ALCOHOL IN GHANA: HEALTH, INEQUITY AND BARRIERS TO DEVELOPMENT

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Introduction

The Vision for Alternative Development (VALD) is a non-profit and non-governmental organization registered in Ghana, with incorporated number: CG000702017.

Goal

Promote alternative initiatives and support sustainable development at all levels of the society.

Mission

To promote and support development at all levels of society"

Objectives

- ✓ To advocate and sensitize on tobacco, alcohol and non-communicable disease prevention and control
- ✓ To build, strengthen capacity and sensitize on road safety and harm prevention.
- ✓ To advocate and support community participation in governance and development
- ✓ To promote and support cultural diversity and peace building

Contact

Vision for Alternative Development
(VALD)
P.O. Box AN12126
Accra-North, Ghana
Tel: +233-(0)30-3938058
E-mail: info@valdghana.org
Web site: www.valdghana.org
Facebook: Tobacco-Free Ghana
Location: No.1 Hamilton Street,
First Floor Phaza Plaza,
Oyarifa-Off Adenta/Aburi Road,
Accra. Ghana

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1. Alcohol: a global profile

- Alcohol kills an average of one person every ten seconds. In 2012, 3.3m people worldwide died of alcohol related causes, constituting 5.9% of all deaths (WHO 2014, p. xiv).
- In 2012, 139 mill DALYs (disability-adjusted life years) or 5.1% of the global burden of disease and injury were attributable to alcohol consumption (WHO 2014, p. xiv).
- Alcohol use is third leading risk factor for poor health globally, after childhood underweight and unsafe sex (WHO 2011, p. 31).
- In countries with lower economic wealth, the morbidity and mortality risks are higher per litre of pure alcohol consumed than in the higher income countries (WHO 2014, p. 10).

2. The Ghanaian context

2.1 Consumption

An estimated 23.3% of the population aged 15 years and over in Ghana consume alcohol; 2.1% of the population engage in heavy drinking. The proportion of men who drink alcohol (35%) is significantly higher than women (18%) (Ministry of Health 2016, p. 4). Alcohol production in Ghana includes a significant and largely unregulated informal sector, producing alcoholic beverages with a high percentage of ethyl alcohol. The most widely consumed type of alcoholic beverage in Ghana is 'other' (locally brewed) (57%), followed by beer (30%), wine (10%), and spirits (3%) (Ministry of Health 2016, p. 4). This proportion of consumption of 'other' alcoholic beverages is far higher than in the worldwide proportion (7.1%), and slightly higher than in the general WHO African Region (51.6%) (WHO 2014, p. 31). This suggests that locally brewed alcohol has a central significance when considering alcohol-related health and social outcomes, alongside formal alcohol production. Alcohol is also used in Ghana as a preservative for herbal products, which are widely used (Ministry of Health 2016, p. 2).

2.2 Current legislation (WHO 2014, p. 108):

- There is no legal minimum age for on- or off-premises sales of alcoholic beverages.
- There are restrictions for sales of alcoholic beverages in certain places (including petrol stations), at specific events, and to intoxicated persons; there are no restrictions according to particular hours or days.
- There are no legally binding regulations on alcohol advertising, product placement, sponsorship or sales promotion.
- There are no legally required health warning labels on alcohol advertisements or containers.
- There is a national maximum legal blood alcohol concentration (BAC) of 0.08% (Road Traffic Act, 2004) when driving a vehicle.
- There is an excise tax on beer, wine and spirits.
- There are national monitoring systems in place.
- As of 2016, there is a written national policy for alcohol in Ghana.

2.3 Social history

Alcohol has been part of communal life on the African continent for centuries, consumed as part of community rituals, funerals and festivals. In pre-colonial Ghana, liquor was a prestige good, controlled by elders and the politically powerful (Akyeampong 1996, p. 15). Its symbolic significance, particularly in rites of passage, was notable; "significantly, drink was a favoured ritual artifact for it bridged the gap between the living and spiritual worlds. Alcoholism – the misuse of this spiritual fluid – was thus perceived as a spiritual ailment" (Akyeampong 1995, p. 262). Palm wine was the most commonly consumed beverage in Ghana. During the colonial period, European traders introduced distilled spirits to Africa; liquor duties in Ghana provided a large part of the British colonial state's revenues (Akyeampong 1996, p. 16). Additionally, during this period, populations across Africa became acquainted with the process of distilling hard liquor, resulting in the growing trade of strong locally brewed alcohol in many colonial outposts. In this climate of increasing availability, alcohol-related social and public health problems were exacerbated (Obot 2015).

Changes to the culture of drinking also occurred in this context; while alcohol in pre-colonial Ghana was central to ceremony, its use was "always public and communal, circumscribed by rules and regulations", and solitary drinking was disesteemed in, for example, Akan traditions (Akyeampong 1996, p. 27). In the colonial and postcolonial periods, however, "commercialism and individualism seemed to penetrate every aspect of social life, including ritual" (ibid., p. 21);

new patterns of alcohol consumption emerged, and new populations, including women and young people, began to consume alcohol.

Historians also document the political significance of akpeteshie (a locally brewed alcoholic beverage) during the struggle for independence; akpeteshie became symbolic of resistance to colonial rule due to its prohibition under the colonial administration and the vigorous prosecution of its patrons. Akpeteshie was therefore a central issue in the growing nationalist politics of the 1940s and 1950s (Akyeampong 1996, p. 18). In independent Ghana, alcohol remained a symbol of protest, but additionally became, in the context of political authoritarianism and economic decline, a "medium of (physical and psychological) escape", with alcoholism rising (ibid., p. xv).

In modern Ghana, the widespread production and availability of a variety of beverages, alongside various social and economic factors, poses a significant threat to public health (Obot 2015).

2.4 Akpeteshie

In the Upper West Region of Ghana, consumption of locally brewed akpeteshie is increasing among both men and women. In a qualitative study, participants identified poverty and poor harvest in the region as the main precipitating factor in akpeteshie consumption, as well as drinking to cope. There is a clear picture of the role of akpeteshie in a cycle of poverty and precarity. Concern was also reported about the easy accessibility of akpeteshie, and its unregulated contents; akpeteshie is significantly cheaper than beer or other imported beverages that may be inaccessible to many Ghanaians. Additionally, akpeteshie is increasingly associated with sexual abuse and rape (Luginaaha and Dakubo 2003). These effects are important to consider in relation to UN Sustainable Development Goals 1 and 5: ending poverty and achieving gender equality.

There is a markedly higher alcohol consumption rate among women in the Upper West Region (37%) compared to other regions (9-26%) (GSS et al. 2009, p. 62); this could be attributable to akpeteshie production in this region.

The cultural role of akpeteshie is complex and any intervention strategies should be carefully considered; researchers recommend that "the most effective prevention strategies will be those that seek to alter the system that produced alcohol problems in the first place [...], altering the social, cultural, economic, and physical environment in such a way as to promote shifts away

from conditions that favour the occurrence of alcohol induced problems" (Luginaaha and Dakubo 2003).

2.5 Marketing

Of considerable concern is the marketing of alcoholic beverages in Ghana, which often appropriates national, religious or cultural imagery and symbolism, tying products to cultural pride. Obot (2015) describes this as a "neo-colonial" approach by the alcohol industry to breach new markets in Africa. Alcohol advertising in Ghana is highly prevalent across media platforms, is self-regulated, and portrays alcohol as associated with social success and central to national culture (De Bruijn 2011).

3. Factors affecting consumption and effects of alcohol

3.1 Age

Research has consistently shown that children, adolescents and elderly people are typically more vulnerable to alcohol-related harm from a given volume of alcohol than other age groups (WHO 2012, p. 7). In the 15-19 age group in Ghana, 6.6% of women and 7.5% of men drink alcohol (GSS et al. 2009). Among 18-24 year old secondary students in Accra, the prevalence rate of lifetime alcohol use was 25.1%; among lifetime users, 46.2% were currently using alcohol. Alcohol use among adolescents in Ghana is strongly associated with cigarette and marijuana use (Adu-Mireku 2003).

The WHO (2014) report on alcohol suggests policies based on age-related vulnerability, including "partial or total advertising bans, restrictions on access to alcohol through minimum ages at which it is legal to purchase alcohol, and laws aimed to prevent any alcohol consumption by young people when driving vehicles." In Ghana there is no legally binding regulation on alcohol advertising or product placement, and no minimum age restriction on alcohol purchase. There is a national maximum legal blood alcohol concentration of 0.08% (Road Traffic Act, 2004) when driving, which is poorly enforced.

3.2 Gender

Alcohol consumption in Ghana is significantly higher among men (35%) than women (18%) (Ministry of Health 2016). Globally, men suffer a greater burden of disease and death attributable to alcohol, explained by their higher level of consumption. However, women suffer worse health outcomes for a given level of consumption than men (WHO 2014, p. 8). Women may suffer additional health consequences, such as "interpersonal violence and risky sexual

behaviour as a result of the drinking problems and drinking behaviour of male partners" and increased social stigma (ibid.). In Ghana, alcohol consumption by a male partner is strongly related to women's reporting of emotional, physical and sexual violence (GSS et al. 2009, p. 320).

Alcohol use among women is increasing on both a national and global scale "in line with economic development and changing gender roles". Women's vulnerability to alcohol related harm is therefore a "major public health concern" (ibid.). Considering these factors, alcohol presents an obstacle to UN Sustainable Development Goal 5: gender equality.

3.3 Socioeconomic status

Within and between societies, those in lower socioeconomic groups consume less alcohol and are more likely to be abstainers. However, they tend to be more vulnerable to the health consequences of alcohol consumption, suffering higher rates of morbidity and mortality for a given level of consumption. One possible explanation for this is a lessened ability amongst those with lower SES to avoid adverse consequences of their behaviour due to a lack of resources (WHO 2014, p. 10).

Consistent with global data, the relationship between SES and alcohol in Ghana appears to be complex. Those who are employed are far more likely to consume alcohol (GSS et al. 2009). Amongst women, those with the lowest and highest education level are most likely to drink alcohol, while those with middle education level are less likely. Similarly, those in the lowest and highest wealth quintiles are most likely to drink alcohol, compared to those in the middle quintiles. Amongst men, however, there seems to be no significant difference in alcohol consumption by level of education or wealth (GSS et al. 2009).

A study of adolescents in Ghana found that use of marijuana and drugs was associated with lower material affluence, while experimental alcohol use was associated with higher material affluence. However, individual anticipated future social position was the strongest predictor of all experimental alcohol use, drunkenness and other drug use, suggesting that the relationship between alcohol and SES is not as straightforward as material wealth and that factors such as social self-perception may play an important role (Doku et al. 2012).

Of increasing public health concern is the availability of alcohol to lower SES groups in growing economies such as Ghana. Changes in affordability of alcohol have historically increased alcohol consumption among lower SES groups (WHO 2014, p. 10). Therefore policies which increase the price of alcohol through, for example, domestic taxation or minimum pricing, may

effectively reduce alcohol consumption. This is consistent with a large body of research indicating that harmful alcohol use declines as alcohol prices rise (WHO 2014, p. 80).

3.4 Economic development

The World Health Organization cites economic development as "the most important of the societal vulnerability factors related to alcohol consumption, as well as to alcohol-attributable disease burden" (WHO 2014, p. 10). The relationship between alcohol and economic development largely mirrors that of individual SES, in that societies with lower economic wealth consume less alcohol yet suffer a greater burden of morbidity and mortality for a given level or pattern of consumption.

Factors such as lower availability of services to mitigate health damage, or health cofactors such as nutritional deficiencies or viral hepatitis, may play a role (WHO 2014, p. 10). Additionally, "drink–driving may also have a worse outcome because less affluent societies have less safe streets and vehicles" (p. 11).

4. Effects of alcohol

4.1 Health effects on the drinker

Alcohol consumption is known to causally impact the following major disease and injury categories (alcohol attributable fractions of all global deaths presented in brackets) (WHO 2014, p. 54):

- Neuropsychiatric conditions (7.8%): e.g. alcohol use disorders, epilepsy
- Gastrointestinal diseases (23.6%): e.g. liver cirrhosis, pancreatitis
- Cancers (5%): e.g. cancer of the mouth, nasopharynx, other pharynx and oropharynx, laryngeal cancer, oesophageal cancer, colon and rectum cancer, liver cancer, female breast cancer, pancreatic cancer
- Intentional injuries (20%): e.g. suicide, violence
- Unintentional injuries (15.2%): e.g. traffic accidents
- Cardiovascular diseases (5.8%): e.g. hypertension, heart disease, stroke
- Neonatal conditions (0.1%): e.g. foetal alcohol syndrome
- Infectious diseases (2.8%): e.g. tuberculosis, HIV/AIDS.

Alcohol therefore presents a major challenge to UN Sustainable Development Goal 3: ensuring healthy lives for all.

4.1.1 Noncommunicable diseases (NCDs)

Noncommunicable diseases (NCDs) are the leading causes of death globally, accounting for almost two thirds of deaths. Nearly 80% of NCD deaths occur in low- and middle-income countries. Harmful use of alcohol is one of the four main behavioural risk factors for NCDs (WHO 2010a, p. vii). As detailed above, there is a direct relationship between higher levels of alcohol consumption and higher risk of various cancers, liver diseases and cardiovascular diseases. The age-standardized death rate of liver cirrhosis in Ghana is 48.2 per 100,000 population, of which 56% is alcohol attributable (WHO 2014, p. 108).

The World Health Organization recommends several alcohol-related interventions for NCDs, including restricting access to retailed alcohol, enforcing bans on alcohol advertising, and raising taxes on alcohol (WHO 2010a, p. 4).

4.1.2 Infectious diseases: tuberculosis and HIV/AIDS

Recent research additionally suggests causal relationships between alcohol consumption and incidence of infectious diseases. Heavy alcohol use increases the risk of tuberculosis almost threefold (Lonnroth et al. 2008). Research also suggests a causal relationship between alcohol consumption and HIV/AIDS (Baliunas et al. 2010). The course of HIV/AIDS progression itself is also impacted by alcohol consumption, due partly to either a weakening of the immune system (frequent alcohol users were 2.91 times more likely to present a decline of CD4 to <200 cells (Baum et al. 2010)) or the influence of alcohol on behavioural factors (likelihood of ARV adherence was almost 50% lower among alcohol users (Hendershot et al 2010)). Both of these effects appear to impact poor and marginalised people more, as they interact with malnutrition, homelessness, or other factors (Schmidt et al. 2010). Both tuberculosis and HIV/AIDS are significant health concerns in Ghana.

4.1.3 Neuropsychiatric conditions

There is virtually no data on neuropsychiatric conditions in Ghana. Mental health as a whole is understudied. Prevalence of alcohol use disorders and alcohol dependence are thought to be 3.3% and 1.4% respectively, consistent with the WHO African Region (WHO 2014, p. 108).

4.2 Injury

Worldwide, 20% of intentional injuries and 15.2% of unintentional injuries are alcohol attributable (WHO 2014, p. 54). Injury constitutes 8% of all mortality in Ghana (Forson et al. 2016). The burden of alcohol-associated injury for many lower-middle income countries such

as Ghana is largely unknown. The age-standardized death rate from road traffic accidents alone in Ghana is 29.5 per 100,000 population, of which 4% is alcohol attributable (WHO 2014, p. 108).

In a 2016 study, 35% of injured adult patients presenting to a Ghanaian emergency department tested alcohol positive. This proportion rose to 40% among those seriously injured, 42% among drivers, 49% among assault victims and 53% among those who died in the ED. Road traffic injuries were the most common type of injury (Forson et al. 2016).

Ghana has a national maximum legal blood alcohol concentration (BAC) of 0.08% while driving; however, studies suggest enforcement is poor. In a study using systematic random breathalyser sampling, 9.7% of drivers and riders had detectable alcohol; 6.1% exceeded the legal BAC limit (Damsere-Derry et al. 2015). Similarly high proportions of drivers exceeding the legal limit were found in previous studies of Ghana: 7.3% in 2001 (Mock et al. 2001) and 5.5% in 2014 (Damsere-Derry et al. 2014). Additionally, motorist knowledge of the legal BAC limit and the number of drinks required to reach the limit seems to be very poor (Damsere-Derry et al. 2016; Damsere-Derry et al. 2015).

The economic burden of motorcycle accidents in northern Ghana, of which alcohol is a major cause, is estimated to be US$1.2 million (Kudebong et al. 2011).

The 2016 National Alcohol Policy identifies drink-driving countermeasures as a priority area, and anticipates “inadequate financial, human and logistical resource to enforce such counter measures” as a significant challenge (Ministry of Health 2016, p. 24). There is a need to continue developing policies aimed at drink-driving and alcohol-associated injury in general.

4.3 Socioeconomic consequences

Because alcohol is typically a valued commodity, drinking often uses resources which would otherwise be available for other purposes (WHO 2014, p. 10). Alcohol consumption is therefore likely to further impoverish those on low incomes as well as their family or community (Schmidt et al., 2010; De Silva et al., 2011). Intoxication or dependence may also worsen socioeconomic conditions due to poor performance in work, family or social roles (Schmidt et al. 2010), or due to the marginalising effects of negative social judgements (Room et al. 2001). Research also suggests that marginalization can cause diminished access to good health care, for example that “care given is likely to be inferior, or the access to health care worsened, if the patient is seen as a run-down drinker or a similarly degraded status” (WHO 2014, p. 14; Sudnow 1967; Strong 1980; Santana 2002; Mitchell et al. 2009). In light of these factors, alcohol is a significant obstacle to the realisation of SDG 1: end poverty and SDG 10: reduce inequality.

4.4 Harm to others

Women appear to suffer more from the drinking of others than men (WHO 2014, p. 16).

There are also consequences for the society as a whole; alcohol presents a significant health and social burden due to lost life years through death and disability. There is additional economic cost, both from the direct cost to the healthcare, criminal justice, and welfare systems, and indirect costs from lost productivity (ibid., p. 17-18). Productivity losses due to alcohol have not been calculated for Ghana, but the Ministry of Health cites alcohol abuse as a "major concern to a number of organizations including the health sector" (Ministry of Health 2016, p. 12).

4.4.1 Pregnancy

The risks associated with drinking during pregnancy are well established, including miscarriage, stillbirth, low birth weight, and birth defects such as foetal alcohol spectrum disorders (FASD). One in 67 women who drink alcohol during pregnancy will deliver a child with foetal alcohol syndrome (FAS), the most severe form of FASD (Popova 2017).

Data on alcohol consumption during pregnancy in Ghana is very limited. In a study of the Bosomtwe District of the Ashanti Region, 20.4% of women were found to consume alcohol during pregnancy. 45% had never received education on the effects of alcohol on the mother or the foetus (Adusi-Poku et al. 2012).

A study in Accra found that 32.5% of pregnant women had consumed alcoholic drinks during the first trimester; 25% had used a herbal brew containing alcohol at any stage of the pregnancy. One third of participants felt that alcoholic herbal brews were beneficial to health; 60% believed maternal alcohol consumption did not affect the foetus. 93.6% were rated as having poor or no knowledge about the effects of alcohol on human health (Adeyiga et al. 2014).

5. Interventions

The World Health Organization 'best buy' interventions to reduce the harmful use of alcohol include regulating availability, restricting advertising and increasing prices (WHO 2014, p. 19).

As interventions are considered to reduce the burden of harm from alcohol, it is crucial that attempts are made to reduce inequities in alcohol-attributable harm along the social gradient (Schmidt et al. 2011). Considerations should be made with regard to the impact of increasing

alcohol attributable harm on those in lower socioeconomic groups as the Ghanaian economy grows and alcohol becomes a more accessible commodity.

5.1 Availability

In Ghana, government control of alcohol distribution and sales may prove challenging due to the significant informal sector of locally brewed alcohol. However, restrictions on public drinking may be effective in this context (ibid., p. 74) and a minimum legal purchase age is likely to be reduce youth consumption, particularly on-premises consumption (ibid., p. 74).

5.2 Marketing

Marketing is also more likely to have an effect in lower and middle income countries due to young populations, high rates of adult abstinence, and emerging marketplaces for alcohol (WHO 2014, p. 75; Babor et al. 2010; Jernigan 2013). Interventions should also consider new forms of alcohol marketing methods, such as social media.

5.3 Pricing

Pricing policies such as excise taxes and minimum prices have been shown to be very effective in reducing harmful alcohol use (WHO 2014, p. 80). In Ghana, where alcohol is becoming increasingly accessible to new, poorer, and younger populations, these interventions may be appropriate.

5.4 Informal production

Informally produced alcohol should also be addressed; the potential for harm is heightened when products are not monitored for quality, strength and consumption levels. The inclusion of informally produced alcohol in 2016 National Alcohol Policy is encouraging, though challenges are anticipated including enforcement at the community level and development of alternative livelihood programmes for local producers (Ministry of Health 2016, p. 23).

5.5 Education

Educational interventions should be structured according to demographic characteristics, including age, gender, culture and region. For example, educational needs in the northernmost regions where poverty is widespread and locally brewed alcohol is prominent will differ from those in urban areas; educational and awareness-raising activities should therefore employ local structures and coordinate community action (Ministry of Health 2016, p. 20; WHO 2014, p. 66).

5.6 Drink-driving

Ghana's existing blood alcohol concentration limit is poorly enforced; sobriety checkpoints and random breath testing are effective suggested enforcement strategies (WHO 2014, p. 69).

5.7 Monitoring

Monitoring processes should be strengthened due to the lack of local data on alcohol use and its effects, as recommended in the Global strategy to reduce the harmful use of alcohol (WHO 2010b, p. 18).

6. Conclusion

The growing economy, increasing accessibility of alcohol, changing cultural drinking norms and largely unregulated informal sector make alcohol use a significant public health problem. Without appropriate regulations and policy in place, alcohol-related harm will likely increase, with those of lower socioeconomic status bearing worse health outcomes as a result. Alcohol threatens several of the UN Sustainable Development Goals and interplays with social inequity, poverty and gendered violence. Alcohol use increases the risk of both noncommunicable and infectious diseases, as well as injury, social problems and harm to others. Interventions in the availability, marketing and pricing of alcohol, among others, are most likely to be effective in protecting public health and reducing alcohol-related harms in the society at large.

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Team

Lead:

Anna Oakes-Monger: Intern- Vision for Alternative Development (VALD)
From: Lancaster University (UK) and Affiliate with Lancaster University (Ghana)

Research Supervisor

Labram Musah
Programme Director
Vision for Alternative Development (VALD)
E-mail: labrammusah@valdghana.org

Research Coordinator
Issah Ali
Executive Director
Vision for Alternative Development (VALD)
E-mail: issahali@valdghana.org