THE HEALTH AND ECONOMIC CONSEQUENCES OF ALCOHOL USE IN CENTRAL NIGERIA*

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ABSTRACT

This study examined the prevalence of alcohol use in Central Nigeria, an understudied segment of the country and explored the impact that alcohol has on the health and economic life of the region. The results showed a substantially high rate of alcohol consumption. Seventy nine per cent of the people sampled admitted to using alcohol. Moreover, 67% reported using alcohol daily or several times a week. Absence of diagnostic and hospital data call for cautious conclusions, but there are indications of serious health consequences resulting from alcohol use. A significantly higher percentage of those using alcohol also were reported to have heart disease. In addition, a significant number of people reported driving after using alcohol, were more likely to engage in sex with non-spousal partners, but less likely to engage in safe sex. In the economic realm, a majority of drinkers were farmers and civil servants. The implications of this on productivity are enormous. Moreover, a majority of alcohol users reported that they use tobacco and were inclined to drink even if they did not have sufficient resources. The impact of these findings on the directions for future research and policy formulation is discussed.

KEY WORDS: alcohol, Nigeria, health

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INTRODUCTION

In its rudimentary forms, alcohol has, for a long time, formed an intricate part of African social life. Most of the alcohol consumed was produced from cereal grains such as maize, millet and guinea corn. As early as 4241 B.C., beer made from barley was consumed in Egypt as a social diversion (Obot, 1993). Despite this long history with alcohol, research on alcohol use in Africa is a relatively recent phenomenon. Although the first epidemiological data on the use of illicit drugs, particularly marijuana (Cannabis), have been available for slightly more than 40 years, it has only been in the last 2 decades that research on alcohol consumption and related problems has been conducted (Obot, 2000).

The focus by both researchers and the public on illicit drugs is understandable. After all, these illicit drugs, especially cannabis, have been widely recognized as significant contributors to psychiatric morbidity. Upon being asked to indicate the drugs they have used, cannabis consistently ranks first among all drugs mentioned by patients with psychiatric disorders reporting to hospitals for treatment (International Council on Alcohol and Addictions, 1988; Obot & Olaniyi, 1991). In addition, although relatively new drugs in the Nigerian scene, cocaine and heroin are associated with serious hazards to health and social well-being; their addictive potentials are very high, and they have been implicated in various petty and violent crimes. In fact, the risk of consuming cocaine and heroin has begun to manifest itself in Nigeria where, beginning in the 1980’s, psychiatric hospitals in the Lagos-Ibadan axis started admitting cocaine and heroin addicts on a regular basis. Trafficking in these drugs has received national and international attraction, has been a major concern for the government, and continues to attract very stiff penalties.

In contrast, alcohol is not only legal, but its use is socially acceptable. Alcohol is often served during cultural and social activities. Important life transitions and events such as the birth of a child, marriages, getting a job or promotion, resolution of a conflict, and burial ceremonies are usually celebrated with a generous supply of alcohol. In a study of women engaged in the brewing of a local alcoholic beverage called burukutu in Jos, a city in central Nigeria, Ojiji, Dagona and Tamen (1993) obtained a surprising and alarming finding that 48% of those surveyed reported giving alcohol to their children as a substitute for food or drink. Furthermore, 42% reported giving alcohol to the children of their friends and relatives. Even though this study utilized a relatively small sample of 97 respondents, the fact that alcohol was served to children as young as 4
months, with a modal age of 1 year, is very striking. The authors noted that neither the fathers nor the customers present objected to alcohol being fed to the children, suggesting that the practice might be culturally sanctioned.

In spite of this extensive use of alcohol, including the serving of alcohol to children in some instances, because drinking occurred in, and was associated with, mostly these cultural events, it was a socially regulated activity. Consequently, drunkenness and excessive drinking were not tolerated and were often met with disapproval (Adomakoh, 1976; El-Guebaly & El-Guebaly, 1981). Young people drank in the presence of adults who closely regulated the quantity of alcohol that they consumed. Ironically, although drunkenness is discouraged, consumption of large quantities of alcohol, so long as it is not associated with behavioral evidence of intoxication, is generally seen as desirable. Thus, the general public is often unaware of the range and nature of impairments that a person is likely to experience following large amounts of alcohol consumption (Gureje, 1999).

**Health and economic consequences of alcohol**

When used in moderation and at social occasions, alcohol can be an effective social lubricant and has even been suggested to reduce the risk of a limited category of health problems. For example, moderate alcohol consumption has been associated with reduced risk of peripheral heart attack, ischemic stroke, sudden cardiac death, and death from all cardiovascular causes (Goldberg, Mosca, Piano, & Fisher, 2001). Moreover, this benefit of moderate drinking has been observed in both men and women, and in people who do not apparently have heart disease. It also applies to people who are at high risk for having a heart attack or stroke, and people with high blood pressure, angina, a prior heart attack or other forms of cardiovascular disease (e.g., Malinski, Sesso, Lopez-Jimenez, Buring, & Gaziano, 2004). Alcohol becomes a serious problem when it is abused. Heavy drinking is a major cause of preventable death in most countries. In the U.S., for example, alcohol is implicated in almost half of fatal traffic accidents (National Institute on Alcohol Abuse and Alcoholism, 2000). However, the harm from alcohol consumption may not be immediately evident; although it takes several years to manifest, its effects are often fatal.

Alcohol tends to affect all systems of the body, from the nervous system to the endocrine system, and can result in a variety of physical and mental health problems. Strokes, psychosis, alcohol hepatitis, cirrhosis, high blood pressure, loss of reproductive potency, and fetal alcohol syndrome are
among the disorders associated with alcohol misuse (Royal College of Physicians, 1987). Alcohol has also been associated with mental health problems. Few studies specifically focused on the link between alcohol problems and mental problems in Nigeria have been conducted. Available data are based on clinical reports from people admitted for treatment in psychiatric hospitals and they indicate that alcohol dependence is second only to cannabis as a factor in admission of young people in these hospitals (Obot & Olaniyi, 1991; Ohaeri & Odejide, 1993).

In addition to the negative impact on health, alcohol abuse has economic and social ramifications. Alcohol affects the drinker, his or her family, and the general community in both direct and indirect ways. In the workplace, alcohol abuse has been implicated in absenteeism, lateness, work-related accidents, and decreased efficiency. Data from Western countries also show that alcohol is involved in 40% of motor vehicle accidents, 10% of all deaths of people under the age of 25 years in Britain, 47-70% of homicides, 25-37% of suicides, and 44% of accidental falls (Royal College of Physicians, 1987). Problem drinkers are also over-represented among those convicted for violent crimes, domestic abuse, and traffic offenses.

The need for alcohol research in Central Nigeria

Despite the documented effects of alcohol abuse, very little research has been conducted to explore the nature and extent of the alcohol-related problems in Nigeria. The few studies of alcohol epidemiology in Nigeria indicate that heavy alcohol consumption as well as alcohol-related problems are rapidly increasing (Obot, 2000). However, these studies of alcohol use in Nigeria have been conducted among students in urban areas, mostly in southern Nigeria, and none of these studies focused specifically on drinking and alcohol-related problems (Obot, 1996).

In the first systematic study of alcohol use in northern Nigeria (the Middle Belt region), Obot (1993) surveyed 1,562 adults from three states – Bauchi, Gongola and Plateau – and found that 52.8% of the participants in the sample were current drinkers. Among drinkers, the prevalence of heavy drinking was high in all socio-demographic categories. However, only heads of households were sampled in Obot’s (1993) Middle-Belt study, leaving out a large segment of the population. In addition, the study did not survey one of the main states in the Middle Belt – Benue state – the focal point of this study.

The aim of this study was to fill this void by conducting a general population survey of alcohol use in central Nigeria, focusing mainly on
Benue state. It is important to study this area not only to extend the systematic study of alcohol use in Nigeria to encompass it, but also because it is an area vital to Nigeria’s food needs, so much that it is dubbed the “food basket of Nigeria.” We sought to determine the prevalence and patterns of alcohol use in this region as well as examine the nature of alcohol-related problems.

**METHOD**

**Participants**
A total of 183 participants (159 men and 24 women) were surveyed in Benue state, one of the core states in central Nigeria, in a geographical region called the middle-belt. The participants ranged in age from 18 years to 72 years of age, with an average age of 34.8 years. In terms of occupation, 35.5% were farmers, 28.4% were civil servants, 20.2% small business owners, 15% in different categories of jobs, and 13% unemployed. Eighty four per cent of the respondents had some formal education while 16% reportedly had no formal education. Participation was voluntary and all respondents were treated in accordance with “Ethical Principles of Psychologists and code of conduct” (American Psychological Association, 1992).

**Materials**
A questionnaire suited for a general population survey was specifically designed for this study. The questions in the survey sought for a wide range of demographic, attitudinal and behavioural information. The questionnaire was designed in accordance with the international guidelines for monitoring alcohol consumption and related harm (World Health Organization, 2000).

**Procedure**
The data were obtained using the personal interview procedure. Three trained interviewers met with the respondents either in their homes or in the local market. Interviews were conducted in English or in the language of the respondent in cases where such a respondent was not fluent in English. Before the actual data were collected, each interviewer had to obtain a signed informed consent form, clearly stating that participation was voluntary and that the respondent could decide to withdraw participation at anytime without any adverse consequences. The time required for each interview ranged from 30 to 40 minutes.

Because this study sought to obtain basic information about alcohol consumption and other factors related to alcohol, much of these data
are categorical in nature. Therefore, only very basic analyses such as chi-squares and percentages were used to process the data.

**Drinking status and characteristics of drinkers**

A significantly higher number of drinkers drank either daily or at least a few times a week $\chi^2 (3) = 18.84, p < .01$. Twenty-nine per cent of people reported drinking daily, and another 38% reported drinking more than once a week. The main findings relating to whom people would typically drink with and place of drinking indicate that solitary drinking is not common (8.4%) but most drinkers drink in company of friends (85.2%) rather than with a spouse (3.5%). The data also indicate that drinking usually takes place outside the home and predominantly at bars (all chi-square values were significant at the .01 level).

In terms of quantities consumed at a sitting, 65.28% of drinkers reportedly drink one to three bottles (beer is sold in 60 cl. bottles in Nigeria), 16.67% drink between 3-6 bottles, and 6.25% drink between 7-12 bottles at a sitting. Among those who drink spirits, 59% (6.94% of drinkers) drink between 1-5 shots; the remaining 41% (4.86% of drinkers) drink between 6-12 shots at a sitting.

Regarding intoxication, a higher number of the respondents (at chi-square values significant at .01 levels) reported having ever been drunk, and even though a smaller number rated themselves as being always drunk, a significantly high number reported being sometimes or occasionally drunk.

**Preferred alcoholic beverage**

As shown in Table 1, among drinkers, beer was significantly preferred over other types of alcoholic beverages, $\chi^2 (5) = 111.7, p < .01$. Of the drinkers surveyed, 42.3% were beer drinkers, followed by palm wine (30%), and the locally brewed alcohol (from food grains such as sorghum and millet) commonly referred to as *tashi/burukutu* (14.6%).

<table>
<thead>
<tr>
<th>Beverages</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
<td>61</td>
<td>42.36</td>
</tr>
<tr>
<td>Palm Wine</td>
<td>43</td>
<td>29.86</td>
</tr>
<tr>
<td>Tashi / Burukutu</td>
<td>21</td>
<td>14.58</td>
</tr>
<tr>
<td>Wine</td>
<td>8</td>
<td>5.56</td>
</tr>
<tr>
<td>Spirits (Whiskey, Brandy, Gin)</td>
<td>6</td>
<td>4.17</td>
</tr>
<tr>
<td>Ogogoro</td>
<td>5</td>
<td>3.47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>144</td>
<td>100</td>
</tr>
</tbody>
</table>
Only an insignificant percentage of respondents drank wine and both industrially distilled (usually imported) drinks such as whiskey and brandy and the locally brewed spirits (ogogoro).

**Reasons for drinking**

The data also showed that people drank for significantly different reasons $\chi^2 (9) = 159.44, p < .01$. As Table 2 indicates, of the many reasons cited for drinking, 31.25% mentioned recreation, 29.86% stated that they drank because they liked it, 13.89% stated that it made them happy, and 18.06% indicated that they drank out of habit.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation</td>
<td>45</td>
<td>31.25</td>
</tr>
<tr>
<td>I like it / Tastes good</td>
<td>43</td>
<td>29.86</td>
</tr>
<tr>
<td>Makes me happy</td>
<td>20</td>
<td>13.89</td>
</tr>
<tr>
<td>Habit</td>
<td>26</td>
<td>18.06</td>
</tr>
<tr>
<td>Medicinal Purposes</td>
<td>3</td>
<td>2.08</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>4.86</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>144</td>
<td>100</td>
</tr>
</tbody>
</table>

**Relation between alcohol use and other factors**

We examined the relation between alcohol and factors such as health, driving, and safe sexual behavior. Based on self-report, there was a higher incidence of hypertension among drinkers than nondrinkers, $\chi^2 (2) = 5.09, p < .05$. There was no difference between drinkers and nondrinkers on such diseases as cancer, heart disease, liver disease, kidney disease, and HIV/AIDS.

Regarding the other behaviors, a significant number (56%) reported driving after drinking. With respect to sexual practices, whereas a majority reported that they were not more likely to have sex after having a drink, those who did have sex were less likely to use a condom after drinking than when they had sex without drinking, $\chi^2 (3) = 107.73, p < .01$. 

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DISCUSSION

This population study represents the first systematic attempt to determine the prevalence of alcohol use in Benue state of central Nigeria. Some of the main findings in the present study include the fact that drinking is highly prevalent in this population, and is generally engaged in by married or single people with a formal educational attainment of secondary school level or below. The results also indicate that drinking is a social activity, supporting a finding by Gire (2002) that people from this culture tend to drink for social motives. Although solitary drinking is rare, the married people in this sample stated that they were more likely to drink in the company of friends than a spouse, perhaps explaining why very little drinking is consumed at home.

Some of the more disturbing findings are those that show that based on self-ratings, a very high number of drinkers report being drunk, and a very high number report driving after drinking. These results have implications for public policy regarding drinking. Even though several studies have reported high prevalence of drinking in Nigeria, there are no explicit guidelines and laws on blood alcohol level nor are there routine stops to check the blood alcohol level of motorists (Gureje, 1999). Perhaps findings of this nature can sensitize the public into pressuring the government to enact strict laws regarding drinking and driving.

Another troubling finding relates to the fact that people are less likely to engage in safe sex after drinking than they do when they are sober. Given the scourge of HIV/AIDS in Africa, this implicates alcohol as a major health risk not only in itself, but in the role that it may play in other areas as well.

The surprising finding in this study was the fairly low relationship between alcohol use and a range of diseases. While this may sound like an encouraging finding, we think that it simply is due to the fact that individuals were self-reporting their health status. Regular visits to the doctor are not common in Nigeria, particularly among the less educated, who were over-represented in the drinking group. It is possible that they have higher incidents that would be evident after thorough medical examinations. Hospital data linking alcohol use to disease are sorely needed to effectively address this question.

Some results from this study replicate the findings of the middle-belt study by Obot (1993) on heads of households in three states. For example, there is a high prevalence of alcohol use in this area (more than 78% of the respondents were current drinkers), a figure even higher than that found in the Obot study; as in that study, beer is the preferred drink.
Unlike in the Obot study in which most drinkers were either divorced or separated, the drinkers in this study were more likely to be married or single. It is not exactly clear why this difference occurred. It is possible that divorced or separated people were not just sufficiently represented in this study. Or it may just be that there is a higher social support for divorced/separated people in this area such that they don’t feel the need to resort to the bottle as a way of coping with their problems. Another study using a larger sample size that is likely to include a high proportion of this category may shed more light on this inconsistent finding.

Some of the major shortcomings of this study include the small sample size and the fact that all the information is based on self-report. This is especially critical with respect to the participants’ health status. We hope to conduct another study with a much larger sample in the near future. In addition, other hospital/clinically-based studies may be needed to provide a better assessment of the relationship between drinking and health in this population. These shortcomings notwithstanding, we believe that some important information has been obtained about alcohol use that would be useful to both research and policy on alcohol use and abuse in central Nigeria.

REFERENCES


CONSEQUENCES OF ALCOHOL USE IN NIGERIA


