



THE EFFECT OF HEALTH EDUCATION WITH THE BUZZ GROUP METHOD ON NARCOLEMA BEHAVIOR IN ADOLESCENTS

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ABSTRACT

Narcolema behavior is an activity to seeking satisfaction from sexual desires or urges that involve physical, mental and emotional using internet or computer media, this condition occurs because of curiosity about sexuality in adolescents. This study aims to determine the effect of health education with the buzz group method on narcolema behavior in class X adolescents at Senior High School Tuban Regency. The research design used in this study is Quantitative Pre-experimental : pre-post test (one group pre-post test design) with a cohort approach. The population in this study were all class X adolescents of Senior High School 3 Tuban as many as 36 adolescents and Senior High School 1 Bancar as many as 35 adolescents with a total population of 71 adolescents selected by cluster random sampling technique obtained 30 adolescents from each school. The researcher will administer a pre-test (initial observation) before providing the treatment (x). After the treatment is given, a post-test (final observation) will be conducted. This procedure is carried out to determine the difference between the pre-test and post-test results. This study uses a cohort approach to collect data, so that the effect of health education using the Buzz Group method on narcolema behavior among adolescents at Senior High Schools in Tuban Regency can be determined. The results of the study conducted after being analyzed using the Wilcoxon test with a significance of $\alpha < 0.05$ were proved to reduce narcolema behavior with a value of $p = 0.000 < 0.05$ which means H_1 is accepted, namely there is an influence of health education with the buzz group method on narcolema behavior in class X adolescents. From the description above, it can be concluded that health education with the Buzz Group method affects narcolema behavior in class X adolescents at Senior High School Tuban Regency.

Keywords: adolescents; buzz group health education; narcolema behavior

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INTRODUCTION

Narcolema is currently a new phenomenon among teenagers, including those in Tuban Regency. Narcolema, or drugs through the eyes, is caused by adolescents' curiosity about sexuality, leading to a desire to access pornography. Technological advances have made it easier to access and distribute pornography. A lack of understanding of the dangers of narcolema is one factor contributing to the high rate of access to pornography by teenagers. High access to pornography can lead to addiction, making it difficult to let go of negative thoughts, fueling curiosity and a desire to experiment. This, in turn, can lead to adultery, incest, sexual harassment, rape, and many other deviant sexual behaviors, including homosexuality. This is a disaster for the younger generation, as morals are damaged, leading to a loss of the ability to distinguish between right and wrong. Several experts have stated that pornography has become a point of entry for sexual crimes, with the object and even the subject of sexual crimes. (Winarti et al., 2021).

According to data from ECPAT (End Child Prostitution, Child Pornography, and Trafficking of Children for Sexual Purposes) Indonesia, the consumption of pornographic content in Indonesia is alarming. A survey conducted by an American adult video hosting site found Indonesia to be the second-highest user of pornographic videos after India. In 2019, approximately 50% of adolescent pornography addicts in Indonesia reported having sexually abused another child (Raharja, 2019).

Based on a preliminary survey conducted by researchers through interviews with guidance and counseling teachers and students at Senior High School 3 Tuban in November 2022, guidance and counseling teachers stated that they had encountered students accessing pornographic videos during teaching and learning activities. Furthermore, a questionnaire survey of 20 students revealed that 11 had intentionally viewed or downloaded pornographic images or videos on their smartphones. Factors that can influence the development of narcolema include individual attitudes, adolescent self-control, and parental supervision. Individuals with negative attitudes toward pornographic media believe that pornography can provide positive benefits and inspire them, leading to feelings of enjoyment and sexual behavior (Purwaningsih et al., 2020).

Pornography, which humans commonly access through the eyes, has a more severe damaging effect on the brain than drug users. Pornography addiction will damage the part of the brain called the PFC (Pre Frontal Cortex), which is the part of the brain that functions as a center for consideration and decision-making (Hilton & Watts, 2011). Early symptoms of damage to the brain's PFC include impaired concentration, decreased ability to weigh right and wrong, and reduced ability to make decisions. Not only that, pornography addicts are also more difficult to detect than drug addicts, said Dr. Mark B. Kastlemaan, a pornography addiction expert from the USA, at the 'Executive Seminar on Overcoming Pornography Addiction' at the Grand Kemang Hotel, Jakarta, Monday (27/9/2010) (Diana, 2018). Given the high number of cases of pornography access among adolescents, there is a need to improve adolescent knowledge, attitudes, and actions, which will hopefully raise awareness of drug addiction. Several efforts can be made to increase knowledge and awareness among adolescents, one of which is through health education using methods that can stimulate active participation, such as buzz groups.

Buzz groups are a health education method that divides a larger target group into smaller groups to discuss a specific task, encouraging teenagers to actively participate in expressing ideas or opinions. The benefits of buzz groups include helping teenagers express ideas or opinions within the group, fostering a friendly and enjoyable atmosphere, and encouraging each member to participate in the discussion. Research by Winacy, Raksanagara, and Fuadah (2015) showed that health education using the buzz group method can improve adolescents' knowledge more effectively than lectures or brainstorming methods. This finding is also supported by research conducted by Nababan (2018), which found that buzz groups were more effective than lectures in increasing knowledge about pneumonia prevention in children. Based on the background description, the researcher aims to conduct a study titled is "The Effect of Health Education with the Buzz Group Method on Narcolema Behavior in Adolescents at Senior High School Tuban Regency".

METHOD

The research design used in this study is "Pre-experimental" with data collection method "one group pre-post test design," which aims to reveal cause-and-effect relationships by involving a single group of subjects. The researcher will administer a pre-test (initial observation) before providing the treatment (x), and after the treatment, a post-test (final observation) will be conducted. This is done to determine the difference between the pre-test and post-test results. This study uses a cohort approach to collect data. So that the influence of health education using the buzz group method on narcolepsy behavior in adolescents at SMAN 1 Tuban Regency can be determined. The population in this study consists of 36 students from class X at SMAN 3 Tuban and 35 students from class X at SMAN 1 Bancar. The research sample was selected using a cluster random sampling technique, resulting in 30 adolescents from each school.

Based on data obtained by distributing questionnaires in the pre-test and post-test and then conducting an editing process by selecting the data obtained and checking the answers. The next step is to code each variable according to what is listed in the operational definition. Then, the data was tabulated into a table and analyzed using the Wilcoxon test with a significance level of $\alpha = <0.05$ using SPSS software version 25 for Windows. The results showed an Asymp sig (2-tailed) value of

0.000, which means the smaller the p-value, the more significant the research results. Therefore, since $p = 0.000 < 0.05$, H_1 is accepted. This indicates that there is a significant effect of health education using the Buzz Group method on narcolema behavior among adolescents at public senior high schools in Tuban Regency.

RESULT

Identification of Narcolema Behavior in Adolescents Before Providing Health Education Using the Buzz Group Method

Table 1.
Frequency Distribution of Respondents Based on Narcolema Behavior in Adolescents Before Being Given Health Education Using the Buzz Group Method

Narcolema Level	f	%
Tall	17	28.3
Currenty	27	45
Low	16	26.7

Based on table 1 above, it can be seen that out of 60 (100%) respondents, the majority, 27 (45%) respondents, had moderate levels of narcolema behavior.

Identification of Narcolema Behavior in Adolescents After Being Provided with Health Education Using the Buzz Group Method

Table 2.
Frequency Distribution of Respondents Based on Narcolema Behavior in Adolescents After Being Provided with Health Education Using the *Buzz Group Method*

Narcolema Level	f	%
Tall	0	0
Currenty	20	33,3
Low	40	66.7

Based on table 2 above, it can be seen that out of 60 (100%) respondents, the majority, 40 (66.7%) respondents, had low levels of narcolema behavior.

Analysis of the Influence of Health Education Using the Buzz Group Method on Narcolema Behavior in Adolescents

Table 3.
Narcolema Behavior Before and After Health Education with the *Buzz Group Method* for Adolescents

Health education with the <i>Buzz Group Method</i>	Narcolematic Behavior			Total
	Tall	Currently	Low	
<i>Pre-Test</i>	17 (28.3 %)	27 (45 %)	16 (26.7 %)	60 (100%)
<i>Post-Test</i>	0 (0 %)	20 (33.3 %)	40 (66.7 %)	60 (100%)

Wilcoxon Signed Ranks Asymp. Sig. (2 tailed) = 0,000

Table 3 shows that narcolepsy behavior before being given health education using the *buzz group method* in adolescents at SMAN Tuban Regency showed that 27 (45%) experienced narcolepsy behavior in the moderate category. After being given health education using the *buzz group method* in adolescents at SMAN Tuban Regency showed that 40 (66.7 %) respondents had low category narcolema behavior

DISCUSSION

Based on a preliminary survey conducted by the researcher through interviews with guidance and counseling teachers and students at SMAN 3 Tuban in November 2022, the guidance and counseling teacher stated that there had been instances where students were found accessing pornographic videos during the learning process. Furthermore, based on the distribution of questionnaires to a total of 20 students, it was found that 11 students had intentionally viewed and

even downloaded pornographic images or videos using their smartphones. This is in line with the study conducted by Galper, E. F., et al. (2024), which stated that most adolescents in their research sample watched pornography, and those who viewed it more frequently tended to have more negative attitudes toward condom use.

Identification of Narcolema Behavior Before Providing Health Education Using the Buzz Group Method to Adolescents

The results of the study conducted by the researcher showed that 27 (45%) of 60 (100%) adolescents at SMAN Tuban Regency before being given health education with the buzz group method based on table 1, namely the majority had a moderate level of narcolema behavior. This is shown from the results of the narcolema behavior questionnaire using the Cyber-pornography Use Inventory (CPUI) developed by Grubbs in (Leonardhi, 2018) which consists of 32 statements filled out by adolescents at SMAN Tuban Regency before being given treatment. The results of this study are in line with research conducted by Siswanto & Wahyu in 2018, which found that 98 students (89.1%) of SMK 7 Surakarta experienced narcolema.

Narcolema (Drugs Through the Eyes) is a pornographic film watched by someone who has an addictive and destructive effect as in narcotics users. Narcolema behavior or watching pornography is defined as a search for satisfaction from sexual desires or urges that involve physical, mental and emotional using internet or computer media. Factors that can influence the development of narcolema, include individual attitudes, adolescent self-control and the role of parental supervision. The Ministry of Education and Culture (Education, 2017) explains several factors that cause pornography, namely: (1) Inappropriate parenting, (2) curiosity and experimentation, (3) influenced by peers and the environment, (4) using free time to do bad things, and (5) accidentally exposed to pornography when accessing the internet.

Individuals who experience narcolema behavior often show nervous responses when someone invites them to communicate, are lazy, like to be alone, especially in their room, cannot be separated from their gadgets, forget their good habits, are worried that their secrets will be revealed, are easily angered and offended, have difficulty socializing with family and friends, have chaotic thoughts because they are always interested in looking for pornographic material, are forgetful and have difficulty concentrating (Galih and Nulina, 2020). Based on the description of existing theories and facts, before being given intervention in the form of health education using the buzz group method, the researcher argued that the 10th grade adolescents experienced moderate narcolema behavior. Moderate narcolema behavior can be identified if they have symptoms such as impaired concentration because thoughts are always directed towards pornography and difficulty making decisions. The narcolema behavior experienced by the class X adolescents is caused by free time, seeking entertainment and adolescent curiosity about sexuality, as well as easy internet access that makes it easy for adolescents to access pornographic videos. This is in accordance with Santrock's research in Hurlock in 1990 which stated that narcolema or cybersex behavior in adolescents occurs because the maturity of sexual organs in adolescents will result in the emergence of sexual urges and curiosity. The dominant gender difference from the *pre-test results* is normal because narcolema behavior can occur in both male and female adolescents, it does not affect gender.

Narcolema behavior can lead to addiction, leading to a person being compelled to consume pornography repeatedly after viewing it for the first time. Neurologically, if left untreated, this condition can damage the frontal lobe of the brain, the prefrontal cortex. The prefrontal cortex functions as the center of judgment and decision-making, and shapes a person's personality. Therefore, adolescents who watch pornography intensively can experience an increase in sexual drive, which can lead to deviant sexual behavior. The results of the researcher's interviews with class X adolescents showed that during the adolescents' narcolepsy behavior, they did not realize that the action was a narcolepsy behavior that could lead to addiction. They only wanted to know about sexuality and fill their free time. One respondent said that when they watched pornographic

videos, they felt arousal fantasies and made the adolescents curious to try it. The pre-test results were classified as moderate narcolema behavior, meaning that students were not yet aware of the dangers of narcolepsy behavior and needed education about the dangers of pornography addiction. The level of moderate narcolema behavior was found at a score of 65-96 on the narcolema behavior questionnaire.

Identification of Narcolema Behavior After Health Education Using the Buzz Group Method for Adolescents

Based on the research results, the level of narcolema behavior in adolescents at Senior High Schools in Tuban Regency showed that 40 (66.7%) of 60 (100%) adolescents showed that narcolema behavior was in the low category. The results of this study are in line with the results of research conducted by Hardiningsih, Fresthy, and Agus in 2020, which stated that there was an increase in adolescent knowledge about narcolema after being given health education. Health education is a learning experience that aims to influence knowledge, attitudes, and behavior related to individual or group health. The goal is to achieve behavioral changes in individuals, families, and communities in fostering and maintaining healthy lifestyles and a healthy environment, and to play an active role in efforts to achieve optimal health levels, the formation of healthy behaviors in individuals, families, groups, and communities that are in accordance with the concept of healthy living, both physically, mentally, and socially, so as to reduce morbidity and mortality rates.

Narcolema can cause addiction, where addiction is a chronic disease in the brain's nervous system network related to rewards, motivation and memory. The community service carried out by Siswanto and Purwaningsih in 2018 entitled "Empowering Youth to Prevent Narcolema" was motivated by the high incidence of narcolema among adolescents in Surakarta in April 2017, especially at SMKN 7 Surakarta. The description of the narcolema incident in SMKN 7 Surakarta students was known to be 89.1 % experiencing narcolema. In addition, the results of interviews with Guidance and Counseling teachers were known to be found during class hours watching pornographic material. For this reason, it is necessary to increase knowledge about the dangers of narcolema and how to overcome it. The results achieved from the implementation of the community service were an increase in knowledge among SMKN 7 Surakarta students after the education was carried out.

For this reason, children who are approaching adolescence need to be given health education so that they know health information, especially about pornography. This aims to prevent teenagers from being curious and from seeking answers to information themselves through social media, which is feared will lead teenagers astray. This is in line with Sarwono's (2012) opinion that the tendency for adolescent sexual behavior is increasing due to the spread of sexual information and stimulation through electronic media, which is very easily accessible to adolescents. Media frequently used by adolescents include pornographic sites (on the internet), videos, pornographic films, and smartphones. Based on the facts and theories obtained, researchers argue that there is a significant change in the level of narcolepsy behavior of adolescents after being given intervention in the form of health education with the buzz group method . This change is caused by various factors that can affect each individual. In class X adolescents of Senior High Schools 3 in Tuban, there was a significant decrease in the level of narcolema behavior in female adolescents, female adolescents tend to be able to control what is in themselves. Meanwhile, in grade X adolescents of Senior High Schools 1 in Bancar, there was also a decrease in narcolepsy behavior. It can be seen from the results of both schools that both experienced a decrease in narcolema behavior after being given health education with the buzz group method.

Analysis of the Influence of Health Education Using the Buzz Group Method on Narcolema Behavior in Adolescents

The data analysis in this study used the Wilcoxon test. The statistical test results in this study indicate an effect between health education and the buzz group method on narcolema behavior in

adolescents at a senior high school in Tuban Regency. Based on table 3 shows that the level of narcolema behavior in adolescents at Senior High Schools in Tuban Regency before being given health education with the buzz group method, most adolescents totaling 27 (45%) had a moderate level of narcolema behavior, a small number of high narcolema behavior levels totaling 17 (28.3%) adolescents and almost half of low narcolema behavior levels totaling 16 (26.7%) adolescents. Meanwhile, after being given health education treatment with the buzz group method, most adolescents totaling 40 (66.7%) had a low level of narcolema behavior, almost half of moderate narcolema behavior levels totaling 20 (33%) and none of the adolescents had a high level of narcolema behavior.

This research was also supported by researchers from the Public Health Commission in Boston in 2016. In response to numerous reports regarding the impact of pornography on adolescents, they created a Pornography Literacy for Teens program. The material presented in the class or program included topics related to pornography. The results of the 2016-2019 trial showed that, on average, adolescents participating in the program experienced changes in their knowledge, attitudes, and behavioral intentions related to pornography. The results of the data analysis used in the study were the Wilcoxon Test with the results of $p = 0.000 < 0.05$, so H1 was accepted so that it can be concluded that there is an influence of health education with the *buzz group method* on narcolema behavior in adolescents at Senior High Schools Tuban Regency. The results of the analysis and interpretation of data obtained from adolescents at Senior High Schools Tuban Regency are in the low narcolema behavior category.

Adolescents are highly vulnerable to pornography, and the harmful effects of pornography addiction are significant, necessitating health education. This is consistent with the results of previous health education programs, which have shown an increase in adolescent knowledge about narcolema and a positive impact of providing health education using the buzz group method on narcolema on adolescent knowledge. It is hoped that increased adolescent knowledge can help prevent pornography addiction (narcolema). The narcolema behavior in both schools was predominantly among 16-year-olds. This age group experiences rapid growth and development, leading to a heightened curiosity about new things, including reproductive health. This situation drives adolescents to seek information from various sources, especially now that access to anything they desire is easy.

Teenagers who have experienced narcolema behavior consider it normal and are unaware of the dangers of narcolema if they become addicted. Then, after being given health education using the buzz group method, teenagers become aware of the dangers of narcolema and will reduce their activities accessing pornographic sites. After intervention with adolescents in the form of health education using the buzz group method, there is a change in the level of narcolema behavior from high to moderate and moderate to low. Based on the results of the study, one teenage girl also found a score that remained the same when filling out the pretest and posttest questionnaires at Senior High Schools 3 Tuban and two teenage girls with *scores* that remained the same when filling out the pretest and posttest questionnaires at Senior High Schools in 1 Bancar. These significant changes indicate that health education using the buzz group method has an impact on class X adolescents experiencing narcolema. The success of the health education was due to the effective implementation of the buzz group method and the implementation instructions in accordance with Standard Operating Procedures. This success was also aided by the cooperative attitude of the adolescents, who carefully followed the researchers' instructions. The success of health education using the buzz group method had a positive effect on reducing narcolema behavior in class X adolescents.

CONCLUSION

Based on data obtained by distributing questionnaires in the pre-test and post-test and then conducting an editing process by selecting the data obtained and checking the answers. The next

step is to code each variable according to what is listed in the operational definition. Then, the data was tabulated into a table and analyzed using the Wilcoxon test with a significance level of $\alpha = < 0.05$ using SPSS software version 25 for Windows. The results showed an Asymp sig (2-tailed) value of 0.000, which means the smaller the p-value, the more significant the research results. Therefore, since $p = 0.000 < 0.05$, H_1 is accepted. This indicates that there is a significant Effect of Health Education using the Buzz Group Method on Narcolema Behavior among Adolescents at Senior High Schools Tuban Regency.

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