PMTOH ARTS CULTURE ACTIVITIES CAN REDUCE TRENDS OF DRUG USED BY HIGH SCHOOL STUDENTS IN BANDA ACEH

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ABSTRACT

Introduction: Narcotics cases in Aceh Province increased from 943 cases in 2014 to 1,170 cases in 2015. Teenagers are one of the groups who were vulnerable to narcotics abuse. It is expected that PMTOH's school-based cultural intervention will prevent the tendency of drug used among students. The purpose of this study was to analyze the effectiveness of the PMTOH arts-based extracurricular program in preventing drug used trends. Method: The research design was a quasi-experiment with a control group and cluster random sampling method divided into a control group and an intervention group with population of 270 and sample of 244 students. Data collection used was Attitudes to Drug Use Scale instrument. Data analyses used was Wilcoxon Signed Rank Test, Chi-Square Test, and Binary Logistic Regression Test. Result: There was a difference between before and after of health education about drugs using the art of speaking in Acehnese (PMTOH) with a value of P = 0.0001. There was no difference between before and after of health education about drugs which was carried out by the BNN Aceh team (P = 0.353). Logistic regression analysis showed that individual factors (P = 0.002) and environmental factors (P = 0.001) were significant predictors of use drug trends by student. Individual factors were the most dominant predictors of drug use tendency in students (OR: 8.419; 95% CI: 2.238 - 36.736) after being controlled by environmental factors (OR: 5.382; 95% CI: 1.213 - 23.686). Conclusion. It is expected that the model of health education using the art of speaking in the Aceh language (PMTOH) is carried out in extracurricular activities as an alternative drug counseling technique that can be used in drug prevention for high school students in Banda Aceh.

Keywords: Speech Art; PMTOH; Culture, Aceh Language, Drugs, Youth.

INTRODUCTION

Drug abuse is a significant problem affecting adolescents1. According to survey results in 2017, the largest proportion of drug abusers is workers with 59%, 24% of students and the general population 17%, based on gender 72% male and 28% female2. The development of narcotics abuse and illicit trafficking that has hit the world also has an impact on the country3,4. The target of narcotics distribution is not only places for night entertainment but also penetrated residential areas, campuses, schools, housing houses, and even in the neighborhood household. United Nations Office on Drugs and Crime estimates that a quarter billion people, or about 5% of adult population aged 15-64 years, used drugs at least once in 2015. Globally, more than 11% of people used drugs. This means that their drug use is totally dangerous so that they can be drug-addicted and require treatment. The number of narcotics abuse in Indonesia in 2014 was 3.8 million to 4.1 million people or around 2.10% up to 2.25% of the total population of Indonesia who are at risk of being exposed to narcotics. This number has increased when compared to 2008, which was 1.9%3,4.5. The National Narcotics Agency (BNN) together with 1,593 large rehabilitation centers managed by the BNN has implemented rehabilitation programs for 38,427 narcotics abusers throughout Indonesia. This figure has increased, wherein the previous year only about 1,123 addicts and abusers were rehabilitated6,7. Observing the development of abuse and illicit narcotics trafficking in recent times has reached a worrying situation, so it becomes an urgent issue. Victims of narcotics abuse are not only adults, but also senior high school even to elementary school level students. Adolescents are one of the groups that are vulnerable to narcotics abuse because besides of being dynamic and energetic, they are always curious. They are also easily
discouraged and easily influenced by traffickers which result in falling into drug abuse problems\textsuperscript{5,7}. Drug abuse (narcotics and drugs containing addictive/dangerous and illicit substances) among adolescents today is increasing, more fragile it is being eaten away by nerve-destroying addictive substances so that the adolescent cannot think clearly. As a result, the expectation for having nation generation that is strong and intelligent, just only hope that cannot be realized.\textsuperscript{7} Drugs are dangerous for anyone who misuses them. Various negative effects, both physical and psychological will make victims of drug abusers suffer. The results of the Survey on Narcotics Abuse and Illicit Narcotics in Student and Student environment as the real facts in the field showed that there is a changing in knowledge and response to avoid drug abuse in student and their environment, after the involvement of these students and students in Eradication Prevention activities Narcotics Abuse and Circulation. Intervention on students can increase knowledge about the dangers of narcotics and also at the same time increase awareness to avoid the use of narcotics among these students. Effective prevention contributes significantly to the positive engagement of children, youth, and adults with their families, schools, workplaces, and communities. According to the Aceh Government, prevention and reduction of drug use takes place at the individual and community level in involving community participation by using local information or theory of local information and community-based. Prevention of drug use is the focus of the Aceh Government by providing various drug prevention facilities based on Islam, justice, protection, humanity, order, security, scientific values, legal certainty, partnership, and local wisdom. The preventive facilities aimed to regulate the government role to protect the community, improve the quality of life, protect from the drugs threat, build community participation and create orderlines in social life. Intervention to prevent narcotics abuse among students in the form of IEC has proven to be effective. However, specifically in Aceh Province, cultural approach can be an alternative in improving the prevention of drug abuse among students and university students in Aceh province. The extracurricular activities carried out in previous studies were mostly in the form of sports activities. This study intended to test the drug counseling model by using the art of speaking in Acehnese (PMTOH) in extra-curricular activities to reduce the tendency of high school students to use drugs. The intervention model of health education about drugs using the art of speaking in Acehnese (PMTOH) is expected to be an appropriate school-based activity to prevent the tendency of drug use among high school students. Therefore, the researcher wanted to compare the drug counseling model with PMTOH’s speech art in extra-curricular activities compared to the lecture and discussion model which was done by the National Narcotics Agency (BNN) on the tendency of drug use by high school students in Banda Aceh City\textsuperscript{9,10}.

### Method

This study used quasi-experimental pre-post test design with control group design, which used to analyze the trends in drug used among students at SMAN 4 as a control group and SMAN 5 as an intervention group by looking at the differences between before and after drug counseling and comparing between the intervention group and the control group. Extension activities about drugs in the intervention group used oral arts in the Acehnese language carried out by cultural figures. The material presented which was related to drugs, types, impacts, and dangers of drugs as well as drug prevention methods which were mixed into PMTOH's speech art. The implementation of activities was adjusted to the school's extracurricular activity schedule. The control group was given standard interventions, namely health education using lecture and discussion method that conducted by the National Narcotics Agency for extracurricular activities that are usually carried out in schools. The research design consisted of one intervention group and one control group. The research data was conducted beforehand. Data normality test was performed using the Shapiro Wilk and Kolmogorov Smirnov test. The data normality test provisions are normal distributed data if the significant value is 0.05 and the data is not normal distributed if the significant value is <0.05. The data analysis used was bivariate (Chi-Square Test) and multivariate (Binary Logistic Regression Test). This study involved 244 respondents divided into a control group of 122 students, namely SMA 4, and the intervention group with 122 students of SMA 5 Banda Aceh city.

### Results

Frequency Distribution of Factors Affecting the Trends in Adolescent Drug Use in SMAN 4 and SMAN 5 Banda Aceh for the Intervention Group and the Control Group (n = 244).

Based on Table 1 below, of the 122 respondents, it was known that as many as 65 people (53.3%) of students in the intervention group stated that individual factors were factors that influence drug use tendencies and as many as 74 people (60.7%) stated that environmental factors were not factors that influence drug use trends. Whereas in the control group, it was known that out of 122 respondents, it was found that 64 people (52.5%) stated that the individual factor was not a factor affecting the tendency of drug use and as many as 69 people (56.6%) stated that environmental factors were not a factor which affects trends in drug use. Individual factors and environmental factors in each control group were measured by asking 17 questions in the form of dichotomous choices. The results of analysis showed that the average (mean) value for individual factors was 8.61, so individual factors were categorized as Yes if the score is ≥ 8.61 and No if the score is <8.61. Furthermore, the average value of environmental factors was 7.61, so environmental factors were categorized as Yes if the score is ≥ 7.61 and No if the score is <7.61. Bivariate Analysis of Differences in Drug Use Trends in the Intervention Group. The results of this analysis can be seen in the table below:

<table>
<thead>
<tr>
<th>Table. 1 Frequency Distribution Tendency Factors for Drug Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>a.</td>
</tr>
<tr>
<td>b.</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>a.</td>
</tr>
<tr>
<td>b.</td>
</tr>
</tbody>
</table>

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Table 2. Differences in Drug Use Trends (n = 244)

<table>
<thead>
<tr>
<th>No</th>
<th>Measurement</th>
<th>Mean Value</th>
<th>Mean Difference</th>
<th>A</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre Test</td>
<td>56.04</td>
<td>39.1</td>
<td>0.05</td>
<td>0.0001</td>
</tr>
<tr>
<td>2</td>
<td>Post Test</td>
<td>16.13</td>
<td>0.0</td>
<td>0.05</td>
<td>0.353</td>
</tr>
</tbody>
</table>

Table 2 showed the mean value (mean) of measuring the tendency of drug use in the intervention group students, namely the pre-test of 56.04 and the post-test of 16.13. This explained that there is a decrease in the average trend of drug use among students in the intervention group of 39.1. The results of the hypothesis test showed a P value of 0.0001 (<0.05), which means that there is a difference in the average value of the tendency of drug use among students in the intervention group between before and after. The intervention was carried out on extracurricular activities at SMAN 5 Banda Aceh City. Whereas in the control group, it is known that the mean value (mean) of measuring the tendency of drug use in the control group students, namely the pre-test is 15.0 and the post-test is 15.0. This explained that there is no difference in the mean value of tendency to use drugs in the control group students. Results of the hypothesis test showed a P value of 0.353 > 0.05, which means that there was no difference in the average value of tendency in drug use with control group students between before and after health promotion with the lecture method at SMAN 4 Banda Aceh.

Differences in Drug Use Trends Between Groups. Differences in drug use trends between students in the intervention group and the control group were analyzed using the Mann Whitney U Test. The results of the analysis can be seen in the table below:

Table 3. Differences in the Trends of Drug Use (n = 244)

<table>
<thead>
<tr>
<th>No</th>
<th>Group</th>
<th>Mean Value</th>
<th>Mean Difference</th>
<th>A</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intervention (SMAN 5)</td>
<td>77.8</td>
<td>89.62</td>
<td>0.05</td>
<td>0.0001</td>
</tr>
<tr>
<td>2</td>
<td>Control (SMAN 4)</td>
<td>167.42</td>
<td>0.0</td>
<td>0.05</td>
<td>0.353</td>
</tr>
</tbody>
</table>

Table 3 showed the mean value (mean) of measuring the tendency of drug use among students in the intervention group of 77.8 and students in the control group of 167.42. This explained that there is a difference in the average score (mean difference) of drug use trends between students in the intervention group and the control group of 89.62. The results of the hypothesis test showed a P value of 0.0001 > 0.05, which means that there is a significant difference in the average value of drug use tendencies between students in the intervention group and the control group at SMAN Banda Aceh. Multivariate Analysis to determine the most dominant factors affecting the tendency of drug use in students of SMAN 4 and SMAN 5 Banda Aceh. The results of this analysis can be seen in the following table:

Table 4: Summary of Logistic Regression Analysis

<table>
<thead>
<tr>
<th>Predictors</th>
<th>OR</th>
<th>P-Value</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals</td>
<td>8.419</td>
<td>0.002</td>
<td>2.238</td>
<td>36.736</td>
</tr>
<tr>
<td>Environment</td>
<td>5.382</td>
<td>0.001</td>
<td>1.213</td>
<td>23.686</td>
</tr>
<tr>
<td>Constants</td>
<td>3.601</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 showed that the individual factors (P = 0.002) and environmental factors (P = 0.001) is a significant predictor of the trend towards drug used by students. Individual factors were the most dominant predictors of drug use tendency in students (OR: 8.419; 95% CI: 2.238 - 36.736) after being controlled by environmental factors (OR: 5.382; 95% CI: 1.213 - 23.686).

DISCUSSION
The results of this research on the factors that influence the tendency of drug use in students of SMAN 4 Banda Aceh showed that mostly students said that individual and environmental factors played a role in the tendency of drug use in adolescents (Table 1). The results of this study indicate that students perceive genetic/hereditary and mental disorders such as ODGJ (People With Mental Disorders). This condition can interfere with the self-esteem of users and their parents and family, religion, life, and economic situations, culture and values, peers, and the availability of narcotics in the adolescent environment, affecting adolescents to use drugs. Genetic factors can make narcotics a little more attractive to use and this factor can also make the effect of addiction is a little more difficult to overcome. For people who have genetic problems, drug use can be influenced by basic biology.
Genetics may not lead people to experiment with illegal drugs, but once that person starts experimenting, their use of drugs can quickly spread out of control due to underlying genetic factors. Once a person used drugs, the risk of drug dependence is greatly influenced by genetics. Research showed that genes are responsible for about half the risk of drug addiction. However, genetics is not the only factor that affects a person's likelihood of drug dependence. Furthermore, family factors that cause drug abuse are the behavior of the parents, the relationship between parents and individuals, the relationship between parents, family atmosphere, and family economic status. Substance abuse habits between parents are the most influential factor in influencing substance abuse in children. There is a significant relationship between family roles and drug abuse behavior with 4.2 times greater risk of abusing drugs if you have a family that does not play a role in preventing abuse drugs compared to respondents who did not abuse drugs. The relationship between religiosity and the use of alcohol...
and drugs by adolescents has been the subject of an investigation by many researchers, while adolescents both religious involvement and practice with alcohol and drug use are very significant dimensions of their personal and social experiences. Drug use is associated with religious commitment among high school students. Students with high religious commitment state that religion is very important in their life. Students with low religious commitment are those who think religion is not important. The results showed that students who have low religious commitment are more at risk of becoming drug users. In contrast, students who have high religious commitment are less likely to engage in drug abuse. One possible causal process between religious factors and a tendency to use drugs is that most religious traditions teach adherents to avoid drug abuse. Illegal drugs, including cigarettes and alcohol, are prohibited for minors, young people who show a strong religious commitment should not use drugs. But importantly, they tend to act according to what they consider to be God's laws. Furthermore, individual life situations also play an important role in the causes of drug abuse among adolescents. The tendency to use narcotics can also be caused by stress and depression. People start using drugs to feel better, especially those with social anxiety, stress-related disorders, and depression. Besides, individuals with this disorder are more likely to relapse after periods of calm. Another factor that causes drug use is economic problems, especially when the drug business is very lucrative. Researchers have determined that (economic) income positively affects drug use. The relationship between drug use and income positively affects drug use. But income negatively affects heavy drug use. The findings also suggest that people on lower incomes use drugs more frequently than those with higher income levels.

The last factors that are considered the most influential drug abuse are peer factors and drug availability. Teenagers use drugs when their friends do it and tend to violent behavior. Usage of drugs among adolescents is frequently done because they are bored with their daily routine and want to try new things. Curiosity and peer pressure are one of the biggest reasons why people choose to try drugs. Results of the above research showed that there is a difference in the decrease of drug use tendency between students who are after being given intervention in the form of extracurricular activities with the Acehnese cultural arts approach and students who are given health promotion through the lecture method. It showed that interventions with a cultural approach are proven to be effective in reducing the tendency to use drugs in adolescents. His research, entitled cultural interventions to treat addictions in Indigenous populations: findings from a scoping study described various cultural interventions in the prevention of drug use. This study found seventeen types of cultural interventions in the handling of narcotics abuse, with a culture in the form of a sweat lodge ceremony being carried out frequently (68%).

Research evidence also showed that many school-based programs are effective in preventing or reducing substance abuse among adolescents. A study entitled School-based substance abuse prevention: an initial review of the red ribbon certified schools program showed that the drug use prevention program for high school students, named The Red Ribbon Program, can increase awareness of substance abuse prevention in high school students. As a preventive strategy, the program changed students’ attitudes towards substance use and provides opportunities to promote positive health behavior. The results of this study also indicate that high school students have negative beliefs about substance use and the level of drug use is very low among students in these schools. The relationship between drug use and extracurricular activities based on the findings also noted that extracurricular activities can reduce the likelihood of substance use. The findings confirmed other studies that the students' participation in sports activities related to alcohol use, 82% showed a significant positive correlation. Individual factors are the most dominant predictors of drug use tendency in students after being controlled by environmental factors.

Drug abuse prevention, the most important factor that must be considered is a factor that comes from within the individual. Drug abuse among adolescents is an internal factor such as family factors that have a really big influence on drug abuse among adolescents. Adolescents who have problems with their families such as families who are frequently noisy, bad communication between family members, and unharmonious households can cause teenagers prefer to hang out with their friends. Second, in terms of external factors, social factors are very influential on drug abuse among adolescents. Adolescents who have the wrong relationship, hang out with their addicts and without realizing it, offers and persuading friends to use drugs cause adolescents to fall into drug abuse. Factors that influenced drug abuse are ignorance, psychological stress, trial and error, social factors, lifestyle factors, and factors of lack of confidence. The factors that cause narcotics abuse are intrinsic factors including religion, family, and intelligence. While extrinsic factors include social factors / environmental, educational, economic, and most dominant factors are family factors. Furthermore, the influence between environmental factors and individuals with a person's tendency to be addicted to drugs. Factors that influence drug use in adolescents are (1) personal factors, such as family income; (2) family environment, such as a family history of drug abuse; and (3) social environment, such as a history of drug abuse among peers. Creating relationships between adolescents and family members, friends, and other communities can reduce the risk of drug abuse.

CONCLUSION

Individual and environmental factors are the factors that influence the trend of drug use among high school students in Banda Aceh City. There is a difference in the average value of tendency in drug use among students in the intervention group between before and after the Aceh cultural arts approach was carried out in extra-curricular activities at SMAN 5 Banda Aceh. There was no difference in the average value of tendency in drug use among students in the control group between before and after health promotion with the lecture method at SMAN 4 Banda Aceh. There is a significant difference in the average value of tendency to use drugs between students in the intervention group and the control group at SMAN 5 Banda Aceh. Individual factors and environmental factors are significant predictors of student drug use trends. Individual factors are the most dominant predictors of tendency of drug use by students.

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