 37 (21.6%) and less category amounted

to 134 (78.4%); while the value of  $p = 0.672$ , which means that in the control group there was an increase of knowledge because no intervention on the students of Vocational High School 1 Topoyo Central Mamuju regency of West Sulawesi province.

**Table 3. Knowledge Level Differences With Use of Video and Video Plus in State High School 1 Topoyo Central Mamuju Regency, West Sulawesi, 2018**

Group	Knowledge	Measurement results		p
		n	%	
Video	Well	84	49.1	0.640
	Less	87	50.9	
	Total	171	100.0	
Video Plus	Well	128	74.9	
	Less	43	25.1	
	Total	171	100.0	

Table 3. shows that knowledge of respondents viewing through video with good category were 84 respondents (49.1%) and less category total of 87 (50.9%); knowledge of respondents viewing through video plus good category as many as 128 respondents (74.9%) and less category as many as 43 respondents (25.1%); whereas the results of the analysis of differences in the level of knowledge after watching the video and video plus is  $p = 0.640$ , which means there is no difference in the level of knowledge after watching the video and video plus or in other words.

### Discussion

The first results, namely that there is a significant effect of pre-test to post-test in the treatment group. It is clear that knowledge is formed when there is the stimulus provided by the sources of knowledge. Stimulus will respond strongly in case of the sensory impression. Received knowledge will be stored in memory until the specified time will be released back into the raw knowledge to someone. The stronger the person's knowledge of something, it is determined that a deep impression received by the human brain. Impression is also influenced by the experience of a person against such knowledge. So that a person's level of knowledge to be better if it has a better experience on such knowledge. The experience in question is never gain the

same knowledge repeatedly. For example, the provision of material on nutrition only incidentally do it, it will be different results if done systematically. In addition to the influence of the frequency of administration of knowledge, it is also influenced by the intensity or the power of knowledge. For example, knowledge of which is given sporadically, would be different if knowledge is only given spontaneously. By him, knowledge is not only determined at the time of its formation, but how to maintain the required knowledge, including elevation. also influenced by the intensity or the power of knowledge. For example, knowledge of which is given sporadically, would be different if knowledge is only given spontaneously. By him, knowledge is not only determined at the time of its formation, but how to maintain the required knowledge, including elevation. also influenced by the intensity or the power of knowledge. For example, knowledge of which is given sporadically, would be different if knowledge is only given spontaneously. By him, knowledge is not only determined at the time of its formation, but how to maintain the required knowledge, including elevation.

The second result, that there was no significant effect of pre-test to post test in the control group, it is clear that knowledge of a person does not have restrictions on the sources from which it came. When the students of Vocational High School 1 Topoyo, not given the intervention or treatment that does not mean knowledge of the *1000 HPK* is not owned, because the sources of knowledge can come from anywhere. Sources of knowledge at this time are manifold, ranging from the conventional sources of knowledge such as interpersonal communication, also with the involvement of the simplest medium to modern. Ranging from personal media to social media, such as media phones, mobile messaging to facebook, whatsapp (wa), and others. It's just that being able to explore knowledge specifically requires a focus on specific learning. In addition, Vocational High School students do not really discuss matters relating to certain subjects (such as biology and the like).

The third result, it is known that there is no difference between the two methods use video and video plus, it is explained that the video plus does not mean there has a better ability for a process of confirmation given by the teacher or instructor. Only the confirmation process does not occur because students are more passive after watching the video. Supposedly after watching a process of confirmation or interactive porses. This confirmation

process in accordance with the theory of communication that requires a transformation in communication feedback or feedback so that doubts on the received knowledge, could confirmed back to the communicator or on a media source. In the communication process terbesar doubt an obstacle to acceptance or adoption of a message in the form of knowledge.

The significant difference in the forms of such treatment. New knowledge is essentially formed from the existing knowledge is then used in a particular context. The process of formation of knowledge through shared experiences while interacting directly. For example one can know the knowledge about child care because he had been taking care of children. Formation of knowledge by transforming knowledge into explicit form. For example, concepts, drawings and written documents. An effective way to externalization is through dialogue. Formation of knowledge to manage existing knowledge from both inside and outside in the form of more complex and systematic.

### Conclusions

Knowledge changes from pre-test to post test after intervention by watching videos and video learning material plus 1000 HPK and prevention of stunting among children under five had an influence (the measurement result  $p = 0.000$ );

Then tested in the control group did nothing to influence the control group ( $p = 0.713$  measurement results);

Plus the use of video in learning there is no difference between the video and the video plus (the measurement result  $p = 0.640$ ).

**Ethical Clearance-** Taken from Faculty of Public Health committee

**Source of Funding-** Self

**Conflict of Interest** – Nil

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