# THE MYTHS OF ALCOHOL USE IN GHANA

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## Abstract -

*Objective:* Alcohol has become a regular part of social functions in many cultures. Before the advent of alcohol use disorder becoming a nosological entity, many cultures noted the detrimental association with alcohol use, particularly in its excess use. With such observation, many cultures and even medical research, have tried in many ways to either justify or explain away the harmful effects of alcohol use and gone ahead to promote the use for the most mundane effects. Such explanations for alcohol use over time become acceptable in many cultures and can be viewed as myths. Four of such myths associated with alcohol use in Ghana, are presented here.

*Methodology:* These myths were drawn from a bigger study that looked at the prevalence of alcohol use disorder in an engineering company with mixed methods.

A thematic analysis of their responses was used to arrive at these myths.

**Results:** Participants believed that alcohol is sexually potentiating, improves appetite and quality of sleep, and has medicinal qualities like "curing" chicken pox and necessary for successful surgery. Apart from the inconclusive evidence of alcohol, particularly red wine, protecting against cardiovascular death, we could not substantiate any of these claims from medicine.

*Conclusion:* Myths of alcohol use in different cultures need to be incorporated in preventive strategies adopted for alcohol use disorder for a comprehensive public health approach to curb the menace. Such myths should be integrated in the training of health workers to help them understand the addictive behaviour of alcohol users and the anthropological underpinnings to alcohol use.

Key words: alcohol use, alcohol use disorder, anthropology, effects of alcohol and myths

## Introduction

Alcohol, an oxygenated hydrocarbon (ethanol:  $C_2H_5$ -OH), is considered a food and a drug. As food, consumption of 30g or 3 units of alcohol can produce up to 10% of daily energy requirement.<sup>1</sup> As a drug, alcohol is psychoactive and can change how we feel, think or behave when consumed. Thus, it may be anxiolytic, mood enhancing, sedating, produce motor incoordination or impair judgement.<sup>2</sup> Even though no biochemical reaction in the body requires exogenous alcohol, it is commonly consumed particularly at social functions in many cultures.<sup>3</sup>

Refined alcohol was introduced to Ghana by the trans-Atlantic trade.<sup>4</sup> Alcohol has however been part of diet in some parts of Ghana, for instance, Upper West Region where the beverage is brewed from millet.<sup>5</sup> With the introduction of refined alcohol, Ghanaians also began refining alcohol and the most popular is a gin known as *Akpeteshie*.<sup>6</sup> This local gin was even banned by the British colonial masters and only legalized 5

<u>Corresponding Author:</u> **Dr. Emmanuel Dziwornu** Psychological Medicine and Mental Health Department, School of Medicine\_University of Health and Allied Sciences, Ho - Ghana <u>Phone Number:</u> +233(0)249650076 <u>Email Address:</u> edziwornu@uhas.edu.gh <u>Conflict of Interest:</u> None Declared years after Ghana's 1957 political independence.<sup>5</sup> More illicit alcohol is abused in Ghana than licit refined alcoholic beverages according to World Health Organization.<sup>7,8</sup> Since most of the illicit alcohol are from spirits, *Akpeteshie* makes up the bulk of that. Studies in Portugal among high school students revealed many myths were associated with alcohol consumption.<sup>9</sup>

Similar myths have been documented in Nigeria where alcohol is believed to be medicinal.<sup>10</sup> The medicinal properties of alcohol myth is also in Ghana, except that it is alcoholic beverage and/or disease specific. In this study we put together the various myths that participants shared as the beneficial effects of alcohol.

### Method

This was part of a cross-sectional study done to assess the medical disease burden of alcohol use disorder among employees of a public engineering organization in Ghana<sup>11</sup>. Every 4<sup>th</sup> person on their nominal roll was pre-selected to be in the study (450 in all). All those who were preselected and were on leave or out of the office that day were excluded. In all, 373 employees returned the questionnaire and were included in the study. A mixed method was adopted, and the quantitative part has been published. The responses to the beneficial effects of alcohol were thematically analyzed and the responses that were shared by at least 10 participants were noted as a myth of alcohol use.

## Results Myth 1

#### Alcohol is sexually potentiating.

This was the most common perception of alcohol shared by the majority of participants, mainly men. This may be fueled by the many advertisements by alcohol producing companies in Ghana who use euphemism to propagate this view. For instance, an advert of a popular alcoholic beverage, *Adonko*, has many women swinging one man on a seesaw. A seesaw is referred to as *Adonko* in *Akan*, the most popular Ghanaian language, and it is also euphemism for sex (from "swinging waist").<sup>12</sup> Indirect language forms are common among Akan speakers.<sup>13</sup> By using indirect language too, the alcohol producing companies avoid sanctioning by the Food and Drug Authority (FDA) for making false claims.

"Drinking alcohol evokes two conceptually separable components: a psychologically driven expectancy component and a pharmacologically driven bioactive component".<sup>14</sup> The pharmacological component is largely as a central nervous system (CNS) depressant while the psychological component will include social disinhibition and increased libido. Perhaps, it is the increased libido in energetic young people who are physically strong anyway, that makes them believe the alcohol gave them "strength" for sex. In fact, alcohol use can cause impotence or erectile dysfunction, contrary to the myth that it makes one more sexually potent.<sup>2,15</sup>

### Myth 2

## Alcohol improves appetite.

Many participants perceived alcohol as an agent that enhances their appetite and hence, they drink it before a meal to get them to eat more. Even though moderate amounts of alcohol may boost appetite in some people, excess of it decreases appetite. The evidence for improved appetite with alcohol is not conclusive from literature and at best, only anecdotal according to Yeoman *et al.*<sup>16</sup> Caton *et al* posits that alcohol merely serves as cues to eat more and not a direct physiological response to the ethanol in the alcoholic beverage.<sup>17</sup>

Alcohol consumption has been shown to decrease ghrelin, a hormone produced by the enter-endocrine cells to regulate food intake and basically makes us feel hungry when high in the blood.<sup>18</sup> This means, alcohol which is addictive and can readily lead to binge drinking, will cause decreased blood levels of ghrelin and this will decrease our physiological need for food and cannot therefore be said to be appetite enhancing. Hence this perception can only be a myth.

## <u>Myth 3</u>

### Alcohol makes one sleep better.

Alcohol is believed to give good sleep when consumed as expressed by the participants. Alcohol is a potent inducer of sleep by reducing sleep latency but it unfortunately decreases the overall quality of sleep and this is even worse for persons who develop alcohol use disorder.<sup>19,20</sup> A study even observed a dose-response association between alcohol intake and poor quality of

sleep in an epidemiological study.<sup>21</sup> In essence, alcohol being a potent somnogen, does not in any way compensate for the overall poor-quality sleep it gives and it will not be worth taking alcohol to sleep better. The belief therefore that alcohol gives good sleep we observed among the participants can only be a myth.

## Myth 4

## Alcohol has medicinal properties.

Many participants asserted that alcohol has some medicinal properties, so it was good to have a little alcohol in your body most of the time. They erroneously believed foods like bread, *kenkey* and *banku* (local food produced from corn) which made use of the process of fermentation contain alcohol at the time they are ready for consumption. All these foods are heated to temperatures above 100°C for not less than 30 minutes, by which time the little amount of ethanol which boils at 70°C would have evaporated. So, the perception that some of our staples contain alcohol already and that is what keeps us healthy cannot be right.<sup>22</sup>

The medicinal properties alcohol is believed to have include having a little amount of alcohol in one's blood to go through surgery successfully. Another is that it is good for the heart, and the last that featured often was using it to treat chicken pox. None of these claims can be substantiated except for the inconclusive evidence that red wine offers some protection against cardiac disease. This claim has received a lot of attention and research studies. Current evidence supports the fact that the polyphenols such as resveratrol in fruits which may end up in red wine are what provide the antioxidant properties that reduce the coronary risk and not the ethanol in alcoholic beverages.<sup>23-25</sup> The reduced cardiovascular risk observed in epidemiological studies among persons who consume a lot of red wine with their meals like the French, is because of the "red" in red wine and not the ethanol. This same effect will be observed if fruits replace the wine. The other medicinal properties cannot be substantiated at all and hence the belief that alcohol may have some beneficial properties can only be myth.

## Conclusion

Alcohol consumption has been with Ghanaians since antiquity and its use has been associated with beliefs that encourage use of more of it and risking addiction. These misperceptions or myths will need to be addressed and debunked especially among the youth if we are to prevent alcohol use disorders. Alcohol use disorders are better prevented than treated and a concerted effort adopting a public health approach with anthropological underpinnings will achieve more.

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