The Effect of Health Education towards Knowledge and Teenager Attitudes in Consuming Liquor, Kupang City in 2016

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Abstract
The liquor that was consumed by the teenagers continuously could lead to the health and behavior disorders. The research type was a quasi-experiment with the randomized pre-test post-test control group design. The technique of collecting the data in the present study was the Random Sampling. The respondents included 40 students in SMAN 1 as the treatment group and 40 students in SMAN 3 as the control group. The study result was obtained, there indicated that the health education interventions in the treatment group succeeded significantly improving knowledge and changing the teenager attitude for drinking.

Keywords:
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1. Introduction

The liquor or often called alcohol is Ethanol or Ethyl Alcohol. Ethanol is a compound consisting of Carbon elements, Hydrogen, and Oxygen that can be metabolized by the body. Whereas, the Methanol will be oxidized into formaldehyde into the body that is toxic for the human body (McMurry et al., 2010).

The liquor consists of the psychoactive substances that are addictive. The psychoactive substances are the class of substance that selectively works, especially in the brain, therefore, it can due to the change of behavior, emotion, cognitive, perception, awareness of someone and others. Whereas, the addictive substance is a substance when it...
The health education aims to change the culture, and improve the health level. The health education is an effort to change the cultural issues. The health education can influence knowledge and behavior changes. The teenagers who consume liquor are usually not knowledgeable about the liquor's effects. It is necessary to provide Health Education to focus on how Ethanol enters the body and its effect on health.

The liquor can lead to behavioral changes, such as being aggressive and not focusing on lessons due to excessive liquor consumption disrupting brain function. The amygdala, a brain part involved in processing and emotional reaction memories, can become uncontrollable due to alcohol. The prefrontal cortex, responsible for cognition and behavioral regulation, can also be disrupted, leading to uncontrolled behavior.

The regulations regarding liquor for teenagers have not received special attention from the government. Although, the Trade Minister Regulation of the Republic of Indonesia No. 20/M-DAG/4/2014 controls and supervises the procurement, distribution, and sale of alcoholic beverages. However, the reality shows that teenagers under 21 years old can freely buy liquor, which can have serious impacts. The BPS data in 2012 showed that 83.1% of Indonesian teenagers had consumed alcoholic beverages.

In Indonesia, every year the estimated death toll due to alcohol reaches 19,000 people. Based on the Riskesda data in 2007, the liquor prevalence in NTT was 17.7%. There were three regencies with the highest prevalence, including Ngada (38.3%), Lembata (36.5%), and North Central Timor (32.7%). For Kota Kupang, the prevalence rate of liquor drinkers was 8.7% higher than the national prevalence rate of 4.6%.

The health education has been proven to effectively increase knowledge about the dangers of smoking, and it is expected to increase knowledge and change teenager attitudes regarding liquor consumption. Health Education in SMAN 1 Kupang was the treatment group, while SMAN 3 Kupang was the control group.

2. Materials and Methods

Research Design and Research Variables
The research type is a quasi-experiment with randomized pre-test post-test control group design to test the improvement of knowledge and attitude towards liquor consumption using Health Education in SMAN 1 Kupang as the treatment group and SMAN 3 Kupang as the control group.

Time and Research Location
This research was conducted in Kupang City, East Nusa Tenggara Province, from December 2016 to February 2017.

Population and Sample
The study population comprised male students in SMAN 1 and SMA 3 Kota Kupang Kupang who have consumed liquor. The sampling technique involved selecting a random sample from the population, resulting in 80 respondents. The study aimed to meet the inclusion and exclusion criteria.

Data Collection

The primary data were obtained from the observation during the research process, wherein the intervention group was provided the health education for 6 weeks and the control group was not treated. The initial data collection included subjects, subject characteristics and the questionnaire about a liquor knowledge consisted of 10 questions and their attitudes regarding alcohol were 15 questions.

Data analysis

An univariate analysis is done to get a general description based on the research problem by describing each variable that used in the present research, i.e. by observing the frequency distribution description as well as the single percentage that related with the research aims.

3. Results and Discussions

The univariate analysis results at describing the respondent's distribution based on the respondent's characteristic i.e. age. They duration consume a liquor, whether they drink an alcohol for free, whether they drink an alcohol with their family, and whether they drink an alcohol with their mates.

Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention (N=40)</th>
<th>Non-Intervention (N=40)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>29</td>
<td>72.5</td>
</tr>
<tr>
<td>18</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>Drinking duration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>55</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>27.5</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Ever drinking a liquor for free</td>
<td>36</td>
<td>90</td>
</tr>
<tr>
<td>Drinking a liquor with family</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Drinking a liquor with mates</td>
<td>40</td>
<td>100</td>
</tr>
</tbody>
</table>

The result of the respondent's characteristic analysis in Table 1 shows that the majority of respondents in the intervention and non-intervention classes are 17.5 years old and 72.5% and 82.5% respectively. Whereas, the most drinking duration in the intervention class and non-intervention class is for each of them 3 years, 55% and 50%. Almost all the teenagers have experienced drinking an alcohol for free without buying each is 90% intervention class and the non-intervention class is 82.5%. The teenagers who drank an alcohol with their families in intervention and non-intervention classes are 50% and 30%, however, all the teenagers at drinking intervention classes with their mates and merely 2.5% for non-intervention classes who never drank alcohol with their mates.
The respondent's knowledge mean score about liquor is in the pretest intervention group 1.13 with the standard deviation is 0.335 mastering increased to 1.68 with the standard deviation is 0.474. Whereas, in the control group showed the subject average about drinking at the pre-test time is 1.10, the standard deviation is 0.304 and increased to 1.30 with the standard deviation is 0.464. The average mean of respondent knowledge during pre-test is the highest in the intervention group and lowest in control group (Table 2). When the post-test occurred, there was an increase in the knowledge mean value of the intervention group and the control group with the highest mean value was in the intervention group and the lowest was in the control group. Likewise regarding an attitude. The average mean of the attitude in the intervention class, a pretest is 1.25 with the standard deviation is 0.439 has increased to 2.38 with the standard deviation is 0.490. However, in the control group showed the average subject attitude about the liquor at the pre-test occurred is 1.30 with the standard deviation is 0.464 and the attitude increased in the small number is 1.35 with the standard deviation is 0.483. The average mean of the attitude for the respondents during the pre-test is the highest in the intervention group and the lowest is in the control group (Table 2). The post-test occurred, there is to increase in the attitude mean value in the intervention group and the control group with the highest mean value is in the intervention group.

Discussion

The research results stated that high school students, when provided a treatment i.e. the Health Education wherein they are provided the knowledge about liquor, is alcohol more precisely consist of Ethanol or Ethyl Alcohol and how Ethanol influence on the health as well as the behavior. Through the health education provided to the teenagers, they become aware of alcoholism and its effects on their health and how liquor can interfere with neuronal work, therefore, the teenager behavior can turn out to be bad. The habit of drinking a liquor starting from a trial, until they like and ultimately affected by psychic substances that are addictive in the liquor itself (Heffernan et al., 2010).

The teenagers consume a liquor due to the lack of knowledge that provided to them, therefore when they offered to drink finally willing. Then, they are affected by the liquor and eventually get used to consuming it. The social motive for a drunker must be strong desire to find a liquor. When the teenagers get together and there is no activity that they do, then they will drink a liquor. Especially, if one of them bought a liquor then, they will both consume it. For the teenagers in Kupang City, if they drink alcohol together, it is a sign they are friendly or families. If any of them refuse an offer to consume a liquor, then it means the person is not a friend or their family. The brain disorders are also reacted with the psychological disorders unlike worry, depression/sadness, anger, anxiety, difficulty concentrating and compulsive behavior (Amaral, 2003; Balleine and Killcross, 2006).

The health education programs for the high school students produce a positive change both about knowledge and attitude. It is also effective in reducing the students consume a liquor. The liquor substance provision in terms of the health, chemistry and behavioral aspects by developing several methods of discussion, simulation with tools and media to make the substance giving process is to be active, the creative and effective as well as fun for students who receive the intervention for those who provide the intervention. It can merely make the participants and the instructor more interested and more concentrated in getting the material and giving the material (Notoatmodjo, 2012).

4. Conclusion

Based on the research results, it was obtained that the intervention group with the Health Education Program could increase the knowledge and change the attitude of the teenagers in consuming a liquor than the control group.

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References


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