# The Effectiveness of Audio Visual Media Intervention Aku Bangga Aku Tahu (Abat) On Knowledge of Street Children In Prevention of HIV & AIDS Transmission In Makassar

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#### ABSTRAK

Transmission of HIV & AIDS generally starts from risky behaviors such as free sex. Free sex is closely related to premarital relationships that are often found in groups of teenagers to young adults including street children. This study aims to determine the effectiveness of ABAT audio visual media interventions on the knowledge of street children in the prevention of HIV & AIDS transmission in Makassar City. The study design uses a quasy experimental approach with the Nonequivalent Control Group Design. Sampling using non probability sampling by purposive sampling. The research sample consisted of 48 intervention groups and 47 controls. Bivariate data analysis using SPSS statistical applications, using the non parametric two related sample (Wilcoxon) test and Mann Whitney. The results showed that the average knowledge score before and after the intervention, where the mean value  $\pm$  SD was 11,25  $\pm$  1,952 to 19,17  $\pm$  1,894 with a p value (p = 0,001) in the intervention group, and at the mean value  $\pm$  SD in the control group was  $12,17 \pm 2,729$  to  $18.02 \pm 1,882$  with a p value (p = 0,001) which meant that there were significant differences in knowledge before and after the ABAT audio-visual media intervention. The results of the mann whitney test showed that there was a difference in knowledge after the intervention of ABAT audio-visual media playback three times and once with p value (p = 0,003). It can be concluded that ABAT's audio-visual media interventions are three times more effective than just once. Provision of health information can then be emphasized on aspects that are not vet properly understood such as lifestyle choices and the use of condoms for the prevention of STIs and HIV & AIDS.

#### INTRODUCTION

The current of globalization has entered all aspects of the life of the Indonesian people. Lifestyle changes have shaped the type of people with consumptive lifestyles that have an impact on the social life of the community to the countryside. The shift

of values from the traditional to the modern, such as hedonic lifestyle, localization, drug trafficking, free sex, which ends in the transmission of the Human Immunodeficiency Virus (HIV).

Globally, in 2012 an estimated 2.1 million adolescents (10-19 years) were



living with HIV in low and middle income countries. However data on adolescence is still limited, so little information is available about progress in preventing new infections or preventing death for the adolescent age group. In sub-Saharan Africa, the percentage of adolescents (15-24 years) who show a comprehensive and accurate understanding of HIV is low (36% for young men and 28% for young women) (UNAIDS, 2013).

Transmission of HIV & AIDS generally starts from risky behaviors such as free sex. Free sex is closely related to premarital relationships that are often found in groups of teenagers to young adults. According to Etrawati et al (2017) as many as 5% of adolescents claimed to have had premarital sexual relations before 13 years of age. This makes them have a high risk of transmitting sexually transmitted diseases and unwanted pregnancies, especially when changing partners. One group of adolescents who have a high risk because of their condition that supports deviant behavior is street children.

Strengthening the skills of street children can be done by increasing knowledge about HIV & AIDS. One government program that aims to increase good knowledge about HIV and AIDS in the 15-24 years age group is through the Aku Bangga Aku Tahu (ABAT) program which is a campaign to prevent the spread of HIV & AIDS so that youth groups can protect themselves and not be infected. Evianasari et al (2017) research results state that there is an influence of audio-visual media I'm

Proud I Know about the knowledge of adolescents about HIV & AIDS in Bandar Lampung "P" High School.

Based on the explanation above, this study aims to look at the effectiveness of audio-visual media interventions, I'm Proud I Know (ABAT) on the knowledge of street children in the prevention of HIV & AIDS transmission in Makassar City.

#### **METHOD**

### Research Design and Location

This research was conducted in Makassar City, South Sulawesi Province. This research uses quasy experimental with The Nonequivalent Control Group Design. In this study three measurements will be carried out, once before the intervention and twice after the intervention.

# Population and Sample

The population in this study were all street children who have been recorded at the Makassar City Social Service in 2018 as many as 232 people. The total sample totaled 97 people consisting of 48 intervention group respondents and 47 control group respondents. Respondents in this study are street children aged 15-18 years and are willing to follow the research.

#### Data Collection

Data collection in this study was conducted by the researchers themselves by distributing questionnaires during the pre-test and post-test. The measuring instrument used was ABAT questionnaire to measure respondents' knowledge which consisted of 25 questions. In the intervention group, giving ABAT audio visual media was

given three times and the control group once. Pre-test is given after intervention, then post-test is given after two weeks and one month after pre-test.

# Data Analysis

Data processing is using Statistical Package for Social Science (SPSS) 22 for Windows. Quantitative data were analyzed by bivariate analysis using Wilcoxon and Mann Whitney tests to assess the effectiveness of ABAT audio visual media interventions on knowledge of HIV and AIDS in street children.

#### RESULTS

Table 1 Distribution of Respondents by Characteristics in the Intervention & Control Groups

	Street Children				TF 4 1	
Characteristics	Intervention		Control		Total	
	n	%	n	%	n	%
Age						
15 years	18	37,5	19	40,4	37	39
16 years	10	20,8	11	23,4	21	22
17 years	20	41,7	17	36,2	37	39
Gender						
Male	28	58,3	29	61,7	57	60
Female	20	41,7	18	38,3	38	40
Education						
Elementary School	11	22,9	2	4,3	13	13,7
Junior High School	37	77,1	45	95,7	82	86,3
Occupation						
Busker	12	25	14	29,8	26	27,4
Parking officers	8	16,7	10	21,3	18	18,9
Seller	18	37,5	8	17	26	27,4
Not Working	10	20,8	15	31,9	25	26,3

Table 1 shows that the characteristics of respondents based on age in the intervention and control groups were mostly at age 15 years and 17 years by 39% (37 people). Whereas respondents with the age of 16 years are the least 22% (21 people). Based on gender, the majority of respondents were male as many as 57 people (60%) and women as many as

38 people (40%). As for the education level of respondents, the most at the junior level were 82 people (86.3%) and at least at the elementary school level were 13 people (13.7%). Characteristics of respondents based on work mostly worked as sellers and buskers each by 27.4% (26 people). While at least work as a parking attendant at 18.9% (18 people).



Table 2 Distribution of Respondents' Knowledge Categories Before and After Intervention

	Street Children				
Knowledge Category	Intervention		Cor	ntrol	
	n	%	n	%	
Pre Test					
Less $(\leq 9)$	12	25	10	21,3	
Enough (10-18)	36	75	37	78,7	
Good (≥ 19)	0	0	0	0	
Post Test 1					
Less $(\leq 9)$	0	0	0	0	
Enough (10-18)	16	33,3	27	57,4	
Good (≥ 19)	32	66,6	20	42,6	
Post Test 2					
Less (≤ 9)	0	0	0	0	
Enough (10-18)	15	31,3	31	66	
Good (≥ 19)	33	68,7	16	34	

Table 2 shows that in the intervention group before being given the audio visual media intervention ABAT (pre-test) was in the moderate category at 75% (36 people) and at least in the less category at 25% (12 people). After being given the audio visual media intervention ABAT and carried out posttest 1 there was an increase to a good category by 66.6% (32 people) and a sufficient category

by 33.3% (16 people). In the control group prior to ABAT (pre-test) audiovisual media intervention, it was also in the moderate category of 78.7% (37 people) and at least in the less category, namely 21.3% (10 people). In post-test 1 increased by 42.6% (20 people) in the good category and 57.4% (27 people) in the moderately category.

Table 3 Differences in Knowledge of Respondents Before and After Intervention in the Intervention Group

		ldren				
Knowledge	n	Median (Min-Max)	Mean±SD	lmogorof Smirnov	p	
Pre Test	48	11 (8-16)	11,25±1,952	0,029	0.001	
Post Test 1	48	19 (12-23)	19,17±1,894	0,014	0,001	
Post Test 1	48	19 (12-23)	$19,17\pm1,894$	0,014	0.505	
Post Test 2	48	19 (14-23)	$19,29\pm1,957$	0,003	0,505	



Table 4 Differences in Knowledge of Respondents Before and After Intervention in the Control Group

		Street Children				
Knowledge	n	Median (Min-Max)	Mean±SD	Kolmogorof Smirnov	p	
Pre Test	47	12 (8-18)	12,17±2,729	0,019	0,001	
Post Test 1	47	19 (12-21)	$18,02\pm1,882$	0,015	0,001	
Post Test 1	47	19 (12-21)	$18,02\pm1,882$	0,015	0.211	
Post Test 2	47	19 (14-21)	17,72±1,753	0,027	0,211	

Table 5 Differences in the Effectiveness of ABAT Three Times and One Time Against Knowledge of Respondents

	Street Children				
Knowledge	Post	Post	p		
	Test 1	Test 2			
Intervention					
Min	12	14			
Max	23	23	0,505		
Mean	19,17	19,29	0,303		
Standar	$\pm 1,894$	1,957			
Deviasi					
Control					
Min	12	14			
Max	21	21	0.211		
Mean	18,02	17,72	0,211		
Standar	$\pm 1,882$	$\pm 1,753$			
Deviasi					
p**value	0,003	0,001			

Bivariate test results in this study are shown in table 3 and table 4. Based on the results of the analysis using the Wilcoxon test, the significance value was 0,001 (p <0,05) in the intervention group and the significance value was 0,001 (p <0,05) in the control group. Thus it was concluded that there were differences in knowledge before and after the ABAT audio-visual media intervention three times and once. The results of the mann whitney test show

that the ABAT intervention was three times better than just one time with a p value (p = 0.003) < 0.05).

## DISCUSSION

Adolescent Based on the explanation above, this research is important to see the effectiveness of audio-visual media interventions Aku Bangga Aku Tahu (ABAT) on the knowledge of street children in the prevention of HIV & AIDS transmission in Makassar City.

Based on the results of the analysis showed that the age of the respondents in this study were at the age of 15 years and 17 years. Based on gender, most of them are male. In general, male has riskier behavior than women. For example the case of men having the behavior of drinking, smoking and dealing with dangerous work. Research conducted by Azriful et al (2016) also states that male street children dominate more than female street children. That was caused by several things, such as threats of violence, sexual harassment and other threats. Men who are male also have the potential to engage in risky behaviors such as drug use and free sex. This statement is



supported by the research of Azmiyati et al (2014) in Semarang which states that most street children use drugs every day on the side of the road, under the bridge to get the effects they want, such as strong stamina at work, not drowsiness and create feelings of pleasure.

Prevention of HIV AIDS transmission is the responsibility of each individual. In addition, the factors that play a role in the process of individual awareness to take precautions knowledge. Therefore we need effective learning method to increase the knowledge of teenagers, especially street children. The learning method used in this research is health education using audiovisual media Aku Bangga Aku Tahu (ABAT). The CIE Media Communication. Information Education) ABAT is a tool for leveling true and comprehensive knowledge about HIV & AIDS.

Based on the results of the study note that the knowledge of respondents in the pre-test are mostly in the sufficient category. After implementing the ABAT intervention three times, the majority of respondents' knowledge improved and was in the good category. The test results also showed that there was a difference in knowledge between before and after the ABAT audio visual media intervention three times. Research conducted by Ho et al (2018) also shows that audio-visual media is effective in increasing secondary understanding school students' and secondary science reproductive topics. Most respondents agreed that the use of audio-visual media increased their interest in learning and increased the ability of respondents to learn and

remember subject matter. Furthermore, in post-test 2, the respondent's knowledge has again increased and statistically, it was concluded that there was no difference in knowledge between the first post-test and the second post-test.

The results of the analysis in the control group also showed that there were differences in knowledge before and after ABAT audio-visual media intervention once. This is in line with research conducted by Yanti et al (2015) which states that there is an influence before (pre-test) and after (post-test) the provision of health education using audiovisual media on adolescent knowledge about prevention efforts against sexually transmitted diseases. This increased knowledge shows that the information conveyed can be well stored completely by street children. Audio visual media can increase knowledge because it involves hearing and vision, so that the results obtained are more optimal. Audio-visual media not only produces effective learning in a relatively short time, but the material received can be stored longer in memory (Meidiana et al., 2018).

Furthermore, the results of the posttest 2 analysis in the control group showed that there was no difference in knowledge between the first post-test and second post-test. This research is in line with research conducted by Ifroh et al (2018) regarding the effectiveness of the combination of ABAT audio-visual media and group discussions in an effort to increase adolescent knowledge about HIV & AIDS. The study also obtained results that the level of knowledge of research subjects increased and was in the good category after the ABAT audiovisual media intervention. The average knowledge of the intervention group was 95.63 and the control group was 91.46. However, there were no statistically significant differences in changes in the value of knowledge about HIV & AIDS between the intervention group (film screenings accompanied by group discussions) and control groups (film screenings). It can be concluded that audio-visual media intervention alone can increase adolescent knowledge.

Other research conducted in the Philippines also received the same result that audio-visual media can be used to increase the retention of adolescent knowledge and skills in science lessons and can be replicated in other fields (Lapada et al., 2017). Other areas in question include knowledge about HIV & AIDS including understanding, ways of transmission, treatment and prevention that can be applied to adolescents, including groups of street children.

Based on the analysis results obtained that there are differences in knowledge between the intervention group (giving audio-visual media three times) and the control group (giving audio-visual media one time). In this study, there was a significant increase in respondents' knowledge even though the analysis showed that there were differences between the two forms of intervention. Therefore, it is necessary to repeat ABAT audio visual media playback repeatedly to obtain maximum results. This is in line with the theory put forward by Notoatmodjo (2010) which states that after people finish learning, it will be followed by a process of forgetting. The forgotten proportion first

increases, then slows down, and finally what remains can be stored for a long time. Therefore, to reach the proportion that is remembered to be sufficient, the learning process must be repeated and not too long.

#### CONCLUSION AND SUGGESTION

Based on the results of the study it can be concluded that the intervention of audio-visual media is three times more effective than the one-time intervention in increasing the knowledge of street children in Makassar. To that end, the provision of further health information should be given repeatedly and emphasized aspects that are not yet properly understood such as lifestyle choices and condom use for the prevention of STIs and HIV & AIDS.



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