Determinant Factors of Alcohol Consumption by Adolescents

By SUCI MUSVITA AYU
Determinant Factors of Alcohol Consumption by Adolescents

Liena Sofiana¹, Suci Musvita Ayu¹, Marsiana Wibowo¹, Erni Gustina¹, Azip Hasbi Asidik¹

¹Faculty of Public Health, Ahmad Dahlan University

Abstract

Objectives: The harmful use of alcohol was a causal factor in more than 200 diseases and injury conditions. The percentage of alcohol consumption at age 15-19 years in Indonesian were male (3.4%) and female (1.5%). Alcohol consumption is associated with a risk of developing health problems, such as mental and behavior disorder which includes alcohol dependence and major non-communicable disease.

Method: This was an analytic observational research with Cross Sectional design. The population were all students of Senior High School or the equal, in Yogyakarta City. Sample size in the research are 380 students. Technic sampling is used Multi-stage random sampling. The Research used questionnaire as the instrument. To analyze the data is used univariate analysis and bivariate analysis (chi-square).

Results: The results show that 40.1% of adolescent in Yogyakarta City consume or once consumed alcohol, while 26.6% were alcohol dependence/harmful alcohol dependence. Bivariate analysis results in the following: Knowledge (p=0.000; RP=0.541); attitude (p=0.000; RP=2.510); self-confidence (p=0.001; RP=1.566); family role (p=0.016; RP=1.396); teacher role (p=0.000; RP=1.960); peer role (p=0.000; RP=2.953); information resources (p=0.436; RP=1.103).

Conclusions: There was relationship among knowledge, attitude, self-confidence, family role, teacher role, and peer role, and alcohol consumption by adolescent. There is no correlation between information sources and alcohol consumption by adolescent.

Keywords: Knowledge, attitude, self confidence, family, teacher’s role, peers, information sources, alcohol consumption, adolescent.

Introduction

Excessive use of alcohol is the causal factor of more than 200 diseases and injuries. 5.1% of them are caused by alcohol consumption. In addition, it causes disability and fatality. Among the age group of 20-39 years old, 25% of total fatality is caused by alcoholism. In 2012, 3.3 million of death is caused by alcoholism, or 5.9% of the total mortality number.¹ Alcohol consumption in South East Asia of the age group above 15 years old, per capita, is 3.4 liters of pure alcohol. It is projected to increase in 5-10 years along with the increasing number of adolescents. Thus, it increases the potential consumers. In 2010, the proportion of alcohol consumption in Southeast Asia, of the age group of 15-19, showed 5.9% of ex-drinker and 8.2% drinkers.²

In 2010, the alcohol consumption per capita in Indonesia showed that male consumed 1.1 liter of alcohol, while female took 0.1 liter.³ The percentage of alcohol consumption in the country for the age group of 15-19 years old are 3.4% and 1.5% for male and female, respectively. The number is small but it is a clear evidence that Indonesian youngsters consume alcohol.⁴

Alcohol consumption may influence individuals’ behavior. Alcohol has encouraged the youth to commit crime, reaching 2%⁵ Juvenile delinquency in Indonesia, particularly in Yogyakarta Special Region Province,
is categorized as severe by the evidence of several incidence, such as school brawling, getting drunk, unwed pregnancy, and so on. Being rebellious is not an only cause of misbehavior. Instead, child rearing or environment may be another factor. This research aims to know the relation among predisposing, reinforcing, and enabling factor and alcohol consumption by adolescents in Yogyakarta.

Materials and Method

This study belongs to observational analytic research with cross sectional design. The research is conducted in all senior high schools, and the equal, in Yogyakarta City, of which all the students become the population, as many as 36,360 students. The samples were taken using Multi-stage random sampling. Sample size among this research is 380 adolescents. The instruments include questionnaires to measure the variables of knowledge, attitude, confidence, family roles, teachers' role, peer roles, and information sources. The research used the instrument adopted from The Alcohol Use Disorders Identification Test published by WHO. The analysis data employed Chi square.

Results

They have low level of knowledge and consume alcohol (27.8%). 129 adolescent (51.4%) who consume alcohol have high level of knowledge. There was relation between knowledge and consume alcohol among adolescent (p=0.000; RP=0.541; CI 95%=0.43-0.69). There was the relationship between attitude and alcohol consumption (p=0.000; RP=2.510; CI 95%=1.972-3.196). There was the relationship between self-confidence and alcohol consumption (p=0.001; RP=1.566; CI 95%=1.25-1.96). There was the relation between family roles and alcohol consumption (p=0.016; RP=1.396; CI 95%=1.091-1.775). There was relation between teachers’ roles and alcohol consumption (p=0.000; RP=1.960; CI 95%=1.604-2.397). There was the relationship between peers’ roles and alcohol consumption (p=0.000; RP=2.953; CI 95%=2.362-3.692). There was no relation between information resources and alcohol consumption (p=0.436; RP=1.103; CI 95%=0.885-1.374).

Table 1: Determinant Factors of Alcohol Consumption by Adolescents in Yogyakarta City, Indonesia

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alcohol Consumption</th>
<th>Number</th>
<th>RP</th>
<th>CI 95%</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>64</td>
<td>166</td>
<td>230</td>
<td>100</td>
<td>0.541</td>
</tr>
<tr>
<td>High</td>
<td>129</td>
<td>122</td>
<td>251</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>63</td>
<td>201</td>
<td>264</td>
<td>100</td>
<td>2.510</td>
</tr>
<tr>
<td>Positive</td>
<td>130</td>
<td>87</td>
<td>217</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Self Confidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low self-confidence</td>
<td>47</td>
<td>35</td>
<td>82</td>
<td>100</td>
<td>1.566</td>
</tr>
<tr>
<td>Confident</td>
<td>146</td>
<td>253</td>
<td>399</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Family Role</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less participating</td>
<td>44</td>
<td>40</td>
<td>84</td>
<td>100</td>
<td>1.396</td>
</tr>
<tr>
<td>Participating</td>
<td>149</td>
<td>248</td>
<td>397</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Teachers’ Role</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less Participating</td>
<td>72</td>
<td>40</td>
<td>112</td>
<td>100</td>
<td>1.960</td>
</tr>
<tr>
<td>Participating</td>
<td>121</td>
<td>248</td>
<td>369</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Peers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating</td>
<td>120</td>
<td>52</td>
<td>172</td>
<td>100</td>
<td>2.953</td>
</tr>
<tr>
<td>Less participating</td>
<td>73</td>
<td>58</td>
<td>235</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Information Sources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>107</td>
<td>148</td>
<td>255</td>
<td>100</td>
<td>1.103</td>
</tr>
<tr>
<td>High</td>
<td>46</td>
<td>140</td>
<td>226</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Discussion

The Correlation between Knowledge and Alcohol Consumption: Adolescents who have low knowledge as a protective factor not to consume alcohol. This situation is because teenagers who do not consume alcohol have no knowledge of the type of alcohol and the aroma of alcohol. While someone who consumes alcohol at least more often see, have physical contact with, know, and obtain the information about alcohol compared to those who do not. They get the information through their senses, particularly sight and hearing. Individual who have learned the effects of drinking will think twice to consume it. Indeed, it is more likely that they will avoid it. Those who take good care of their life will not harm themselves. Previous research showed there is a relation between poor knowledge about the effects of alcohol and the drinking behavior of adolescent where the higher is the score of poor knowledge, the higher is the number of alcohol drinking by adolescence.

The Correlation between Attitude and Alcohol Consumption: Attitude influences alcohol consumption by adolescents in Yogyakarta. Attitude is the second level of behavior before an individual takes an action. Attitude is a readiness to act, but it is not an implementation of motive. It is a response that involves opinion and emotion. Previous research shows there is a relation between attitude and alcohol consumption by adolescent. The occurrence of those with negative attitude is 14.88 times compared to adolescents who have positive attitude. Another research show there no relation between attitude and the prevention of alcohol consumption.

Attitude is part of the process of changing behavior. It means that attitude is not yet operate in an action or behavior. It is not always manifested in a real action. An action can be illustrated by attitude of like-dislike, or agree-disagree. However, the attitude can influence particular behavior, such as preventing alcohol consumption. An individual has the opinion and tendency to avoid alcohol consumption, but pressure, lack of confidence, or other factors may cause the attitude cannot manifest in the real action.

The Correlation between Self-confidence and alcohol consumption: Confidence influences an individual’s attitude and behavior. An individual’s belief in his capability or confidence will lead him to do what he wants. Meanwhile, those who lack of confidence tend to doubt his action. Indeed, they tend to avoid the action. Self-confidence is the key factor in making an individual feel more optimistic and try to adapt the environment. Nevertheless, self-confidence for conducting negative may harm others. It is supported by the idea that self-confidence is a positive assessment on a self, which raises the individual’s motivation to respect himself.

Frequently, adolescents drink alcohol to gain self-confidence and eliminate shyness, stress, and depression. Alcohol belongs to anti-depressant of central nerve system that presses the control shyness and avoidance, as well as influencing the conscience. Thus, drinking individuals cannot control their behavior and conscience, allowing them to gain more confidence. If this continues, the individuals will be addicted and they will experience a kind of mental disorder, leading to other health problems.

Other research that is in line with the result concludes that self-confidence contributes to juvenile delinquency, but it has negative correlation value. It means that the higher the self-confidence, the less the occurrence of juvenile delinquency. Alcohol consumption belongs to one of the mentioned delinquency.

The relation between family and alcohol consumption: In families less participating, the number of alcohol consumption is higher compared to those whose family have greater roles. The family’s participation in preventing youth from drinking alcohol is not enough to encourage the youth to leave it. Family role is not the only factor in this case. Theoretically, parents’ role will root within an individual to interact with himself or with others. Good interaction will help to shape adolescence’s behavior.

The research is supported by another research conducted to under-age inmates, ranged from 15 to 18 years old. It shows that children’s attachment to their father, particularly when it decreases, lead to improve the numbers of juvenile delinquency. The most influential factor of adolescent alcohol consumption is their parents. The quality of parents-children relationship reflects the level of warmth, security, confidence, positive affective, and response.

The Correlation between Teacher’s role and alcohol consumption: In this study, it is known that teacher has not been fully capable of encouraging adolescents not to drink alcohol, apart from other influencing factors, such as environment and peers. The previous research shows that 80.6% of students perform
unhealthy behavior because their teachers do not concern much about them. The relation is significant. Children and adolescents tend to imitate the adults. In this case, teachers are the adults they see at school. It is expected that the policies, regulation, and sanctions arranged by the teachers help the adolescents to behave better.

Teachers can strengthen students in performing good deeds. This strengthening factor is concomitant factor following the behavior, such as giving sanction, incentive, or punishment upon the behavior. Teachers also participate in maintaining or eliminating the behavior. Teachers have the power to influence the values and characters of the students in three ways: be an effective caregiver by loving and respecting the students; be a good model inside and outside the classroom; and be an ethical counselor by providing moral teaching.

The Correlation between Peers and alcohol consumption: The role of friends becomes a reinforcing influence for adolescents to consume alcohol. Previous research show that one of the reasons causing an individual to drink is the environment. Youth who spend their time with peers who drink alcohol are likely to develop drinking habit. Other research supports the results, showing that there is positive and significant relation between peers’ attachment and juvenile delinquency. The finding indicates that attachment to peers is the risk factor that causes juvenile delinquency, one of them is alcohol consumption.

Adolescents have more time to spend with their peers rather than to their family. Indeed, it is common that peers come first before the parents, for individuals tend to easily actualize themselves and live their own choices without their parents. Mostly, drinking alcohol becomes the main social activities of male adolescents. It also becomes their social symbol.

Peers are influential social agent for individuals. These individuals are willing to do anything to join their peers in a group, such as smoking, drinking, or any other activities. Previous research shows significant relation between peers giving negative influence and alcohol consumption by adolescents. It reached OR=9.64, meaning that the occurrence of alcohol consumption is 9.64 times bigger in adolescents receiving negative influence than those receiving positive influence.

The relationship between Information Sources and Alcohol Consumption: Information sources do not relationship with alcohol consumption by adolescents in Yogyakarta City. A study shows that the respondents exposed by alcohol advertisement indicate an increase in their willingness to drink compared to those who are exposed to non-alcoholic advertisement. Waring advertisement of the effects of alcohol indirectly contributes to decrease alcohol consumption. Mass media becomes strong influence in shaping public opinion and behavior. Other study found that mass media causes assertive behavior and the tendency of juvenile delinquency. Youth behavior that leads to alcohol consumption can be influenced by advertisement. It results in significant relation between cigarette advertisement and smoking behavior by students of junior high schools.

However, the present study shows that information sources or mass media does not give negative effect. The problem is not on the type or the number of mass media, but from the characteristics (positive or negative) and the attitude of the receiver of information. Conversely, information sources can give positive impact. If the information provided by the mass media is positive, it brings good knowledge which leads to good attitude reflected in the real life. The higher the access to positive information sources, the more knowledge obtained and the more positive the behavior.

Conclusion

There was relationship between knowledge, attitudes, self-confidence, family role, teacher’s role, and peer role with alcohol consumption in adolescents. There was no relationship between information sources and alcohol consumption in adolescents in the city of Yogyakarta. Provide understanding to adolescents about healthy living behaviors such as avoiding alcohol consumption and involving parents, teachers and friends in supporting teenagers to avoid alcohol consumption.

Acknowledgements: We would like to convey our biggest gratitude to LPPM UAD (Lembaga Penelitian dan Pengabdian Kepada Masyarakat Universitas Ahmad Dahlan) for its funding.

Conflict of Interest: We declare that there is no conflict of interest.

Ethical Approval: The data collected will not be used for other purposes than this research. This study was discussed by the Ethics Committee of Ahmad Dahlan University, Yogyakarta, Indonesia with number 01705068.
References


24. Stutz K, Frings D, Albery IP, Moss AC, Marteau TM. Impact of alcohol-promoting and


## Determinant Factors of Alcohol Consumption by Adolescents

### PRIMARY SOURCES


---

**EXCLUDE QUOTES** | ON
---|---
**EXCLUDE BIBLIOGRAPHY** | ON
**EXCLUDE MATCHES** | OFF