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Underage and Unrecorded: Alcohol Consumption and its Health Risk for the Youth Case Study in Bandung, West Java

by Hizkia Respatiadi and Sugianto Tandra

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Author:

Hizkia Respatiadi and Sugianto Tandra
Center for Indonesian Policy Studies (CIPS)

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Glossary

I. Recorded alcohol:

Licit beverage alcohol products produced and sold within a regulatory framework and reflected in official statistics of either the country where they are produced, the country where they are consumed, or both.

II. Unrecorded alcohol:

Alcohol that is not taxed in the country where it is consumed because it is usually produced, distributed and sold outside the formal channels under government control.

It has several types, including:

A. Contraband/smuggled alcohol:

Alcohol with original branding that has been illegally imported or smuggled into a jurisdiction and sold, evading tariffs and/or customs.

B. Counterfeit alcohol:

Fraudulent imitations of legitimate branded products, including refilling, falsification, and tampering.

C. Non-conforming alcohol:

Products that are not compliant with production processes, guidelines, or labeling legislation. Includes products produced with denatured alcohol or illegal industrial alcohol.

D. Surrogate alcohol:

Alcohol or alcohol-containing products not meant or sold for human consumption but that are consumed as substitutes for beverage alcohol.

E. *Oplosan* alcohol:

In Indonesia, the term *oplosan* falls between the category of non-conforming and surrogate alcohol. It contains mixes of ingredients that have not gone through the distillation process (non-conforming alcohol). *Oplosan* could be dangerous to health if it also contains non-food ingredients such as methanol (surrogate alcohol).

Sources are collated from UN-WHO (2014), International Alliance for Responsible Drinkers (IARD) (2016), and Center for Indonesian Policy Studies (2016).

Executive Summary

Underage consumption of unrecorded alcohol is a major threat to the youth in Bandung City. In this study, 48% of all students who confirmed that they drink alcohol reported that they started drinking when they were in senior high school (15 – 17 years old). Alarming, 12% started drinking while they were primary school age (6 – 12 years old), and 20% began while in junior high school (13 – 15 years old). Ministry of Trade Regulation (MOT) 20/2014, MOT 06/2015, and Bandung City Regional Regulation (BCRR) 11/2010 all fail to curb underage drinking.

The volume of alcohol that Indonesians consume is not the problem as they drink much less than citizens of other countries. In 2015, Euromonitor International stated that annual sales volume per capita of recorded alcohol in Indonesia was only 2.26 liters. This number is much lower than in Thailand and Turkey that reached 47.63 liters and 15.88 liters respectively. According to the World Health Organization (WHO), Indonesians only consume 0.6 liters of pure alcohol annually per capita, lower than the South-East Asian average (3.4 liters) and also lower than in the Arab World (0.7 liters).

The problem is, instead, what people consume. The most vital threat to Indonesian youth is *oplosan*, a type of unrecorded alcohol that can contain non-food ingredients, such as mosquito repellent, headache pills, and battery fluids. When methyl alcohol (methanol) is added, consuming *oplosan* can lead to seizures, organ failure, and death. 32% of all alcohol-consuming students surveyed for this study have consumed *oplosan*.

Bandung and the surrounding area appear to be a hot spot for *oplosan*-related deaths. In the Greater Bandung area there were 40 reported deaths attributed to *oplosan* between January 2008 and December 2013. From January 2014 to April 10, 2018, however, the reported deaths more than doubled and reached 90 cases. On average, there is one death per 615,000 people every year in this region. This is nearly five times higher than the national average of one death per 3 million people per year.

Unlicensed kiosks are the main suppliers of *oplosan* for students. 65% claimed they bought their drinks at these small, nighttime-operated kiosks, which are located near campuses or residential areas and sell unrecorded alcohol at low prices.

Nearly half of respondents stated there is no dissemination of information about the danger of underage drinking and unrecorded alcohol by schools and universities, and another third claimed they were not aware of such information.

To address this issue, there must be joint efforts by the government, universities, civil society, and parents to inform young people about the dangers of underage drinking and unrecorded alcohol consumption. Besides better law enforcement, local communities need to be involved in preventing sales of unrecorded alcohol at unlicensed stores to underage customers.

I. Alcohol consumption in Indonesia at a glance

Consumption of alcoholic beverages in Indonesia is low compared to other beverages. A national study¹ conducted by the Ministry of Health from 2014 – 2015 (Ministry of Health, 2014, pp. viii, 42, 43) concluded that the average daily consumption of alcoholic beverages in Indonesia is only 1.0 ml/person/day, lower than carbonated drinks (2.4 ml), and ready-to-drink (RTD) packaged beverages (19.8 ml) (Figure 1). Only 0.2% of respondents consume alcoholic beverages, a rate lower than RTD packaged beverages (8.7%), coffee (25.1%), and tea (31.2%) (Figure 2).

Figure 1
Daily Consumption of Liquid Beverages in Indonesia (ml/person/day)

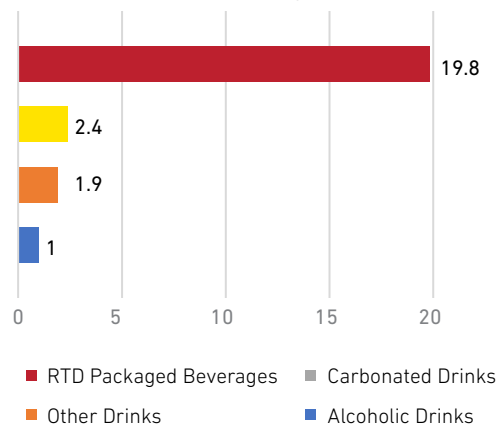
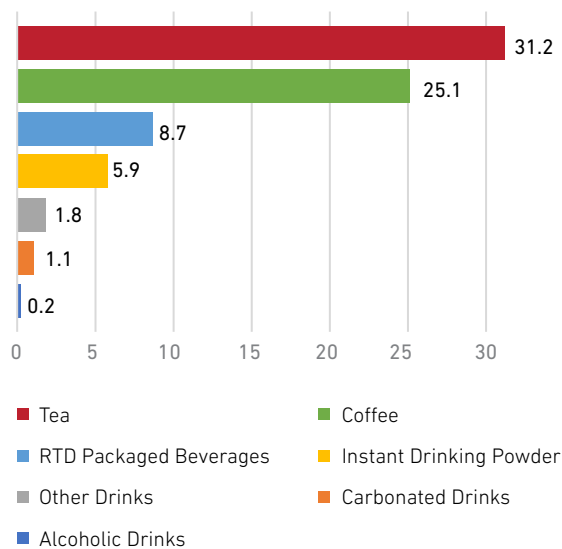


Figure 2
Proportion of Indonesian Population Consuming Types of Beverages (%)



Source: Ministry of Health (2014)

¹ Ministry of Health uses its own database to determine the household respondents. This database was the result of the Ministry's national health survey (Riskesdas) conducted in 2013.

Indonesia has low absolute sales volumes of recorded alcohol per capita. Sales to the population aged 15 and above is only 2.26 liters per capita annually. This number is much lower compared to neighboring Thailand (47.63 liters) and to Turkey, another Muslim-majority country (15.88 liters). It is, not surprisingly, lower than Germany (155.34 liters), a benchmark country for high alcohol-consumption (Table 1).

Table 1
Sales Volume of Alcoholic Beverages per Capita (aged 15+) (2015)

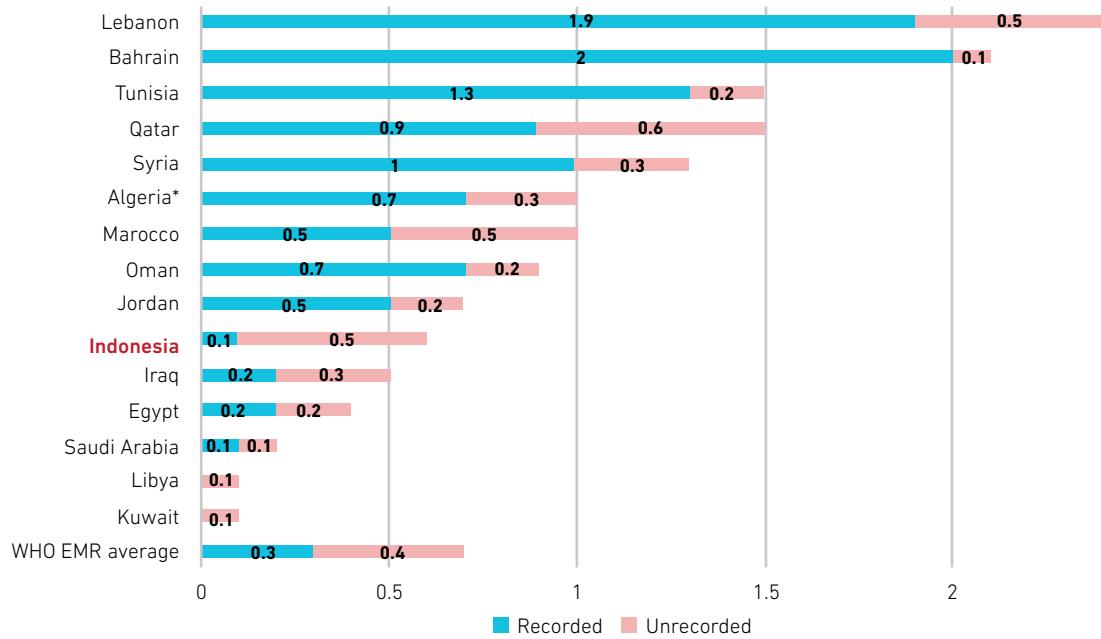
Country	Remarks	Total Recorded Alcohol Sales Volume (000 liters)		Population*			Recorded Alcohol Sales Volume per capita (aged 15+) (liters)
				Population (total)	Population (aged 0-14)	Population (aged 15+)	
Indonesia		421,435	*	258,162,113	71,920,631	186,241,482	2.26
Thailand	Neighboring country in Southeast Asia	2,682,000	**	68,657,600	12,352,801	56,304,799	47.63
Turkey	Eurasian country with Muslim majority (99.8%)**	924,700	***	78,271,472	20,024,544	58,246,928	15.88
Germany	Highest total alcohol sales volume in Western Europe	11,024,500	***	81,686,611	10,716,271	70,970,340	155.34

Source: Authors' own calculation with the data from:

- * Euromonitor International, Alcohol in Indonesia (2017)
- ** Euromonitor International, as cited by Wine Australia (2017)
- *** Agriculture and Agri-food Canada, Market Access Secretariat (2016)
- + The World Bank (2017)
- ++ US-CIA World Factbook (2018)

Indonesia has low annual pure alcohol consumption per capita compared to most Muslim-majority countries. According to the UN-WHO (2014a), its annual per capita pure alcohol consumption reached only 0.6 liters, lower compared to the average of the Arab World (0.7 liters). It is also lower than Jordan (0.7 liters), Algeria (1.0 liter), Qatar (1.7 liters), and Lebanon (2.6 liters) (Figure 3).

Figure 3
Recorded and unrecorded alcohol consumption in the Arab World, 2010
(in liters of pure alcohol)



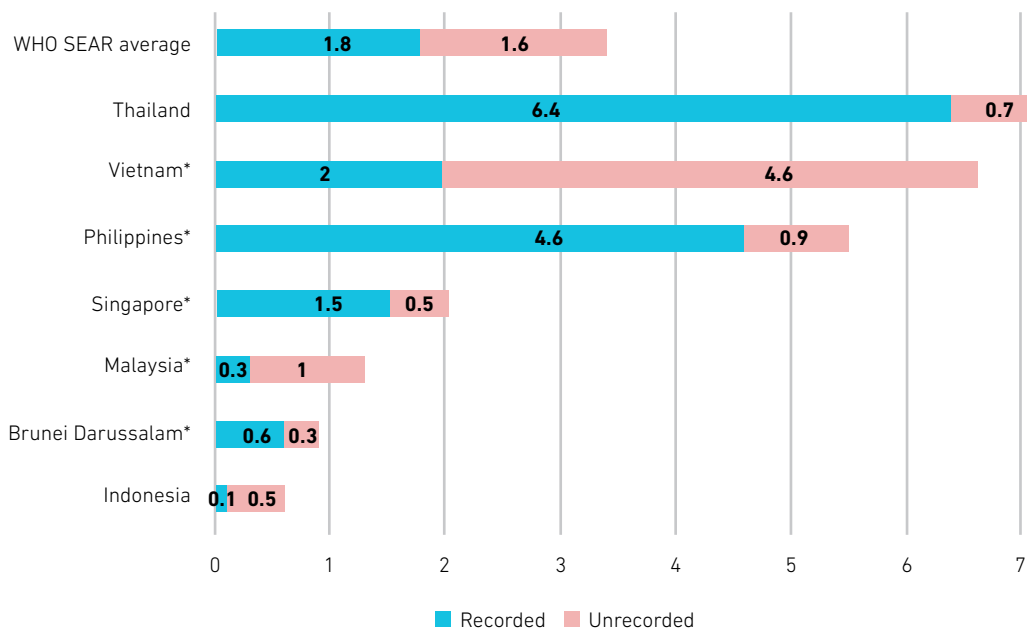
Source: WHO (2014)

Notes:

* In the WHO's *Global Status Report on Alcohol and Health 2014* (2014a, p. 349), which we use as the source for this figure, the asterisked countries are classified within the WHO Africa Region instead of the WHO Eastern Mediterranean Region (EMR). Therefore, the WHO EMR average consumption does not include consumption in these countries. Their inclusion here is for comparison only.

Indonesia also has low annual pure alcohol consumption per capita compared to most South East Asian countries, 0.6 liters. This is lower than the average of WHO South East Asian Region consumption of 3.4 liters per year per capita. It is also lower than Brunei Darussalam (0.9 liters), Malaysia (1.3 liters) the Philippines (5.4 liters), and Thailand (7.1 liters) (Figure 4).

Figure 4
Recorded and Unrecorded Alcohol Consumption in Southeast Asia, 2010
 (in liters of pure alcohol)



Source: WHO (2014)

Notes:

*In the WHO's *Global Status Report on Alcohol and Health 2014* (2014a, p. 349), which we use as the source for this figure, the asterisked countries are classified within the WHO Western Pacific Region (WPR) instead of the WHO South East Asia Region (SEAR). Therefore, the WHO SEAR average consumption does not include consumption in these countries. Their inclusion here is for comparison only.

In spite of Indonesia's relatively low alcohol consumption there is a public health risk, which lies in the fact that its unrecorded alcohol² consumption is five times higher than consumption of recorded alcohol. In Malaysia, the consumption of unrecorded alcohol is only around three times higher. In Brunei Darussalam, the Philippines, and Thailand, the consumption of recorded alcoholic drinks was higher than unrecorded consumption (Figure 4, above).

Since there are not proper quality or hygiene controls on the production of unrecorded alcohol, its consumption is more risky for Indonesians than consumption of recorded alcohol. The youth,³ estimated to be around 45 million people in the country, are the most exposed to this risk. As they mature, young people become curious and want to try new things, and might encourage their friends to do the same. Underage drinking is one risky act common among the youth (NIH, 2017, p. 3; US DHHS, 2007, p. 17). As a result, young people in Indonesia are easily tempted to drink unrecorded alcohol as their first exposure to alcohol because it is more readily available at cheaper prices than recorded alcohol (IARD, 2017, p. 5). Once they begin, they are prone to be regular drinkers of alcoholic beverages due to peer pressure as they seek entertainment with their friends.

² According to the WHO (2014, p.30), unrecorded alcohol refers to "alcohol that is not taxed in the country where it is consumed because it is usually produced, distributed and sold outside the formal channels under government control".

³ The United Nations (UN) defines "youth" as between 15 to 24 years old <UN_Definition of Youth, p.1 PDF>.

II. Underage and Unrecorded - Alcohol consumption among the youth in Bandung City

Brief statistics of Bandung City

Total population: 2,490,622

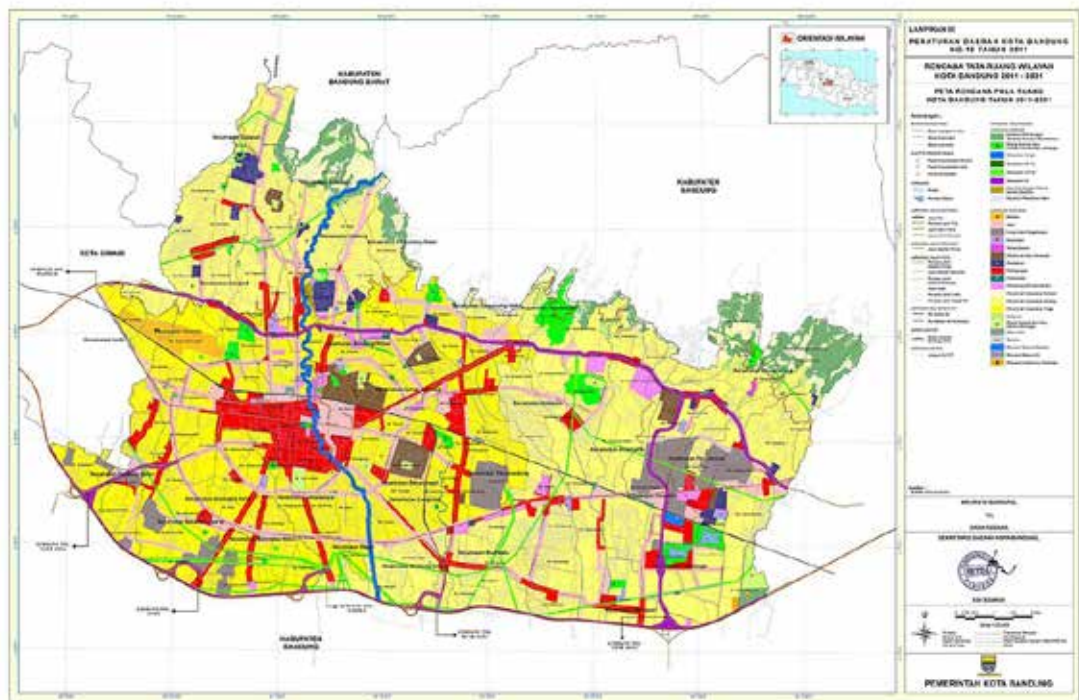
Youth (aged 15 – 24) population: 481,950 (19.35% of the total population)

Number of listed universities and other tertiary education institutions: 115

Number of registered students: 149,351

Source: Statistics Indonesia (2017)

Figure 5
Map of Bandung City



Source: Bandung City Local Government (2017)

Research Methodology

This study used a chain-referral sampling survey to interview 100 alcohol-drinking university students in Bandung City. It used a chain-referral sampling method due to the difficulty of approaching the respondents without prior contact with the people whom they know personally, and because of the bias this introduces to the sample, the survey does not offer a representative sample of the population. Therefore, the survey result in this study serves only as an indication of a trend that must be further verified through future research that uses a survey with a more representative sample. For privacy reasons, any mention of names of the respondents and the universities are made under an encoded number or letter.

Profile of the respondents

The sample consists of 100 university students who confirmed that they drink alcohol. Most (83%) were male and only 17% were female (Figure 6). They were between 18 and 24 years old (Figure 7). For most of them (47%), monthly allowance ranged between IDR 1 – 3 million, and another 37% received less than IDR 1 million per month (Figure 8). Four state universities (coded University A – D) and four private universities (coded University E – H) in Bandung City are represented in the survey (Figure 9).

Figure 6
Gender of the respondents (n=100)

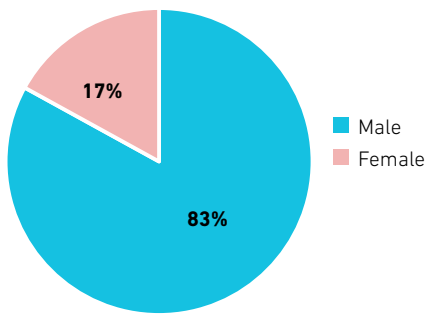


Figure 7
Respondents' ages (n=100)

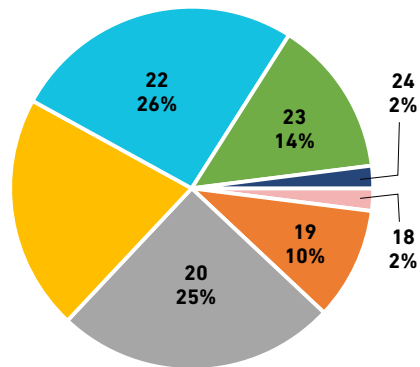


Figure 8
Respondents' monthly allowance (IDR) (n=100)

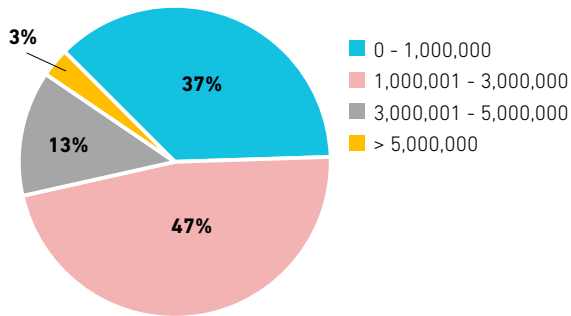
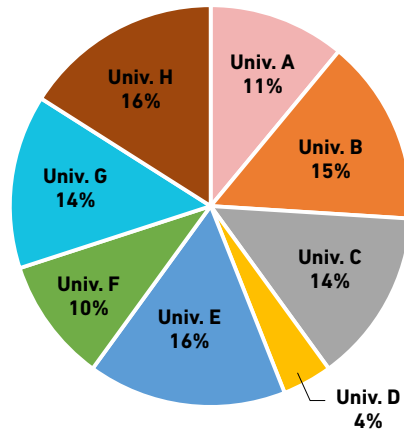


Figure 9
Respondents' University (n=100)

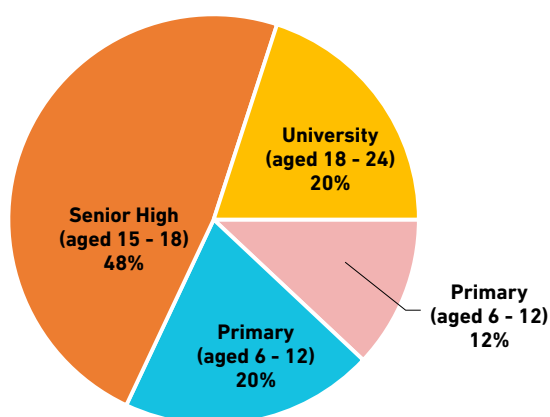


Source: CIPS Survey (2018)

Alcohol consumption among the youth in Bandung City

Underage drinking is prevalent in Bandung City. Of the sample of alcohol-consuming students, 48% stated that they started drinking during their senior high school years (between 15 and 17 years old). The other 32% started even younger: 12% started drinking at primary school age (6 – 12 years old), and another 20% began when they were still in junior high school (13 – 15 years old) (Figure 10). This is far below the legal drinking age set by the Ministry of Trade Regulation (MOT) 20/2014 (Article 15) and Bandung City Regional Regulation (BCRR) 11/2010 (Article 18) of 21 years old.

Figure 10
The first time respondents drank alcohol (n=100)



Source: CIPS Survey (2018)

More than half of the respondents (58%) stated that curiosity was their main reason for trying alcohol for the first time (Figure 11),⁴ including their desire to learn the taste of alcoholic beverages and what being drunk feels like. Once they begin drinking, they mainly drink in order to socialize, according to 33% of the respondents (Figure 12). Drinking alcohol as a young person is closely related to fact that they are especially sensitive when they feel they are being evaluated by the people around them and their strong desire to be a part of a peer group (Silk et al., 2011, p. 93). However, peer pressure also plays a role, as one of the respondents reported:

“ I know my religion does not allow me to drink. We are all Muslim, so are my friends. I hang out with them, and I come home late at night. Drinking alcohol helps me to fit in with them ”

- Respondent No. 4 from University B

⁴ This confirms the findings of National Institute of Alcohol Abuse and Alcoholism (2017) and the US Health Services (2007) on the main reason of underage drinking among youth.

Figure 11
Respondents' main motivation to drink alcohol for the first time (n=100)

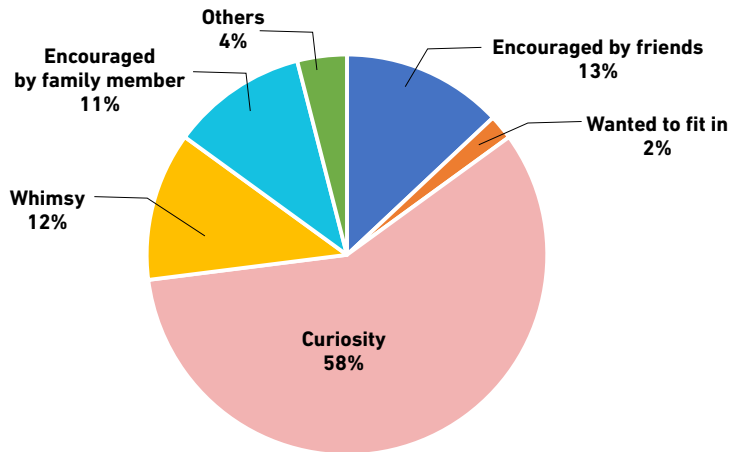
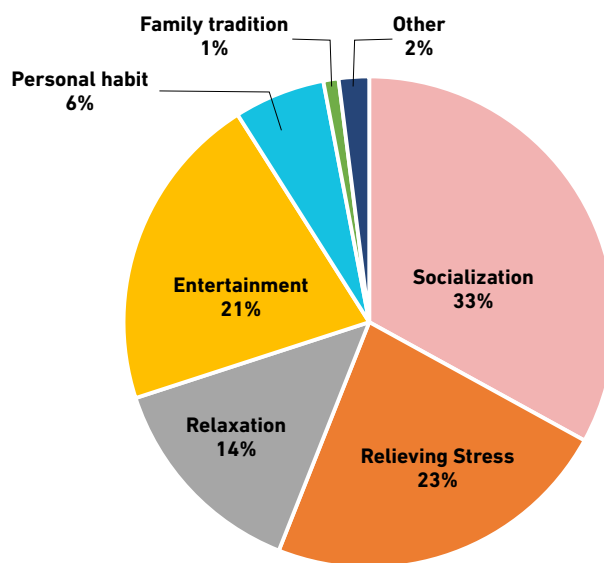


Figure 12
Respondents' main motivation to drink alcohol as of now (n=100)



Source: CIPS Survey (2018)

Nearly one-third (32%) of the students stated they consume *oplosan*, a type of unrecorded alcohol containing mixes of ingredients that have not gone through the distillation process. *Oplosan* could be dangerous if it also contains methanol, a toxic ingredient that may cause headache, vomiting, impaired vision, convulsions, and death from respiratory arrest (UN-WHO, 2014b). A previous study on unrecorded alcohol in six cities in Indonesia⁵ found that headache pills and ingredients such as mosquito repellent lotion and battery fluid are also possible ingredients in *oplosan* (Uddarojat, 2016, p. 12).

⁵ These six cities are Cirebon, Depok (both in West Java Province), Sleman, Bantul (both in DI Yogyakarta Province), Malang (in East Java Province), Medan (in North Sumatera Province), and Palembang (in South Sumatera Province).

Nearly one-fifth (18%) of all respondents have made *oplosan* themselves (Figure 13). While this number seems small, almost three-quarters (72%) of these students admitted that they learned the technique from their friends, and another 17% were able to teach themselves how to make it (Figure 14). This suggests that students who know how to make *oplosan* can easily pass along the information to their friends, potentially increasing the number of students who are exposed to this drink.

Figure 13
Number of respondents who have ever made *oplosan* (n=100)

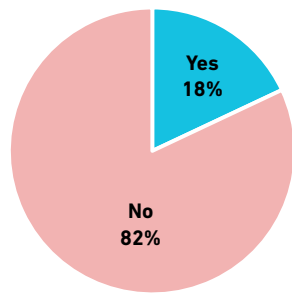
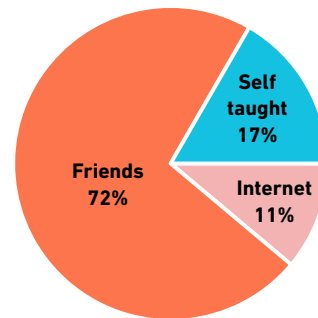


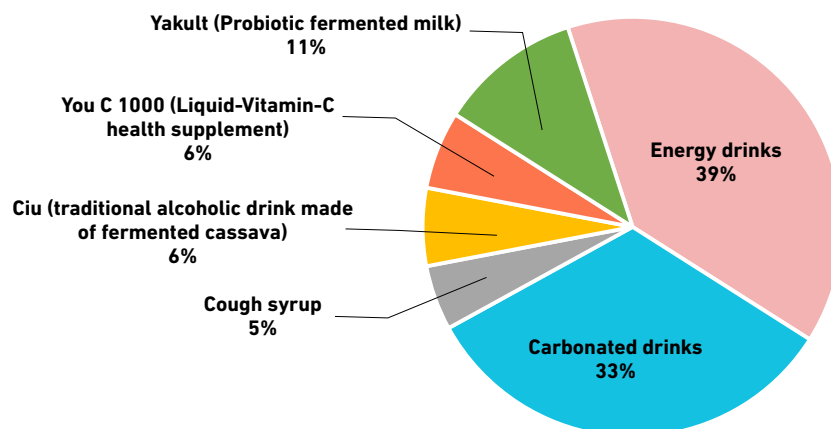
Figure 14
Main source of information for respondents who have ever made *oplosan* (n=18)



Source: CIPS Survey (2018)

Oplosan is typically mixed with other drinks before consumption. Our survey shows that energy drinks are the most popular mixing ingredients for *oplosan* (Figure 15). Several respondents claim that mixing energy drinks into their *oplosan* reduces their sleepiness and increases their enjoyment of consuming alcohol. This might be explained by the effect of the energy drinks, which reduce the depressant effects of alcohol while increasing its excitatory effects (Ferreira et al., 2006, p. 598).

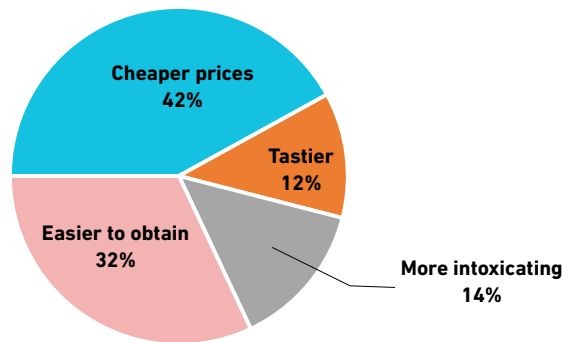
Figure 15
The most favourite *oplosan* ingredients for respondents who have ever made the drink by themselves (n=18)



Source: CIPS Survey (2018)

The cheaper prices of unrecorded alcohol and its wider availability compared to recorded alcohol are the two main factors (42% and 32%, respectively) that drive students to consume it (Figure 16).⁶

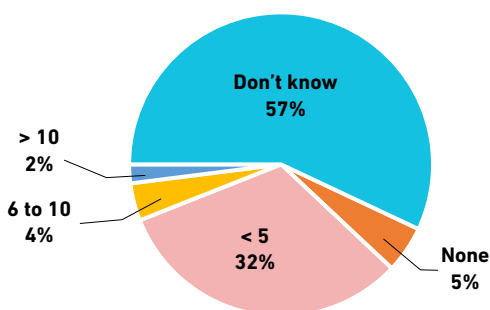
Figure 16
The main reason of the respondents who prefer unrecorded alcohol (including *oplosan*) to the recorded ones (n=44)



Source: CIPS Survey (2018)

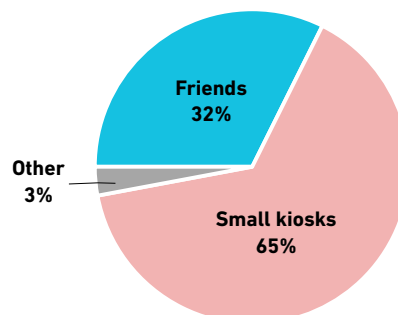
Nearly one-third (32%) of all respondents reported that there are around five places that sell *oplosan* near where they live (Figure 17). Around 65% of the respondents who reported having bought *oplosan* purchased it from small kiosks near their universities or close to where they live, and the other 32% bought it from their friends (Figure 18). During the daytime, these kiosks sell household consumable goods such as snacks, stationeries, cigarettes, and toiletries (e.g., soap and toothpaste). At night, however, we observed during the survey that some kiosks inconspicuously sell *oplosan* or its ingredients. This is illegal as none of these kiosks are licensed to sell alcoholic beverages, and so these kiosks disguise their *oplosan* as traditional herbal drinks.⁷ The kiosks are located near campuses and residential areas, which makes them easy to reach for their customers, including those who buy *oplosan*. As previously discussed, consuming *oplosan* is potentially dangerous for students since they do not know with certainty what ingredients are in their drink, and especially if it contains toxic ingredients such as methanol that could severely injure them.

Figure 17
Number of places selling *oplosan* near where respondents live (n=100)



Source: CIPS Survey (2018)

Figure 18
Source of *oplosan* for respondents who have ever bought the drink (n=26)



⁶ This is in line with the findings of International Alliance for Responsible Drinkers (IARD) (2016) on the main drive of unrecorded alcohol consumption

⁷ Locally known as *jamu*, these traditional herbal drinks are perceived to have health benefits. Depending on the type of herbal ingredients they contain, some types of *jamu* are believed to cure illness while others are perceived to enhance sexual pleasure.

The existence of such kiosks indicates a widespread black market for unrecorded alcohol. Black markets thrive whenever high taxes are applied while the tax morale⁸ is low (Snowdon, 2012, p. 17). This describes the unrecorded alcohol market in Indonesia, where the government imposes an increasing excise on recorded alcohol (Table 2). While the tax morale among the Indonesian university students is mid-high, it continuously declines as they get older (Susila, Juniult, & Hidayat, 2016, p. 161).

Table 2
Increase of Excise on Recorded Alcohol Beverages in Indonesia

Type of Alcohol Beverages	Amount of Excise (IDR per liter)					
	Regulation as of 2010		Regulation as of 2013			
	Domestic Products	Imported Products	Domestic Products	Increase (%)	Imported Products	Increase (%)
Type A ($\leq 5\%$)	11,000	11,000	13,000	18%	13,000	18%
Type B ($5\% < x \leq 20\%$)	30,000	40,000	33,000	10%	44,000	10%
Type C ($> 20\%$)	75,000	130,000	80,000	6.77%	139,000	6.92%

Sources are collated from the Regulation of the Ministry of Finance (MOF) 63/2010 and MOF 207/2013

Health risk

Consuming any type of alcohol, especially while underage, contributes to negative consequences, including declining academic performance (Balsa et al., 2011, p. 14; Onyebuchukwu et al., 2015, p. 152), depression and suicidal thoughts (Spath et al., 2008, p. S311), and multiple health risks such as stomach inflammation (NIH, 2000, p. 8) and cardiovascular diseases (Rehm et al., 2016, p. 1). For older people, especially aged 45 to 54 years, alcohol consumption can also contribute to death (Shield et al., 2013, p. 1).

While recorded alcohol can contribute to death, especially in cases of older people, unrecorded alcohol could be deadly to anyone if it contains toxic ingredients (Leon et al., 2007, pp. 2006–2007). Dangerous ingredients such as lead, methanol, and long-chain alcohols may cause liver damage, alcohol poisoning, and cancer risk (IARD, 2017, p. 6).

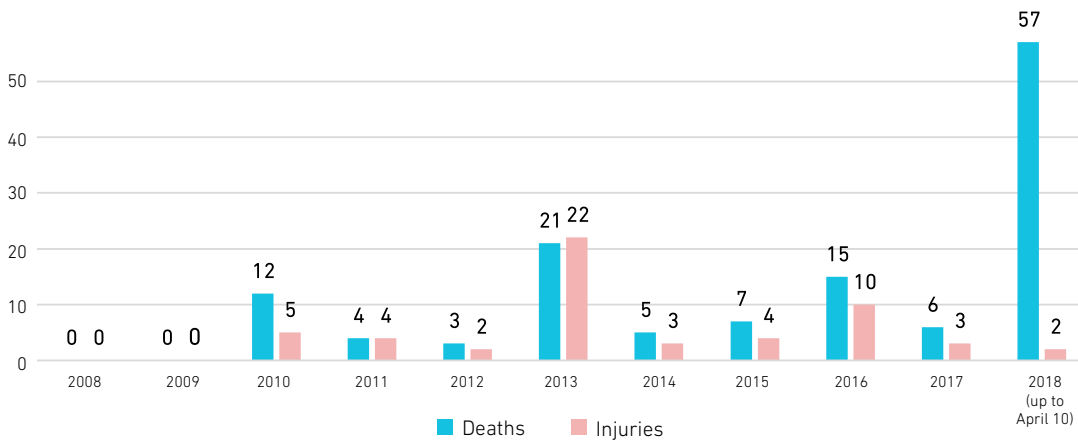
Respondents' preference for energy drinks as a mixing ingredient for their *oplosan* might create additional health risks. The energy drinks are themselves associated with improved physical performance as well as cognitive functioning (Alford et al., 2012, p. 521). However, when they are consumed together with alcohol, energy drinks significantly reduce the perception by the drinkers' of their intoxication symptoms such as headache, dry mouth, and impairment of motor coordination (Ferreira et al., 2006, pp. 598, 603). This means that energy drinks with added *oplosan* hamper the drinkers' ability to determine when they should stop drinking, which in turn may lead to more dangerous outcomes from alcohol consumption and intoxication.

Media monitoring of the Greater Bandung area (comprises of Bandung City, Bandung District, West Bandung District, and Cimahi City) from January 2008 to April 10, 2018 revealed 130 deaths

⁸ Tax morale refers to the voluntary compliance of the citizens with tax laws and the creation of a social norm of compliance (Luttmer & Singhal, 2014, p. 149). Tax morale is influenced by several factors, such as the perception of the citizens on the utilization of tax money, the level of simplicity in the tax system, as well as the overall trust in the government and tax authority (Parlaungan, 2017, pp. 165–167).

and 55 injuries due to unrecorded alcohol consumption (Figure 19). The number of deaths in 2018 alone reached 57, more than in the previous five years (2013 – 2017) combined.⁹

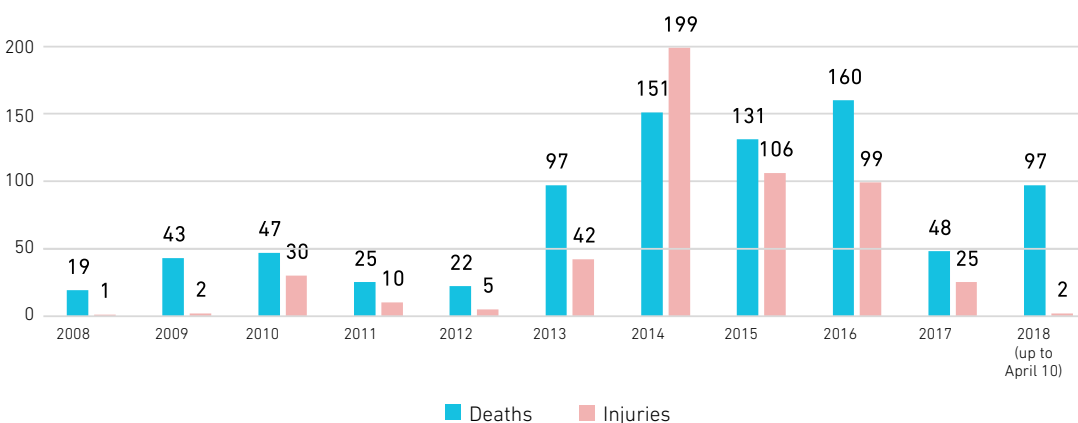
Figure 19
Number of deaths and injuries due to unrecorded alcohol consumption in Greater Bandung area, January 2008 - 10 April 2018



Source: CIPS media monitoring from January 2008 to 10 April 2018

On a national scale, from January 2008 to April 10, 2018, there were 840 deaths and 521 injuries due to unrecorded alcohol consumption (Figure 20). While from 2008 to 2012 there were fewer than 50 deaths per year, this number was doubled in 2013, continued to increase in 2014, declined slightly in 2015, and then increased again in 2016. The number of victims declined in 2017, but shows an upward trend as of April 10, 2018.

Figure 20
Number of deaths and injuries due to unrecorded alcohol consumption in Indonesia, January 2008 - April 10, 2018



Source: CIPS media monitoring from January 2008 to April 10, 2018

⁹ An incident in Cicalengka sub-district in Bandung District contribute the most to this number, as 45 people were killed after consuming unrecorded alcohol. The local government of Bandung District declared it as an emergency situation for the region (Wijanarko, 2018).

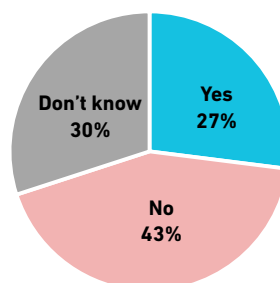
On average, there is one death per 615,000 people every year in the Greater Bandung region, nearly five times higher than the national average of one death per 3 million people per year. While media reports may not be fully accurate, they demonstrate the scale of the consumption and circulation of unrecorded alcohol in Indonesia (Uddarojat, 2016, p. 12).

III. Lack of compliance and lack of awareness on the danger of unrecorded alcohol

A 2018 CIPS study found that government policies such as MOT 20/2014, MOT 06/2015, and BCRR 11/2010 fail to curb underage drinking.¹⁰ This survey confirms that finding. More than half (52%) of respondents stated they do not know about BCRR 11/2010, which bans, supervises, and controls alcoholic drinks. A majority of the respondents (65%) claimed they know about specific articles that ban the sale of alcohol to people younger than 21, such as MOT 20/2014 (Article 15) and BCRR 11/2010 (Article 18). Most (76%) agree with the ban, including those who do not know that it exists. Nevertheless, more than half (59%) reported that a ban would not deter them from drinking, but instead encourage them to look for *oplosan* as an alternative to recorded alcohol. The black market mentioned in the previous section makes it easy for them to obtain *oplosan* to satisfy their demand for affordable alcohol, providing further evidence of their lack of compliance with existing regulations.

Our survey indicates that nearly half (43%) of the respondents reported no dissemination of information about the impact of alcohol consumption by their universities. Another 30% claimed they are not aware whether such dissemination exists (Figure 21). This illustrates their lack of awareness of the impact of alcohol in general, let alone the dangers of underage drinking and unrecorded alcohol, such as the *oplosan* that they consume. Existing literature shows that universities must acknowledge their role in preventing alcohol misuse among their students (Curtin University, 2017; Lorant et al., 2013, pp. 1 & 7). Universities must therefore step up their efforts in addressing this issue.

Figure 21
Respondents' awareness whether there is any campaign by their universities about the impacts of alcohol consumption



Source: CIPS Survey (2018)

¹⁰ Respatiadi, Hizkia and Sugianto Tandra (2018). *Fighting Unrecorded Alcohol: A Policy Priority for Bandung, West Java*. Center for Indonesian Policy Studies.

INTERNATIONAL EXPERIENCE IN DEALING WITH UNDERAGE DRINKING

The experience of Kiama town in New South Wales, Australia and *The Kiama Stop Underage Drinking Project* (CHSR, 2016) can provide lessons for Indonesia and Bandung. From 2012 to 2016, this town organized a joint campaign together with parents, community members, police officers, teachers, youth workers, community development workers, and representation from junior sporting associations. The campaign focused on fixing the misperception that “most Australian teenagers drink alcohol”, while the teen drinking in that country was at its lowest compared to levels from 1980 to 2011. This misperception of social norms drove the students in Kiama to think that they needed to drink to fit in, making them vulnerable to peer pressure.

The campaign was intended not only for students, but also for the whole community to create a supportive environment for the students to help them stand their ground when facing peer pressure to drink alcohol. It included putting up posters and banners, distributing fact sheets and infographics, organizing workshops and focus group discussions, and coverage by local media. At the end of the campaign, they conducted a survey to measure their success. One of the highlights of the survey results was that before the campaign, the respondents in Kiama thought that 53% of 16-year-old in Australians drink alcohol. After the campaign, respondents were aware of the actual rate of 43%, as measured in official statistics.

The campaign did not cover whether or not the successful change in perception of social norms resulted in a reduction in underage drinking in Kiama. The social norm is important, though, because a common factor of underage drinking in both Kiama and Bandung City is that students want to socialize with their friends and believe that only drinking alcohol will allow them to do so. Equipping them with the knowledge that fewer friends than they thought drink alcohol gives them a better chance at resisting peer pressure to drink.

IV. Conclusion and Recommendations

The issues of underage drinking and unrecorded alcohol are complex and cannot be solved by government regulations alone. We make three recommendations to improve the situation.

First, there must be joint efforts by government, campuses and universities, civil society, and parents to inform students about the dangers of underage drinking and unrecorded alcohol consumption. Lessons from the experience of Kiama in Australia can help inform these efforts. In the case of Bandung City, the campaign needs to be adjusted to ensure it covers not only underage drinking, but also the consumption of unrecorded alcohol such as *oplosan*.

Second, the government must focus their efforts to fight unrecorded alcohol rather than recorded alcohol. While both recorded and unrecorded alcohol are associated with health risks, unrecorded alcohol is more dangerous since it may contain toxic components capable of mortally injuring anyone who consumes them. In our survey, young males with low income are the ones who most regularly consume unrecorded alcohol, and are thus the most exposed to this risk. Therefore, in the joint campaign recommended above, it is imperative that students be informed about the differences between recorded and unrecorded alcohol, about how to identify various types of unrecorded alcohol, including *oplosan*, and about the health risks associated with ingredients that are commonly used to make unrecorded alcohol. By equipping them with comprehensive information, the campaign can empower students to avoid unnecessary health risks related to unrecorded alcohol consumption.

Third, instead of adding more regulations, the government should better enforce the existing ones by setting up a public monitoring system involving the local community to prevent sales of alcohol to underage individuals. Safeproof.org provides an example of how such a system might work. SafeProof.org is a website that allows Indonesians to report where they have bought a drink with “tainted, counterfeit, or fake alcohol”. Rather than relying on the government alone, SafeProof.org attempts to involve the broader community in unrecorded alcohol awareness and prevention efforts. This kind of system could be started by the local community through cooperation between civil society and the local authorities, in which anyone could report the sale of alcohol to underage individuals or groups. Any reporting mechanism must protect the identity of the informants while providing a secure channel, via website or mobile phone application, to report the regulatory violations to the relevant authorities. It should also provide information about which authorities or government agencies are being tasked to follow up on such information and on their progress.

References:

- Agriculture and Agri-Food Canada. (2016). *Sector Trends Analysis - Wine, Beer and Spirits in Western Europe* (Market Access Secretariat - Global Analysis Report) (p. 23). Retrieved from <http://www.agr.gc.ca/resources/prod/Internet-Internet/MISB-DGSIM/ATS-SEA/PDF/6828-eng.pdf>
- Alford, C., Hamilton-Morris, J., & Verster, J. C. (2012). The effects of energy drink in combination with alcohol on performance and subjective awareness. *Psychopharmacology*, *222*, 519–532.
- Balsa, A. I., Giuliano, L. M., & French, M. T. (2011). The effects of alcohol use on academic achievement in high school. *Economics of Education Review*, *30*(1), 1–15. <https://doi.org/10.1016/j.econedurev.2010.06.015>
- Centre for Health and Social Research [CHSR]. (2016). The Kiama Stop Underage Drinking Project 2012-2016. Retrieved April 26, 2018, from <http://stopunderagedrinking.com.au>
- Curtin University. (2017, October). Alcohol in the University Setting: A resource to support Australian universities. Curtin University. Retrieved from <http://ndri.curtin.edu.au/news-events/ndri-news/alcohol-in-the-university-setting-a-new-resource-t>
- Euromonitor International. (2017). *Alcoholic Drinks in Indonesia*.
- Ferreira, S. E., de Mello, M. T., Pompeia, S., & de Souza-Formigoni, M. L. O. (2006). Effects of Energy Drink Ingestion on Alcohol Intoxication. *Alcoholism: Clinical and Experimental Research*, *30*(4), 598–605. <https://doi.org/10.1111/j.1530-0277.2006.00070.x>
- International Alliance for Responsible Drinking [IARD]. (2017). Policy Review - Unrecorded Alcohol. International Alliance for Responsible Drinking [IARD].
- Leon, D. A., Saburova, L., Tomkins, S., Andreev, E., Kiryanov, N., McKee, M., & Shkolnikov, V. M. (2007). Hazardous alcohol drinking and premature mortality in Russia: a population based case-control study. *Lancet*, *369*. Retrieved from https://www.demogr.mpg.de/publications/files/3168_1225988966_1_Lancet%20369%209578%202008.pdf
- Lorant, V., Nicaise, P., Soto, V. E., & d'Hoore, W. (2013). Alcohol drinking among college students: college responsibility for personal troubles. *BMC Public Health*, *13*(615).
- Luttmer, E. F. P., & Singhal, M. (2014). Tax Morale. *Journal of Economic Perspectives*, *28*(4), 149–168.
- Ministry of Health. (2014). Buku Studi Diet Total - Survei Konsumsi Makanan Individu Indonesia 2014 [Report on Total Diet - Survey on Individual Food Consumption in Indonesia 2014]. Ministry of Health.
- National Institute on Alcohol Abuse and Alcoholism [NIH]. (2017, February). Underage Drinking. Retrieved from <https://pubs.niaaa.nih.gov/publications/UnderageDrinking/UnderageFact.htm>
- NIH. (2000). Health Risks and Benefits of Alcohol Consumption. *Alcohol Research and Health*, *24*(1), 7.
- Onyebuchukwu, I. J., Sholarin, M. A., & Emerenwa, A. B. C. (2015). The Effect of Alcohol Consumption on the Academic Performance of Undergraduate Students. *Psychology and Behavioral Sciences*, *4*(4), 147–153.
- Parlaungan, G. (2017, March). *The Tax Morale of Individual Taxpayers in Indonesia* (PhD Thesis). Curtin University.
- Rehm, J., Shield, K. D., Roerecke, M., & Gmel, G. (2016). Modelling the impact of alcohol consumption on cardiovascular disease mortality for comparative risk assessments: an overview. *BMC Public Health*, *16*(363).
- Shield, K. D., Gmel, G., Kehoe-Chan, T., Dawson, D. A., Grant, B. F., & Rehm, J. (2013). Mortality and Potential Years of Life Lost Attributable to Alcohol Consumption by Race and Sex in the United States in 2005. *PLoS ONE*, *8*(1), e51923. <https://doi.org/10.1371/journal.pone.0051923>
- Silk, J. S., Stroud, L. R., Siegle, G. J., Dahl, R. E., Lee, K. H., & Nelson, E. E. (2011). Peer acceptance and rejection through the eyes of youth: pupillary, eyetracking and ecological data from the Chatroom Interact task. *Oxford University Press*, *7*, 93–105.

Snowdon, C. (2012). IEA Discussion Paper No. 43. *The Institute of Economic Affairs*, 27.

Spoth, R., Greenberg, M., & Turrisi, R. (2008). Preventive Interventions Addressing Underage Drinking: State of the Evidence and Steps Toward Public Health Impact. *PEDIATRICS*, 121(4).

Statistics Indonesia. (2017). *Kota Bandung Dalam Angka 2017 [Bandung Municipality in Figures 2017]*.

Susila, B., Juniult, P. T., & Hidayat, A. (2016). Wajib Pajak dan Generasi Muda: Tax Morale Mahasiswa di Indonesia [Taxpayers and Young Generation: Tax Morale of Indonesian College Students]. *Jurnal Ekonomi Dan Pembangunan Indonesia [Journal of Indonesian Economics and Development]*, 16(2), 154–172.

The World Bank. (2017). The World Bank Data - Population. Retrieved from <https://data.worldbank.org/indicator/SP.POP.TOTL>

Uddarojat, R. (2016, December). Negative Effects of the Proposed Alcohol Prohibition Bill on Safety and Public Health in Indonesia: Studies in Six Cities. Center for Indonesian Policy Studies.

UN-WHO. (2014a). *Global status report on alcohol and health 2014*. UN-WHO.

UN-WHO. (2014b, July). Methanol poisoning outbreaks. UN-WHO. Retrieved from http://www.who.int/environmental_health_emergencies/poisoning/methanol_information.pdf

US Central Intelligence Agency (CIA). (2018). The World Factbook. Retrieved April 28, 2018, from <https://www.cia.gov/library/publications/the-world-factbook/>

US Department of Health and Human Services [US DHHS]. (2007). The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking 2007. US Department of Health and Human Services [US DHHS]. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK44360/pdf/Bookshelf_NBK44360.pdf

Wine Australia. (2017). *Thailand: an emerging wine market*. Retrieved from <https://www.wineaustralia.com/getmedia/2abea9a2-08c9-4233-a095-4f41c2cae552/20170523-Thailand-an-emerging-wine-market.pdf>



ABOUT THE AUTHOR

Hizkia Respatiadi is the Head of Research at the Center for Indonesian Policy Studies (CIPS). The focus area of his research is policy issues in Food Trade and Agriculture. He leads the Affordable Food for the Poor project that aims to lower basic food prices in Indonesia by reducing trade barriers between Indonesia and other countries.

Previously, Hizkia worked as a civil servant at the Indonesian Ministry of Foreign Affairs. His international experience includes a posting period to the Indonesian Embassy in Zimbabwe, and short-term assignments to the United Kingdom and several countries in Asia and Africa.

Sugianto Tandra is an education policy and community livelihood researcher at the Center for Indonesian Policy Studies. His research interests include teachers and curriculum implementation, citizenship education, low-cost private schools, as well as public health issues. Prior to joining CIPS, he worked at political think-tank Freedom Institute and for over a decade as a journalist for several media companies in Jakarta. He studied at the Institute for Development Studies and the University of Sydney.

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Jalan Wijaya II
Jakarta Selatan 12160