



2nd ICHMS & 2nd LSC

PROCEEDING

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The 2nd International Conference of Medical and Health Sciences (ICMHS) and The 2nd Life Sciences Conference (LSC) 2016

*"Towards a Better Quality of Life
through Interdisciplinary Research"*

Yogyakarta, 9th-10th December 2016
The Alana Hotel and Convention Center

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**The 2nd International Conference of Medical & Health Sciences
and
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Partner	Dr Zahid Iqbal, Ph.D
Secretary	Winnie Setyonugroho, S.Ked, MT, Ph.D
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Scientific section	Dr dr Ikhlas M Jenie, M.Med, Sc Dr Sri Nabawiyati Nurul Makiyah, S.Si, M.Kes Lia Fitriana, SP
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**Chair person of The 2nd International Conference of Medical and
Health Sciences and The 2nd Life Sciences Conference 2016**



Welcome to Jogja, sugeng rawuh!

For the second time, the Faculty of Medicine and Health Sciences Universitas Muhammadiyah Yogyakarta is going to conduct the 2nd International Conference of Medical and Health Sciences (ICMHS) this December in vibrant Yogyakarta, Indonesia. This year we are going to collaborate with the Life Sciences Society of Pakistan for their 2nd Life Sciences Conference (LSC) with Dr. Zahid Iqbal as the general secretary.

This year's conference theme "Towards a better quality of life through interdisciplinary research" will be celebrating an era of seamless interdisciplinary integration and collaboration in scientific innovations with the involvement of more extensive topics and disciplines in the conference. We aim to exhibit the products of that kind of approach in solving challenges, improving the quality of life, and creating sustainable developments. We are happy to announce that our conference is filled with Invited speakers from Pakistan, United States of America, Uni Emirates Arab, Malaysia and Indonesia. Presentations will be conducted in oral as well as poster that covers topics from medicine, public health, dentistry, pharmacy, biomedical to agriculture. To put more credibility to the conference we are collaborating with Isra Medical Journal and the Asian Journal of Agriculture and Biology to publish selected papers from the event. Other paper will be published in the ISBN Proceeding book.

The last but not least, enjoy the conference, start networking and sharing ideas, and let immerse yourself to the heritage cultural ambient of Jogja, sumonggo!

Yogyakarta, 1st December 2016

dr. Iman Permana, M.Kes, Ph.D.

**The 2nd International Conference of Medical & Health Sciences
and
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**Dean of Faculty of Medicine and Health Sciences,
Universitas Muhammadiyah Yogyakarta**



Assalamu'alaikum Wr. Wb.

Science, especially in the areas of health and life growing more rapidly. We need to work together in the research of various disciplines to the advancement of science and to provide benefits to human life.

After successfully organized international scientific meeting last year, the Faculty of Medical and Health Sciences Universitas Muhammadiyah Yogyakarta, held the second scientific meeting ICMHS along with "2nd Life Sciences Conference". In this second scientific meeting, FKIK UMY collaborates with various researchers, among others from Pakistan, Malaysia, and the United States. Taking the theme "Towards a better quality of life through interdisciplinary research" we hope to establish cooperation with various parties to be able to contribute ideas to the civilization of human life.

Finally, we congratulate the scientific meeting in the city of Yogyakarta Indonesia. Enjoy the beautiful city of Yogyakarta with priceless historical relics. We hope that this meeting can run smoothly and provide benefits to the advancement of knowledge.

Wassalamu'alaikum Wr. Wb.

Yogyakarta, 1st December 2016

dr. Ardi Pramono, M.Kes, Sp.An.

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Rector of Universitas Muhammadiyah Yogyakarta



Assalaamu'alaikum Wr. Wb.

Ladies and Gentlemen,

Welcome to the 2nd International Conference on Medical and Health Science in conjunction with the 2nd Life Sciences Conference 2016

Welcome to Yogyakarta City of Tolerance

Our Faculty of Medicine and Health Sciences has been doing such international conference almost every year for the last ten years. This and other previous conferences are the things that supporting our vision as an excellence and Islamic university, a young and global university. We will always try to keep monitoring the development of science through sending more lecturers to do the sabbatical leave overseas, doing international research collaborations and also the international conference. Each department should do this strategy of internationalization so that each department has its own network. Faculty of medicine and health science is one of the most progressive units in implementing this strategy by inviting international experts on a regular basis. This program will certainly strengthen our vision.

International conference on medicine and health sciences is a smart choice to offer our lecturers access to the most recent development of the subjects. The participants will also gain the same knowledge and latest information on medicine and health sciences. As everyone knows that the development of science and technology are faster today compared to the previous period. Information technology, computer, and other development havefastened the transformation of medicine and health science into the different and more complex stage.

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Cellular technology, for instance, can be used for several functions including those that directly impacts our daily life. There is no long distance call anymore today because cellular phone can do everything we need to contact other people far from where we stand anytime anywhere. People will finally innovate cellular phone for the sake of personal health services. We will in the future using our simple cellular phone to detect our body temperature, blood pressure, even how much fat we have in our body and how much it is supposed to be. We may also be able to check the health of our body without leaving our house and order medicine without going into the drug store. Everything is almost possible as long as we think hard for the better of people in the future. Enjoy the conference and don't forget to visit our rich tourist destinations, mountains, beaches or caves (underground waterways).

Thank you

Wassalaamu'alaikum Wr. Wb.

Prof. Dr. Bambang Cipto, MA

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Keynote Speech

**by Head of Provincial Health Office Special Region of Yogyakarta
in International Conference
of Medical and Health Sciences and Life Sciences Conference**

The Alana Hotel and Convention Center, Yogyakarta, December 9-10, 2016

The honorable:

- Rector of Muhammadiyah University of Yogyakarta,
- The Dean of Medical and Health Sciences Muhammadiyah University of Yogyakarta,
- The chairman of organizing committee of the international conference of medical and health,
- Distinguished guests and colleagues.

Assalamu'alaikum Warahmatullahi Wabarakatuh,

First of all, we thank God for His blessings that today we may attend the International Conference of Medical Health Towards a Better Quality of Life Through Interdisciplinary Research in Yogyakarta.

My distinguished colleagues,

In Indonesia National Long Term Development Plan (2005-2024), the Indonesian Ministry of Health have determined a paradigm shift that have governed health services in health development plan. There has been a shift from Curative Health Services to Preventive and Promotive Health Services.

Recently, Indonesia suffers from a triple burden of diseases as health development challenges. The triple burden of diseases are: 1) the backlog of common infections, undernutrition, and maternal mortality; 2) the emerging challenges of non-communicable diseases (NCDs), such as cancer, diabetes, heart disease; and 3) mental illness, and the problems directly related to globalization, like pandemics and the health consequences of climate change.

Dear colleagues,

Here are some data that show several health problems in Indonesia:

1. Maternal mortality rate in 2015 is 4,809 cases, infant mortality rate in 2015 is 22,267 cases;
2. Regarding to children under the age of five, the national stunting rate is 37.2% which consists of 18% for very short dan 19.2% for short (Riskesdas 2013);

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3. HIV testing coverage is 14% dan antiretroviral (ARV) therapy coverage is 65.58% (Directorate General of Disease Control and Prevention Ministry of Health, 2015);
4. Tuberculosis (TB) notification rate in 2015 is 73.5% and tuberculosis treatment success rate is 72% (Directorate General of Disease Control and Prevention Ministry of Health, 2015).

Distinguished guests,

Indonesia Health Development Program in 2015-2019 strengths in improving human quality life through Health Indonesia Program with family approach. The Indonesian Ministry of Health issued The Minister of Health Regulation (Permenkes) No. 39 Year 2016 as a Guideline of Implementation of Health Indonesia Program with Family Approach. This program has 12 main indicators as markers of a family health status. Currently, many health programs have been implemented by Indonesian Ministry of Health, Provincial Health Offices, and District Health Offices. However, many health problems, some as mentioned above, still become health burdens. We may ask a question whether the programs that we conducted have answered the health problems we have in Indonesia.

It would be better if all health programs that we implement based on scientific health research, especially interdisciplinary research. The research should be related to detection, prevention, and treatment of diseases or problem solving for better health.

My dear colleagues,

Being a province with speciality, Special Region of Yogyakarta placed Traditional Medicine as one of the priority programs in Provincial Medium Term Development Plan (2017-2022). We still encounter many challenges in developing Traditional Medicine, especially in providing services which are based on scientific evidence.

Distinguished colleagues,

We look forward to results of interdisciplinary research which would support health problem solving, especially by developing traditional medicine in Yogyakarta. We believe that collaboration in interdisciplinary research would improve quality of human life.

Finally,

Thank you for your attention. We wish you a successful conference.

Wassalamu'alaikum Warahmatullahi Wabarakatuh,

On behalf of
the Head of Provincial Health Office
Special Region of Yogyakarta

Drg. Pembajun Setyaningastutie, M.Kes

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**SPEAKER OF
INTERNATIONAL CONFERENCE**

Zahid Iqbal

Al-Nafees Medical College Isra University Islamabad Campus Islamabad, Pakistan
"One Health Program for Public Health Benefit"

Prof. Dr. Abdul Khaliq

Professor, Department of Agronomy, University of Agriculture, Faisalabad
"Role of Agriculture in Poverty Alleviation of Rural Areas"

Fitri Arofati

Universitas Muhammadiyah Yogyakarta, Indonesia
"Continuing Professional Development of Practicing Nurses in Indonesia"

Tri Wahyuliati

Universitas Muhammadiyah Yogyakarta, Indonesia
"Diabetic Neuropathy - A Chance Towards A Better Treatment"

Mohammad Khalid Ashfaq

University of Mississippi, USA
"Natural Products –Use or Misuse"

Muhammad Mukhtar

American University of Ras Al Khaimah, United Arab Emirates
"Emerging Biotechnologies and Genomic Medicines in Human Health and Well-Being"

Muhammad Sasmito Djati

Brawijaya University Malang, Indonesia
"Herbal Medicine a Holistic Approach: in case of food supplement formulation of Sauropusandrogynus and Elephantopuscaberto modulate immune and hormonal system in pregnant Salmonella typhi infected mice"

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REVIEWER

1. Dr. Zahid Iqbal, Ph.D (Isra University, Islamabad, Pakistan)
2. Prof. Dr. Abdul Khaliq (University of Agriculture, Faisalabad)
3. Dr. Mohammad Khalid Ashfaq, DVM, DTVM, MS, Ph.D (University of Mississippi, USA)
4. Dr. Muhammad Mukhtar, Ph.D (American University of Ras Al Khaimah, United Arab Emirates)
5. Dr. Ir. Muhammad Sasmito Djati, MS. (Brawijaya University Malang, Indonesia)
6. Fitri Arofiati, S.Kep., Ns., MAN., Ph.D (Universitas Muhammadiyah Yogyakarta, Indonesia)
7. Dr. SN Nurul Makiyah, S.Si., M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
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13. Dr. drg. Tita Ratya Utari, Sp. Ort (Universitas Muhammadiyah Yogyakarta, Indonesia)
14. Dr. dr. Tri Wahyuliati, Sp.S, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
15. Dr. Elsy Maria Rosa, M.Kep (Universitas Muhammadiyah Yogyakarta, Indonesia)
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18. Dr. dr. Sri Sundari, M.Ke (Universitas Muhammadiyah Yogyakarta, Indonesia)
19. Dra. Lilis Suryani, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
20. Drh. Tri Wulandari K, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
21. Dr. dr. Wiwik Kusumawati, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
22. Sabtanti Harimurti, S.Si., M.Sc., Ph.D., Apt. (Universitas Muhammadiyah Yogyakarta, Indonesia)

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**SPEAKER OF
INTERNATIONAL CONFERENCE**

ICMHS-P-1-23

Analysis of Factors that Influence Smokers Using Alcohol among Students in a Private University in Yogyakarta

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Abstract

Background: Nicotine and alcohol are both addictive substances that often used together. Current studies in the western countries show that 80-90% of the population who smoke, are drinking alcohol regularly compared with the general population, which is only 66%. Furthermore, smokers tend to be heavy drinkers than non-smokers. However, there are paucity of studies in regards of this relationship in Indonesia with a consideration of Indonesia as the country with the biggest Muslim population that prohibit alcohol consumption. Aim: the purpose of this study was to determine what factors are influencing smokers to consume alcoholic beverages among college students from one of a private university in Yogyakarta. Methods: a non-experimental study with analytic descriptive approach and cross sectional design. Subjects were 170 university students in one of a private university in Yogyakarta who smoke and/or drink alcohol. This research was conducted in May 2011 by distributing questionnaires on cigarettes smoking and alcohol consumption. Logistic regression is used to determine the correlation's strength of predictor factors with SPSS version 15. Results: indicating that factors influencing smokers to consume alcohol is unhealthy social condition (OR = 52.521), the belief that drinking alcohol can reduce boredom and stress (OR = 16.364), low self-esteem (OR = 9.774), curiosity (OR = 6.990), lack of achievement motivation (OR = 4.679), adherence to worship (OR = 1.788), and how to obtain recognition from her friends (OR = 1.238). A qualitative study was considered important in exploring deeper into the underlying perceptions.

Keywords: smokers, alcohol, adolescences, influencing factors, Muslim population.

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INTRODUCTION

Nicotine and alcohol are addictive substances that often consumed together.¹ The consumption of one substance might lead to use of another.² Several studies in Western countries have shown that more than a half of smokers were a regular drinker, compared to the general population.^{3,4} Moreover, smokers tended to be heavy drinkers than non-smokers. On the other hand, 80% of smokers were coming from drinkers compared to 23% of general population.^{5,6}

Indonesia is considered to be the country with the largest Muslim population in the world.⁷ With around 200 million Muslim, it comprises almost one eighth of the world Muslim population.

Islam is regarded as the way of life among Muslim. It can be seen in daily life such the practice of communal sholat in masjid, wearing hijab for women and many gestures and behavior in human interaction, for example. Moreover, there are specific teachings in Islam related to how Muslims dealt with daily life style, including the consumption of alcohol and smoking. Alcohol consumption is regarded as prohibited in Islam as it is explained in the Qur'an, as one of the main source of Islamic jurisprudence, along with hadits (the saying and example from the Prophet, Muhammad) and the 'ijma of the 'ulama or Muslim scholar.⁸ Moreover, Al Qur'an has mentioned alcohol in several surah under the term intoxicant as in al Baqarah: 219 and al Maidah: 90, for example (The Quran, 2010).⁹ While, in regards of smoking, which contains nicotine, Majelis Ulama Indonesia (MUI) or Indonesian Ulama Council, has declared it as haram or prohibited in certain conditions, such as for pregnant mother, children and if it is done in public spaces. [10] MUI is regarded as the top independent-muslim scholar in Indonesia which comprised of representative ulama from every province as well as Islamic organization in Indonesia.¹⁰ One of the many function of MUI is to provide guidance on every issue related to daily Muslim life, as a part of the Islamic jurisprudence.

Despite the exceptional conditions, there is unanimous agreement among the MUI of nicotine's bad impact to health.¹⁰ Nevertheless, data in 2007 showed that more than half (67%) of the men in Indonesia was active smokers. While, 51,3 % is exposed to tobacco smoke or secondhand smoker.¹¹ Furthermore, 4.6% of the population were drinking alcohol. They were more prevalent in the rural areas compared to the urban with the range of age between 15 to 34.¹² Indeed, in regards of Indonesian jurisprudence system in general, fatwa of MUI is not considered as formal and law.

Upon observation, there were a lot of students who smoke inside the university perimeter, which was actually against the regulations of the university. Furthermore, to better understand the behavior of smoking and alcohol consumption among the adolescent, especially in this university, it needed to conduct a study to reveal factors that might involve in that particular actions.

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MATERIALS AND METHODS

This was a descriptive analytic study with cross sectional design to analyse what factors that might influence a smoker to consume alcohol. The population of the study was the student in one department, with the number of 865 students. Target population was the students who smoke and drank alcohol. However, due to the confidentiality of data, since smoking was regarded prohibited inside the university parameter moreover drinking alcohol, snowball sampling was taken.¹³ A questionnaire was used to collect the data. Chi-square test was used to reveal the relationship between smoking behavior and alcohol consumption. Logistic regression was used to reveal the most influent factors that might play a role in maintaining the relationship.

Prior to conduct the study, an ethical approval was gained from the Ethical Committee in the Faculty of Medicine and Health Sciences, Universitas Muhammadiyah Yogyakarta.

RESULTS

This study was trying to explore the habit of smoking and alcohol drinking among the students in one private university, which was affiliated to one of the largest Muslim organization in Indonesia. This setting was considered important to give more emphasize in putting Islamic perspective into context, since the university's vision and mission was in line with Islamic's values.

Based from the snowball sampling technique 170 participants were collected, consisted of 147 male and 23 female students. All of the participants were smoking with more than a half were also a drinker (57.7%). According to the national data of the abuse of Narkoba, stands for narkotika, alcohol, psikotropika dan zat adiktif lainnya, or narcotics, alcohol, psychotropic and other addictive substances, the proportion of students were increasing for almost 4 fold, from 2011 to 2013.¹² However, the data did not distinguish between the alcohol drinker and other substances abuser. Furthermore, data from the Basic Health Research or Riskesdas 2007 showed that it was more prevalent in urban population than rural with data from Yogyakarta revealed the contrary.¹¹

Unanimously, alcohol consumption is prohibited among the Muslim scholar since it is clearly stated in Al Qur'an as haram.⁹ There are several surah in Al Qur'an mentioned the nature of alcohol such as Al Maidah verse 90 and 91 "(90) O you who believe! Intoxicants (all kinds of alcoholic drinks), gambling, *Al-Ansab*, and *Al-Azlam* (arrows for seeking luck or decision) are an abomination of *Shaitan's* (Satan) handiwork. So, avoid (strictly all) that (abomination) in order that you may be successful. (91). *Shaitan* (Satan) wants only to excite enmity and hatred between you with intoxicants (alcoholic drinks) and gambling, and hinder you from the remembrance of Allah and

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from *As-Salat* (the prayer). So, will you not then abstain?”. Or, Al Baqarah 219: “They ask you (O Muhammad ﷺ) concerning alcoholic drink and gambling. Say: “In them is a great sin, and (some) benefit for men, but the sin of them is greater than their benefit.” And they ask you what they ought to spend. Say: “That which is beyond your needs.” Thus, Allah makes clear to you His Laws in order that you may give thought.”

Unlike alcohol, there was no distinct and clear explanation on cigarette or smoking. However, several school of Muslim scholar who prohibited smoking, have put it under the term of “harmful” (Surah An Nisa verse 29) or “destructive behavior” (Surah Al Baqoroh verse 195).⁸ Furthermore, another supportive argument came from the Fatwa of Majelis Ulama of Muhammadiyah, as one of the largest religious’ non-governmental organization in Indonesia. Smoking was considered haram or prohibited in several circumstances, including: pregnant women, children and in open public spaces.¹⁰

Smoking behaviour among the students. Among the sample of study, almost third quarter (74.7%) were moderately or heavily smoking. According to Mu’tadin (2002) moderate smoking refers to consuming 11 to 21 cigarettes a day with the earliest of smoking between 31 to 60 minutes after wake up in the morning, while heavily smoking refers to 21 to 30 cigarettes a day and 6-30 minutes after waking up in the morning. While, there was no female students in the heavily smoking category.

Table 1. Smoking behavior among students

Smoking behavior	Frequency (%)		
	Male	Female	Total
Mild smoking	27 (15,9%)	16 (9,4%)	43 (25,3%)
Moderate smoking	79 (46,5%)	7 (4,1%)	86 (50,6%)
Heavy smoking	41 (24,1%)	0 (0 %)	41 (24,1 %)

Tabel 2. Alcohol consumption among students in a private university in Yogyakarta

Description of alcohol consumption behavior	Frequency (%)		
	Male	Female	Total
<i>Abstainer</i>	61 (35,8%)	11 (6,5%)	72 (42,3%)
<i>Non-Hazardous drinking</i>	37 (21,8%)	11 (6,5%)	48 (28,3%)
<i>Hazardous or harmful alcohol use</i>	26 (15,3%)	1 (0,6%)	27 (15,9%)
<i>Alcohol dependence</i>	23 (13,5%)	0 (0%)	23 (13,5%)

Alcohol consumption. Among the sample of this study, the majority (57.7%) were drinking alcohol. This was in line with other studies from western countries.^{3,4} However, there was slightly different proportion between male and female participants. Female participants who were drinking were slightly higher than non-drinker (52.17%). Among

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the drinker, mostly (28.3%) were categorized as non-hazardous drinker.

Tingkat ketergantungan minum minuman keras berbanding lurus dengan tingkat perilaku merokok responden hal ini sesuai dengan Batel *et al.* (1995).¹¹

Data from the Riskesdas 2007 showed, nationally, almost half of the alcohol drinkers consume traditional type of drinks (43.1%), followed by beer, wine and liquor.¹¹ Furthermore, data from Yogyakarta revealed a very different phenomenon. Wine was the most popular drinks, followed by liquor, beer and traditional alcoholic drinks was only composed of less than 2% (1.8%). However, this study was not intended to gain more information on the type of alcoholic drinks.

The relationship between influencing factors and smoking behaviour. This sub section is discussing the relationship between factors that might play a role in influencing of alcohol consumption among the tobacco smokers. Odds ratio was used to show the probabilities of the consumption of alcohol appear in the influence of certain factors.¹³ as displayed in Table 3.

Table 3. The relationship between smoking behavior, predisposing factor, contribution factor and trigerring factor with the alcohol consumption behavior with Chi Square test

Variable Sub Variable	alcohol consumption		P	OR	95%CI
	Yes	No			
a. Low self-respect					
a. Influencing	91	32	0,000	16,25	6,62-39,90
b. Not Influencing	7	40			
b. A belief to reduce boredom and stress					
a. Influencing	91	26	0,000	23,00	9,29-56,956
b. Not Influencing	7	46			
c. Curiosity					
a. Influencing	33	7	0,000	4,714	1,945-11,424
b. Not Influencing	65	65			
d. To gain peer recognition					
a. Influencing	87	34	0,000	8,849	4,055-19,272
b. Not Influencing	11	38			
e. Religious compliance					

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Variable Sub Variable	alcohol consumption		P	OR	95%CI
	Yes	No			
a. Influencing	85	33	0,000	7,727	3,667-16,283
b. Not Influencing	13	39			
f. Monitoring from and interpersonal relationship with the parents, and family integrity					
a. Influencing	35	18	0,136	1,667	0,849-3,273
b. Not Influencing	61	54			
g. Easy access to get alcohol					
a. Influencing	36	24	0,647	1,161	0,613-2,201
b. Not Influencing	62	48			
h. Unfavourable environment					
a. Influencing	93	19	0,000	51,884	18,315-146,98
b. Not Influencing	5	53			

Table 3. shows that 'unfavorable environment' among adolescent was the most influential factor for a smoker student to become an alcohol drinker, with a 51 times probability. 'Unfavorable environment' refers to any existing factors that might influence someone to be a drinker, such as the drinkers peer. Moreover, the underpinning factor of this tendency might be coming from the lack of self-control. It is in accordance to a study by Indraprasti and Rachmawati that has showed a significant relationship between lack of self-control among the adolescent between 13 to 21 years old in Yogyakarta.¹⁶ There are 2 influential factor of drug abuse, those are internal factors (low self-esteem, anxiety, etc) and external factors (family and peers). This is in accordance to the fact that adolescent tends to gather with the peers instead of a more formal group.¹⁷ Moreover, Hawari (2006),¹⁸ mentioned that peer group has been playing a role in establishing a strong bond among the drinkers. However, this study was not aimed to revealed the underlying cause of this behavior. Thus, this might serve as recommendation for further studies.

A belief of alcohol consumption as a way 'to reduce boredom and stress' showed to be the second influential factor with 23 times probability, and it was in accordance to the study from Kartini.¹⁴ It was followed by 'low self-respect' followed and 16 times probability, respectively. 'Low self-respect' was also found as determinant factor in drugs abuse in other studies.^{17,19}

Furthermore, 'curiosity' has showed a significant influence for a smoker to become a drinker, with 4.7 times probability, which was in line with Sari (2008),¹⁹ that

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mentioned the nature of adolescent who keen to seek and try something new. While, the sub variable of 'as a means to gain peer recognition' was significantly correlated to the behavior of alcohol drinking. The nature of adolescent was characterized by the need to gain acknowledgement from their peer, as well as maintaining solidarity among them has influenced them to follow what others have done, including in alcohol.¹⁷ Every individual has or attached to his or her own preference group. If the preference group was an alcoholic drinker, there was highly likely that everyone in the group was also and accepted as a drinker since everyone has to agree to the rule inside the group.²⁰

While, the 'compliance to religion' only play a role in inhibiting 7 times of the probability of consuming alcohol. There are several factors that might play into role of how someone would comply or adhere to the teachings of his or her religion. The religious knowledge is regarded important in hindering someone from performing an act that prohibited by the religion.¹⁹ Individual with a religious family's background would highly unlikely to drink alcohol.¹⁶ Furthermore, if someone with lack of religious background would shift his or her dependency from God to the habits. Thus, alcohol would become the way of coping against any difficulties in life.¹⁷

Furthermore, this study found that the influence of family, in term of 'parents' monitoring and family integrity' did not have a relationship with the tendency to become an alcohol drinker, with level of significance > 0.05 . This was not in accordance to the study from Lestary and Sugiharti.²¹ Hawari (2006) mentioned that drugs abuse has been correlated with the family system disorder and alcohol abuse among adolescent, which reflecting a dysfunctional relationship between the family member.²²

Sub variable of 'easy access to get the alcohol drinks' had a level of significance of >0.05 , which means there was no relationship. This result was not in accordance to the study from Sari (2008), which mentioned that easy access to get the drink was the influential factor of particular behavior. [19] It was argued that there are two factors that influenced substances abuse, those are: internal (low self-esteem, anxiety, etc.) and external (family and peer) Ouellette, et al. (1999).¹⁶ The underpinning of such relationship was probably caused by the fact of the tendency of someone who already addicted would do anything to get the drugs, regardless that access.²¹

CONCLUSION

Despite the clear and distinct Islamic norms in regards of alcohol consumption, the study found the practice of alcohol consumption among the students in a private university affiliated to the biggest Islamic organization in Indonesia. Moreover, it was not only evident among the male but also female students.

Unfavorable environment has revealed as the most determinant factor in influencing a smoker to become an alcohol drinker. Followed by a belief that alcohol

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might reduce stress and boredom, and the low self-respect. The influence of religion has also played a role to a lesser extent, which has questioned the role of Islamic norms in their daily life, not the least the role of the university in the effort to implement their vision and mission which were in line with Islamic values and norms. Other influential factors were curiosity, as an effort to gain peer recognition, the influence of family and the access to get the alcohol.

Further study might be directed in discovering the underpinning facts behind the phenomenon. Qualitative study would be more beneficial in trying to shed some lights in revealing how a Muslim might start to become an alcohol drinker, since Islamic norms were very clear on this subject.

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