# PATTERN OF ALCOHOL CONSUMPTION AMONG MALES AND FEMALES AND ASSOCIATED HEALTH PROBLEMS IN JOS 

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#### Abstract

Background Studies on drinking behaviour in Nigeria have reported a preponderance of males, which makes it difficult to make any strong comparative assertion.


## Aims

The aim of this study was to determine the types of alcoholic beverages commonly consumed by males and females, to compare the quantity and quality consumed, and to determine the time spent on drinking as well as to determine the mental and physical health problems encountered by both males and females. The study also sought to find out about their knowledge of health hazards associated with alcohol consumption.

## Method

The modified version of the Obot's 1993 Middle Belt general population survey questionnaire was randomly administered to respondents at various drinking places and offices.

## RESULTS

Four hundred and fifty participants responded to the questionnaires ( 225 males and 225 females). Beer was the single most preferred alcoholic beverage by both males and females. Both men and women consumed similar quantity of alcoholic beverage but women spent more time drinking. Majority of both sexes had knowledge about the health hazards associated with drinking alcohol. Whereas men reported more mental health problems, both men and
women equally experienced physical health problems.

## CONCLUSION

The study reveals that both males and females have a similar drinking behaviour pattern in Jos and majority engaged in problem drinking despite awareness of the health problems associated with alcohol consumption. Hence there is dire need for deliberate Government policy to regulate the production, sale, and consumption of alcoholic beverages in view of the health, social, and economic consequences associated with problem drinking..

## INTRODUCTION

The pattern of alcohol consumption varies considerably among different countries and even among different ethnic groups within a given country. ${ }^{(1)}$ Alcoholic beverages are usually consumed for different reasons by different people, at different occasions. Bennet et al ${ }^{1}$ pointed out that alcohol consumption is a central feature of adult life in Nigeria and plays a major role in social, religious, political and economic relationships, and can be given as gifts to a bride's relations and as part of bride price. Alcoholic beverages are consumed at virtually all ceremonies, including festivals, weddings and funerals; ${ }^{1}$ as well as agricultural pursuits ${ }^{2}$, child naming ceremony and settling of disputes ${ }^{3}$. Oladimiji and Fabiyi ${ }^{4}$ found reasons for alcohol consumption among Nigerian under graduates to include just for fun, to calm down and to identify with peers, while Obot ${ }^{5}$ found numerous social and psychological reasons for drinking, which include drinking for happiness, as part of social life celebrations, and to forget problems.

Whereas others drink due to influence of friends, to cope with frustration, and just because of the taste of alcohol. But some drink to relieve anxiety from the hectic modern life and almost temporarily relieve intense emotional pains, for social integration and interaction, and as food! ${ }^{6}$, while young people drink so as to escape pressure or problems, to relate, to get more self confidence or to feel better about one self. ${ }^{7}$

Empirical work has shown that the consumption of alcohol varies between males and females. In the cross cultural study of alcohol consumption among Indians, Mexicans and Nigerians Bennet et al ${ }^{1}$ found that men drink more often and consume greater amount of alcohol than do the women folk in all three countries. Fabiyi and Oladimiji ${ }^{\text {i8 }}$, in a study of brewery workers in Nigeria reported that $93.8 \%$ of the males who participated in the study consumed alcohol compared to only $6.2 \%$ of the females. Similarly Obot ${ }^{5}$ found that more males than females consumed alcohol in the Middle belt of Nigeria ${ }^{\text {( However, he did recognize that }}$ the relatively very small number of women in the sample made it difficult to make strong comparative assertion.

This study will however draw equal number of males and females to enable us make some comparative analysis.

For whatever reasons alcohol is consumed, it has been found to cause problems to the consumer. Empirical works have indicated that alcohol consumption does lead to physical, social, psychological and mental health problems. Link between alcohol consumption and physical, social, psychological, mental health problems have been reported ${ }^{4,6,7,9,10,11}$. Indeed, Lipson ${ }^{12}$ particularly found that the quantity of alcohol consumption has a relationship between it, stress and depression. He reported that light and moderate drinkers had less depression in the presence of stress than persons in the other extreme categories. Furthermore, he found that women had slightly but significantly higher depression scale scores than men and that moderate and light alcohol users generally had lower depression scale scores than did abstainers and heavy drinkers for every level of stress. In a review of literature on the consequences of alcohol misuse among
college students, Perkins ${ }^{13}$ noted that several consequences do arise from the misuse of alcohol. These include damage to self and others. The damage to self includes black outs, memory loss, emotional, physical, social and legal problems, while damage to others includes destruction of property, vandalism, fighting, interpersonal and sexual violence. He further pointed out that alcohol abuse has both short term and long-term consequences. The shortterm health problems associated with heavy drinking include hangovers, nausea and vomiting while the long-term consequences may include reduced resistance to illness.

Empirical evidence indicated that chronic abusers of alcohol and other drugs often exhibit persistent deficits on neuropsychological tests ${ }^{14}$. In a comparison of 309 hypertensive urban black men who consume alcohol with other drugs and abstainers, Klim et al ${ }^{15}$ found that users of alcohol and illicit drugs were significantly more likely to have uncontrolled blood pressure and higher systemic blood pressure. The consumption of alcohol has also been linked to high cases of diseases and death. For instance Slimgle ${ }^{16}$, in a study of 90 causes of disease or death attributed to alcohol, tobacco and illicit drugs, found that in 1995, 6.50 deaths and 82.014 admissions to hospital were attributed to alcohol consumption while 34,728 deaths and 194,072 admissions to hospital were linked to tobacco smoking. 805 deaths and 6,940 admissions were traced to the intake of illicit drugs in the same study

Despite the numerous problems associated with the consumption of alcohol and despite awareness in these respects, evidence shows that in many African countries, alcoholic beverages are actually considered a type of food and that mothers do feed their children with alcohol ${ }^{1}$. Ojiji, Dagona, and Tamen ${ }^{17}$, in a study of women who brew local drinks in Jos found that $48 \%$ of the women do give their children alcohol and $42 \%$ to the children of friends or relatives in spite of the fact that $51 \%$ of the women admitted having knowledge that alcohol affects their children's health. Whereas, in the study of brewery workers ${ }^{8}$, $52.7 \%$ were not aware of any link between alcohol consumption and disease condition.

In the light of these, the study seeks:
(i) To find out the type of alcoholic beverages usually consumed by men and women in Jos and environs.
(ii) To compare the quantity and quality of alcohol consumption among males with females in Jos and environs.
(iii) To determine the time that is usually spent on drinking by men and women.
(iv) To determine the mental and physical health problems among these categories of people.
(v) To find out their knowledge about the health hazards associated with alcohol consume.

## METHOD

## Participants

Five hundred men and women who fell within the age range 17-58 were randomly administered questionnaires within Jos Township and environs. 450 people responded to the questionnaires comprising 225 males and 225 females. The population also comprised of both literate and illiterate people who consumed alcoholic beverages.

## Materials

The modified version of the Obot's ${ }^{5}$ Middle Belt general population survey questionnaire was used for this study. The modified questionnaire contained items that sought to find out the types of alcoholic beverages that people usually consume in the study areas, the quantity and quality usually consumed, time or duration of alcohol consumption, frequency of consumption, and source of first contact with alcohol. The questionnaire also contained items that asked about the types of mental and physical health problems present in those who consumed alcoholic beverages. Also
investigated was the respondents' knowledge about the health hazards associated with alcohol consumption. Furthermore, the questionnaire contained a section for the provision of demographic information.

## Procedure

The data for the study was obtained from various points. These include hotels, pubs, offices and drinking houses. At each of these points, questionnaires were administered to consenting respondents, who were willing to participate in the study. For people who could read and understand English language, the questionnaires were giving to them individually to fill. For this category of respondents, those who were able to fill the questionnaires immediately were waited upon to do so. For those who could not and needed to complete it at their convenience, opportunity was given to them to do so. Such people were advised to return the completed questionnaires at the points for which they were given the questionnaires for easy retrieval. For those who were not literate and could not understand English language, the researcher or assistant read out the items to them one after another and the response to each question noted down at the appropriate response option category.

## RESULTS

Four hundred and fifty people comprising 225 men and 225 women responded to the questionnaires. The response rate was $90 \%$.
The Mean age of the males was 25.27 and of the females 21.8. The overall Mean age of the participants was 33.53.

The tables below present the information obtained on the various aspects of the alcohol questionnaire.

Table 1: Types of Alcoholic beverages usually consumed

| S/N | Types of alcohol usually <br> consumed | No. of <br> males | $\%$ | No. of <br> females | $\%$ |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1. | Beer | 50 | 22.2 | 62 | 27.6 |
| 2. | Burukutu - Local brew | 11 | 4.9 | 9 | 4.0 |
| 3. | Ogogoro - Illicit Gin | 14 | 6.2 | 15 | 6.7 |
| 4. | Palm wine | 21 | 9.3 | 14 | 6.2 |
| 5. | Pito | 12 | 5.3 | 37 | 16.4 |
| 6. | Wine | 6 | 2.7 | 17 | 7.6 |
| 7. | Multiple consumption | 111 | 49.3 | 71 | 31.6 |
|  | Total | 225 | 100.0 | 225 | 100.0 |

A large number of the males ( $49.3 \%$ ) and females ( $31.6 \%$ ) usually consume more than one alcoholic beverage. Beer is the single most consumed alcoholic beverage by males and females, $22 \%$ and $28 \%$ respectively.
Table 2: Quantity of beer usually consumed per day

| S/ | Number of Bottles <br> N | no. of mally consumed | $\%$ | No. of <br> females | $\%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. | One bottle | 15 | 6.7 | 30 | 13.3 |
| 2. | Two bottles | 41 | 18.2 | 46 | 20.4 |
| 3. | Three bottles | 46 | 20.4 | 47 | 20.9 |
| 4. | Four bottles | 47 | 20.9 | 42 | 18.7 |
| 5. | Five bottles | 34 | 15.1 | 35 | 15.6 |
| 6. | Six bottles plus | 42 | 18.7 | 25 | 11.1 |
|  | Total | 225 | 100.0 | 225 | 100.0 |

149 ( $66.2 \%$ ) of the women consumed 3 or more bottles of beer per day compared 169 ( $75.1 \%$ ) of the men.
Table 3: Quantity of local drinks usually consumed per day.

| S/N | Number of Jugs/dishes usually <br> consumed | No. of <br> Males |  | \% | No. of Females |
| :--- | :--- | :--- | :--- | :--- | :--- |

More than half, $55.5 \%$ of the men and $44.9 \%$ of the women consumed small quantity of the local drinks (less than 3 jugs or dishes/calabashes) per day.
Table 4: Frequency of Alcohol Consumption.

| S/N. | Frequency of Consumption | No. of <br> Males | $\%$ | No. of <br> Female | $\%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. | Once a month | 14 | 6.2 | 27 | 12.0 |
| 2. | $2-4$ time a month | 45 | 20.0 | 54 | 24.0 |
| 3. | $1-3$ times a week | 61 | 27.1 | 66 | 29.3 |
| 4. | $4-6$ time a week | 24 | 10.7 | 16 | 7.1 |
| 5. | Daily | 81 | 36.0 | 62 | 27.6 |
|  | $\quad$ Total | 225 | 100.0 | 225 | 100.0 |

More men consumed alcoholic beverages at least 4 times per week ( $46.7 \%$ ) than women (34.7\%).
Table 5: Time/duration of Drinking

| S/N. | Time/duration of Consumption | No. of <br> Males | $\%$ | No. of <br> Females | $\%$ |
| :--- | :--- | :---: | :--- | :---: | :--- |
| 1. | From morning to evening | 8 | 3.6 | 25 | 11.1 |
| 2. | Morning and evening | 8 | 3.6 | 36 | 16.0 |
| 3. | Evening only | 119 | 52.9 | 111 | 49.3 |
| 4. | From afternoon to evening | 39 | 17.3 | 19 | 8.4 |
| 5. | No specific time | 51 | 22.7 | 34 | 15.1 |
|  | Total | 225 | 100.0 | 225 | 100.0 |

More than half of the men (52.88) and about half of the women (49.33\%) drank only in the evening, but overall women spent more time drinking.
Table 6: Knowledge about the health problems associated with the consumption of Alcohol.

| Sex | Number Aware | $\%$ | Number Not Aware | $\%$ |
| :--- | :---: | :---: | :---: | :---: |
| Males | 191 | 84.9 | 34 | 15.1 |
| Females | 167 | 74.2 | 58 | 25.8 |

$\mathrm{X} 2=17.3, \mathrm{df}=1, \mathrm{p}>0.5$
More men ( $84.88 \%$ ) had knowledge about the health problems associated with alcohol consumption than their female counterparts ( $74.22 \%$ ), but the difference was not statistically significant.

Table 7: Mental heath problems among consumers of alcohol.
S/N Types of mental problems
No. of
Males
$\% \quad \begin{aligned} & \text { No. of } \\ & \text { Females }\end{aligned}$
\%

1. Waking up in the morning and failing to remember what happened while drinking the previous day even when the person is reminded.
2. Seeing things that others do not see 80
3. Hearing voices that others do not hear. 70
4. Difficulty recalling a time that a particular 100 event occurred.
5. Difficulty remembering places that one

102 has been to.
6. Get confused easily when doing certain 104 things
7. Inability to remember events, which took 95 place a few seconds ago or forget what one has said a few moments ago.
8. Feeling like life is not worth living 134
9. Difficulty concentrating in spite of making 134 efforts to do so.
10. Waking up in the night because of bad 109 dreams

Males experienced more mental health symptoms than females.

## Table 8: Physical Problems Among Consumers of Alcohol.

| S/N | Types of Physical Illness | No. of <br> Males | \% | No. of <br> Female | \% |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1. | Heart burn | 128 | 56.9 | 144 | 64.0 |
| 2. | Loss of appetite the next day after a <br> previous day's drinking. | 134 | 59.6 | 105 | 46.7 |
| 3. $\quad$Feeling like vomiting the next day after a <br> previous day's drinking. | 102 | 45.3 | 108 | 48.0 |  |
| 4. $\quad$Actually vomiting the following day when <br> one drinks heavily the previous day. | 97 | 43.1 | 118 | 52.4 |  |
| 5. $\quad$Waking up in pains or general body <br> weakness after a previous day's drinking | 158 | 70.2 | 132 | 58.7 |  |
| 6. $\quad$Waking up with headache, particularly on <br> one side of the head after a previous day's <br> drinking | 138 | 61.3 | 126 | 56.0 |  |
| 7.Going to toilet more frequently the <br> following day after an individual drinks <br> the previous day. | 100 | 44.4 | 83 | 36.9 |  |


| 8. $\quad$Feeling more thirsty than usual, the next <br> day after a previous day's drinking. | 152 | 67.6 | 118 | 52.4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 9. $\quad$The individual's hand shakes when he | 88 | 39.1 | 68 | 30.2 |
| holds an object. |  |  |  |  |$\quad$| Things easily fall off an individual's hand |
| :--- |
| when drinking. |

Both men and women experienced equally multiple physical problems out of the ten physical problems investigated. Thirst is the symptom most experienced by men; 152(67.5\%) while heartburn is the symptom most experienced by the women; 144(64.0\%).

## DISCUSSION

The study revealed a wide range of health problems that consumers of alcoholic beverages do encounter. A high proportion of the respondents, $84.9 \%$ of men and $74.2 \%$ of the women, were aware of the health problems associated with alcohol consumption, higher than that found by Ojiji et al ${ }^{17}$, who found that $51 \%$ of the women who brewed local drinks in Jar were aware of the effect of alcohol on the health of their children, but contrary to what oladimiji and Fabiyi ${ }^{4}$ found in their study of brewery workers. They found that $52.7 \%$ of the workers were not aware of any link between alcohol consumption and disease conditions. In spite of this awareness, a high proportion of respondents was engaged in problem drinking.

Beer was the single most preferred type of alcoholic beverage consistent with the finding of Netting ${ }^{18}$, who found that the Kogyer people of Southern Plateau, Nigeria prefer beer. Similarly in Ibadan, Nigeria, consumers of alcoholic beverages consumed mostly beer and palm wine, Bennet et $\mathrm{al}^{1}$. The preference for beer could be related to factors like availability, affordability, and the vigorous advertisement put up by the various breweries in the country.

In this study, both sexes consume more than one type of alcoholic beverage ( $49.3 \%$ and $31.6 \%$ of males and females respectively). Few people consumed the locally brewed burkutu, pito or ogogoro. Educated and class conscious people would not like to drink such locally brewed drinks most likely because of their low quality, lack of prestige and the unhygienic
environment in which they are brewed and sold. More so, fewer people preferred ogogoro most likely because of the aggressive campaign embarked upon by traditional rulers and government against its consumption. In addition, a small percentage of both males and females consumed wine ( $3 \%$ of males and $8 \%$ of females). This is attributable to its cost and the non-alcoholic content of some of the wine. The popular consumption of beer and the low patronage of wine confirm the earlier finding by Obot ${ }^{5}$.

Majority of consumers of beer by both sexes consume beer above the daily safe drinking limit. Safe drinking implies a daily consumption of not more than one bottle of beer, Ibanga ${ }^{3}$. Indeed, $0.05 \%$ to $.06 \%$ of alcohol in an individual's blood within two hours lead to mild impairment in reaction time, judgment, careless behavior, some loss of coordination and self control, difficulty making rational decisions about one's capabilities such as ability to drive or to operate machine ${ }^{7,19}$. By implication, it means that the respondents who consume two bottles and above are more prone to health problems associated with alcohol consumption. Indeed, Obot ${ }^{5}$, pointed out that the consumption of three bottles of beer per day for men and two bottles for women is regarded as heavy drinking and a sign of trouble ahead, while a daily intake of about five bottles and above has the high chance of causing liver problem.

A high proportion of respondents consume alcohol most days of the week. This would suggest problem drinking. Consequently, this category of drinkers, especially those who spent
most of the day drinking, is more likely to develop alcohol related health problems. Since a higher proportion of women than men spend more time drinking within a day, it is expected that the women would develop more alcohol related health problems. This is supported by the fact that more women than men experience nausea and vomiting after drinking the previous day, indicating heavy alcohol consumption ${ }^{(13)}$. However, while males experienced both mental health and physical symptoms, the females experienced more physical symptoms.

## CONCLUSION

The study reveals that both males and females have a similar drinking behaviour pattern in Jos. Though majority of drinkers are aware of the health problems associated with alcohol consumption, they tend to engage in problem drinking. This has health, social, and economic implications. Hence, there is a dire need for deliberate Government policy to regulate the production, sale, and consumption of alcoholic beverage.

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