

The Effect of the Video "Young Smart Without Drugs" Is Effective In Increasing Adolescents' Knowledge About Drugs

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ABSTRAK

Background: The prevalence of drug abuse in 2019 was 0.80% of the total population of West Kalimantan province. Students, especially at the high school/vocational level, are at the top of the drug abuse list. **Objective:** This study aims to determine the effectiveness of education through animated video media "Young Smart Without Drugs" on adolescents' knowledge about drugs in class XI at SMK Negeri 4 Pontianak. **Methods:** This research is a pre-experimental research with one group pretest and posttest design. The population in this study were all grade XI students at SMK Negeri 4 Pontianak in the 2021/2022 school year, totaling 592 students. **Results:** There is a significant difference in knowledge before the intervention (4.80) and after the intervention (9.73) of the animated video education "Young Smart Without Drugs". The test results obtained a p value of 0.000 <0.05. **Conclusion:** Animated video media "Young Smart Without Drugs" can be an alternative media used in education to increase adolescents' knowledge in preventing drug abuse.

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1. INTRODUCTION

Based on data from the World drugs report from the United Nations Office on Drugs and Crime (UNODC) in 2020 around 275 million people in the world abuse drugs, and 18 million lives as a result of premature death caused by drug use¹. The BNN survey revealed that drug users in Indonesia until November 2016 reached 5.9 million people. The prevalence of drug abuse in Indonesia in the student sector as a whole in the last year was 3.2%, or equivalent to 2,297,492 people. The prevalence rate of high school students who have ever used drugs ranks top compared to junior high school students and university students. At the high school level, the prevalence rate of high school students who have ever used and have used drugs in the past year is 6.4%. The prevalence rate of university students who have ever used drugs is below that of high school students at 5.0%, and the next lowest is junior high school students at 4.8%².

West Kalimantan (Kalbar) Province is known that the prevalence rate of drug abuse in 2019 was 0.80% of the total population of the province of West Kalimantan.². Pontianak City with drug users in 2020 amounted to 116 people. The number of drug users of high school students in 2020 ranks top with 33 people compared to junior high school students totaling 32 people and elementary school students totaling 24 people. The West Pontianak sub-district area is included in the top 3 sub-districts with the highest number of drug use cases in Pontianak City with 22 users³.

Adolescents generally feel pressure to conform to group norms and expectations. If adolescents struggle with their tasks, they tend to engage in risky behaviors such as self-harm, promiscuity, escapism, smoking, drinking alcohol, and even drug abuse⁴. The National Narcotics Agency (BNN) released its survey findings regarding drug users as a whole, which turned out that 24 percent of them were students. The number of students from elementary school (SD) to high school (SMA) or vocational high school (SMK) amounts to 50 million children. This indicates that many Indonesian teenagers are abusing drugs for fun or pleasure⁵.

Some of the factors that motivate adolescents to abuse drugs include a lack of knowledge⁶. adolescents need to be educated about drug abuse and its dangers to reduce drug abuse in the community⁷. The results of previous research explain that 15.7% of students lack knowledge about drugs⁸. The same research also states that the first factor influencing drug abuse among adolescents is the lack of knowledge in adolescents⁹. Other research shows that knowledge is not good because of a lack of understanding of the information received, in addition to being indifferent and having a tendency to continue using drugs because they have experienced addiction¹⁰. Increasing knowledge can be done by education, this is in line with research which states that there is a significant increase after providing education¹¹. Other studies have also shown the effectiveness of health education on adolescent attitudes in preventing Narcotics, Psychotropic and Addictive Substances (NAPZA) Abuse¹². One of the media that can be used in this education is health education through video media because it has advantages in terms of providing good visualization so as to facilitate the absorption of knowledge¹³.

This research was conducted at SMK Negeri 4 Pontianak, West Pontianak District, Sungai Beliung Village, Pontianak City. The reason for choosing the location in the school is because no research has been conducted on drug-related education and the school has the largest population at the vocational high school (SMK) level in Pontianak City, totaling 1,928 students and students at SMK Negeri 4 Pontianak are teenagers. Adolescents are the most prone age to experience problems of deviation and may be

affected by promiscuity, in adolescence, preventive measures by increasing knowledge about drugs need to be improved, because this will greatly affect the life of the nation and state in the future.

The purpose of this study was to determine the effect of the video media "young smart without drugs" on the level of drug knowledge in adolescents.

2. METHODS

This study used *pre-experimental* research with a *one group pretest and posttest design*. The population in this study were all grade XI students at SMK Negeri 4 Pontianak in the 2021/2022 academic year in June 2022 totaling 592 students. The sample size in this study was calculated using the paired analytical research formula / experiment¹⁴:

$$n = \left(\frac{(z_\alpha + z_\beta)S}{x_1 - x_2} \right)^2$$

Description:

z_α = standard deviation of alpha (1.96)

z_β = standard deviation of beta (1.64)

S = standard deviation

$X_1 - X_2$ = Mean value after-before previous research intervention $89.00 - 65.45 = 23.55$ ¹⁵

Calculation:

The minimum mean difference that is considered meaningful is $(X_1 - X_2) = 23.55$, while the standard deviation is not found from the literature, so the judgment of the difference in knowledge level before and after education is 2 times the minimum mean difference that is considered meaningful ($S = 47.1$), so the following calculation can be done:

$$n = \left(\frac{(z_\alpha + z_\beta)S}{x_1 - x_2} \right)^2$$

$$n = \left(\frac{(1,96 + 1,64)47,1}{23,55} \right)^2$$

$$n = 52$$

So, the sample size obtained based on the results of the calculations that have been rounded up is 52 respondents, plus 10% of the total sample size, namely 6 people to avoid sample dropout, the total sample size is 58 respondents. Sampling was taken using *probability sampling* technique, namely *proportionate stratified random sampling*. In this study, the intervention is an animated video made by the researcher with a duration of 5 minutes, which contains the definition of drugs, the dangers of drugs for adolescents, the types of drugs, the impact of drugs in general, factors of drug abuse, efforts to prevent drug use.

The measuring instrument calculated is a questionnaire made in the form of a *kobocollect*. The answer to each questionnaire item submitted is *multiple choice* type. Data were obtained from respondents' answers that were considered correct on the questions provided in the questionnaire. The collected data were analyzed by univariate analysis in the form of respondent characteristics in the form of frequency tables and bivariate analysis using the *Wilcoxon test*. Analysis testing was carried out using a computer application program.

The sample was divided into 3 groups/sessions. Each session was \pm 17 respondents. Respondents filled out the respondent's consent sheet, pretest questionnaire through the link distributed for \pm 15 minutes, then given treatment, namely watching an animated video with the title "Young Smart Without Drugs" for \pm 5 minutes once, then measuring filling out the posttest questionnaire for \pm 15 minutes.

3. RESULTS

The results showed the characteristics of respondents in gender, the number of male respondents was 67.3% greater than female respondents who totaled 32.7%. A total of 63.5% of research subjects were 17 years old. 36.5% of respondents' parents' jobs as entrepreneurs. 48.1% of respondents' parents' income > Rp 3,000,000.

Table 1.
Respondent Characteristics

Characteristics	n = 52	%
Gender		
Male	35	67,3
Female	17	32,7
Age		
15 years	2	3,8
16 years old	14	26,9
17 years old	33	63,5
18 years old	2	3,8
19 years old	1	1,9
Parental Occupation		
PNS	16	30,8
TNI/Polri	5	9,6
Private Employee	8	15,4
Self-employed/entrepreneur/trader	19	36,5
Laborers (farmers, fishermen etc.)	4	7,7
Parents' Income		
>Rp 3,000,000	25	48,1
IDR 1,000,000 - IDR 3,000,000	22	42,3
IDR 500,000 - IDR 1,000,000	5	9,6

Source: Primary Data, 2022

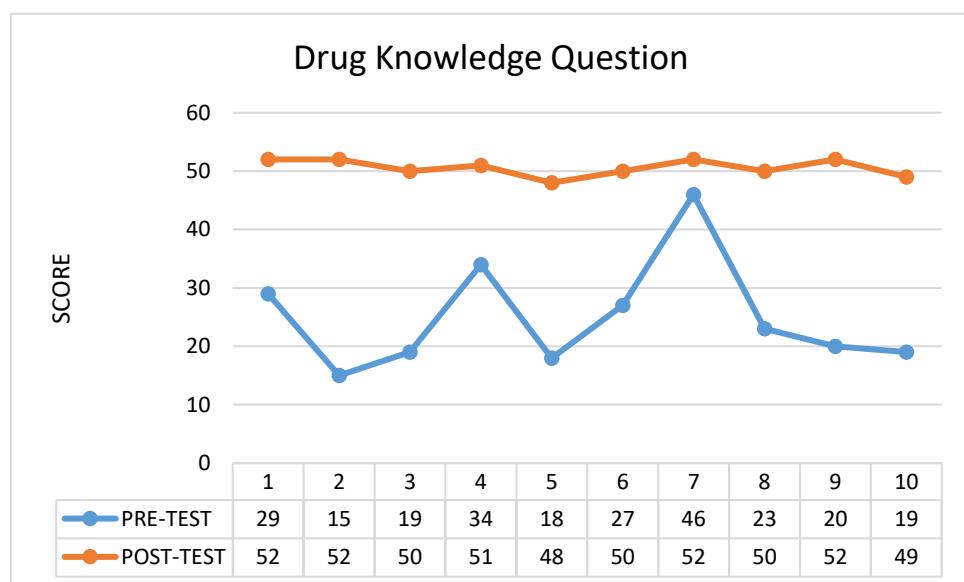
Table 2. Wilcoxon Test Results (Pretest and Posttest Knowledge)

Measurement	N	Mean (SD)	Minimum-Maximum	Mean Difference	P Value
Pretest	52	4,807 (1,920)	1-9		
Posttest	52	9,730 (0,597)	8-10	4,923	0,000

Source: Primary Data, 2022

Based on table 2, from the results of the Wilcoxon test, it is found that the p value is $0.000 < 0.05$, so there is a difference before and after being given the animated video education "Young Smart Without Drugs" on the level of drug knowledge in adolescents.

Figure 1
Figure Graph of Respondents' Knowledge Improvement



Based on Figure 1 above, it can be seen that the highest increase in respondents who answered correctly on pretest knowledge questions was on knowledge questions about "The Impact of Drug Use on Students" as many as 46 respondents. While in the posttest there were questions about "The Extent of Drugs, the Effects of Types of Drugs, the Impact of Drugs, and How to Prevent yourself from Drugs" as many as 52 respondents. can be caused because the content in the video animation media researchers explained clearly and well along with pictures about the question.

4. DISCUSSION

This study shows that there is a significant difference in knowledge between before and after being given the animated video education "Young Smart Without Drugs" on the level of drug knowledge in adolescents. This is supported by research conducted by Hayati (2020) that there is an effect of education with audio visual media on knowledge of drug abuse prevention. Providing the right education is like using audio visual media. It is hoped that adolescents can apply drug abuse prevention measures obtained from education so that they can help prevent drug abuse properly¹⁶. This study is in line with Fuad's research (2017) showing that there is effectiveness before and after education using video media on student knowledge about drugs. Changes in

respondents' knowledge influenced by education are the material provided, educational media, and targets throughout the material presented quite interestingly which can be seen from the enthusiasm of respondents¹⁷.

Another study conducted by Anggraeni (2016) also stated that there were differences in knowledge levels after being given health promotion through video media. Providing health promotion really helps students understand about drug abuse¹⁸. It is also supported by Idealistina's research (2020) that there is a relationship between education and knowledge in early adolescents about the dangers of drugs. After being given education, it has a positive impact on individuals. Sufficient knowledge that individuals have becomes good knowledge¹⁹. The results of this study are in line with the results of research by Wiyani (2017) showing an increase in knowledge after education obtained from 0 respondents (0%) with good knowledge to 31 respondents (77.5%) with good knowledge after education²⁰.

The same research conducted by Fajjurahman (2022) states that education using videos is more effective in increasing adolescent knowledge²¹. The results of this study are in line with the research of Govender et Al (2019) showing that education with video animation is acceptable, interesting, informative and relevant for most cancer patients. Therefore, animated videos are not only useful as intermediate education but also have the potential to influence patients' desire to carry out preventive interventions²². It is also supported by Lin's research (2018) which explains that learning procedural knowledge from animated visualizations reduces the difficulty felt by learners when compared to static visualizations²³. Another study conducted by Kor et Al (2014) states that animation media can be an option to support the learning process because it is believed that interactive and visual materials make lessons more enjoyable and increase student motivation²⁴.

Figure 2
Animated Video Media



[\(Play Video Here\)](#)

Education is needed to improve a person's knowledge and abilities through learning practice techniques or individual instruction to increase health awareness so that they consciously want to change their behavior to be healthy, an important step in education is to create messages that are tailored to include media selection, here researchers use video media to convey information that can have a significant effect on increasing knowledge.

5. CONCLUSIONS

The results showed that there were differences before and after being given the animated video education "Young Smart Without Drugs" on the level of drug knowledge in adolescents. Schools can provide animated video media "Young Smart Without Drugs" to increase knowledge to all students about drugs. This animated video media can be used as an educational media for drug prevention in adolescents.

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Author Contribution

SM: collect and analyze data,

IA: conceptualizing and designing research

LS: reviewing empirical studies

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