WHO/MSD/MER/02.08

A Rapid Situation Assessment of Alcohol in Relation to Sexual Behaviour in Lagos, Nigeria

World Health Organization
MSD/MER

A Rapid Situation Assessment of Alcohol in Relation to Sexual Behaviour in Lagos, Nigeria

Sponsored by

Mental Health: Evidence and Research (MER)
Department of Mental Health and Substance Dependence (MSD)
World Health Organization, Geneva

Implemented by

Federal Psychiatric Hospital
Calabar, Nigeria
August, 2002

Principal Investigator: Dr. R. A. Lawal

Acknowledgement

The contributions made by the following individuals, agencies and organizations are deeply appreciated:

- The WHO coordinating team of Dr Shekhar Saxena and Mrs Mwansa Nkowane;
- The project consultant: Tim Rhodes;
- The Federal Minister of Health, Professor A. B. C. Nwosu
- Professor Oshotimeyin, Coordinator of the National Action Committee on AIDS (NACA);
- Drs N. Sani-Gwarzo and Mohamed Mukhtar of the National AIDS/STD programme;
- Chairmen and other officials of the Local Government Areas used for the study, namely, Ikoyi, Lagos Island and Agege;
- Community and religious leaders;
- Other stakeholders interviewed: Government and private health care providers; and the NGOs that participated one way or the other in the study;
- Federal Psychiatric Hospital, Calabar, Cross River State, Nigeria;
- All the members of the research team listed in Appendix 1;
- All the subjects who participated in any part of the field work;

Finally, I thank God Almighty for guiding and protecting the research team through the study.

Dr. R. A. Lawal
Principal Investigator
August 2002

EXECUTIVE SUMMARY

Background

The prevalence rate of HIV/AIDS in Nigeria has been rising with every national sentinel survey conducted in the country. It rose from 1.8% in 1991 through 3.8% and 4.5% in 1993 and 1995 respectively to 5.4% and 5.8% in 1999 and 2001 respectively (Federal Ministry of Health sero-sentinel report, 2001). The prevalence of HIV in the 1995 survey among sex workers (34.2%) and STD patients (15.1%) were higher than the national average (5.4%) (Federal Ministry of Health Technical Report, 1999). Understanding and determining the nature and socio-cultural driving force behind the epidemic in the country is important if adequate and effective interventions are to be formulated for the country. Although many studies have been reported in Nigeria on alcohol and drug use, (Asuni, 1964), very little has so far been reported on the relationship between alcohol and HIV infection in the country.

This study offered the much desired opportunity to study the dynamics of the HIV risk behaviours that result from the interaction between alcohol users, commercial sex workers and subjects suffering from sexually transmitted diseases.

Objectives

i. To determine the knowledge, attitude and practice of alcohol users in relation to sexual behavior.
ii. To study the relationship between the use of alcohol and high risk sexual behaviour in Lagos.
iii. To identify key features of the social, cultural and structural context which influence sexual behaviour, alcohol use and sexual risk taking by alcohol users and commercial sex workers.
iv. To identify factors influencing relationship formation, the satisfaction of sexual and other needs among alcohol users and commercial sex workers.
v. To assess the potentials for the occurrence of adverse health consequences such as HIV and other infections associated with risky sexual behavior by alcohol users and commercial sex workers.
vi. To identify key factors which influence the reduction of alcohol use and sexual risk behavior among alcohol users and commercial sex workers.
vii. To study the community awareness of issues pertaining to alcohol use and high risk sexual behavior and the associated adverse health effects, especially HIV infection.
viii. To assess the resources available within the community to address alcohol use and sex-related problems among alcohol users and commercial sex workers.
ix. To use the data gathered from the assessment to develop appropriate intervention strategies for alcohol users, commercial sex workers and STD patients.
x. To empower alcohol users, commercial sex workers and STD clinic attendees on HIV prevention measures.
xi. To offer a constructive critique of the existing RAR methodology and to make suggestions concerning its improvement for use in Nigeria and other similar settings.

Methods

The study employed a rapid assessment methodology which consisted of both quantitative and qualitative methods.

The quantitative design used a modified form of the 2nd version of the WHO Drug Injecting Study Phase II Survey Questionnaire.

The qualitative design was based on Rapid Assessment methodology by using the WHO/PSA Rapid Assessment and Response (RAR) Guide on Psychoactive Substance Use and Sexual Risk Behaviour (2000).

The essential features of the methods were:

i) **Duration:** The whole study was conducted within a period of eleven months divided as follows:
   - *Pre-field work:* Ten weeks;
   - *Field work:* Six weeks;
   - *Initial data analysis:* Four weeks;
   - *Full data analysis and report writing:* Twelve weeks

ii) **Personnel**: The research team consisted of 27 carefully selected members of the research team. They included 15 field workers (13 males and two females), 6 supervisors, 5 key informants and one statistician.

iii) **Study Location:** The study was carried out in three local Government Areas of Lagos, one in the high density and two in the low density areas.

iv) **Pre-field work:** These included the formation of the Advisory Board to ensure a close linkage between the research team and the community through contact and good rapport, obtaining ethical approval from the community and other stakeholders, recruitment and training of research team and a pilot study

v) **Field work (Qualitative):** These included secondary data gathering; four FGDs each in the low and high density areas – two with the alcohol users and two with the CSWs alike; in-depth interviews, observations and triangulations.

vi) **Field Work, including sampling and recruitment method (Quantitative):** Conducted after the FGDs. The survey questionnaire was administered to 354 subjects. They were made up of 239 alcohol users, 62 commercial sex workers (CSWs) and 53 subjects with sexually transmitted diseases (STDs). The snowball sampling method was used to recruit subjects who satisfied the criteria for inclusion in the study.

vii) **Post-field work:** Data analysis, report writing and limited intervention in the form of educational programmes for attendees in one beer parlour each in the low and high density areas with free distribution of condoms.

Key Findings

i) **Alcohol Use by Subjects:** Most of the alcohol users started the habit either to experiment, HDA-beer 52 (50%); LDA 29 (27.1%); PWD 5 (21.7%) or due to peer pressure/friends, HDA-beer 32 (30.8%); LDA 49 (45.8%); PWD 8 (34.7%). This applied also to CSWs and STD subjects who used alcohol. Many of the alcohol users drank to feel happy and to be their normal self, HDA-Beer 57 (55.9%); PWD 14 (60.8%); LDA 35 (33%).

ii) **Sexual Partners of Subjects:** Although many of the subjects had one primary sex partner, Alcohol - LDA 70 (75%); HDA-Beer 72, (74.5%), PWD 14 (70%); CSWs - HDA 8 (66.7%); LDA 14 (73.7%); STD 29 (65.9%), some others had more than one. Except for the STD subjects, most of the other subjects had casual partners, sometimes more than one. Many of the subjects in all the groups and areas engaged in sex almost everyday.

iii) **Alcohol use at sex with Primary and Casual Partners:** Many of the alcohol users drink alcohol both before and after sexual activities with their partners. **Primary:** Before sex - LDA 70 (72.9%), HDA-Beer 49 (53%), PWD 8 (42.1%); After sex - LDA 37 (45.2%), HDA-Beer 31 (28%), PWD 1 (5.6%). **Casual:** Before sex - HDA-Beer 28 (75.6%); PWD 5 (62.5%); LDA 50 (79.2%). After sex - HDA-Beer 22 (61.2%), PWD 1 (12.5%); LDA 41 (70%). The beer users in the LDA used alcohol significantly before sex than those in the HDA (P = 0.0064). A similar situation also applied to the CSWs and the STDs. HDA beer users significantly drank beer more than the Palm wine drinkers (P = 0.036).

iv) **Alcohol Use by Primary and Casual Partners:** Primary and casual partners of alcohol users used alcohol before sex. **Primary:** HDA – Beer 10 (12.1%); PWD 0 (0%); LDA 20 (21.1%); **Casual:** LDA (60%), HDA-Beer 16 (50%), PWD 6 (25%). They also used after sex.

About two-thirds of the primary partners of CSWs used alcohol, HDA 6 (63.7%); LDA 10 (66.7%). A similar proportion was also in the habit of drinking before sex, HDA 7 (63.6%); LDA 9 (60%). Almost all the casual partners of the commercial sex workers (HDA 93.3%, LDA 93.3%) had ever used alcohol

About one-third (16) of the primary partners of STD subjects had ever used alcohol.

v) **Role of Alcohol in Sex and Condom Use by Subjects**: The majority of alcohol users in the low density area significantly believed that alcohol played some/major role in their desire and performance of sex with primary partners, LDA 54 (56.8%); HDA-beer, 30 (33.4%); PWD 7 (38.9%) (P = 0.0052). A small percentage believed that alcohol use made them careless about condom use, LDA 13 (14%); HDA-Beer 10 (12.4%); PWD 1 (7.1%).

. About 50% of the CSWs who responded to this question in the high density area and 22.2% in the low density area admitted to some/major role for alcohol in their desire and performance of sex.

vi**)** **Condom use by subjects and Partners 3 months before interview:** Most alcohol users in the high density area did not use condoms at all with their

primary sex partners HDA-Beer 44 (52.4%); PWD 11 (68.8%). The opposite was the case with users in the low density area 64 (68.8%). With casual partners, more than half of alcohol users used condoms most or all of the time, except for Palm wine drinkers who were more careless, HDA-Beer 19 (55.8%), PWD 2 (28.6%), LDA 50 (82%). The majority of the CSWs either did not use or used condoms occasionally with their primary partners, HDA 9 (69.3%), LDA 8 (61.5%). A considerable proportion of them were also not using condoms with their casual partners, HDA 5 (22.7%); LDA 7 (35%). STD subjects were mostly not using condoms during sex with their primary 40 (83.4%) and casual partners 29 (85%).

vii) **Commercial Sex work by Subjects last 3 months:** Many of the alcohol users gave money for sex during the period, HDA-Beer 24 (57.1%); PWD 4 (40%); LDA 13 (31.7%). They engaged in sex with CSWs almost everyday and many of them, especially the palm wine drinkers, either did not use condoms at all during this period or did so only occasionally, HDA-Beer 35 (41.7%); PWD 7 (77.7%); LDA 13 (44.8%). Almost all the CSWs admitted receiving money/goods for sex, HDA 21 (95.5%), LDA 27 (93.1%). About 75% of the STD subjects did not use condoms whenever money or alcohol exchanged hands for sex.

viii) **Sexual Practices by Subjects:** Some of the subjects in the two areas engaged in oral sex, HDA-Beer 2 (11.8%) and LDA 9 (32%); CSW: HDA 2, LDA 4; STD 2. One subject from the high density area admitted to male on male sex. One from the low density area engaged in female on female sex. Three and six STD subjects practiced male on male and female on female sex respectively.

ix) **HIV/AIDS Knowledge by Subjects:** Fewer than half of the alcohol subjects discussed HIV/AIDS with their sex partners, HDA-Beer 40 (38.1%); PWD 23 (45.1%); LDA 52 (49.5%). Whereas most users in low density area were aware that one could be infected with HIV and look well, less than half of the high density users were unaware of this (HDA-Beer 44 (45.8%); PWD 5 (35.7%); LDA 86 (85.1%). This also applied to the CSWs as no less than two-thirds of them did not know that a person can be infected with HIV and look well, HDA 17 (70.8%), LDA 20 (66.7%).

x) **HIV Test History of Subjects:** More alcohol users in the LDA had had HIV screening tests before compared with the users in the HDA, LDA 49 (46.2%); HDA–Beer 23 (22.3%); PWD 0 (0%). In all, four of the alcohol users, two each in the low and high density areas drinkers had tested positive to HIV before.

xi) **Factors Affecting Sexual Behaviour Change By Subjects:** Continued alcohol use, 9 (16.4%), availability of sex partners, 7 (12.7%), and refusal of sex partners to use condom, 10 (18.2%), were the three main reasons given by beer users in the high density area that may prevent their reduction of alcohol use. Refusal of sex partners to use condom was the reason given by 41 (43.2%) of the low density area alcohol users.

The main factor that the CSWs and STD subjects considered that may enable change in their alcohol use was the Knowledge of adverse health effects that

can result from alcohol use, HDA 4 (44.4%); LDA 7 (58.3%), STD 16 (57.1%).

Conclusions

This study has been able to show that alcohol users in the Nigeria indulge in high risk sexual behaviours that could predispose them to infection with HIV and other sexually transmitted diseases. These behaviours cut across socioeconomic class, ethnic group, educational attainment and religion. Lower levels of education and socioeconomic class may predispose users to indulge in risk behaviours as evidenced by the higher proportion of alcohol users in the high density area not using condoms during sexual activities compared with users in the low density area.

Issues such as the social and cultural acceptability of alcohol in many Nigerian communities and the traffic delays encountered by workers returning home from work everyday appeared to encourage the use of alcohol and consequently the associated HIV risk behaviours.

Knowledge about HIV and its mode of infection was generally low among alcohol users. Most of the subjects did not know their HIV status. There is at present no intervention strategies specifically designed for the HIV and other health problems of alcohol users in the country.

Inadequate financial income may have contributed to the decision of some of the CSWs to indulge in the practice. Use of alcohol and sex without the use of condoms was not uncommon among them, especially with adequate financial incentives. The CSWs adopted self medication and traditional methods to prevent infection with HIV and other STDs that gave them false sense of security and encouraged them to be more careless with HIV risk behaviours.

The STD and the Palm wine users engaged in sex without the use of condoms proportionally more than the other subjects

Recommendations

In view of the sexual risk behaviours identified among the three groups of subjects in this study, the following prevention strategies are recommended.

1. Government, CBOs and NGOs should organize regular IEC programmes for attendees of facilities where alcohol is used to create awareness and encourage them to adopt safer behaviour practices.
2. Condom use should to be encouraged among persons belonging to the three groups of subjects by making it popular, cheap and easily available in the beer and palm wine using spots and other places where sexual activities take place.
3. Subjects should be educated on the benefits of voluntary regular HIV screening.
4. HIV screening facilities should be provided by Government at easy to reach locations for these high risk groups at subsidized rates.
5. Regular HIV screening should be encouraged and facilitated for high risk groups.
6. Pre and Post HIV counseling services should be provided for these three high risk groups.

7. Arrangements should be made for the referral of HIV positive members of these and other high risk groups for treatment at well recognized treatment centers adequately equipped to manage HIV related problems.
8. Government should set up subsidized HIV counseling and treatment centers in all parts of the country to increase accessibility by individuals in need.
9. Efforts should be made to encourage CSWs to go for safer and more gainful vocations, with assistance provided by government through its poverty alleviation programmes, and to provide equipment for them after completing the training period so as to provide or increase their financial base.
10. Arrangements should be made for comprehensive health care services specifically targeted at these high risk groups for primary and secondary prevention of their HIV and other health related sexual risk behaviours.
11. There is a need for similar studies in other parts of the country
12. Some harm reduction approaches need to be employed to ensure a significant decline in the spread of HIV among Alcohol users, STD and CSWs.
13. The findings of the study need to be widely disseminated.
14. Powerful and persistent advocacy need to be put in place at all levels of Government to sensitize officials to this dangerous health issue.

TABLE OF CONTENTS

CHAPTER SIX

LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency syndrome
CBO	Community Based Organization
CSWs	Commercial Sex Workers
FGD	Focus Group Discussion
HDA	High Density Area
HIV	Human Immunodeficiency Virus
ID	Identity Card
LDA	Low Density Area
LGA	Local Government Area
NACA	National Action Committee on AIDS
NDLEA	National Drug Law Enforcement Agency
NIDU	Non-injecting drug user
PWD	Palm Wine Drinker
RAR	Rapid Assessment and Response
RSA	Rapid Situation Assessment
SES	Socio-Economic status
STD	Sexually Transmitted Diseases
Tb	Tuberculosis
T & R	Training and Rehabilitation
UNDCP	United Nations Drug Control Programme
WHO	World Health Organization

LIST OF TABLES

LIST OF APPENDICES

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 Introduction and Background to the Study

The prevalence rate of HIV/AIDS in Nigeria has been rising with every national sentinel survey conducted in the country. It rose from 1.8% in 1991 through 3.8% and 4.5% in 1993 and 1995 respectively to 5.4% and 5.8% in 1999 and 2001 respectively (Federal Ministry of Health sero-sentinel report, 2001). The prevalence of HIV in the 1995 survey among sex workers (34.2%) and STD patients (15.1%) were higher than the national average (5.4%) (Federal Ministry of Health Technical Report, 1999). With these findings the country has crossed the 5% mark, and is believed to have the 2nd largest number of HIV/AIDS cases in Africa (2.6 million). Understanding and determining the nature and socio-cultural driving force behind the epidemic in the country is important if adequate and effective interventions are to be formulated. These can only be achieved through studies targeted at identified risk groups and behaviours. Such groups include alcohol and other drug users, commercial sex workers (CSWs) and STD patients.

Although many studies have been reported in Nigeria on alcohol and drug use, (Asuni, 1964, Lawal et al 1998), very little has so far been reported on the relationship between alcohol and HIV infection in the country. This is in spite of findings in other countries pointing to an association between alcohol and other drug use, sexual activity and sexual behavior (Burcham et al, 1989; Chesney et al, 1998).

Since HIV is known to be transmitted mainly through unprotected heterosexual practices in Nigeria and other parts of Africa, it is important to study the relationship between HIV and high risk sexual behaviour of alcohol and sex workers in the country. The need for this study becomes more imperative in the light of the recent reports that 9.8% of a group of street users of injectable substances interviewed in Lagos were HIV positive, and that many of them, especially the females, engaged in unsafe sexual practice as well as sex work to sustain their habit (Adelekan et al, 2000).

This study offered the much desired opportunity to study the dynamics of the HIV risk behaviours that result from the interaction between alcohol users, commercial sex workers and subjects suffering from sexually transmitted diseases.

The cosmopolitan nature of Lagos coupled with its large population as well as the relatively high industrial and trading activities and the easy availability of several brands of alcohol (local, imported and traditional) in the city make Lagos the choice location for this study. The findings of the study are expected to lead to a more comprehensive countrywide study on the high risk sexual behaviour of alcohol users in various ethnic groups all over the country.

1.2 NIGERIA IN CONTEXT

Nigeria is a multi-ethnic Federation composed of thirty-six states, and Abuja, the Federal Capital Territory. It is the most populous nation in Africa, though it is only the 14th largest country in the continent. A census conducted in 1991 put the total population at 88.5 million, while the current population is estimated at about 112 million.
Nigeria is a tropical country, lying between 3 and 14 degrees longitude, and 4 and 14 degrees latitude North of the equator. Nigeria's total land mass is 923,768 square kilometres. It is bordered by the Republic of Benin to the west, Cameroon Republic to the east, Niger and Chad Republics to the North, and Atlantic Ocean to the south. The country has a long coastal shore covering 864 nautical miles. The coastal region is mangrove, interspersed by a network of creeks and rivers. Beyond the mangrove belt lies a stretch of tropical rain forest followed by the Savannah region. The country's climate varies from the typical tropical at the coast, to sub-tropical further inland. There are two distinct seasons: the rainy season lasting from April to October, and the dry season from November to March. The absolute main maximum temperature is about 30 degrees Celsius in the coastal areas, and 35 degrees Celsius in the North.

More than half of all Nigerians (about 60 million) are below 18 years old, with about 20 million of these being less than five years old. About 40% of all Nigerians now live in the urban areas, though it is expected that this proportion will reach 55% by the year 2015.

Nigeria has more than 250 linguistic and tribal groups spread through the 36 States and the Federal Capital Territory of Abuja. The major ethnic groups are the Yoruba in the West, the Igbo in the East, and the Hausa in the North. Other important groups are the Ijaw, Tiv, Ibibio, Nupe, Kanuri and Edo. English is the official language in Nigeria.

Although Abuja is the federal capital, Lagos remains the most cosmopolitan and principal commercial city as it harbours the big industries, as well as the largest seaport and airport in the country.

Life expectancy in Nigeria is estimated at 51.5 years. There are 21 doctors per 100,000 Nigerians (1990–1995 average). Over a third of the population have no access to basic health infrastructures. Infant mortality rate is estimated at 9.9% increasing up to 16.7% for under-five children. The maternal mortality rate is estimated at 1,000 per 100,000 live births. Illiteracy rate with regard to the entire population has been estimated at 49%. Social welfare services are severely restricted and unemployment is rife, particularly among youths and graduates.

The economy is heavily dependent on oil earnings, superimposed upon a traditional agricultural and trading base. Crude oil and related products account for more than 95% of the earnings of the State. Nigeria's economy, which was very buoyant in the '70s, has been in a very bad shape in the past two decades. In 15 years, from 1980-1995, the country's Gross National Product (GNP) per capita fell from $US 1,200 to $US260. The worsening economic situation of the country has resulted in a considerable damage to the

social structures. The rapid transition from an agrarian to an oil-based economy provoked uncontrolled urbanisation, which could not be supported by an equally fast upgrading of urban infrastructure. The multiple factors which interplay to produce this poor state include overpopulation, poor industrial growth, low capacity utilisation, prolonged political uncertainty, global fall in oil prices, mismanagement of scarce resources, severe constraints on capital flows and heavy debt servicing.

1.3 THE STATE OF LAGOS

Lagos state was created in 1967 by virtue of Decree No 14 of 1967 when Nigeria's Federation was restructured into 12 states. It was carved out from the old Lagos colony and some adjacent parts of the former Western region of Nigeria. It is bounded in the south by the Atlantic ocean, Ogun state in the East and the North and Benin Republic in the West. Lagos was the federal capital city of Nigeria before the seat of Government was moved to Abuja in December1991.

The total population of the state is about 8,181,991 people made up of the Yoruba (mostly), and other tribes in Nigeria and other parts of West Africa. It also has a considerable presence of people from the Middle East, Asia, Europe and other parts of the world.

The state is divided into 20 Local Government Areas (LGAs). Over the years, Lagos has grown to become a big city that included some of the towns and villages in its suburbs. While some parts of the Lagos metropolis (Low density area) are inhabited by highly placed senior civil servants, company executives and foreign embassy officials of the middle to high income bracket, the high density area is mainly inhabited by the junior civil servants, the unemployed, peti-traders and the self employed.

The state is generally regarded as the commercial capital of the country because it has more industrial and trading activities than any other part of the country. It has a number of creeks and islands separated by the lagoon. It has the typical tropical rain forest weather and climatic condition. It has the biggest and busiest air and seaports in the country.

The two largest alcohol producing companies (Nigerian Breweries and Guinness Nig. PLC) in the country have their headquarters and major breweries situated in Lagos while a number of others are located in a boundary town in the adjourning state to Lagos. In view of its strategic location, foreign made brands of alcohol also find their way to the market in state. In addition to these, are the locally brewed alcohol that are available in every nook and corner of the state.

1.4 THE IMPLEMENTING AGENCY

The implementing agency for this study will be the Federal Psychiatric Hospital, Calabar. The hospital which is the first Psychiatric unit in the country, was taken over by the Federal Government in 1995. The hospital has an established Research Unit. It also hosts a Health Evidence Based Research Unit which collaborates with the centre in Liverpool. Among its research areas are substance abuse and serostatus (HIV, Hepatitis and syphilis) of persons using drugs as well as persons using mental health services. The Medical Director, Dr. Michael Ekpo, is an experienced Psychiatrist who until his appointment was the Deputy Director in the Department of Research and Statistics of the Federal Ministry of Health. He has served in various National Health committees and is at present a member of the National HIV/Syphilis Sero-prevalence Sentinel Surveillance Survey Committee. He has been involved in various substance abuse and HIV/AIDS studies in Nigeria. He was a member of the team that conducted the year 2000 WHO sponsored Phase II Injecting Drug Use study in Lagos. He has also carried out a number of international assignments for the World Health Organisation (WHO) in the African Sub-region. He is also one of the investigators of the proposed Sex-Rar.

1.5 COLLABORATING PARTNERS

i. The Research Team comprised twenty five people selected from a wide range of professional background (medical doctors, nurses, psychologists, statistician, and alcohol users and commercial sex workers recruited as key informants)

ii. The Federal Ministry of Health, through the personnel of its AIDS Control Unit. The officials of the Ministry will also play a major role in the advocacy and planned intervention that is expected to follow after the study has been completed.

iii. National Action Committee on Aids (NACA) as sole agency responsible for the multidisciplinary approach to HIV/AIDS prevention will require the results of the study to make informed input into the national AIDS control strategy.

iv. Lagos State Ministry of Health through the personnel in the AIDS control unit. The research team will require the active co-operation of the ministry in the dissemination of the findings and the interventions recommended by the team.

v. Psychiatric Hospital, Yaba is centrally located in Lagos, and provided the bulk of the research team. Among these are the principal investigator, other psychiatrists, nurses and psychologists who have had previous field experience in RAR and who were able to provide counseling to subjects before and after the interviews. They were also able to advice subjects on where they could get help if necessary.

vi. Some research personnel (statistician and a consultant epidemiologist) were invited to join the research team from Yaba College of Technology, Lagos and the Federal Office of Statistics, Lagos.

vii. Non Governmental Organizations: Three NGOs (CADAM, Finger of God Ministry, Hebron House of Hope) which offer mainly Christianity-based treatment and rehabilitation services in Lagos were invited to serve in the advisory board of the study.

viii. Community based organizations (CBOs) in the Local Government Areas (LGAs) were used for study. These included Action Health Incorporated, Stop AIDS and Monument.

ix. Federal Psychiatric Hospital, Calabar. This Hospital is the implementing agency for the study.

CHAPTER 2: AIMS AND OBJECTIVES

2.1 Overall Project Aim

The overall aim of the project is to study the relationship between alcohol use, sexual risk behavior and the adverse health consequences, especially HIV so as to increase knowledge and understanding of the relationship between alcohol and sexual behaviour in Nigeria with a view to developing appropriate interventions for minimising the adverse health consequences of alcohol use related to sexual risk behaviour.

2.2 Specific Objectives

i. To determine the knowledge, attitude and practice of alcohol users in relation to sexual behavior.
ii. To study the relationship between the use of alcohol and high risk sexual behaviour in Lagos.
iii. To identify key features of the social, cultural and structural context which influence sexual behaviour, alcohol use and sexual risk taking by alcohol users and commercial sex workers.
iv. To identify factors influencing relationship formation, the satisfaction of sexual and other needs among alcohol users and commercial sex workers.
v. To assess the potentials for the occurrence of adverse health consequences such as HIV and other infections associated with risky sexual behavior by alcohol users and commercial sex workers.
vi. To identify key factors which influence the reduction of alcohol use and sexual risk behavior among alcohol users and commercial sex workers.
vii. To study the community awareness of issues pertaining to alcohol use and high risk sexual behavior and the associated adverse health effects, especially HIV infection.
viii. To assess the resources available within the community to address alcohol use and sex-related problems among alcohol users and commercial sex workers.
ix. To use the data gathered from the assessment to develop appropriate intervention strategies for alcohol users, commercial sex workers and STD patients.
x. To empower alcohol users, commercial sex workers and STD clinic attendees on HIV prevention measures.
xi. To offer a constructive critique of the existing RAR methodology and to make suggestions concerning its improvement for use in Nigeria and other similar settings.

CHAPTER 3: METHODS

3.1 Study design

The study employed a rapid assessment methodology which encourages the use of government, and non-government organisations, and community groups in overseeing the study and in suggesting intervention strategies as soon as preliminary findings are available. Both quantitative and qualitative methods were employed. These enabled the study to gain both an epidemiological assessment of the relationship between alcohol use and risky sexual behaviour, and a descriptive understanding of the social contexts in which alcohol use and risky sexual behaviour occurred.

The quantitative design used a survey questionnaire locally designed for the purpose of the study (Appendix 1). It was based on the 2nd version of WHO Drug Injecting Study Phase II questionnaire. This questionnaire was modified for the purpose of the study. The questionnaire was not interpreted into the local language because our earlier experience with a similar questionnaire in the IDU RAR study, and which was confirmed in the pilot of this study, showed that most people in the Lagos area understood enough English to be able to understand and answer the questions.

The qualitative design was based on Rapid assessment methodology by using the WHO/PSA Rapid Assessment and Response (RAR) Guide on Psychoactive Substance Use and Sexual Risk Behaviour (2000). The guide offered a detailed description of the RAR process and formed the basis of this study. It involved the following methods:

i. Review of existing Nigerian data and research
ii. Social and geographic mapping
iii. Focus group interviews
iv. Cross-sectional quantitative surveys (using interview questionnaire)
v. In-depth interviews
vi. Ethnographic observations

The study also employed a multi-site design. This sampling strategy was used in order to minimise potential bias and to increase the potential of the study to examine the social contexts of alcohol use and risky sexual behaviour. The design also made it possible to compare samples recruited in high and low density area settings as well as samples recruited in hotels/beer parlour and local alcohol (Palm wine) drinking settings within the low socio-economic (high density) settings.

A beer parlour for this study was defined as a small space usually a sitting room or a room within a residential building, with the sitting arrangement converted for the sale and drinking of alcohol.

3.2 Community involvement

Community involvement was facilitated through an Advisory Board. The Board was set up to ensure a close linkage between the research team and the community by involving them in the planning and execution of the study in order to facilitate the translation of findings of the study into practice. The objectives of setting up the Board are to advise the research team on the

i. Study design
ii. Monitoring
iii. Evaluation
iv. Analysis
v. Publication
vi. Dissemination of the rapid situation assessment findings
vii. The design of appropriate response based on the findings of the rapid situation assessment
viii. Implementation of the recommended interventions.

The members of the board included:

i. The Federal Ministry of Health through the National AIDS/STD Control Programme (NASCP).
ii. National Action Committee on HIV/AIDS in Nigeria (NACA).
iii. Lagos State Ministry of Health through the HIV/AIDS control unit.
iv. The Medical Officers of Health of the three Local Government Areas where the study was conducted.
v. Non-Governmental Organisations working on drug use and HIV/AIDS prevention. These are Christ Against Drug Abuse Ministry (CADAM), Finger of God Ministry, Hebron House of Hope
vi. Managers of bars, clubs and beer parlour that were used for the study.
vii. Two Alcohol users who patronized the sites of the study.
viii. A representative of commercial sex workers
ix. Two people from the communities where the study was conducted.
x. Study Investigators.

The Advisory Board was based on the principles of voluntarism and confidentiality. All members were informed about the study background and design. Board members were told that they had the right to withdraw from the group at any time without giving any reasons. Members of the board agreed not to disclose any information to anybody outside the group. The Advisory Group established a set of guidelines and ground rules for the conduct of the research. These guidelines provided criteria for the exclusion of any member of the research team found to behave in a manner incompatible with the principles of the research. The Group set the criteria for discontinuation of the study as a whole. These included insufficient guarantee of confidentiality and causing harm to study participants. Furthermore, the Group established an appropriate surveillance mechanism to ensure the rapid assessment was carried out with due regard to the human rights of study participants.

3.3 Ethical Considerations

The ethical principles followed were in line with the International Guidelines for Ethical Review of Epidemiological Studies. Considerations regarding confidentiality and the protection of research participants from harm, invasion of privacy, and the provision of emotional and practical support were given priority. The research team (led by the Principal Investigator) supported and monitored by the Advisory Body ensured that ethical principles were appropriately adhered to. There was a basic understanding that any breach of confidentiality was to lead to an immediate interruption of the study as a whole and this was to be followed by an independent investigation.

Ethical Approval

An application to carry out the study was sent to the ethic review committee of the Federal Psychiatric Hospital, Calabar along with a copy of the proposal of the study. A written approval was received from the committee before the study was commenced.

3.4 Consent:

Before obtaining informed consent, the title, nature and purpose of the study was explained to each of the potential study subjects, and their voluntary participation was requested. Subjects were informed that talking about some of the questions on drinking patterns and sexual behaviour could arouse feelings of concern and embarrassment vis a vis the interviewers and other participants (the latter in case of group interviews). Participants were asked to give separate informed consents for their participation in the survey, individual interviews and focus groups (Appendix II, III and IV). Some participants took part in more than one aspect of the study. They were told that all answers would be treated with strict confidence and every effort would be made to maintain the confidentiality. The information from the interviews/focus group discussions was grouped so that it was not possible for the identification of individual answer. The subjects were also informed that the information they gave would be used to design programmes to help people reduce their risk of HIV infection when they are under the influence of alcohol.

Each study participant was asked to choose a personal identifier ('code name'). Except during focus group interviews, at no point (survey or in-depth interview) did they have to reveal their own name, or other personal data that could allow them to be identified. Thus, no evidence existed that could make it possible to associate a questionnaire/ interview with an individual. All information given by a subject during interview/focus group discussion that had the potential to disclose their identity was erased immediately after the interview/focus group discussion. Participants in the focus groups were allowed to use whatever names they chose, whether real, fictitious or pseudonyms. This is because it was possible that some members of the focus group knew each other.
In general the consent forms were written in a clear, comprehensible style. They were carefully designed and scrutinized by the research team going along with strict rules. To protect the identity of the participants, no personal names were recorded on the consent

forms. The subjects, however, declined to sign the consent forms sighting the sensitivity of the subject of the study as the reason for refusal. They would rather withdraw from the study than sign a form which they believed might give them out, even when they were given assurances and told to sign these forms with their code-names.

3.5 Rules to guarantee confidentiality

The Advisory Board ensured that human rights and confidentiality were guaranteed during the study. The following rules were also enforced to ensure that human rights were protected:

i. Prior to undertaking the research, the participants were informed of its objectives and goals and a written form was submitted to them.
ii. They were informed of their right to withdraw from the study, to keep information which was not deemed to be shared, and that they would be provided professional support for crisis related to their involvement in the project
iii. Interviews were taped only if a written or verbal consent was provided by the interviewee. Names were changed in both the written and oral interviews to the "code" name so as to make the participant unknown to anyone but the research coordinators. This also included the Advisory Board.
iv. Research team members were forbidden to share any information that could reveal information on individual study participant's behaviour and attitudes with anyone, including club and bar attendants and owners.
v. Survey questionnaires and interview tapes (except for focus groups) only allowed a code name to be used and all data remained confidential.
vi. Group discussions were held under strict confidentiality and participants were reminded that any disclosure that took place in a group situation and any information they chose to disclose was entirely a matter of individual violation.
vii. Once the reports were made, names were changed by group coordinators.
viii. Cassettes were used only if participants were willing and consented in a written or verbal form.
ix. These cassettes were transcribed under the supervision of the research team and were destroyed once they were copied.
x. The participants' names were changed in the written report.

3.6 Inducements:

Participation in the study was voluntary, and there were no inducements beyond serving refreshment during questionnaire sessions/interviews/focus group discussions. They were provided with information on HIV and other Sexually Transmitted Infections. Free condoms were also given to the subjects.

3.7 Psychological Support for Study Participants and Research Team Members

Emotional and practical support for research team members and the study participants were provided as follows:

i. Professional psychosocial counseling was available on the spot during and immediately after questionnaire sessions, interviews, and focus group discussions. Participants were given contact details of other treatment and counseling centers available that they could contact for assistance.
ii. The research team represented by the Principal Investigator and the other psychiatrists in the team, provided therapeutic short-term support to all research participants who needed it.
iii. As research team members could themselves need emotional support, regular supervision was ensured to discuss relevant issues.
iv. The research team referred participants that required therapeutic intervention to available facilities. Some members of the research team and the board, including the Principal Investigator, worked in some of these facilities. This facilitated the entry of participants into treatment programs when necessary.
v. The research team provided effective information on reducing harm to health professionals working with these populations.

All these services were provided at no cost to participants.

3.8 Community Linkages

In order to ensure community participation and sustainability of the project, contact and good rapport was established between the research team, the community and other stakeholders. This was achieved through several formal briefing sessions delivered by members of the research team on the background, concept, methodological issues and what we planned to do with the results of the study.

3.9 Study Venues

The study was carried out in two areas covering three Local Government Areas (LGAs) in Lagos for alcohol users and commercial sex workers. The areas and venues of the study were selected after the Principal Investigator and his two other colleagues had

i. Carried out a thorough social and geographic mapping exercise of Lagos based on the investigators' knowledge of the city of Lagos where they have lived for many years and after visits to all areas of the Lagos metropolis.
ii. Made observations of various areas of the Lagos metropolis

iii. Conducted focus group interviews
iv. Sought advise from the key informants

The areas are:

i. Low density areas in the Lagos Island and Ikoyi LGAs.
ii. High density area in Agege LGA.

The low and the high density areas were chosen because those who live in these two areas belonged to two distinct socioeconomic groups. Whereas inhabitants of the low density area are mostly well educated professionals holding executive or senior managerial positions in government or multinational companies and diplomats, the high density area is inhabited by illiterates and lowly educated individuals who are mostly peti-traders, artisans, junior government and company officials and unemployed. The low density area is also well known for its good physical, infrastructural and environmental planning and low population density compared with the high density population where these are either lacking or are poorly provided.

The STD subjects were recruited from two government hospitals. These are:

i. Lagos State General Hospital, Lagos – Lagos Island LGA
ii. Lagos State University Teaching Hospital, Ikeja – Ikeja LGA

The two hospitals belong to the state government and are highly subsidized. They attract their clientele mainly from the low socioeconomic group. The second hospital was also a general hospital until the year 2000 when it was converted to a Teaching hospital. This has however not changed its clientele significantly as the billing system and state subsidy have remained at the same level as that of the General Hospital. For the low density area, Ikoyi and Lagos Island were chosen. Both of them are two of the small Islands in the Lagos metropolis. Ikoyi used to be the exclusive reserve of senior white officials during the colonial era. It is a well planned area and even now, more than forty years after independence, it is only occupied by senior civil servants, successful and well educated business executives, top company officials, foreign diplomats and expatriate workers.
In all five venues were selected for the study in this area. A club house each was selected in Ikoyi and the low density part of Lagos Island for the study. One hotel located in Ikoyi was also selected in this area. It is a 4 star hotel and although CSWs were officially barred from entering the hotel, in practice, they were allowed to come to the relaxation area of the hotel until midnight when they were required to leave. The two clubs and hotel are prominent, popular and of high standard. They have high patronage mainly by Nigerians and non Nigerians of the upper and middle socioeconomic class.
Administrative officers are employed to the run the affairs of the clubs although they also elect officers for the clubs every two years. The officers include club President, General Secretary, Financial Secretary, Treasurer and Public Relations Officer. Fee paying members and their friends are allowed to come to the club any time of the day. The clubs organize several social activities and games from time to time. CSWs are not allowed into the clubs unless they are brought by one of the club members. Thus CSWs only hang around these clubs in the evenings and at nights everyday.

Two beer parlours were selected based on findings after observations, focus group interviews and advise by key informants. They are very popular in the area. They also

enjoy high patronage by people living or working in the area. The team could not find a local alcohol (Palm wine) drinking venue in the low area to select for the study.

Agege a town in the suburb of Lagos was chosen because it reflects the cosmopolitan nature of Lagos with many of the people living there belonging to different ethnic groups, mainly from the low socioeconomic class. The inhabitants range from the unemployed and peti-traders to technicians, self employed low income earners, and junior civil servants. Most of the houses are rented out as single rooms while slums abound in the area. The only railway line that goes from Lagos to the North of Nigeria passes through the town. It also has a train station. The town serves as an intersection point with many poorly organized crowded motor packs where many people going and coming from other parts of Lagos change buses or board the train to their destinations. It has a number of hotels, clubs, beer parlours and brothels for the relaxation and socialization of the people living, working and passing through the area. It is from these that three venues, two hotels and one beer parlour, were selected for the purpose of the study.

The three sites selected included two hotels and one beer parlour where only palm wine (traditional alcohol) was sold. They are situated close to motor parks and the train station; thus making the area a beehive of activities during the day and at night when the people who lived and worked there come to relax and socialize. Many shops also lined the streets of the area where all kinds of things ranging from foodstuff to clothing materials, electronic musical items, and other things were sold.

The hotels were selected because of their high popularity and patronage by various groups of people living and working in the area, as well as the advise of our key informants.

One of the hotels had live–in facilities for their CSWs. The CSWs rented rooms in the building where their male clients come to meet them for commercial sex purposes. The other hotel had no live-in arrangement for the CSWs, though it had some rooms that were rented out on hourly basis for the CSWs and their male clients. In this hotel there was a large beer hall where a life musical band comes to play in the middle of the week and at weekends while the people would drink and dance individually and in groups. At the same time, several CSWs would hang around or sit with drinkers and seduce men in different ways by greeting them or asking where the men had been for some time, even if they had not seen the men before. They sometimes pecked or hugged some of the men they had known before openly. The CSWs were strictly not allowed to come into the hotels until 12.00noon every day to allow for the cleaning of the hotel. The hotel manager knew and had control over the CSWs, including the power to ask them not to come again or to send them to the remote branches of the hotel, if they (CSWs) committed any offence. The CSWs, we were told, registered in the hotel and were rotated between the branches of the hotel. Various brands of alcohol including beer (the most common), wine and spirit were sold in the hotel. Traditional alcohol like palm wine and others were not available in the hotel. Selling or smoking of cannabis, as a rule, was not allowed within the premises of the hotel. We, however, observed that, if desired, it could easily be

purchased in the area surrounding the hotel. The hotel also served as meeting place for some groups and societies in the area.

Similar situations were found in the first hotel except that the rules were not as strictly applied as it was in the second. However, the hotel had live-in CSWs who had permanent rooms to themselves where their clients come to meet them.

The CSWs for the high density area were recruited in these two hotels. Police raid in these hotels were not uncommon. Two of our field team members were caught up at different times in these hotels while administering survey questionnaires when the police came to harass the CSWs in the hotels. They were, however, left to continue after they had explained their mission to the police and showed their identity cards.

The third site (the palm wine beer parlour) was selected in order to include users of the traditional alcohol in the group. It was selected because it was the only one that enjoyed the largest patronage by palm wine drinkers in the area and to find out whether the use of traditional alcohol could be associated with any special or peculiar high risk behaviors for HIV infection compared to beer users. The venue was a one-room shop by the side of a main road converted to a traditional alcohol (palm wine) drinking spot. This description fits into that of a beer parlor except that in this case only palm wine, a locally produced alcohol from either oil palm or raffia palm trees, was sold there. In this beer parlour, only palm wine tapped from oil palm tree was sold. The sale would usually begin from about 2.00 pm and continue until late in the evening. While most users were seen drinking their palm wine undiluted, one of them was seen mixing it with Guinness stout. This according to him was "to make it stronger." Although there were few women among them, the clients all claimed that prostitutes were only allowed if they were brought by male drinkers.

3.10 Recruitment of Members of the Research Team

The recruitment of the field workers was done by the principal investigator and the two other investigators and later referred to the advisory board for approval. The recruitment criteria included:

i) Previous participation in field research
ii) Availability to participate on full time basis
iii) Educational qualification (minimum of 12 school years).

The following members of the research team (25 in all) were thus recruited:

i. 14 field workers (12 males and two females)
ii. 5 field supervisors
iii. 5 key informants
iv. 1 statistician.

The key informants (2 managers of alcohol drinking venues, 2 other men with a CSW who linked the team up with CSWs) were engaged to provide guidance on the selection of study sites and recruitment of study subjects.

Following the recruitment exercise, five field teams were established as follows:

i. Low density area team
ii. High density area team
iii. 2 teams for STD subjects
iv. In-depth interview team

Each of the teams was headed by a field supervisor. All but one of the supervisors were Consultant Psychiatrists with previous experience in RAR research. The 5th supervisor who led one of the STD teams was a general practitioner also with previous research experience.

3.11 Recruitment of Subjects

Inclusion criteria

The inclusion criteria for the recruitment of subjects included the following:

i. Only participants 18 years and above were recruited into the study.
ii. Individuals who were able to understand the nature and purpose of the study. This was to exclude individuals who by virtue of their mental state either due to their drink or mental illness were unable to understand the nature or purpose of the study even after due explanation.
iii. Individuals who consented to participate and signed the informed consent form or give oral consent after declining to sign the consent form.
iv. Individuals who were not inebriated at the time of the interview/focus group discussion.
v. Female commercial sex workers who engaged in sex for money as a source of income for daily living.

Exclusion criteria

The exclusion criteria included the following:

i. Individuals who were psychotic, aggressive or experiencing hallucinations were excluded as determined by the mental state examination conducted by a psychiatrist.
ii. Vulnerable participants who could experience negative psychological consequences from being interviewed/taking part in a focus group discussion as identified by the research staff who were trained on how to identify such individuals.
iii. Participants who were disruptive during the study.

Circumstances that could lead to the discontinuation of the study were:

i. If confidentiality could not be guaranteed or
ii. If there was a significant possibility of participants being prosecuted by the law-enforcement agencies because of the study.

Participants, who were subject to a breach of confidentiality, had at their disposition a person from the Advisory Board who was versed in ethical matters. Psychosocial and juridical counseling and other mechanisms were also provided to minimize harms related to such breach of confidentiality.

Recruitment of alcohol drinkers

A total of 239 male drinkers (LDA 109; HDA 130) were recruited for the survey-based interviews. They were recruited by the head (supervisor) of the research team for each of the low and high density areas after they had satisfied the inclusion criteria for the study. Only male alcohol drinkers were recruited because it was observed that there were relatively few female drinkers coming to drink in the drinking venues and that it would be difficult to differentiate between female alcohol drinkers and female CSWs who came purposely to look for male clients. In each of the venues, the recruitment of subjects was initially facilitated by the club/hotel managers who identified drinkers who satisfied our inclusion criteria. Subsequently, the snowball sampling method was adopted for the recruitment of the subjects. Most of the recruited subjects were drinkers who patronized the particular venue five or more days a week. Alcohol users who patronized the CSWs at the selected venues were also preferentially selected.

Recruitment of Female Commercial Sex Workers (CSWs)

For the purpose of the study, a commercial sex worker was defined as a female who practiced sex for money as a source of income for her daily living. A total of 62 CSWs, 29 and 33 in the high and low density areas respectively, were surveyed during the study. They were recruited by the head (supervisor) of the research team for their area after they had satisfied the recruitment criteria for the study. In the high density area, the CSWs were recruited in the same location as the alcohol users except for the palm wine drinking venue where no CSW was recruited. Their recruitment was initially facilitated by the key informants (hotel managers) who introduced the study team for the area to the leaders of the CSWs. The team then explained the purpose, potential benefits of the study and other details to them. After recruiting a few of the CSWs, including the leaders and gaining their confidence, the others were recruited through snowball sampling.
The situation was different in the low density area where CSWs were not allowed to come to the clubs and hotels on their own, unless they were accompanied by a member of the club or a man who had earlier checked into the hotel. The team, therefore, had to find key informants who linked us with the CSWs who hanged around the selected beer parlours, hotel and clubs or stand along the major streets of the low density area in the night. After recruiting the initial few CSWs through the assistance of the key informants, the snowball sampling method was employed to recruit the other CSWs.

The recruitment of the CSWs in the two areas was based on the principles of voluntarism, anonymity, confidentiality and safety for all parties. They were told that they were free to refuse to answer any question, or withdraw at any time. The study participants were invited to participate on the basis of informed consent. They however declined to sign informed consent form because they were afraid that it could be used against them in

future by the law enforcement agents. They preferred to give verbal (oral) consent rather than signing the informed consent form.

Recruitment of STD Subjects

A total of 53 attendees, both new and old (repeat), of two STD Out Patient Clinics (OPC) of a General and a Teaching Hospital in Lagos were systematically selected to participate in the survey interviews. This allowed for systematic comparisons on the relationship between patterns of alcohol use, risky sexual behaviour and infection with STDs. The clinic staff were requested to ask attendees of OPD/STD clinics after registration whether they were willing to be approached by researchers to participate in a study. The staff member was to briefly explain the research to the attendees, and inform them that the head of the research team would further explain the study to them and invite them to participate in it. At the same time, patients were assured that refusal would not negatively impact on their treatment. In case of agreement, patients were asked to go to a separate room to talk with the head of the research team (supervisor) in the clinic. The recruitment followed the principles of voluntarism, anonymity, confidentiality and safety. The subjects also only agreed to participate on the basis of oral consent. They were told that they were free to refuse to answer any question, or withdraw at any time.

Recruitment for Focus group interviews

The recruitment of alcohol users for the focus group discussions (FGDs) was done based on observations made by the principal investigator and the other two investigators during the selection of drinking venues and with advice from managers of the clubs and beer parlours used for the FGDs. The selected alcohol users were experienced drinkers that were frequently coming to the venues of the FGDs to drink not less than five days every week in the six months before the FGD was conducted and who were considered to be able to discuss their personal experiences freely among other drinkers. The selection of CSWs for participation in the high density area FGDs was also carried out by the principal investigator and his two colleagues following observations made during the selection of the study sites and also with the advise of the key informants based on regular almost daily patronage of the hotels by the CSWs, willingness and ability to talk about their experience. Preference was given to CSWs who admitted to using alcohol. In the low density area, the CSWs who participated in one of the FGDs were recruited in the hotel used for the study in this area. The recruitment was carried out following observations made during previous visits to the hotel and realization that CSWs were allowed to the evening relaxation part of the hotel in the evenings until 12.00 midnight. Because of the difficulty in recruiting them in the evenings when they claimed to be looking for clients, the recruitment and conduct of the FGD was deferred until about 10.30pm by initially sitting with them in the relaxation area and intimating them about the objectives of the study the future health prospects for them and the their other colleagues. They were also told about the FGD and what it entailed. Six of those who agreed to participate were recruited with preference being given to those of them who

used alcohol. It was conducted for one hour late in the night from 11.00pm – 12.00am. For the second FGD, through the assistance of a key informant, the CSWs agreed for the FGD to hold in a hostel where some of them lived. It was conducted in the morning from 10.00am – 11.00am after they had returned from the previous night's outing.
Participation in any of the focus group interviews was voluntary, private, confidential and based on informed oral consent as they refused to sign the consent forms. Each participant was free to withdraw from the discussion anytime he or she liked. Participants were reminded that anything they disclosed would be heard by other members of the focus group and that they only needed disclose information that they were comfortable disclosing. Participants were asked if the interview could be tape-recorded and this only took place with the consent expressed by each of the participants. They were informed that when interview tapes were transcribed (by the research team), any references to personal details would be edited out. They were also told that cassette tapes used in the interview would be destroyed once they have been transcribed.

Recruitment for In-depth Interviews

A total of 30 in-depth interviews were conducted with a purposively selected sub-sample of alcohol users who did not participate in the survey (15 subjects in each of the high and low density areas). From the initial observations made by the investigators, the focus group discussions, the survey and advice of the hotel mangers and beer parlour operators, drinkers who visited the particular venue not less than five days a week to drink and observed to be outspoken and willing to talk to the team were invited to participate in the in-depth interviews. They were requested to participate in the in-depth interviews after the survey interviews had been completed. Participation in any of the in-depth interviews was voluntary, private, confidential and based on informed or oral consent. Each participant was free to withdraw from the discussion anytime they liked.
A semi-structured questionnaire was developed for the purpose of the in-depth interview (Appendix V). The questionnaire was designed to collect basic socio-demographic information on the respondents, their detailed knowledge of alcohol use in the domain or environment as well as their associated high risk behaviours for HIV.

The interviews were tape-recorded only with the consent of the participants. When the interview tapes were transcribed by the research team, any references to personal details were edited out. The cassette tapes used in the interview were also destroyed after they have been transcribed.

General information and Plan for Recruited subjects

Generally, all the participants in the study were provided with information on HIV and other Sexually Transmitted Infections, and with free condoms. They were all informed on who to contact for more information or questions about the study, and how they could access psychosocial support during and after participation in the study. Participants were given a special "help-hotline" where they could obtain professional, individual psychosocial support throughout the data collection and for one month thereafter via the

telephone or face-to-face. Participants were informed about existing support organizations, (such as the Pathfinder International, Hope Worldwide and Center for the Right to Health). Efforts were made to ensure that private, secluded areas were used to carry out the research activities to ensure confidentiality and maximize participation. The selection criteria for recruiting the sub-samples were not made public and measures were taken such that further participation in the study was not interpreted as a sign of risk or misbehavior.
All information given in the questionnaire, focus group discussions and in-depth interviews were confidential. In order to ensure that no individual beyond the research group had access to the data of the study, the data was stored in lockable filing cabinets in the office of the principal investigator at the Psychiatric Hospital, Yaba.

3.12 Pre-field work training and pilot study

Training Workshop
A one-day training workshop for field workers (Appendix VI) was conducted on 27th of January, 2002. It was held in the conference hall of Psychiatric Hospital, Yaba where the principal investigator and the bulk of the field workers work. It was attended by 29 participants that included the 3 investigators, 5 supervisors, 15 field workers, 5 key informants and the statistician. The training was facilitated by the fact that most of the participants had previous field experience with RAR. The topics covered during the workshop included basic concepts of the RAR methodology and the administration of the survey questionnaire. Some of the other topics discussed were ethical issues, record keeping and data management, security, report writing and dissemination. The workshop broke into small group practical sessions that covered interviewing techniques, focus groups, questionnaire administration and community penetration.

Pre-Pilot Study
After the training workshop, each of the field teams spent one week meeting under the direction of its supervisor, to further study the questionnaire in-depth, review the WHO Sex-RAR Guide and come out with their logistical arrangement for the pilot study.

Pilot Study
The two field teams for the low and high density areas conducted the pilot study over a 2-day period in their assigned areas. No testing could be done in the STD team because no subjects could be found for recruitment during the period of the pilot.

The objectives of the pilot study were:

i) To familiarize with the study sites. In this regard, each team was expected to establish rapport with the community and opinion leaders in their respective areas, and discuss logistical issues including security, venue for interviews etc;

ii) To determine the acceptability, ease of applicability and average completion time of the survey questionnaire. Each team was expected to administer 10 questionnaires;
iii) Where possible, each team was expected to try out a focus group discussion.

Lessons learnt from the pilot study

The entire research team reviewed the experience gained and the problems encountered during the pilot study in another one-day meeting. The questionnaire was found to be generally acceptable to the subjects and no new changes were made to it. The twenty survey questionnaires that were completed during the pilot testing were included among the total questionnaires administered. Some of the problems identified and lessons learnt include the following:

i) Each team gained some insight into the best recruitment time and method in their respective areas.
ii) It was realized that the drinkers could best be interviewed in the evenings as the drinkers were arriving for the day.
iii) It was realized that the CSWs could best be recruited either in the evenings before the male drinkers begin to arrive or late in the night when most people have gone home and there was little chance of getting new clients.
iv) The importance of going about with identity cards was learnt as, on three occasions, our field workers were accosted by the police for talking to CSWs in the two hotels in the high density area and in the street at night while interviewing CSWs that were hanging out in the low density area.
v) The identity cards of the study rather than those of the workplace of the field workers were necessary because the police wanted to know whether their places of work were involved in the study or not.
vi) The importance of the key informants in the penetration and recruitment of the drinkers and CSWs was realized.
vii) The drinkers and the CSWs interviewed agreed that the objectives of the study were important topical and relevant issues in their lives.
viii) The survey questionnaire items were found to be easy to administer and the average completion time was about 35-40 minutes.
ix) The content of the questionnaire was well understood and all the subjects recruited agreed to participate in the pilot.
x) The pilot study facilitated the building of team spirit and confidence. Most of the fears expressed during the training sessions were manageable.
xi) It was realized that it would be difficult to recruit STD subjects because of a new government programme of syndrommic management of STDs that encouraged paramedical staff to diagnose and treat STDs by following a chart designed to show the symptoms of major STDs.

3.13 Field Work

The fieldwork was carried out over a period of six weeks from 1st March – 15th April.

Secondary data gathering:
Relevant data were retrieved from existing literature on alcohol use in the country through medline search, contact with known researchers in the alcohol and substance abuse in Nigeria and the alcohol and substance abuse and the National HIV/AIDS/STD units of the Federal Ministry of Health. The reports of UNDCP-sponsored RSAs in selected communities of Lagos State were reviewed just as were the national RSA of drug use in 22 states of Nigeria sponsored by UNDCP (Vienna) in 1998 and the annual reports of the National Drug Law Enforcement Agency (NDLEA) for 1998 - 2000. A review of alcohol-related news items and articles carried in 4 national newspapers (*The Guardian, Daily Times, Punch and Post Express*) over a 6-month period (September, 2001 – February 2002) was also conducted. This secondary data gathering was carried out by the principal investigator with a view to have an up to date information and knowledge of alcohol use and HIV risk behaviour of drinkers, CSWs and STD sufferers in the country.

Focus Group Discussions
Focus Group Discussions (FGDs) were conducted by the research team among samples of alcohol users and CSWs recruited for the study. The groups comprised 6-8 subjects. Each FGD lasted for a minimum of 60 minutes, and was conducted by a team supervisor, with the assistance of a field worker who was taking notes. While the FGDs for the alcohol users were conducted in beer parlours in the low density areas, hotel and beer parlour were used in the high density area. Two FGDs each were conducted in the low and high density areas. For the CSWs, two FGDs were also conducted each in the low and high density areas. The FGDs in the high density areas were conducted in the two hotels used for the study in the area while in the low density area, one of the FGDs was conducted in a hotel used for the study while the second was conducted in a hostel where some of the CSWs resided. The FGD for the alcohol users were conducted early in the evening before they started drinking. This was to ensure that the participants were not inebriated during the period of the discussion. The FGDs for the CSWs in the high density area was also conducted early in the evening before the arrival of many of their clients (Alcohol users). In the low density area, one FGD was conducted late in the night when there was little chance of getting more customers and the other one was conducted in the morning after the CSWs had returned from the preceding night's outing.
The alcohol users and the CSWs were generally co-operative once they knew what the study was all about and had given their consent. Those of them that were initially shy opened up as the discussion proceeded and they observed that many of their experiences were shared by some of their CSW colleagues too.
All the interviews were tape recorded with the consent of the participants. The contents were later transcribed. All the rules of FGDs as contained in the WHO Sex-RAR guide were observed.

In-depth Interviews

In-depth interviews were conducted with 30 alcohol users, 15 each from the low and high density areas. The participants were specially selected based on the advice of the managers of the clubs, hotels and beer parlours and the experience from the FGDs. The interviews enabled the study to generate more detailed descriptive explanations about the critical issues discussed in the FGDs. The in-depth interviews were directed at exploring in greater detail key issues that emerged during focus group interviews. In particular, they aimed to reveal descriptive data on the socio-cultural and economic context of alcohol use and risky sexual behaviour. The interviews were loosely structured. They focused on the following key areas of interest:

i. Sexual risk encounters where alcohol or other substances were involved.
ii. Sexual risk encounters where alcohol or other substances were not involved.
iii. Explanations for condom use and non-condom use.
iv. Expectations of alcohol use, sexual behaviour and condom use in different situations and types of sexual encounters.
v. Expectations of the effects of alcohol and other substances commonly used.
vi. Beliefs concerning male and female sexual behaviour and condom use.
vii. Beliefs concerning alcohol and sexual activity.
viii. Factors inhibiting and enabling reductions in alcohol use.
ix. Factors inhibiting and enabling condom use.
x. Type of sexual activity, sexual partner, and location of sexual behaviour.
xi. On days where both alcohol use and sexual activity occurred, timing of events (was alcohol before, during or after), and assessment of whether alcohol had an effect

The In-depth interviews were conducted in English. They were also tape-recorded with the consent of the participants. They were later transcribed for analysis.

Observations

Ethnographic observations were considered as one of the important aspects of the study. Part of the Sex-RAR training emphasized the importance of observations to the team members. Thus, the observations were conducted by the three investigators and all the other members of the Sex-RAR team. This concentrated on the setting of the drinking venues and on behavioural norms with regard to alcohol use, as well as the process over time and the approaches of clients. The investigators undertook ethnographic observations with field notes everyday from the beginning of the study to the end of the fieldwork. All the members of the research team were provided with papers and writing materials to carry along with them during the period of the study to write down their observations to be submitted through the supervisors to the principal investigator everyday. These form part of the daily reviews that advised on what additional information or observations to make in the field the following day. Important, useful and interesting observations and events were recorded throughout the study.

Confidentiality was maintained through the use of code names when writing field notes on the approaches of clients.

Triangulation of findings

All through the period of the study, the principal investigator met everyday with the other investigators and the team supervisors to review the progress of the study, the new information that were being gathered through the various methods employed in the study. Members of the team were also meeting with the supervisors at the end of fieldwork everyday to review the day's activities and write their reports. All members of the research team also had weekly meetings throughout the period of the fieldwork to review the progress made during the week, the problems and obstacles and to discuss ways of solving them. The meetings at all levels served as important avenues to triangulate emerging findings and observations. The process also enabled the team to devise methods of corroborating interesting observations at subsequent outings.

The Survey Questionnaire

A survey questionnaire was developed for the purpose of the study. It was a modified form of the 2nd version of WHO Drug Injecting Study Phase II questionnaire. It was modified to satisfy the objectives of the Sex-RAR study (Appendix). The questionnaire was finally modified with some further additions after the FGDs were conducted to include some issues that arose from them. It was administered on the 239 alcohol users and the 62 CSWs and 53 STD clinic attendees who consented to take part in the study. The questionnaires were administered in the evenings (between 5.00 - 9.00pm) for alcohol users in the low and high density areas as well as CSWs in the high density areas. CSWs in the low density areas were interviewed late in the night (11.00pm - 12.00am and in the morning (8.30 - 10.00am) when they had just returned from the previous night's outing. The STD clinic attendees were recruited and interviewed in the morning at the STD clinic just before they consulted the doctor.

DATA MANAGEMENT

Qualitative

The tapes that were recorded during the FGDs and in-depth interviews were carefully transcribed. Any reference to any to any individual or personal details were either edited out or replaced with codes. The data were analysed manually by reading the transcribed tapes several times and referring to them when they were required.

Quantitative

A statistician contracted from the Yaba College of Technology, Lagos (a polytechnic) handled the data analyses. The data codes were created on Epi info version 6.0 meticulously. The data was then analysed statistically. This initially involved the generation of simple frequency tables and cross-tabulations. More advanced deductive analysis of the data is intended at a later stage.

The following steps were taken from the beginning of the study to minimize data coding and entry errors:

i) The statistician was involved throughout the study from the planning stage;
ii) The training covered every aspect of the questionnaire, and adequate time was given to individuals and teams to study and understand the items;
iii) The questionnaire was pilot-tested, and the teams met to discuss difficult areas to ensure better understanding and uniform application;
iv) Each team supervisor went through completed questionnaires at the end of each fieldwork, and discussed areas that needed to be corrected or improved with the field workers;
v) Data entry was carried out by four trained research assistants under the close supervision of the statistician;
vi) Data cleaning was extensively and thoroughly carried out, after the trial run of the simple frequencies.

DEBRIEFING AND REPORT WRITING

Debriefing: Regular debriefing was organized throughout the period of the fieldwork through:

i) Daily review meetings of research members within every team;
ii) Regular interaction and feedback among the team supervisors;
iii) Daily meeting and feedback between the field supervisors and Principal Investigator;
iv) Weekly meetings of the entire research team to review the project, and sort out administrative issues.

Report Writing

i) This began from the very first day of the research team's meeting, and continued on a regular basis throughout the study. A notebook was distributed to every member of the research team.
ii) Team supervisors were requested to ensure that records on every important and/or interesting event and observations were meticulously kept on a daily basis.
iii) Team supervisors were expected to complete pre-designed daily and weekly Record Sheets. It was also agreed that tapes recorded during the week should be transcribed during the same week and turned in at the weekly general meeting.
iv) The final report writing was done by the Principal Investigator in close association with the team supervisors and the statistician.

Limitations of the study

1. The questionnaire was not translated into any of the local Nigerian languages. This is because previous experience with the use of the original questionnaire among Street Users of injectable Drugs in Lagos showed that most of them were able to speak and understand sufficient English language well enough as to be able to understand and respond to the questions in the questionnaire. An interpretation of the questionnaire to the predominant local language could have further simplified its application on the field. The possible impact of this limitation was further reduced greatly, as all the field workers were comfortable with the use of the English language. Every effort was made to ensure that every field worker thoroughly understood the contents of the questionnaire. This also assisted in simplifying the process of its application;

2. The use of the purposive snowball sampling technique meant that we lost the benefits of using the random sampling technique. Hence, we could not determine prevalence rates, but rather we described the rates of the phenomena we investigated. This was due mainly to the sensitive nature of the issues involved in the study and the desire to recruit subjects who met the inclusion criteria of the study.

Problems encountered in the field

1. Accessing and interviewing the CSWs in the low density area was not easy because, unlike the high density area, they were not allowed to patronize clubs, beer parlours and hotels in this area. They had to be reached by arrangement with key informants who facilitated our meeting with them late in the night as they lined up the streets where they were recruited for the study. A separate appointment was made to meet with them in a hostel for the FGD. Another FGD had to be conducted late in the night in a hotel in this area. Difficult and dangerous as this was, the team members were able to recruit the CSWs because of their individual motivations, interest and determination to ensure the success of the study.
2. Two of the research team members witnessed police raids on the CSWs in one hotel in the high density area while they were administering the survey questionnaire to the CSWs on two different days. They were left untouched when they showed their identity cards (ID) as members of the research team to the police.
3. Recruiting subjects in the club houses and hotels in the low density areas was initially difficult because the members of the clubs were conscious of their positions in the society and the sensitive nature of the issues involved in the study. This affected the number of subjects recruited in the clubs and hotels. We were able to make up for this in the beer parlours.
4. Recruitment of STD subjects was difficult because for some reasons, such subjects were not coming to the hospitals for treatment as expected before the study was commenced.

5. Alcohol users in the low density area made a number of passes at the female member of the team and tried to date her
6. The commercial sex workers had lukewarm attitudes towards the female members of the research team.

CHAPTER 4: RESULTS

The results will be discussed under the broad grouping Qualitative and Quantitative aspects.

4.1 Qualitative

Review of existing Nigeria data and research (Step 1)

A considerable number of studies have been reported in the literature on alcohol and alcohol use in Nigeria. Reporting on the use of alcohol in Nigeria, Umanah (1967) wrote that the use of traditional alcohol at important social and religious events was the norm in many traditional Nigeria cultural groups. The traditionally brewed alcohol include Palm wine, Burukutu, Pito and Ogogoro (Obot, 1999). He further wrote that the first brewery for beer in Nigeria commenced operations in 1949. Beer produced in the breweries is the most common alcoholic beverage used in Nigeria. Two large studies in the South (ICAA, 1988) and the middle belt (Obot, 1993b) found a percentage beer use of 32.3% and 43.5% respectively compared with 21.9% and 21.4% respectively for the local palm wine/burukutu and 5.9% and 5.4% respectively for spirits. In an earlier study among civil servants in southern Nigeria, Odejide (1982) reported that the prevalence of beer use was 45.7%, while those of imported wine, imported spirits, and traditional spirits were 43.2%, 32.8% and 22.2% respectively. The difference in these findings and those of the ICAA and Obot may have reflected the difference in the drinking pattern between literate and non literate Nigerians. The findings should, however, be taken with caution in view of the several changes that has taken place in the social, political and economic lives of the people after the study was conducted.

Patterns of Alcohol use

Akerele (1993) reported that the estimated per capita consumption of beer rose from 3250.8 litres in 1977 to 10689.1 litres in 1981 and after a period of fall to about 7500.0 litres between 1983 and 1985 was back to 9220.6 litres in 1989. Although these figures represent the entire consumption for all the drinkers in the country, it did not explain the reasons for the differences observed and the differences among age groups. Many studies have however, shown that alcohol use is common among students, with a large proportion of drinking students having their first drink while still children (Pela, 1986; Ebie, 1990; Adelekan, 1989; Abiodun, 1994). Oladimeji and Fabiyi (1993) reported that significant rise had been shown in the proportion of undergraduates who drink in the country over a four year period (1984 – 1988). About 50% of these students were found to be problem drinkers who sometimes get drunk while drinking (Oshodin, 1981b). Heavy drinking has also been reported among adult drinkers in the country (Obot, 1993c). In contrast to these findings, however, is the report that in some parts of the country, especially the largely Muslim North, abstinence is an extolled virtue (Gureje, 1999). Religion and sex appeared to be two of the factors that affect drinking pattern in the country. Obot (1993b) reported that the abstainers in his cohort were more likely to be females, above the age of 40 years, and to be Muslims.

Health Related Effects

ICAA (1988) reported that a disproportionate part of the total admissions to tertiary hospital beds is linked to alcohol misuse. Other studies have also shown that acute intoxication, withdrawal syndrome, physical dependence, delirium tremens, psychosis, polyneuropathy and liver damage are common forms of presentation in emergency units and medical wards by people with history of heavy alcohol use (Odejide, 1978; Obembe, 1988; Isichei et al, 1993). Physical violence, loss of jobs and marital disharmony are also reported to be commonly associated with alcohol abuse in the country (Obembe, 1988; Obot, 1993b). The poor nutritional state of alcohol users (Falase, 1979, 1980), inadequate medical and other facilities needed in the management of alcohol related problems in Nigeria, coupled with the lowering of resistance to diseases reportedly associated with excessive alcohol use put alcohol users in Nigeria probably at higher health risks than their counterparts in the developed countries.

Alcohol and HIV in Nigeria

There was generally a dearth of studies and newspaper reports and or articles in the country on the association of alcohol use and high risk behavior for HIV infection. However, Obot (1999) observed that the most significant contribution of alcohol use to AIDS is the increased likelihood of engaging in high-risk sexual behaviours, including unsafe sex when intoxicated. He also noted that the psychological propensity to take risks observed among excessive drinkers is related to the spread of the disease. A newspaper article carried in one of the Nigerian newspapers (Post Express, 2002) observed that Drinking beer often leads men to be less cautious, and more likely to engage in risky sex. The writer remarked that “alcohol in particular has an impact on the epidemic. It not only make safer sex less likely, but is also linked to other forms of mortality from traffic accident to street violence”. This paucity of reported studies and news paper reports, articles or comments on alcohol and the associated social and health related hazards in Nigeria is probably an indication of the poor knowledge and/or attention paid to the use of alcohol as a habit that predisposes the users to high risk sexual behaviours which could lead to HIV infection. More advantage needs to be taken of the print media as a means of sensitizing the people to the dangers of HIV infection associated with alcohol use and risky sexual behaviour. AIDS control programmes in Nigeria and other African countries should include alcohol education especially in hotels and bars patronized by prostitutes.

Focus Group Discussions with Male Alcohol Users

Four FGDs, two each in the low and high density areas, were conducted during the study. In the low density area, one was conducted in two beer parlours that were part of the selected sites for the study while in the high density area, they were conducted in one of the hotels and in the local alcohol (Palm wine) drinking site. The number of participants in the FGDs ranged from 6 to 8 alcohol users.

Why they used alcohol
Relaxation and enjoyment were two main reasons why participants in the two areas use alcohol. Their words:

"It relaxes my nerves. It is a form of relaxation" *Low density*

"I feel like to take it just for enjoyment" *High density*

Feelings of inferiority could also be responsible for drinking by some alcohol users. This is informed by the claim of this informant:

"People vary the reason why they take alcohol, feeling of inferiority and so on. But I am different I love alcohol" *Low density*

Palm wine drinkers had some other reasons. Most abandoned beer for the local alcohol. Palm wine is natural and therapeutic, they claimed:

"It is a natural thing" *Palm wine drinker –High density*

"To be realistic, I can confirm to you that this Oguro (Palm wine) is better than beer. Beer contain so many chemicals of which we cannot distinguish. But to confirm to you again this one (Palm wine) contain yeast. You are a medical doctor. You know what yeast does to the eyesight. Then early in the morning, I will wake up peacefully. I go to the toilet, whatever debris may be typhoid germs in my abdominal cavity, I will pass them out, malaria parasite everything gone. Since I have been taking it, I don't have problem with it" *Palm wine drinker –High density*

Some users drink alcohol to cause mischief. According to one them:

"Some of us drink alcohol to cause mischief …. To insult someone they would not have insulted" *Low density*

Why they use alcohol in the Club/Hotel/Beer Parlour

Drinking alcohol in the club, hotel and beer parlours provided the optimum environment for socialization and relaxation by the participants. This view cuts across the low and high density areas. As one of them said:

"For me, the situation I like alcohol most is when I am among friends either in the club or at parties. I hardly sit down alone to drink in the house" *Low density*

Making business connections was another reason for going to clubs to drink. A participant from the low density put it this way:
"We learn many things when we come to this place. …….. I can get 5 million Naira (about USD25,000) business here" *Low density*

The wish to remain outside the home for some time after work was another reason for going to the drinking venues by some people. According to one of them:

"We can either go home to watch television, but for how long do you want to watch television" *Low density*

This latter view was further explained as due to overcrowding. This was explained by the manager of one of the hotels in the high density area. His word:

"Some people cannot go their home in the afternoon …… So they get a place where they while away the time …….. going to the house, you don't have relaxation arena. The room that five people are occupying. Even when on your bed, it is problem" *High density*

Going to the clubs to drink was for, some drinkers, a way of coping with the unpredictable supply of electricity in the country. One of them put it this way:

"When you finish the day's work, sometimes there may be no light. You have to go to somewhere to relax" *High density*

Traffic jam was another reason why people went to the clubs to drink while they waited for the traffic to ease off after they closed from their offices. This was explained this way by a user in the low density area:

"Some people drink alcohol to while away the time or ease out the stress, especially where there is persistent hold ups (traffic hold up). You want to stay around in a club or in a joint where the hold ups would have gone before you go home" *low density*

Alcohol use and sexual behaviour

Alcohol enhanced sexual desire and performance as it gave users extra strength for sexual performance. Follow are samples of statements of participants from both areas:

"Alcohol plays a good role in sex"…….. "it kind of gives you some kind of strength apart from your own natural strength. It brings out the best in you".
Low density

"Alcohol is a stimulant to sex. Alcohol and palm wine make the sex longer" This view was shared by the majority of the users in the FGDs *High density*

"Woe unto the woman that I come across when I have finished 2 cartons of beer. I will embarrass her" *Low density*
One key informant, however, cautioned against some of the claims of alcohol users:

"Some of them brag a lot", he said.

With alcohol, users would go for any woman, as stated by these participants:

"It makes the available desirable" *Low density*

"You are alone in the restaurant, you are in there to have drink. If the service is a female. She is not beautiful. By the time you take the first bottle, 2nd bottle, 3rd bottle. You now discover that you will be looking at it that this girl is manageable. The reflex of alcohol has now affected your control" *Low density*

Alcohol users also experienced increased sexual arousal drinking alcohol as stated by this participant:

"After drinking, there is that easier arousal. The more you drink, the more arousal, you feel towards the opposite sex" *High density*

For some others, desire for sex could be reduced after drinking alcohol. This was expressed by another participant this way:

"When I am drinking alcohol, I don't need woman at that moment and I don't think any woman need me because when I am drinking that is my wife" *Low density*

Mind set appeared to be an important determinant of the effect of alcohol use as explained by this drinker:

"It's a 50-50 thing. Some days it enhance, some days it really messes you, but in this case, it may be the mind set" *Low density*

Alcohol and condom use

Most participants admitted that they did not use condom. This, according to them, could either be due to the influence of alcohol or because they believed that condom use reduced the enjoyment of sex. The interview revealed that most of the alcohol users had sex partners other than their wives. They admitted that they were not using condoms with these sex partners, many of them also patronized commercial sex workers.

Participants preferred not to use condom for different reasons. The palm wine drinkers were more forthright in their responses. The words of two one of them:

"To me o, I don't usually use condom – flesh to flesh" *Palm wine drinker*

"Am I sexing or rubber is sexing? There is a difference between me and condom. If I spend my money for woman and I allow condom that did not spend money to sex the girl. What about myself? Let her enjoy my flesh and I enjoy her own" *Palm wine drinker*

Guidance from God was another reason for not using condoms for some users. According to one of them:

"I believe God can guide someone but I like flesh to flesh" *Palm wine drinker*

A big penis, according to another user, was the reason for not using condoms:

"…I have a big something (penis) if I use condom, it will burst" *Palm wine drunker*

Keeping to a regular girlfriend was a reason for not using condoms by some other participants:

"To me, I don't use condom ……. I have only one woman, not my wife" *Low density*

Being under the influence of alcohol encourage non use of condom. A user from the low density explained it this way:

"Since I am under the influence of alcohol, I never think of using condom. The thought never comes to me " *Low density*

Intoxication with alcohol also led to non use of condom. Following is the an excerpt from two of the participants:

Sometimes when you drink, you don't even remember you're making love with someone until the following morning when you wake up and you say *Ha! Mo gbe* (Ha! I am in trouble!) *Low density*

"Condom is less likely to be used when you are intoxicated" *Low density*

The efficacy of condom use for HIV prevention was doubted by some participants. This user put it this way:

"Let us separate the fact fro the chaps, condom cannot prevent anyone from having HIV/AIDS. The only thing condom can do for any one is to prevent pregnancy or any little thing like Gonorrhea or syphilis. Definitely, it depends on the capacity. It (alcohol) is more of an enhancement. It makes you total charged and if you are total charged, initially you might even put on condom and remove it again because you are not in control of yourself" *High density*

The male alcohol users believed that women generally did not like condom to be used. One alcohol user stated that:

"The woman will always want it flesh to flesh. With condom and alcohol, fine for the man, without condom and alcohol, the better for women" *High density*

Some alcohol users were cautious and would always use condom with or without alcohol: Their comments:

"I am not careless with it (condom) because the caliber of girls you take home, you can't really tell" *Low density*

"If I carry my wallet, I used to carry condom" *Low density*

"Oguro (Palm wine) will never make you lose your sense for not to use condom" *Palm wine drinker*

The subjects in the low density area were very critical of the type of condom (Gold circle) most commonly used in Nigeria which they considered as inferior. Most of them rejected the condoms (Gold circle) we distributed to them and showed us the superior ones that they used (rough rider). The former cost less than ten cents for a packet of four condoms, while the latter cost about two dollars for a packet of three condoms. They explained:

"The average Nigerian uses Gold circle (condom) which breaks. It is very substandard" *Low density*

Oral Sex

On oral sex they have this to say:

"Oral sex, you don't need condom for that" *Low density*

Knowledge and believe about HIV infection

The FGDs revealed that some of the drinkers interviewed disbelieved the heterosexual mode of transmission of HIV and some did not believe in its existence at all.

This applied to users from both the low and high density areas. They variously made their views known this way:

"There is no AIDS" *Low density*

"I reject AIDS in Jesus name" *Low density*

"You don't contact AIDS basically through sex ……" *Low density*

"Attention should be focused on needles rather than sex" *Low density*

"Not only sex you can get AIDS …….we exchange cups, you can exchange anything. From there you can get AIDS - cups, spoons, whatever. You can contact AIDS. AIDS is very very effective" *High density*

"That is why I said this HIV they are talking about, I don't believe …… the one we know you can contact from vagina, that is the one I am telling you - *Palm wine drinker*

"…..you said AIDS and sincerely speaking, if you present somebody with *"Atosi Egbe"* (Gonorrhea with weight loss) and somebody with AIDS, I will tell you that there is no difference between them. ……They started something some years back they call AIDS. They said is real. I don't want to know. I don't to know what is AIDS" *Palm wine drinker*

Focus Group Discussions with Female Commercial Sex Workers

Four focus group discussions were conducted during the period of the study, two each in the low and high density areas. Participants in the FGDs were either six or seven in number. The CSWs were made up of various tribes in the country. While the low density area participants claimed to take about 2,500 Naira (about USD20) for one night, the high density take 150 Naira (about USD1.0) per hour. They were generally very co-operative during the FGDs. This was not until after some initial reluctance because they were afraid that we were law enforcement agents in disguise.

At a point one of them said:

"We ran away from Italy for you, you find us come here again" (*High density*) – an apparent reference to Nigerian CSWs recently repatriated to the country from Italy.

After our key informants (hotel managers) had talked to them and they got used to us, they became friendly and our FGDs were conducted in a friendly and co-operative atmosphere.

Age of CSWs

The CSWs in the high density area were on the average older than those in the low density area. Whereas the former were mostly in their 30s (range 20 – 40yrs), the latter were all in their 20s (range 24 – 26yrs). Consequently most of the subjects from the high density area were either married, divorced or separated women while most of those in the low density area were mostly single girls. Many of the subjects in the high density area claimed that they engaged in other money making activities during the day. The CSWs in the low density area were mainly students, apprentices or unemployed.

Reason for Sex Work

Many engaged in commercial sex work because they needed money to earn a living for themselves and their children as explained by two of them:

"I am a student ……. I am coming here three times a week to make money to take care of myself. I am here because of my future" *low density*

"A woman that practices prostitution does so because of her children ……some have husbands like no husbands" – *High density*

Some also went into it because they could not find employment. One of them put it this way:

"The situation of the country is so bad. While you go to an office to find job, the man you meet there will like to use you. So we don't know what to do. That's why we stand out" – *low density*

Others took to prostitution to buy professional equipment and to train other family members. This cut across subjects from the high and the low density areas as shown in their statements below:

"It pays me to prostitute to buy my equipment with little assistance from any man and later get married" – *High density*

"To train my junior brothers and children because my father is dead" - *High and low density*

Some CSWs took to prostitution as a result of greed and need for quick money. The words of two of them:

"For some young ones, it is due to greed for money. Some of them are asked to go to school but they come here" – *High density*

"It is the only place I get quick money"- *High density*

Alcohol use by CSWs

Not all CSWs use alcohol. Some insisted that they did not drink alcohol and one of them recalled her experience as follows:

"Some men when they ask me whether I drink alcohol and I tell them that I don't drink and I don't smoke, they drive me out".

Most others admitted using alcohol for different reasons. Drinking alcohol, for example, made CSWs to fit and flow with settings in which they found themselves. One of them had this to say:

"I love the highness. It makes me to flow with the kind of setting I am" *low density*

In addition, prostitutes used alcohol to be bold, to be able to cope with cold weather as they hanged out in the streets in the evenings and for treatment purposes. According to them:

"Not all drink for sex. Some of them drink for shyness, for cold, some because of to wash down if they have stomach problem". *Low density*

"With alcohol, I can talk to any man even to the President" *low density*

CSWs generally used alcohol to become disinhibited during sex. This was expressed by CSWs from both the low and high density areas thus:

"You know it is with alcohol that I came into prostitution. It is with beer. Then they started to use me. In the morning when I woke up I realize this is what alcohol did to me. Then I continue to drink." *Low density*

"If I take alcohol, I can fork and sex any kind of man …….. because I don't know what I am doing with alcohol" *low density*

"I take alcohol because I like it and when I take it, that is when I know how to make love well" *High density*

"When I am with my "boy friend", I drink so that I can go out of my senses so that I can do anything he ask me to do" *High density*

Like the male users, the CSWs also used alcohol to relax and to induce sleep according this subject:

"I feel alcoholic sometimes. It helps me eat, to sleep fine and to relax" *High density*

The CSWs also used alcohol when they had clients as expressed by one of them:

"I always take alcohol the day of my valentine and when I have customers" *High density*

Some CSWs combined the use of alcohol with Rohypnol for superstitious reasons. This believe was overwhelmingly acclaimed by the other participants in the FGD in the low density area when it was mentioned by one of them. She put it this way:

"Whenever we take it we make money. It makes me to be more alert" *Low density*

During the discussion, it came out that some of the CSWs were careful not to get drunk while they were "at work" (with their clients) because doing so could make them to lose money. According to them:

"It is not good for men or women. Although I drink, but I don't drink when I want to work" *High density*

"….if I take more than 2 bottles, I won't be able to hustle or do anything" *Low density*

"For me it makes me weak" *High density*

"…….some of them (clients) steal our money" *Low density*

Role of the hotel/club/beer parlour setting on alcohol use by CSWs

Some CSWs probably were going to clubs, hotels and beer parlours not only to look for clients but also to enjoy themselves. This came out from the comment of one of the CSWs during one of the FGDs when she said:

"……. If I want to go out in the night, I will go to club because I won't go out with those Teris. I won't go and stand for main road. If you stand outside you no even know who carry you. Spirit fit carry you, those Aladura (religious group), all those spiritual people". *Low density*

Other CSWs claimed to go to clubs primarily to search for clients. Thus, they had little interest in alcohol use. The claim by one subject from the low density area throws more light on this:

" We are not there to drink. We are there for our money. Drink is not our problem. Even if a man talk to us to take us to his house and when he is still drinking another man comes to us, we follow him (the 2nd man)" *Low density*

Alcohol and Sex

Most of the participants claimed that about half (50%) of their clients drink alcohol. Their views about alcohol and sex, as sampled below vary depending on what they desired at that time. The problem of delayed release by men after alcohol use may, therefore, be desirable and enjoyable or it may be seen as an unnecessary burden or delay depending on the state of mind and need of the CSW - sex or money. The following comments made by CSWs in both the low and high density areas are self revealing:

"I like men we de take alcohol. They can perform well" *Low density*

"If he is handsome, I will like him to take alcohol" *Low density*
" If I drink, I know that time I go kill the man before sex. Any style the man want I go give the man. Even the Akuete style …. (declined to describe it but claimed the man will continue to remember her even when he is at home with his wife after experiencing this style). *Low density*

"After we might have drink, we may have sexual intercourse, enjoy ourselves, bring joy, happiness. From there we feel happy" *High density"*
" I don't like men who take alcohol because if they should take alcohol, they will go mad. They will like to stay 2 hours on top of you". *Low density*

"These people who are drunk, some don't sleep with woman. They just like to come and carry you. When you reach the hotel, they sleep off. When they wake in the morning, they will just do little and both of us we just go our way". *Low density*

However, alcohol reduced performance in some women like this participant:

"For me, if I should drink too much alcoholic, I won't have the strength to perform anything with anybody" *Low density*

For some women, delayed stimulation is what they get:

"If a woman drink alcohol, she will not get stimulation in time" *Low density*

With regard to men, the CSWs believed that alcohol delayed their release of sperm with consequent prolongation of sexual performance:

"It make them to delay time on woman" *Low density*

From the experience of other CSWs, the men become stronger after using alcohol:

"It make them stronger" *Low density"*

Alcohol and Condom use

Generally the CSWs claimed that they used condoms with most of their clients before sex. Their words:

"Person (client) we don drink, how he go remember condom. But that no concern me. Me I de use man condom. I de use woman condom. If man tell me say make I no use condom, I go tell am say I de go toilet. I go go put woman condom. When you put the condom, you no go let the man finger you" *High density*

"Some of them ask me to come and check them (the client's body in order to allow sex without condom) but I return money to them" *Low density*

"Whether I take alcohol or I don't take when you want to have sex you must use condom" *High density*

This is, however, not so for all the CSWs. According to some of them, they were likely to agree to sex without condom use if the man was either a regular customer, clean, handsome or offered more money. Excepts of what they said:
"Some customers I de use condom, some of them I don't use, the one that I trust them. The ones that come to me regularly" *Low density*

"As for me, I no fit fork any customer without condom, except my boyfriend" *High density*

One CSW admitted that alcohol use reduced the likelihood of condom use during sex:

"Under the influence of alcohol, we are less likely to use condom" *Low density*

For some CSWs, money is the deciding factor. One of them put it this way:

"If you see money you no go do am? Wo, I go do o" *Low density*

"If I tell the man to use condom and he said no, I will agree with him. I will just add extra money" *Low density*

Effect of alcohol on men

Men under the influence of alcohol, the CSWs observed, were careless with condom. In their words:

"It make them to be careless about condom use"

"If they are drunk, they (men) don't use condom" *Low density"*

CSWs Response to Sperm discharge by clients
This situation is apparently not uncommon because the condoms may burst. This was testified to by the statement by one of the CSWs:

"Using condom is not 100% (safe) and is not safe because the condom can burst" *Low density*

Use of unprescribed drugs, like antibiotics, was the way some of the CSWs were dealing with the situation as explained by this participant:

"I get up quickly and urinate it out, so in the morning so when I get home I use medicine like Ampiclox or Menstrogen" *Low density"*

Conducting laboratory tests was another method used by some of them:

"If I did not use condom, with the man, I go to test in the lab for Gonorrhea, for Syphilis" *Low density*

Pushing the man up was adopted by some others as explained thus:

"If you are on top of me and the condom burst, I push you immediately because I will know" *Low density*

Oral Sex
Most of the CSWs interviewed ((low and high density alike) admitted engaging in the practice but only one of them believed that it was possible to be infected with HIV through this habit. One of them put it this way:

"I do it to customers because I need money" *Low density*

Detecting STD in men
Some CSWs had their ways of detecting infection in men. These methods included physical examination of men's penis and the use of traditional medicine. Some of the affected CSWs explained this way:

" There is a way I do it. If I know the man is clean I bring his dick out, I will massage it very well then the head, i.e. the cap, I will touch it. If the man shake, then you know that the man get something or if you didn't do it like that, the moment you shake that thing, if water come out, the white water if you touch it with your hand, if it did not draw then the man is contacted" *Low density*

"Any man who has disease, if he wants to sleep with me, he will have an emotional power. I did it in the village when I want to go to prostitution. I have no work. I go out to hustle. I go out to hawk" *Low density*

Police Harassment
CSWs in both the low and high density areas were unanimous in their displeasure for incessant police harassments. The police they claimed were fund of having sex with them after taking them to police stations under the pretence of arresting them for being commercial sex workers. Sometimes some of the policemen have sex with them at the same time without using condoms. According to them:

"The police, sometimes they will even sleep with us. They don't use condoms"

Knowledge of HIV/AIDS
All the subjects have heard about HIV and AIDS before, mostly over the radio and television. Two of the subjects claimed that a Christianity based religious group and NGO visited them. Their knowledge and believe about the truthfulness of its existence, how it can be contacted or its treatment vary. Excerpts:

"HIV has cure in Jesus name. HIV infection is by instrument, blade, knife, blood transmission, love without condom, syringe of injection" *Low density*

"There are some diseases worse than AIDS like Gonorrhea. Breathing to ourselves (during sex) is dangerous" *High density*

AIDS has no cure. HIV is a demon. Sickness is demon. With prayer, it will be cured" *Low density*

"In television, you will see somebody like Pastor T.B. Joshua. He will perform some miracles. He will cure HIV. But hospital, I don't believe there is treatment for HIV" *High density*

4.2 Survey Findings

Background Information

A total of 354 subjects took part in the survey aspect of the study. They were made up of 239 alcohol users, 62 commercial sex workers (CSWs) and 53 subjects with sexually transmitted diseases (STDs).
One hundred and nine of the alcohol users were recruited in the low density area (LDA), while 130 were recruited in the high density area (HDA). The users in the high density area were made up of 106 subjects who used beer and 24 who used Palm wine (PWD).
A total of 62 CSWs were interviewed, 29 and 33 from the high and low density areas respectively. Since the alcohol users and the CSWs were recruited in the low and high density areas, the survey results are being presented according to these areas. Though, they were recruited in the high density area only, the results of the Palm wine drinkers are being described separately because Palm wine is the only local (traditionally produced) alcohol included in the study. It will, therefore, be useful to observe and compare some of their characteristics with those of users of western products, especially beer which is the

type used most commonly by the other alcohol users in the study. The STD subjects were recruited from Lagos State University Teaching Hospital and General Hospital, Lagos. The two hospitals are both owned and subsidized by the Lagos state Government. The cost of services in the two hospitals and their clientele are identical. Thus subjects from the two recruitment sites will be described together. During the administration of the questionnaire, some subjects did not respond to some items in it. This is reflected in the non equal number of subjects in the variables in the tables. The percentages expressed in the tables, therefore, are based on the number of subjects who responded to the questions.

Socio-demographic characteristics

Alcohol Users (Table 1)

The majority of the beer and palm wine users in the high density area were Yoruba (the dominant tribe in the Lagos area), 69 (65.1%) and 21 (91%) for beer and palm wine users respectively. However, in the low density area, the beer users were spread between Yoruba and two other ethnic groups, Yoruba 39 (36.4%), Ibo 22 (20.6%) and Edo 13 (12.1%). Compared with beer and palm wine users in the high density area, beer users in the low density area were, on the average, younger (mean age LDA 32.7yrs; HDA-beer 36.9yrs; PWD 45.4yrs) and lived in apartments (LDA 97.1%; HDA-beer 61.5%, PWD 91.6%). Although the alcohol users in the two areas were fairly well educated (most had more than primary education), more of the users in the LDA, 93 (85.3%), had post secondary education than the users in the high density area, HDA-beer 54 (50.8%); PWD 10 (22.6%). Unlike the Low Density Area beer users, the majority of the beer and palm wine users in the high density area were married (LDA 38.5%; HDA-beer 78.1%; PWD 79.2%). Beer users in the two areas were mainly Christians, except for the palm wine drinkers where they were in the minority (LDA 86.2%; HDA 84%; PWD 33.3%).

Commercial sex workers (CSWs) (Table 1)

Most of the CSWs were young (mean age: LDA 24.7yrs; HDA 26.7yrs) unmarried (LDA 89.7%; HDA 96.9%), Christian (LDA 97%; HDA 89.7%) ladies who lived mostly in rented rooms (LDA 65.6%; HDA 66.7%). Although the CSWs in the two areas were fairly well educated (most had minimum of secondary education), more CSWs in the LDA had post secondary education (8, 25.1%) than those in the HDA (1 3,4%). Although, the study was conducted in an area where the dominant inhabitants were Yoruba, the majority of the CSWs in the two areas were non-Yoruba (HDA 57.1%; LDA 81.8%).

Sexually transmitted disease subjects (Table 1)

The STD subjects were mostly males 45 (84%), unmarried 42 (79.2%), Christians 38 (71.7%) whose ages ranged from 17 – 50 years (mean 30.55yrs; sd 7.7). They lived mainly in apartments (97.7%) and most of them did not have more than secondary school education, 34 (64.2%). About half, 26 (49.1%), of them belonged to the dominant ethnic group in the area of the study (Yoruba).

Social Class of Subjects (Table 2)

Alcohol Users
The beer users in the low density area were mostly professionals 68 (63.6%) while only 39 (37.1%) of beer users in the high density area and 3 (14.3%) of Palm wine drinkers were professionals. Two-thirds 14 (66.7%) of the Palm wine drinkers and 31 (29.5%) of beer drinkers in the high density area were not classifiable by occupation

Commercial sex workers (CSWs)
The CSWs, because of the nature of their work, belonged mostly to the group of those who were not classifiable by occupation (LDA 87.9%; HDA 88.5%)

Sexually transmitted disease subjects
The social class of the STD subjects were spread over the classes like the alcohol users and the CSWs. However, more than half of them (52%) were unclassifiable by profession.

Vocations of Subjects (Table 3)

Alcohol Users
About sixty percent (LDA 57.8%; HDA 60%, PWD 62.5%) of the beer users in the low density areas as well as beer and palm wine users in the high density area had one vocation or the other. These include Tailoring, Motor Mechanic, Carpentry, Electrician, Driving and Barbing/Hairdressing. Most of them have some other vocations other than the ones listed in the table.

Commercial Sex Workers
The main vocations of the CSWs were Tailoring HDA 6 (26.1%); LDA 3 (12.5%) and Hairdressing HDA 7 (30.4%); LDA 11 (45.8%). In addition, many of them also had some other vocations not listed in the questionnaire.

Sexually transmitted disease subjects
Forty one percent (16) of the STD subjects engaged in all the vocations listed in various proportions while the remaining 59% (23) had other vocations not listed.

Source of Income of Subjects *(Table 4)*

Alcohol Users
Regular work was the source of income of many of the beer users in the high and low density areas - HDA 55 (51.9%); LDA 63 (57.8%) - except for the Palm wine drinkers where only one-third of them were in regular employment while 11 (45.8%) of them were self employed. A higher proportion of the beer users in the high density area - 40 (37.7%) - were self employed compared with the those in the low density area - 27 (24.8%).

Commercial Sex Workers
Sex work was the main source of income of the CSWs, LDA 27 (84.4%); HDA 26 (89.7%). A small proportion of them were also self employed LDA 3 (12.5%); HDA 1 (3.4%).

Sexually transmitted disease subjects
Regular work and self employment were the main sources of income of the STD subjects, 14 (28.6%) and 17 (34.7%) respectively.

Cannabis use by subjects (Table 5)

More low density area beer users used cannabis, 19 (19.2%), compared with those of the high density area, 9 (9.1%). Only, 1 (4.4%), of the palm wine drinkers used cannabis. Among the CSW and STD subjects, 1 (4.2%) CSW in the HDA and 3 (6.4%) among the STDs used cannabis.

Alcohol use by subjects

Why they started using alcohol *(Table 6)*

Alcohol Users
Most of the alcohol users started the habit either to experiment - HDA-beer 52 (50%); LDA 29 (27.1%); PWD 5 (21.7%) or due to peer pressure/friends, HDA-beer 32 (30.8%); LDA 49 (45.8%); PWD 8 (34.7%). Proportionally more LDA users, 16 (14.9%), were introduced to the habit by their family members compared with the HDA users, 6 (5.7%).

Commercial Sex Workers
Like the male alcohol users, the CSWs in the LDA started using alcohol mainly to experiment, 11 (64.7%), while those in the HDA got into drinking through the influence of friends/peers, 7 (46.2%), and to experiment, 5 (38.5%).

Sexually transmitted disease subjects
The STD subjects were also mostly introduced to alcohol use to experiment, 16 (37.2%), and due to peer pressure/friends, 16 (37.2%).

Mean age subjects' first used alcohol *(Table 7)*

Alcohol Users
The mean age at which the subjects started using alcohol ranged from 17.1yrs (sd 4.9) in the LDA to 20.03yrs (sd 6.45) in HDA-beer. The palm wine users commenced its use at a mean age of 22.9yrs (sd 7.65).

Commercial Sex Workers
The CSWs in the two areas started using alcohol at about the same mean age, 21yrs (sd 4.44) and 21.6yrs (sd 4.98) for LDA and HDA respectively.

Sexually Transmitted Disease Subjects
The STD subjects commenced alcohol use at a relatively lower mean age of 18yrs (sd 3.4).

Where users drink most frequently *(Table 8)*

Alcohol Users
Beer users in the low and high density areas drank most frequently in beer parlours/bars (LDA 92 (85.9%), HDA-Beer 56 (56%). Some users in the high density area also drank in hotels, 28 (28%). Palm wine drinkers drank either in other locations 11 (45.9%) or Beer Parlour/Bars, 7 (29.1%).

Commercial Sex Workers
The CSWs in high density area drank frequently either in beer parlours/bars, 4 (36.4%), or Hotels, 5 (45.5%). In the low density area, users did so mainly in beer parlours/bars, 8 (47.1%), and club Houses, 5 (29.4%).

Sexually Transmitted Disease Subjects
STD subjects used alcohol mostly in their Homes, 11 (35.5%) and in Beer parlours/bars, 5 (16.1%).

Drinking category of alcohol users *(Table 9)*

Alcohol Users
The alcohol users in the two areas were almost equally divided (50% each) between heavy (Male 36 or more units/week; Female 21 or more units/week) and medium drinking categories (Male 11-35 units/week; Female 6-20 units/week), Heavy drinkers - HDA-Beer 48 (48.0%); LDA 49 (47.6%); PWD 12 (54.5%).

Commercial Sex Workers
The majority of the commercial sex workers (CSWs) who responded to this question were heavy drinkers, HDA 8 (72.7%), LDA 14 (87.5%).

Sexually Transmitted Disease Subjects
Most of the STD subjects who responded were also heavy drinkers, 14 (70%).

Why Alcohol Users Drink *(Table 10)*

Alcohol Users
More than half of the alcohol users in the high density area drank to feel happy and to be their normal selves, HDA-Beer 57 (55.9%); PWD 14 (60.8%). However, only 35 (33%) gave these reasons in the low density area while 54 (50.9%) had other reasons.

Commercial Sex Workers
The main reasons given by the CSWs were to feel happy and to forget their problems, HDA 7 (53.9%); LDA 10 (58.9%).

Sexually Transmitted Disease Subjects
About one out of every three 8 (20.5%) of the STD subjects used alcohol to feel happy.

Sexual Behaviour of Subjects

Frequency of sexual practice with Opposite Sex Partner *(Table 11)*

Alcohol Users
Fifty seven (53.3%) of the of the beer users in the LDA and 61 (58.7%) of the beer users in the HDA had sex almost everyday (1-6 times weekly) three months before they were interviewed for the study. However, sexual activities were less frequent among Palm wine drinkers as many of them, 11 (55%), engaged in sex less than once a week during the same period.

Commercial Sex Workers
Most of the CSWs either engaged in sex once a day or more, HDA 18 (69.2%); LDA 12 (38.8%), or 1-6 times a week, HDA 5 (29.2%); LDA 17 (54.8%).

Sexually Transmitted Disease Subjects
The STD subjects engaged in sex mostly less than once a week during the period, 34 (65.4%).

Sex with Primary Partners *(Table 12)*

Alcohol Users
The beer users mostly had one primary sex partner, LDA 70 (75%); HDA-Beer 72, (74.5%), with whom the majority of them had sex 1-6 times a week three months prior to the interview, HDA-Beer 54 (55.1%); LDA 57 (53.2%), usually in the subjects apartments, LDA 87 (91.6%); HDA-Beer 80 (87.0%).

The Palm wine drinkers also mostly had one primary partner, 14 (70%) with who the majority of them engaged in sex mainly in their (subjects') apartment, 15 (83.3%), either less than once a month (9, 45%) or 1-6 times a week, 9 (45%).

Commercial Sex Workers
Most of the CSWs claimed to have one primary sex partner three months before the interview, HDA 8 (66.7%); LDA 14 (73.7%). Whereas the CSWs in the high density area were mostly engaging in sex once a day or more, 18 (69.2%), in their partners' apartment, 6 (54.5%), those in the low density area had sex mostly 1-6 times a week, 17 (54.8%), either in their own apartments, 5 (31.2%), their partners' apartment, 5 (37.5%), or in the hotel, 5 (31.2%).

Sexually Transmitted Disease Subjects
The STD subjects mostly had one primary sex partner, 29 (65.9%), and had sex mainly in their own apartment, 29 (72.5%), either less than once a week, 20 (38.5%), or 1-6 times a week, 13 (24.9%).

Sex with Casual Sex Partners *(Table 12)*

Alcohol Users
About half, 38 (48.1%), of the beer users in the low density area had sex with casual partners 1-6 times a week while, one-fifth, 17 (21.5%), of the subjects did so less than once a month The sexual activities were mostly in the subjects' apartments, 30 (46.9%), or hotel rooms, 14 (21.9%). However, beer users in the high density area had sex mainly in hotel rooms, 26 (72.2%), less than once a week, 16 (29.6%), or 1-6 times a week, 15 (27.8%). Palm wine drinkers also had sex either in their own apartments, 3 (37.5%), or hotel rooms, 3 (37.5%), mostly 1-6 times a week, 7 (63.7).
The majority of the beer users in the low density area, 44 (62.7%), had more than one casual partner compared with, 14 (36.9%), and 4 (44.4%), of the beer and Palm wine drinkers in the high density area.

Commercial Sex Workers
The majority of the CSWs had more than one casual sex partner, HDA 17 (94.7%); LDA 11 (61.1%), and they engaged in sex with these partners either once a day or more, HDA 14 (60.8%); LDA 9 (36%) or 1-6 times a week HDA 7 (30.4%); LDA 10 (40%), mostly in hotel rooms, HDA 19 (82.6%); LDA 14 (73.7%).

Sexually Transmitted Disease Subjects
The majority of STD subjects had no casual sex partners, 24 (63.2%). Those of them who did, 14 (36.8%), engaged in it most of the time in their apartments, 10 (55.6%), and Guest houses 6 (33.4%), less than once a week, 7 (15.6%).

Alcohol use at sex with Primary and Casual Partners ***(Tables 13, 13A, 14 and 14A)***

Alcohol users Primary Partners

The beer users in the low density area, 70 (72.9%), used alcohol before sex with their primary partners significantly more than the beer users in the high density area, 49 (53%), (P = 0.0064). Most of the LDA users did so either occasionally, 28 (29.1%), or most or all of the time, 42 (43.7%). In the high density area, beer users did so occasionally before sex most or all of the time, 21 (22.6%).
Like their beer user colleagues in the high density area, less than half, 8 (42.1%), of Palm wine drinkers drank alcohol before sex, with 7 (36.8%) of them using it occasionally while 1 (5.3%) did so most or all of the time.
The alcohol users generally were not in the habit of using alcohol during sex with their primary partners as only 13 (12.1%) of the beer users in the high density area and 18 (19.1%) users in the low density area used alcohol during sex.
After sex with primary partners, more users from the low density area, 37 (45.2%), drank beer compared with 31 (28%) and I (5.6%) of beer and Palm wine users in the high density area respectively.

Alcohol users Casual Partners
Alcohol users in both the low and high density areas mostly used alcohol before, HDA-Beer 28 (75.6%); PWD 5 (62.5%); LDA 50 (79.2%), and after sex, HDA-Beer 22 (61.2%), PWD 1 (12.5%); LDA 41 (70%), except for Palm wine drinkers where only a small percentage of the responders to the question used it after sex. Most users did not use alcohol during sex, HDA-Beer 26(72.2%); PWD 8 (100%) and LDA 42 (66.7%). Beer users in the HDA used beer significantly after sex with casual partners more than the Palm wine drinkers (P = 0.036).

Commercial Sex Workers Primary Partners
Although only a small number of CSWs responded to this question, (HDA 11, LDA 13), about 40% of the CSWs who responded used alcohol before sex, HDA 5 (45.5%), LDA 5 (38.5%), at one time or the other. However, almost all the CSW respondents in the low and high density areas, LDA 15 (100%), HDA 8 (80%), did not use alcohol during sex. After sex, 3 (27.3%) and 2 (13.3%), of alcohol users in the high and low density areas respectively drank alcohol.

Commercial Sex Workers ***Casual Partners***
Most, about 60%, of the CSWs in the two areas used alcohol before sex, HDA 11 (60%), LDA 12 (57.2%), while a lower percentage, HDA 7 (33.3%), LDA 4 (19%), used alcohol after sex. An even smaller proportion drank during sex.

Sexually Transmitted Disease Subjects Primary Partners
Most, 43 (86%), 47 (95.9%) and 47 (96%), of the STD subjects never used alcohol before during and after sex respectively with primary partners.

Sexually Transmitted Disease Subjects Casual Partners
Majority of STD subjects were not in the habit of drinking before, during or after sex with casual partners, 36 (92.5%), 40 (97.6%) and 41 (100%) respectively.

Alcohol Use by Primary and Casual Partners *(Table 15 & 16)*

Alcohol users Primary Partners
Ever use of alcohol by primary partners in the low density area was about two times that of either the high density beer users or Palm wine drinkers, HDA–Beer 14 (18.4%), PWD 3 (23.1%); LDA 32 (39.5%). Similarly, more primary partners in the low density area used beer three months before the interview compared with those in the high density area, HDA – Beer 14 (18.9%); PWD 4 (30.8%); LDA 31 (39.7%). More alcohol using primary partners also did so in low density area than the high density area before, HDA – Beer 10 (12.1%); PWD 0 (0%); LDA 20 (21.1%), during, HDA–Beer 2 (2.2%); PWD 0 (0%); LDA 10 (10.5%); and after sex, HDA–Beer 2 (2.1%); PWD 1 (5.2%); LDA 42 (45.2%).

Alcohol users Casual Partners
Majority of the alcohol users in both areas who responded to this question believed that their casual sex partners used alcohol before, HDA-Beer 16 (62.5%); LDA 35 (70%); PWD 3 (100%), mostly less than once a week, HDA-Beer 21 (70%), PWD 6 (75%); LDA 36 (61.1%). Twenty five (60%), 16 (50%) and 6 (25%) respectively of casual partners in the LDA, HDA-Beer, and PWD used alcohol before sex while 34 (54%); 12 (33.3%), and 1 (12.5%) in the LDA, HDA-Beer, and PWD respectively used it after sex. Nineteen (30.2%) of those in the LDA claimed that their casual partners used alcohol during sex.

Commercial Sex Workers Primary Partners
About two-thirds of the primary partners of commercial sex workers used alcohol, HDA 6 (63.7%); LDA 10 (66.7%). Out of these, about 60% were current users who used alcohol sometime in the three months before the interview, HDA 7 (63.7%); LDA (57.1%). A similar proportion HDA 7 (63.6%); LDA 9 (60%), was also in the habit of drinking before sex, while lower proportions did so during, HDA 3 (30%); LDA 1 (6.7%) and after sex, (HDA 3 (27.3%); LDA 2 (13.3%).

Commercial Sex Workers Casual Partners
Almost all the casual partners of the commercial sex workers (HDA 93.3%, LDA 93.3%) had ever used alcohol while 12 (92.4%) and 7 (77.7%) of responders in the HDA and LDA respectively claimed that their casual partners used alcohol one or more times a

week. Most of them also used alcohol before, HDA 14 (63.6%); LDA 16 (80%) and after sex, HDA 19 (86.3%); LDA 13 (61.9%). A smaller number used alcohol during sex, 59% and 23.8%, from the HDA and LDA respectively.

Sexually Transmitted Disease Subjects Primary Partners
One-third (16) of the primary partners of STD subjects had ever used alcohol, while 29.7% (14) used it three months before the interview. Ten percent (5) of these primary partners used alcohol before sex, while 2% (1) and 4% (2) used alcohol during and after sex respectively.

Sexually Transmitted Disease Subjects Casual Partners
Six (about 20%) of the casual partners of STD subjects who responded had ever used alcohol. Seven of them used alcohol once a week or more. Only 3 (about 7.2%) and 2 (4.4%) used alcohol before and after sex respectively.

Role of Alcohol on Sex and Condom Use by Subjects *(Table 17, 17A & 18)*

Alcohol users Primary Partners
The majority of alcohol users in the low density area significantly believed that it had some, 41 (43.2%), or major role, 13 (13.6%), in their desire and performance of sex compared with users in the high density area, HDA-beer, 30 (33.4%); PWD 7 (38.9%) (P = 0.0052.
Similarly, most users in the low density area, 54 (61.3%), believed that alcohol increased their desire for sex though only about one-third admitted to this in the high density area, HDA 25 (32.9%), PWD 6 (35.3%). About half of the LDA and PWD users, 41 (48.3%) and 9 (52.9%) respectively, claimed that alcohol enhances their performance of sex though only, 19 (23.8%) of beer users in the high density area admitted to this.
Although, most of the alcohol users believed that it did not play any role in their use of condoms, a small percentage claimed that alcohol use made them careless about condom use, LDA 13 (14%); HDA-Beer 10 (12.4%); PWD 1 (7.1%).

Alcohol users Casual Partners
Most of the beer users, HDA-Beer 20 (55.5%); LDA 43 (68.2%), and less than half of the Palm wine drinkers, PWD 3 (37.5%), believed that alcohol played some or major role in their performance/desirability for sex with casual partners. Similarly, most users believed that alcohol increased their performance, HDA-Beer 16 (51.6%), LDA 29 (51.8%); PWD 5 (62.5%) and desirability, HDA-Beer 18 (58.1 %); LDA 39 (70.9%), of sex with casual partners, except for Palm wine drinkers, PWD 3 (37.5%). Most of the alcohol users, however, claimed that alcohol use played no role in their use of condoms with casual partners, HDA-Beer 24 (70.6%); PWD 7 (100%); 39 (63.9%).
.

Commercial Sex Workers Primary Partners
Half of the CSWs who answered this question in the high density area admitted to some or major role for alcohol in their desire and performance of sex. This compares with only 22.2% in the low density area. Three (75%) of the LDA sex workers and 5 (62.5%) of those in the HDA agreed that alcohol increased their desire for sex. For performance, three (75%) and 4 (50%) of LDA and HDA CSWs respectively admitted that alcohol increased their performance of sex while 0 (0%) and 1 (10%) of the CSWs in the LDA and HDA respectively agreed that alcohol made them careless about condom use.

Commercial Sex Casual Partners
Although some CSWs claimed that alcohol played some or major role at sex with their casual partners, alcohol had no effect on the desirability, HDA 14 (70%); LDA 7 (50%), and performance of sex, HDA 14 (73.7%), LDA 7 (50%), of most of them with their casual partners.

Sexually Transmitted Disease Subjects Primary Partners
Only 6 (13%) of the STD subjects claimed that alcohol played any role in their performance/desire for sex. Similarly, only a small proportion, 14.3% (5) and 16.2% (3), of them believed that it increased their desire and performance of sex respectively. An even lower percentage, 4% (2), believed that it made them careless about the use of condoms.

Sexually Transmitted Disease Casual Partners
The majority of STD subjects claimed that alcohol had no role in their desirability, 25 (92.6%), or performance 24 (88.9%) of sex with casual partners. It also had no role in their condom use during sex with casual partners 38 (97.5%).

Condom use by subjects and Partners 3 months before interview *(Table 19)*

Alcohol users Primary Partners
More than half of alcohol users in the high density area were not using condoms at all with their primary sex partners 3 months before the interview, HDA-Beer 44 (52.4%); PWD 11 (68.8%). The opposite was the case with users in the low density area where almost one-third of them used condoms during the same period with their primary sex partners, 64 (31.2%). About 1 out of 5 of the alcohol users in the two areas used condoms only occasionally during the period with their primary partners, HDA-Beer 17 (20.2%), PWD 3 (18.8%), LDA 21 (22.6%).
Most of the primary partners never used condoms with the subjects during the period, HDA-Beer 74 (93.7%), PWD 13 (100%), LDA 78 (88.6%).
However, with casual partners, alcohol users were more cautious as more than half of them used condoms most or all of the time. However, less than half of Palm wine drinkers used condoms with casual partners, HDA-Beer 19 (5.8%), PWD 2 (28.6%), LDA 50 (82%).
Most of the casual partners also did not use condoms with the subjects, HDA-Beer 20 (69%); PWD 7 (100%); LDA 47 (87%).

Commercial Sex Workers
The majority of the CSWs either did not use or used condoms occasionally with their primary partners 3 months before the interview, HDA 9 (69.3%), LDA 8 (61.5%). Although the majority of the CSWs used condoms most or all of the time, a considerable proportion of them did not use condoms with their casual partners, HDA 5 (22.7%); LDA 7 (35%).
Many of the primary partners of the CSWs either did not use condoms at all or did so occasionally, HDA 8 (61.6%); LDA 6 (42.9%). However, most of the casual partners used condoms with them most or all of the time, HDA 21 (95.4%); LDA 18 (90%).

Sexually Transmitted Disease Subjects
The STD subjects were less cautious with the use of condoms as most of them were not in the habit of using condoms during sex with either their primary or casual partners all the time or they did so only occasionally, 40 (83.4%) and 29 (85%) for primary and casual partners respectively. Similarly all their primary and casual partners did not use condoms with the STDs at all or did so only occasionally, 50 (98%) and 38 (97.5%) for primary and casual partners respectively.

Methods of Contraception used by Subjects with Primary Partners
(Table 20)

Alcohol Users
The use of male condoms was the most frequent method of contraception used by the alcohol users with their primary partners, HDA-Beer 36 (45.6%); PWD 5 (62.5%); LDA 43 (53.8%). Oral contraception was also practiced by a small percentage of the partners of alcohol users, HDA-Beer 14 (17.7%); PWD 1 (12.5%); LDA 15 (18.8%). Female condom use was very uncommon among them, HDA-Beer 2 (2.5%); PWD 0 (0%); LDA 2 (2.5%).

Commercial Sex Workers
Male condom use was also the most common method of contraception used by partners of CSWs, HDA 6 (50%), LDA 9 (52.9%). Oral contraception was practiced to a lesser extent, HDA 3 (25%); LDA 1 (5.9%) while two subjects (11.8%) in the low density area used female condoms. Intra-uterine devise (IUCD) was also practiced by one CSW each in the high and low density areas, HDA-Beer 8.3%, LDA 5.9%.

Sexually Transmitted Disease Subjects
STD subjects and their primary partners either did not use any form of contraception, 11 (35.5%), or used male condoms, 13 (41.9%), and oral contraception, 5 (16.1%).

Commercial Sex work by Subjects last 3 months *(Table 21)*

Alcohol Users

Many of the alcohol users gave money for sex during this period, HDA-Beer 24 (57.1%); PWD 4 (40%); LDA 13 (31.7%). A small proportion of them also gave alcohol for sex, HDA-Beer 7 (16.3%); LDA 10 (25%). They engaged in sex with CSWs between one to six times a week and many of them, especially the palm wine drinkers, either did not use condoms during this period or they did so only occasionally, HDA-Beer 35 (41.7%); PWD 7 (77.7%); LDA 13 (44.8%). Most of them believed that giving money or alcohol had no role in the use of condoms, HDA-Beer 24 (88.9%); PWD 9 (100%); LDA 25 (83.3%).

Commercial Sex Workers

Almost all the CSWs admitted receiving money/goods for sex, HDA 21 (95.5%), LDA 27 (93.1%). Some of them also admitted receiving alcohol for sex, HDA 1 (3.6%); LDA 3 (9.3%). On the average, they engaged in commercial sex 11 (HDA) and 16 (LDA) times a month. While almost all the CSWs in the high density area used condoms most of the time whenever money or alcohol exchanged hands for sex, HDA 14 (93.3%), only half of the low density CSWs used it most of the time on such occasions, 8 (50%). About 70% of them, however, believed that receiving money or goods had no role in condom use, HDA 19 (73.1%); LDA 18 (69.2%).

Sexually Transmitted Disease Subjects

All the STD subjects denied giving or receiving money, goods or other drugs for sex during the 3 months before the interview. However, about 75% of them did not use condoms whenever money or alcohol exchanged hands for sex. Almost all of those who responded to the question (94.6%) believed that giving money had no role in the use of condom.

Sexual Practices by Subjects *(Table 22)*

Alcohol Users

Only a small proportion of the subjects who responded in the high and low density areas engaged in oral sex, 2 (11.8%) and 9 (32%) respectively. One subject from the high density area admitted to male on male sex.

Commercial Sex Workers

Two and four CSWs respectively from the high and low density areas engaged in oral sex. One from the low density area engaged in female on female sex.

Sexually Transmitted Disease Subjects
Two STD subjects engaged in oral sex while three and six of them practiced male on male and female on female sex respectively.

HIV/AIDS Knowledge by Subjects *(Table 23)*

Alcohol Users
With the exception of two subjects in the high density area and one in the low density area, all alcohol users have heard about HIV/AIDS before. However, proportionally more alcohol users in the low density area talked about HIV/AIDS with their sex partners than users in the high density area, HDA-Beer 40 (38.1%); PWD 23 (45.1%); LDA 52 (49.5%). Only few users were in the habit of discussing HIV/AIDS issues with their friends. However, users in the low density area and the palm wine drinkers also discussed HIV/AIDS issues with their alcohol using friends proportionally more than the Beer users in the high density area, HDA-Beer 36 (34.3%); PWD 12 (52.2%); LDA 63 (59.4%). Majority of the alcohol users in both the high and low density areas either rarely or never discussed HIV/AIDS with members of their family, HDA-Beer 67 (65.1%); PWD 21 (90.3%); LDA 66 (62.8%).
Similarly, whereas most users in low density area were aware that one could be infected with HIV and look well, less than half of the palm wine drinkers and high density beer users were aware of this (HDA-Beer 44 (45.8%); PWD 5 (35.7%); LDA 86 (85.1%). Safer practice and other sex related changes were the two most common efforts that the alcohol users made to prevent infection with HIV, HDA-Beer 62 (74.7%), PWD 8 (61.6%); LDA 81 (80.3%).

Commercial Sex Workers
Almost all the CSWs have heard about HIV/AIDS as only two out of the 59 respondents to this question in the two areas have not heard about HIV/AIDS. Most of them discussed HIV/AIDS frequently with their sex partners well, HDA-Beer 17 (63%); LDA 19 (57.6%), and alcohol using friends as well, (HDA-Beer 15 (62.5%); LDA 17 (54.8%), but they rarely, if at all, discussed it with their family members, HDA-Beer 6 (26.1%); LDA 6 (18.8%). No less than two-thirds of them did not know that a person can be infected with HIV and look well, HDA 17 (70.8%), LDA 20 (66.7%), and almost all of them had adopted safer sex practices or other sex related changes since they heard about HIV/AIDS, HDA 23 (92%); LDA 32 (100%).

Sexually Transmitted Disease Subjects
Although STD subjects had heard about HIV/AIDS before, most of them rarely or never discussed it with their sex partners, 27 (53%), alcohol using friends, 30 (58.9%), and family members, 48 (71.7%). Most of them also knew that it was possible to be infected with HIV and look well, 34 (70.8%), and had adopted either safer sex and other sex related practices, 26 (61.9%), or reduced drug and alcohol use and made other drug related changes, 16 (38.2%).

Test History of Subjects *(Table 24)*

Alcohol Users
Many of the alcohol users considered their health to be fair only, HDA-Beer 73 (71.6%); PWD 19 (82.6%); LDA 59 (56.7%). Nearly half, 49 (46.2%) of low density area alcohol users compared with none 0 (0%) of the Palm wine drinkers and only 23 (22.3%) of the beer users in the high density area have had HIV testing before. These tests were carried out mostly in hospitals, HDA-Beer 18 (81.8%), LDA 41 (80.4%). However, only a small number had Pre-test counseling, HDA-Beer 9 (8.9%); PWD 2 (8.3%); LDA 18 (17.6%). An even smaller number were provided with Post-test counseling services.
In all, four of the alcohol users, two each in the low and high density area drinkers had been told that they were HIV positive

Commercial Sex Workers
The CSWs also mostly considered their health as fair, HDA 20 (69%); LDA 24 (72.4%). None of the CSWs in the high density area had ever had pre or post HIV test counseling, though six (22.2%) of them had had HIV test before. Thirteen (39.4%) CSWs in the low density area had HIV screening test before though only five of them respectively had had pre test and one (1) post test counseling before. Their HIV tests were conducted in the STD clinic (12). None of the LDA subjects had ever tested positive to HIV before.

Sexually Transmitted Disease Subjects
The STD subjects also believed mostly that their health was fair, 18 (39.1%). Although 13 (24.5%) of them had had HIV screening tests before, only 6 and 3 of them respectively had pre and/or post test counseling. The HIV test was done mostly in STD clinics (83.3%) but none of them had ever been found to be HIV positive.

Factors Affecting Sexual Behaviour Change By Subjects *(Table 25)*

Alcohol Users
Though other reasons were given by almost half, 27 (49.1%), of them, continued alcohol use, 9 (16.4%), availability of sex partners, 7 (12.7%), and refusal of sex partners to use condom, 10 (18.2%), were the three main reasons given by beer users in the high density area that may prevent their reduction of alcohol use. Similarly, refusal of sex partners to use condom was the reason that may prevent reduction of alcohol use in 41(43.2%) of the low density area alcohol users, while knowledge of the heterosexual transmission of HIV was the main reason given by most, 5 (71.4%), of the few responders among the palm wine drinkers to this question. Beer users in the HDA also admitted that easy availability of alcohol, 6 (22.5%), the need to use it to cope with psychological problems, 6 (22.5%), and the fear of withdrawal symptoms, 5 (18.5%), were among the important factors inhibiting change in their alcohol use. However, continued use by friends was the main reason given by low density users, 27 (42.2%). Knowledge of the adverse effects of alcohol was the reason given by many of the users as being capable of changing their alcohol using habit, HDA-Beer 17 (27.9%); PWD 4 (44.4%); LDA 33 (36.3%). Thirty-six (39.6%) of the LDA users also claimed that Physical illness from alcohol may lead to a change in their alcohol use.

Commercial Sex Workers

Refusal of Sex Partners to use condom was the reason given by majority of respondents, HDA 7 (52.9%); LDA 17 (63%), to this question as the main factor that can prevent reduction in their sexual behaviour change of the CSWs. Easy availability and continued use of alcohol by friends were the reasons given by HDA CSWs as inhibiting change in their use of alcohol, HDA 4 (100%). However, LDA CSWs gave more diverse reasons. These included easy availability, 2 (20%), fear of withdrawal symptoms, 3 (30%), use by friends, 2 (20%), and the need to cope with psychological problems 2 (20%). The main factor that the CSWs considered that may enable change in their alcohol use was the Knowledge of adverse health effects that can result from alcohol use, HDA 4 (44.4%); LDA 7 (58.3%).

Sexually Transmitted Disease Subjects

Many of the STD subjects believed that Refusal of sex partners to use condoms, 12 (33%), and availability of Sex Partners, 10 (27.8%), were the two main factors that can affect their sexual behaviour change. Similarly, the need to cope with psychological problems was the main factor given by the STD subjects, 7 (35.0%), as inhibiting change in their alcohol use. Lack of awareness of availability of alcohol T&R facilities and fear of withdrawal symptoms were two other reasons given by 2 (25%) STD subjects each as inhibiting change in their alcohol use.

The main factor given by the STD subjects, 16 (57.1%), as capable of enabling change in their alcohol use was knowledge of its adverse health effects.

CHAPTER 5

5.0 Discussion

5.1 Socio-demographic Characteristics

The beer users in the low density area were, on the average, younger than those in the high density area. They were also more highly educated and lived in apartments more than those in the high density area. These findings probably explain the higher socioeconomic class of the beer users working or living in the low density area where there were more senior managers and professionals compared with users in the high density area. This group of subjects (senior managers and professionals), because of their higher level of functioning and exposure, would be expected to live in western type of private apartments than those in the high density areas. The dominant ethnic group among the beer and palm wine users in the high density area was the Yoruba. This is not surprising in view of the fact that this group constitutes the dominant ethnic group living in Lagos. However, the finding that in the low density area, the subjects were spread mainly between the Yoruba, Igbo and Edo probably reflects the cosmopolitan nature of Lagos, especially in the low density area where most residents were well educated senior government and company officials from different parts of the country. The former status of Lagos as the Federal capital city of Nigeria may also have contributed to this.
The Palm wine drinkers were less educated and fewer proportions of them were in regular employment compared with the beer drinkers in the high density area. This probably explains the reason why there were very few professionals (14.3%) and senior managers (0%) among them.
As would be expected, more CSWs in the LDA had post secondary education, (25.1%) than those in the HDA (3.4%). Unlike the beer users, majority of the CSWs in the two areas were non-Yoruba (HDA 57.1%, LDA 81.8%). These findings may be explained by the cosmopolitan and multiethnic nature of Lagos. It is also possible that some groups are more likely to indulge in prostitution than some others, even within the same tribal group. This observation, however, needs to be further investigated because of its potential in the development of intervention strategies for different ethnic groups in the country. More than half of the CSWs also engaged in Tailoring and Barbing/Hairdressing. This corroborates the findings in the FGDs where some of them revealed that they engaged in commercial sex work to provide them with additional financial income to meet their financial requirements. This is probably a reflection of the unemployment level in the country especially with the downturn in the economy. It is also an indication that if the CSWs are provided with alternative vocations with which they can earn more money, some of them may disengage from commercial sex work.
The finding that most of the STD subjects were non-professionals who engaged in various vocations and attended Government subsidized hospitals is probably an indication that they belonged to the low socioeconomic class.

5.2 Alcohol Use by Subjects

In line with the reports of established findings about the etiological factors for alcohol and drug abuse, many of our subjects started using alcohol to experiment (50%) or through the influence of friends (30.8%). This finding cut across all the groups both in the low and high density areas. This is probably an indication of the influence of friends and peers over individuals.

In the case of the sex workers, these friends could probably have been male friends or their customers. This was corroborated by findings during the FGDs when they disclosed that some men would not patronize CSWs who did not drink alcohol. Some of the CSWs may have experimented with alcohol to be bold and to cope with the psychological problems associated with commercial sex work. They also admitted to this during the FGD sessions and in the survey questionnaire. They may, therefore, have taken to alcohol use as one of the ways to entice and retain their clients.

However, it is noteworthy that some subjects claimed to have been introduced to drinking by family members. This habit which is well known and recognized is unfortunate. It may partly be due to attempts by the child to identify with his/her parents. The long term risk which includes sexual risk behaviours with the potential for infection with HIV and other associated adverse health effects of alcohol use indicates the need for intervention programs designed to address this habit.

Many of the users claimed that they continued drinking to be happy or to be their normal selves. This is an indication of probable co-morbid social or psychological disorders in these subjects. This is well recognized among alcohol users. Some of them also claimed that they drank to avoid withdrawal symptoms. A proper medical consultation and referral for treatment of the identified disorder may therefore be required in some of these subjects rather than the current practice of coping by using alcohol, hence the need for regular medical and psychiatric/psychological check up by these subjects to identify and treat those who suffer from co-morbid psychiatric/psychological disorders.

The finding that many of the alcohol users drank mainly in beer parlours, bars, hotels and clubs is dangerous. This is because drinking outside the house encouraged drunk driving which predisposes users to accidents both on the road and at home. This is particularly more likely in view of the fact that almost all of them were heavy to moderate drinkers. Reasons given during the FGDs for drinking so regularly in these places included the need to avoid traffic delays on the road and to while away time so as not to get home too early because they live in small rooms with a large family and because of the problems resulting from frequent electricity outages in the country. This is not the appropriate way to cope with these problems. There is a need to draw the attention of Government to the provision and maintenance of these social amenities as their non availability may be having multiple effects including alcohol use and associated HIV risk behaviours. The alcohol users also require to be thought alternative methods of coping with these social problems that will not involve the use of alcohol or any other drug.

5.3 Sexual Behaviour of Subjects

Although most of the subjects had only one primary sex partner, some subjects in all the groups had more than one. This ranged from about 9% in he STD subjects through 15% in the CSWs to 20% in the alcohol users. This habit of having multiple sexual partners is dangerous because it encourages the spread of HIV and other sexually transmitted infections to the primary partners. This is especially likely to occur because most of the subjects in all the groups and areas were not using condoms during sex with their primary partners. Since HIV is known to spread mainly by the heterosexual method in Nigeria, this is a risky behaviour that may lead to a rapid spread of HIV infection. The habit has the potential to cause explosion in the spread of HIV in the country because many of the subjects in all the groups had casual partners, often more than one (HDA-Beer 65.8%; PWD 88.8%; LDA 87%; CWS-LDA 100%; CSW-HDA 77%, STD 36.5%), with who they engaged in sex, with condom use not regular (not all the time). This could provide a conducive environment that would facilitate the spread of HIV and other sexually transmitted diseases rapidly among the alcohol users, their partners (primary and casual alike) and also the rest of the community with whom they interact and relate sexually. The situation calls for urgent action to be taken by Government and other public spirited individuals and Non-Governmental Organisations (NGOs) to reduce the health risks associated with this behaviour by embarking on various methods of interventions, such as IEC, that are capable of reducing these health risk behaviours.

5.4 Alcohol Use and Sex by Subjects

The use of alcohol by many of the subjects in all the groups before and after sex with both their primary and casual sex partners, as found in this study, is a further indication of high risk behaviour by alcohol users among the subjects. Studies conducted in other countries like Zimbabwe, Tanzania, Kenya, Zambia and Central African Republic also reported significant associations between alcohol consumption and high risk behaviour (Mniyika et al, 1997; Ndinya- Achola et al, 1997; Somse et al 1993; Basset et al, 1996), prevalent STDs, prevalent HIV infection (Basset et al, 1996; Mnyika et al, 1996) and incident HIV infection (Allen et al, 1992; Kapiga et al, 1998). It will appear that with the exception of the STD subjects, the subjects used alcohol more frequently before and after sex with casual partners than with primary partners. This practice probably increased the risk of infection with HIV because of the disinhibition that is commonly associated with alcohol use and the fact that casual partners were more likely to have other sex partners apart from the subjects.

The CSWs proportionally appeared to drink less before and after sex with casual partners compared with the alcohol users. This probably corroborates the disclosure by some of them that they were usually careful not to drink alcohol before sex with their clients because this might make them to lose money and/or their property to their clients. This is to say that they considered themselves to “at work” whenever they were with their casual partners (clients), a situation that required them to be as alert as possible. However, it is worrisome to observe that the CSWs sometimes gave in to sex without the use of condoms when “adequate” financial incentive was offered. This was attested to during

some of the FGD sessions by some of the CSWs and corroborated by some of the survey findings where some of the subjects admitted to sex occasionally with their partners without the use of condoms. This is yet another indication of high risk behaviour for HIV infection. There is a need to organize free HIV screening for the CSWs as part of the health education and public health care programmes for them. What is more, among the few subjects that had been previously screened for HIV infection, four of them were positive to HIV among the alcohol users, two each in the high and low density areas. These HIV positive subjects probably continued to engage in sex without the knowledge of their primary and casual partners. Some of these sexual activities may have been without the use of condoms.

5.5 Condom Use by Subjects

High risk behaviour that could facilitate infection with HIV was common among most of the subjects in the two areas. This included the admission by many of the alcohol users that alcohol use increased both their desire for and performance of sex. Consequently, the users would probably continue to look for and use alcohol before sex. An indication to this was revealed during the FGD discussions when CSWs claimed that, with alcohol, users spend longer time on them during sex. This probably further confirms the already identified high risk behaviours by alcohol users because the disinhibition that could follow the use of alcohol may probably encourage sex without the use of condoms. This tendency to be careless with condom use after sex was attested to by some of them in the survey. Many of the subjects also confirmed that they either never used condoms during sex or did so only occasionally. This applied during sex with both the primary and casual sex partners. The finding that this risk behaviour also occurred in high proportions among the STD subjects, mostly in proportions higher than those of alcohol users, probably explained the reason why they were victims of sexually transmitted diseases. STD subjects along with injecting drug users, commercial sex workers and long distance drivers among others are well known high risk groups for HIV infection. The 2001 HIV/Syphilis sero-prevalence and STD syndromes sentinel survey in Nigeria found a median HIV prevalence among STD patients of 11.5% (FMOH, 2001). This is about double the 5.8% national HIV prevalence rate for HIV in the general population. This high rate may be explained, among other reasons, by the high risk behaviour of STD patients like this. Considerable IEC intervention programmes are needed for this group of patients.

Messersmith and his colleagues (2000) had observed in their report that men's condom use was highest in commercial sex, inconsistent in casual relationships, and lowest in marriage. This observation is also corroborated by our study. Thus, as they advised, STD/HIV-prevention programs need to address the range of sexual relationships and the meanings and behaviors associated with them.

The LDA beer users, probably due to their relatively higher educational level, were more careful with condom use as 82% of them used condoms always or most of the time with casual partners. This compares with 55.8% and 28.6% use by beer users and Palm wine drinkers in the high density area respectively, in who a combination of low education and inadequate knowledge of HIV infection and transmission routes may have been responsible for their high risk behaviour practices. Some of the low density beer users

actually talked about and showed us the "superior quality" condom they carried along with them anytime they wanted to go to bed with their sex partners during the FGD sessions. This, however, did not absolve them from associated risk taking as some of them indulged occasionally and sometimes always in sex with their casual partners without the use of condoms.

5.6 Commercial Sex work by Subjects

The alcohol users patronized commercial sex workers and they gave money, alcohol and other drugs to achieve this. Although most of them claimed that this had no role in their condom use habit, the CSWs admitted during FGD sessions that they used to compromise the use of condom when they were offered sufficient financial incentive or when they were under the influence of alcohol. The CSWs also described the inadequate methods they employed to protect themselves against HIV and other infections. These included traditional methods and the use of inadequate doses of antibiotics without any medical consultation or laboratory test to show any indication for it. The likelihood of infection with HIV in this type of practice could be very high for those who patronize these CSWs. The prevalence of HIV infection among Nigerian CSWs was 34.2% in 1995, very much higher than the 4.5% prevailing average in the country at the time. Engaging in sex without the use of condoms, as practiced by some of our alcohol and STD subjects, could only serve to spread the disease rapidly. The practice of oral as well as male on male sexual habit by some of the subjects is another dimension of risk behaviour by the subjects. Men who practice male on male sex constitute a well known high risk group for HIV infection. The practice had been reported in previous studies in Nigeria (Adelekan et al, 2000). The use of alcohol at sex by these individuals could only increase the risk of HIV infection among them. This finding probably added to the risk taking dimensions of the subjects, especially among the STD subjects where this was reported.

5.7 HIV/AIDS Knowledge and Behaviour of Subjects

Although the subjects have mostly heard about HIV before, they generally did not discuss it with their sex partners and their family members. Many of them, however, discussed it with their alcohol using friends. The habit of not discussing HIV issues with sex partners and members of the family is fraught with danger and may be a passive way with which alcohol users, CSWs and STD subjects tried to reduce the anxiety related with the fear of infection from sex with their sex partners. This habit could increase their predisposition to infection with HIV as they may be less cautious during sex since the associated risks were underplayed with sex partners. Discussion with alcohol using partners, though desirable, may depend on the prevailing mood and environment at the time it was being discussed. If it was discussed when alcohol use was in progress, it was not likely to play any significantly positive role.

Many of the subjects did not know that a person could be infected with HIV and look well. This is unfortunate because this might make them more careless and less discrete in their sexual activities. Most of the subjects claimed that they had either adopted safer sex practice or made sex related changes. This claim is rather vague because many of them, especially the commercial sex workers, did not use condoms regularly during sex and the

precautions they claimed to take after sex (during the FGDs) were ineffective by orthodox medical standards.
Only a small proportion of the subjects had had HIV screening before. Among them, only a small proportion had Pre and/or Post test counseling. This situation lives much to be desired. A lot of information and education work needs to be done in order to achieve behaviour change among these three groups of subjects, especially since some of them are already known to be HIV positive. There is a need for proper screening of these subjects with Pre and Post test counseling practice to determine the true prevalence of HIV among the alcohol users and the CSWs including the difficult to reach ones in the low density area who stand along the roadside in the evenings.
The subjects need to be educated on the health hazards and physical illnesses that may result from the use of alcohol and the need for them to undergo regular HIV screening if, as they admitted in the survey, this could enable change in their alcohol using habit. Pre and Post test counseling, which is at present a rarity, should be introduced not only to relieve the anxiety that a positive result may generate but also to meet the required ethical standards for this practice.

5.8 Palm Wine drinkers

The subjects who used Palm wine, a traditionally prepared alcohol, were on the average older than those who used beer (mainly) in the low and high density areas. This may be due to the revelation during the FGDs that most of them had used beer earlier in their lives before they decided, for various reasons, to change to Palm wine. Probably due to their relatively lower educational attainments, they had fewer professionals among them proportionally compared with the beer users in the two areas. There were also more Muslims (66.9%) among them than Christians. The reason for this is probably difficult to explain because it contrasts with the finding among the beer users in both the low and high density areas where most of the users were Christians (HDA-Beer 80%; LDA 89.7%). However, the finding only corroborates the established finding that the use of alcohol cut across religious beliefs. About 50% of them were in self employment. This is higher than the relative proportions of the self employed among the beer users (HDA-Beer 37.7%; LDA 24.8%). These factors, especially lower educational level and socioeconomic class compared with the other alcohol users, may be responsible for the proportionally higher sexual risk behaviours among them compared with the other alcohol users as found in this study. These behaviours include less frequent condom use during sex with both their primary and casual sex partners compared with the beer users. Similarly, non of them, compared with 23 and 49 in the HDA-Beer and LDA users respectively had ever had HIV test done before. Thus, non of them knew his HIV status despite the fact that they engaged in sex usually without the use of condoms with their sex partners. The risk of HIV spread within and beyond their subculture to the rest of the society is, therefore, very high. If Palm wine drinkers are taken as examples of the many other traditional (locally prepared) alcohol users in the country, it could be said, therefore, that they require special focus and attention for HIV intervention. Since these local brews are cheaper than beer, the number of Nigerians who patronize these traditional brands of alcohol may probably be growing by the day in view of the current depression in the economy of the country with consequent less money available for alcohol use by users/addicts. More studies are, therefore, required among the users of

traditionally prepared alcohol to determine their HIV and other health risk behaviours as well as their level of knowledge and attitude to HIV/AIDS infection. This is required to be able to design and introduce practical and realistic interventions for them.

CHAPTER 6

6.0 Conclusion

The results of this study has demonstrated that alcohol users in the country indulge in high risk sexual behaviours that could predispose them to infection with HIV and other sexually transmitted diseases. These behaviours cut across socioeconomic class, ethnic group, educational attainment and religion. Lower levels of education and socioeconomic class may predispose users to indulge in risk behaviours as evidenced by the higher proportion of alcohol users in the high density area not using condoms during sexual activities compared with users in the low density area.

Palm wine users also indulged in HIV prone risk behaviours more than the other alcohol users in both the low and the high density areas.

Issues such as the social and cultural acceptability of alcohol in many Nigerian communities and the traffic delays encountered by workers returning home from work everyday appeared to be encouraging the use of alcohol along with the associated HIV risk behaviours

Knowledge about HIV and its mode of transmission was generally low among alcohol users. The use of safety precautions by alcohol users may not be always, even with casual partners. Most of the subjects did not know their HIV status and they probably did not see for it. There is, at present, no intervention strategies specifically designed either to look at the health problems of alcohol users in the country or directed at their HIV risk behaviours.

Inadequate financial income may have contributed to the decision of some of the CSWs to indulge in the practice. Alcohol use and sex without the use of condoms is not uncommon among the CSWs, especially with adequate financial incentives. The methods adopted by some of the CSWs to prevent HIV infection which included the unprescribed use of antibiotics in inadequate doses and the use of some traditional methods probably give the CSWs a false sense of security which could encourage them to be more careless with HIV risk behaviours during their sexual activities.

The CSWs have very poor knowledge of HIV infection and there is at present no organized national programme in the country directed at the prevention HIV infection among them.

The STD subjects probably engaged in sex without the use of condoms proportionally more than the alcohol users and the CSWs.

7.0 Recommendations

In view of the sexual risk behaviours identified among the three groups of subjects in this study, the following prevention strategies are recommended in order to reduce the spread of HIV infection among them and the rest of the community.

i. Government, CBOs and NGOs should organize regular IEC programmes for attendees of facilities where alcohol is used for alcohol users and CSWs to create awareness and encourage them to adopt safer sex behaviour practices that will reduce the spread of HIV infection and other sexually transmitted infections among them. A similar arrangement should be made for the relatively hard to find CSWs who stand by the roadside in the low density area and the STD patients in the clinics.

ii. Organisation of regular outreach activities aimed at educating members of the public about HIV and other health risks associated with alcohol use and patronage of beer parlours, clubs, and hotels.

iii. Condom use should be encouraged among persons belonging to the three groups of subjects by making it popular and easily available in the beer and palm wine using spots and places like hotels, guest houses, club houses and beer parlours where sexual activities take place.

iv. Subjects should be educated on the benefits of voluntary regular HIV screening.

v. HIV screening facilities should be provided by Government at easy to reach locations for these high risk groups at subsidized rates.

vi. HIV screening should be encouraged and facilitated for high risk groups regularly.

vii. Pre and Post HIV counseling services should be provided for these three high risk groups.

viii. Organized, simple and effective arrangements should be made for a method of referring HIV positive members of these and other high risk groups for treatment at well recognized treatment centers adequately equipped to manage HIV related problems.

ix. Government should set up subsidized HIV counseling and treatment centers in all parts of the country to improve accessibility by individuals in need.

x. Efforts should be made to encourage CSWs to go for safer and more gainful vocations, with assistance provided by government through its poverty alleviation programmes, to provide equipment for them after completing the training period so as to increase their financial base. This may discourage commercial sex work in some of them.

xi. Arrangements should be made for comprehensive health care services specifically targeted at these high risk groups in order to reduce their sexual risk behaviours.

xii. There is a need for more studies in other parts of the country to study the pattern of HIV risk behaviour among alcohol users, and the Hard to reach CSWs in different parts of the country.
   a. To determine the prevalence of HIV among alcohol users in the country.
   b. To critically review the existing policy and practice for the care of CSWs and alcohol users in Nigeria, with a view to articulating changes based on the evolving dynamics of alcohol problem and HIV infection among the users and CSWs.

xiii. Evaluation studies are also needed to monitor progress being made in the areas of intervention, policy and practice.

xiv. Some harm reduction approaches need to be employed to ensure a significant decline in the spread of HIV among Alcohol users, STD and CSWs.

xv. The findings of the study need to be widely disseminated to ensure that it reaches Government Health care policy makers, health care givers and General practitioners as well as paramedical staff, stakeholders and other members of the community through publication of the results in journals, print media newspaper and Television interviews and seminars.

xvi. Powerful and persistent advocacy need to be put in place at alllevels of Government and non-Government agencies to ensure that Government regulations against alcohol use are strictly adhered to and that care rather than arrest is the provided for alcohol users.

References

1. Abiodun O.A. et al. (1994) Pattern of substance use amongst secondary school students in Ilorin, northern Nigeria. West Africa Journal of Medicine, 13; 91-97.

2. Adelekan, M. L.and Adeniran, R.A. (1988) Psychosocial and clinical profile of hospital-managed drug abusers in Nigeria. *Nigerian Medical Journal* 18(4):461-468.

3. Adelekan, M. L. (1989) Self-reported drug use among secondary school students in the Nigerian state of Ogun. Bulletin on Narcotics, 41: 109-116.

4. Adelekan, M. L and Morakinyo, O (2000) *A Rapid Assessment of Treatment and Rehabilitation Facilities for Drug Dependent Persons in Nigeria* (eds O. A. Odejide), UNDCP, Lagos.

5. Akerele, A. O. (1993) Supply of Alcohol: a major determinant of alcohol consumption and abuse. In: Obot I.S. (Ed) Epidemiology and Control of Substance Abuse in Nigeria. Jos: Centre for Research and Information on Substance Abuse (CRISA), pp. 45-51.

6. Allen S, Tice J, Van de Perre P, Serufilira A, Hudes E, Nsengumuremyi F, Bogaerts J, Kindan C, Hulley S. (1992) Effect of serotesting with counselling on condom use and seroconversion among HIV discordant couples in Africa. British Journal of Medicine. 304: 1605-1609.

7. Asuni, T (1964) Socio-psychiatric problems of cannabis in Nigeria. *Bulletin on Narcotics* 16 (2): 17-28.

8. Bassett MT, McFarland WC, Ray S, Mbizvo MT, Machekano R, van de Wijgert JH, Katzensstein DA. (1996) Risk factors for HIV infection at enrollment in an urban male factory cohort in Harare, Zimbabwe. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 13: 287-293.

9. Burcham J, Tindall B, Marmor M, Cooper D, Berry G, Penny R. (1989) Incidence and risk factors for Human Immunodeficiency Virus seroconversion in a cohort of Sydney homosexual men. Medical Journal of Australia 150: 634-639.

10. Chesney M, Barrett D, Stall R. (1998) Histories of substance use and risk behaviour: precursors to seroconversion in homosexual men. American Journal of Public Health 88: 113-116

11. Ebie, J.C. (1990) Use of different alcoholic beverages in two urban areas in Nigeria. In: Maula J, Lindblad M, Tigerstedt C, Green-Rutanen L. (Eds) Alcohol in Developing Countries. Proceedings from a meting in Oslo, Norway, August 7-

9, 1988. Helsinki, Finland: Nordic Council for Alcohol and Drug Research, pp. 168-184.

12. Ekpo, M., Adelekan, M.L., Inem, V., Agomoh, S., Agbo, S. and Doherty, A. (1995) Lagos "Area Boys and Girls" in rehabilitation: their substance use and psychosocial profiles. *East African Medical Journal* 72(5): 311-316.

13. Federal Ministry of Health (2001) 2001 HIV/Syphillis Sentinel Sero-Prevalence in Nigeria (Technical Report). National AIDS/STD Control Programme, Federal Ministry of Health, Abuja, Nigeria.
14. Falase, A.O. (1979) Heart muscle disease among adult Nigerians: role of nutritional factors in aetiology. European Journal of Cardiology, 10; 197-204.

15. Falase, A.O. (1980) Heart muscle disease in adult Nigerians. Nigerian Medical Journal, 10; 89-97.

16. Federal Ministry of Health (1999) 1999 HIV/Syphillis Sentinel Sero-Prevalence in Nigeria (Technical Report). National AIDS/STD Control Programme, Federal Ministry of Health, Abuja, Nigeria.

17. Gureje, O. (1999) Country profile on alcohol in Nigeria. In: Leanne R and Marshal M (Eds.) Alcohol and public health in 8 developing countries. World Health Organisation pp. 94-113.

18. International council for alcoholism and addiction (ICAA). Report of a Research on Substance abuse in some urban areas of Nigeria Lausanne: ICAA.

19. Isichei, H.U., Ikwuagu, P.U., Egbuta, J.O. (1993) Pattern of alcoholism in Jos Nigeria and Castrop-Rauxel, West Germany: A comparative study. In: Obot IS (Ed.) Epidemiology and control of substance abuse in Nigeria. Jos: Centre for Research and Information on Substance abuse (CRISA), pp. 123-127.

20. Messersmith LJ, Kane TT, Odebiyi AI, Adewuyi AA; (2000) Stud Fam Plann Sep;31(3):203-16

21. Mnyika KS, Klepp KI, Kvale G, Ole-King'ori N. (1996) Risk factors for HIV-1 infection among women in the Arusha region of Tanzania. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 11: 484-491.

22. Mnyika KS, Klepp K, Kvale G, Ole-King'ori N. (1997) Determinants of high-risk sexual behaviour and condom use among adults in the Arusha region, Tanzania, International Journal of STD and AIDS 8: 176-183.

23. Ndinya-Achola JO, Ghee AE, Kihara AN, Krone MR, Plummer FA, Fisher LD, Holmes KK. (1997) High HIV prevalence, low condom use and gender

differences in sexual behaviour among patients with STD –related complaints at a Nairobi Primary health care clinic. International Journal of STD and AIDS. 8: 506-514.

24. NDLEA (1999) Report of the Rapid Situation Assessment of Drug Abuse in Nigeria, National Drug Law Enforcement Agency, Lagos.

25. Obembe, A. (1988) Alcoholism: a ten year hospital survey. Nigerian Medical Practitioner, 16: 181-182.

26. Obot I. S. (1999) Licit and illicit drugs. Malthhouse Press Limited. Pp. 39-56.

27. Odejide, O.A. (1978) Alcoholism: a major health hazard in Nigeria? Nigerian Medical Journal, 8: 230-323.

28. Odejide, A.O (1982) Pattern of psychotropic drug use: A survey of civil servants in Ibadan, Nigeria. Report of the working group on the use of and abuse of psychotropic substances in developing countries. Tangiers, Morocco: ICAA Publication

29. Ohaeri, J. U. and Odejide, A. O (1991) Admissions for drug and alcohol-related problems in Nigerian psychiatric care facilities in one year. *Drug and Alcohol Dependence* (31): 101-109.

30. Oshodin O.G. (1981b) alcohol abuse among high school students in Benin City, Nigeria. Drug and Alcohol Dependence 7: 141-145.

31. Ostrow D, DiFranceisco W, Chmiel J, Wagstaff D, Wesch J. (1995) A case control study of human immunodeficiency virus type 1 seroconversion and risk-related behaviours in the Chicago MACS/CCS cohort, 1984 –1992. American Journal of Epidemiology 142:8754-883.

32. Page-Shafer K, Veugelers P, Moss A, Strathdee S, Kaldor J, van Griensven G. (1997) Sexual risk behaviour and risk factors for HIV –1 seroconversion in homosexual men participating in the tricontinental seroconverter study, 1982-1994. American Journal of Epidemiology 146: 531-542.

33. Pela, O.A. (1986) drug abuse as a correlate of child abuse and neglect. In Ebigbo, G.I., Izuora, et al, (eds.), Child Labour in Africa. Proceedeings of the first international workshop on child abuse in Africa. Pp.204-207.

34. Penkower L. Dew M, Kingsley L, Becker, J, Satz P, Schaert F, Sheridan K. (1991) Behavioural health and psychological factors and risk for HIV infection among sexually active homosexual men: the Multicenter AIDS Cohort Study. American Journal of Public Health 81: 194-196.

35. Post Express (2002) Young Men, Beer and sex. Healthy living. March 6, pp14

36. Silverstre A, Lyter D, Valdiserri R, Huggins J, Rinaldo C. (1989) Factors related to serconversion among homo-and bisexual men after attending a risk-reduction educational session. AIDS. 3:647-650.

37. Somse P, Chapko MK, Hawkins RV. (1993) Multiple sexual partners: results of a national HIV/AIDS survey in the Central African Republic. AIDS. 7: 579-583.

38. Umuna I (1967) The drinking culture of a Nigerian community: Onitsha. Quarterly Journal of Studies on Alcohol, 28: 529-537.

39. World Health Organization (1999) The WHO Drug Injecting Phase II Questionnaire, Version II, Geneva, WHO.

Table 1: Socio-demographic characteristics

	High Density Area				**Low Density Area**				**STD**	
1. Ethnic Group	Beer (N = 106) n	%	PWD (N= 23) n	%	CSW (N = 28) n	%	Beer (N = 107) n	%	CSW (N=33) n	%	STD (N = 53) n	%
Yoruba	69	65.1	21	91.3	5	17.9	39	36.4	3	9.1	26	49.1
Igbo	18	16.9	1	4.3	7	25.0	22	20.6	19	57.6	11	20.8
Edo	10	9.4	-	-	9	32.1	13	12.1	8	24.2	8	15.1
Hausa	2	1.9	-	-	-	-	6	5.6	-	-	4	7.5
2. Mean age	36.9		45.4		26.6		32.7		24.7		30.5	
Range	22 – 60		26 – 80		18.41		20 – 59		19 – 33		17 – 50	
SD	7. 710		15.045		7.051		7.205		3.403		7.732	
3.Where they live	Beer (N = 104) n	%	PWD (N= 24) n	%	CSW (N = 27) n	%	Beer (N = 108) n	%	CSW (N=32) n	%	(N = 52) n	%
Apartments	64	61.5	22	91.6	27	25.9	105	96.1	10	31.3	51	97.7
Rented Rooms	36	34.6	1	4.2	18	66.6	3	2.7	21	65.6	-	-
Others	4	3.8	1	4.2	2	7.4	-	-	1	3.1	1	1.9
4. Highest level of Education	Beer (N = 106) n	%	PWD (N= 22) n	%	CSW (N = 29) n	%	Beer (N = 109) n	%	CSW (N=32) n	%	STD (N=53} n	%
Not more than Secondary completed	48	45.2	12	54.5	28	96.4	16	14.6	24	74.9	34	64.2
More than Secondary	54	50.8	10	45.5	1	3.4	93	85.2	8	25.1	19	35.6
5. Marital status	Beer (N =106) n	%	PWD (N= 24) n	%	CSW (N = 29) n	%	Beer (N = 109) n	%	CSW (N=33) n	%	STD (N=53) n	%
Married	79	78.1	19	79.2	3	10.3	42	38.5	1	3.0	11	20.8
Not married	27	25.5	5	20.8	26	89.7	67	61.5	32	97.0	42	79.2
6. Religion	Beer (N =106) n	%	PWD (N= 24) n	%	CSW (N = 29) n	%	Beer (N = 109) n	%	CSW (N=33) n	%	STD (N=53) n	%
Christian	84	80.0	8	33.3	26	89.7	94	86.2	32	97.0	38	71.7
Islam	19	18.1	16	66.7	2	6.9	15	13.8	1	3.0	14	26.4
Others	2	1.9	-	-	1	3.4	-	-	-	-	1	1.9

Table 2: Social Class of Subjects

International Standard Classification of Occupations (ISCO-88)

	High Density Area				**Low Density Area**		**CSW**				**STD**	
	Beer (N =105)		PWD (N = 24)		Beer (N = 107)		HDA (N=26)		LDA (N = 33)		(N=50)	
	n	%	n	%	n	%	n	%	n	%	n	%
1.Legislators, Senior officials and Managers	3	2.9	-	-	6	5.6	-	-	-	-	-	-
2. Professsionals	39	37.1	3	14.3	68	63.6	-	-	-	-	4	8
3. Technicians and Associate Professionals.	3	2.9	1	4.8	13	12.1	-	-	-	-	4	8
4. Clerks	7	6.7	-	-	1	0.9	2	7.7	-	-	1	2
5. Service workers and Shop market sales workers	7	6.7	2	9.5	5	4.7	-	-	1	3	7	14
6. Skilled Agriculture and Fishery worker	2	1.9	-	-	-	-	-	-	-	-	1	2
7. Crafts and Related Trades worker	9	8.6	1	4.8	3	2.8	1	3.8	3	9.1	4	8
8. Plant and machine operators and Assemblers	-		-	-	1	0.9	-	-	-	-	-	-
9. Elementary Occupation	-		-	-	3	2.8	-	-	-	-	2	4
10. Armed Forces	4	3.8	-	-	2	1.9	-	-	-	-	1	2
11. Workers not classifiable by occupation	31	29.5	14	66.7	5	4.7	23	88.5	29	87.9	26	52

Table 3: Vocations of Subjects

Vocation	**High Density Area**						**Low Density Area**				**STD**	
	Beer (N = 78)		PWD (N= 15)		CSW (N = 23)		Beer (N = 63)		CSW (N=24)		STD (N=39)	
	n	%	n	%	n	%	n	%	n	%	n	%
Tailor	6	7.7	-	-	6	26.1	-	-	3	12.5	4	10.3
Motor Mechanic	6	7.7	1	6.7	-	-	3	4.8	-	-	2	5.1
Carpentry	3	3.8	3	20.0	-	-	2	3.2	-	-	3	7.7
Electrician	5	6.4	-	-	-	-	2	3.2	-	-	2	5.1
Driving	3	3.8	2	13.3	-	-	10	15.9	-	-	2	5.1
Barbing/Hairdressing	-	-	-	-	7	30.4	-	-	11	45.8	3	7.7
Others	55	70.5	9	60.0	10	43.5	46	73.0	10	41.7	23	59.0

Table 4: Source of Income

Source of income	Higher Density Area						Low Density Area				STD	
	Beer (N=106)		PWD (N=24)		CSW (N =29)		Beer (N=109)		CSW (N=32)		STD (N=49)	
	n	%	n	%	n	%	n	%	n	%	n	%
Regular work	55	51.9	8	33.3	-	-	63	57.8	-	-	14	28.6
Temporary	4	3.8	1	4.2	1	3.4	3	2.7	-	-	4	8.2
Self employed	40	37.7	11	45.8	1	3.4	27	24.8	4	12.5	17	34.7
Sex for money	-	-	-	-	26	89.7	-	-	27	84.4	-	-
Others	7	6.6	4	16.7	1	3.4	16	14.5	1	3.1	14	28.5

Table 5: Cannabis Use by Subjects

Cannabis use	High Density Area				Low Density Area		CSW				STD	
	Beer (N = 99)		PWD (N = 23)		Beer (N = 99)		HDA (N = 24)		LDA (N =25)		STD (N=47)	
	n	%	n	%	n	%	n	%	n	%	n	%
No	89	89.9	22	95.7	80	80.8	23	95.8	25	100.0	44	93.6
Yes	9	9.1	1	4.3	19	19.2	1	4.2	-	-	3	6.4

Table 6: Why Subjects started using Alcohol

	High Density Area				Low Density Area		CSW				STD	
	Beer (N =104)		PWD (N=23)		Beer (N = 107)		HDA (N =13)		LDA (N = 17)		STD (N=43)	
	n	%	n	%	n	%	n	%	n	%	n	%
Family	6	5.7	5	21.7	16	14.9	1	7.7	-	-	6	14.0
Friends/Peers	32	30.8	8	34.7	49	45.8	7	53.9	3	17.7	16	37.2
Experiment	52	50.0	5	21.7	29	27.1	5	38.5	11	64.7	16	37.2
Others	14	13.5	5	21.7	13	12.1	-	-	3	17.6	5	11.6

Table 7: Mean Age that Subjects Commenced Alcohol Use in Years

	High Density Area		Low Density Area	CSW		STD
	Beer	PWD	Beer	HDA	LDA	STD
Mean Age	20.03	22.9	17.1	21.6	21	18
sd	6.45	7.65	4.9	4.98	4.44	3.4
Range	10.00 – 43.00	10.00 – 40.00	10.00 – 45.00	0.00 – 33.00	0.00 – 30.00	0.00 25.00

Table 8: Where Users Drink Most Frequently

	High Density Area				Low Density Area		CSW				STD	
	Beer (N = 100)		PWD (N = 24)		Beer (N = 107)		H DA (N =11)		LDA (N = 17)		N=31	
	n	%	n	%	n	%	n	%	n	%	n	%
Beer Parlour/Bars	56	56.0	7	29.1	92	85.9	4	36.4	8	47.1	5	16.1
Club House	3	3.0	3	12.5	11	10.3	-	-	5	29.4	3	9.7
Hotel	28	28.0	2	8.3	-	-	5	45.5	2	11.8	1	3.2
Home	4	4.0	1	4.2	2	1.9	2	18.2	2	11.8	11	35.5
Social gathering	6	6.0	-	-	1	0.9	-	-	-	-	4	12.9
Others	3	3.0	11	45.8	1	0.9	-	-	-	-	7	22.6

Table 9: Drinking Category of Subjects

	High Density Area				Low Density Area		CSW				STD	
	Beer (n = 100)		PWD (n = 22)		Beer (n =103)		HDA(n = 11)		LD A (n =16)		(n = 20)	
	n	%	N	%	n	%	n	%	n	%	n	%
Heavy	48	48.0	12	54.5	49	47.6	8	72.7	14	87.5	14	70.0
Light	1	1.0	-	-	1	0.9	3	27.3	2	12.5	1	5.0
Medium	52	52.0	10	45.5	53	51.5	-	-	-	-	5	25.0

Table 10: Why subjects Drink Alcohol

	High Density Area		Low Density Area	CSW		STD
	Beer	PWD	Beer	HD A	LD A	
	n %	n %	n %	n %	n %	n %
To feel happy	41 40.2	13 56.5	19 17.9	4 30.8	8 47.1	8 20.5
To be bold	2 2.0	- -	2 1.9	- -	1 5.9	- -
To have courage	5 4.9	- -	- -	2 15.4	1 5.9	3 7.7
To forget my Problems	5 4.9	1 4.3	4 3.8	3 23.1	2 11.8	3 7.7
To be my normal self	16 15.7	1 4.3	16 15.1	1 7.7	1 5.9	- -
To increase sex endurance	1 1.0	- -	1 0.9	- -	- -	1 2.6
To increase appetite	1 1.0	1 4.3	1 0.9	1 7.7	1 5.9	3 7.7
To induce sleep	7 6.9	- -	9 8.5	1 7.7	1 5.9	1 2.6
Others	24 23.5	7 30.4	54 50.9	1 7.7	2 11.8	17 43.6

Table 11: Sexual intercourse of Subjects with opposite sex in the last 3 months

	High Density Area		Low Density Area	CSW		STD
	Beer N= 104	PWD N=20	Beer N=107	HDA N=26	LDA N=31	N=52
	n %	n %	n %	n %	n %	n %
Less than once a week	39 37.5	11 55.0	45 42.0	3 11.5	2 6.2	34 65.4
1 – 6 times a week	61 58.7	9 45.0	57 53.3	5 29.2	17 54.8	13 24.9
Once a day or more	3 2.9	- -	5 4.7	18 69.2	12 38.8	5 9.6

Table 12: Sex with Primary and Casual Opposite Sex Partners by Subjects

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
Primary Partners												
Frequency												
Nil	6	6.1	2	10.0	8	7.5	1	3.8	-		14	26.9
Less than once a week	36	36.8	9	45.0	37	34.6	2	7.7	2	6.4	20	38.5
1 – 6 times a week	54	55.1	9	45.0	57	53.2	5	19.2	17	54.8	13	24.9
Once a day or more	2	2			5	4.7	18	69.2	12	38.8	5	9.6
Number of Partners												
Nil	6	6.3	2	10.0	3	3.2	2	16.7	2	10.5	11	25.0
1	72	75.0	14	70.0	70	74.5	8	66.7	14	73.7	29	65.9
> 1	18	18.7	4	20.0	21	22.4	2	16.6	3	15.9	4	9.1
Usual Place of Sex												
My Apartment	80	87.0	15	83.3	87	91.6	1	9.1	5	31.2	29	72.5
Partners Apartment	2	2.2	-	-	4	4.2	6	54.5	6	37.5	8	20.0
Hotel room	7	7.6	3	16.7	2	2.1	2	18.2	5	31.2	1	2.5
Guest house	2	2.2	-	-	1	1.1	2	18.2	-	-	-	-
Bar	1	1.1	-	-	1	1.1	-	-	-	-	-	-
Beer parlour			-	-	-	-	-	-	-	-	2	5.0
Casual Partners												
Frequency												
Nil	22	40.7	1	9.1	22	27.8	1	4.3	6	24.0	33	73.3
less than once a month	16	29.6	2	18.2	17	21.5	1	4.3	-	-	7	15.6
1 – 6 times a week	15	27.8	7	63.7	38	48.1	7	30.4	10	40.0	5	11.1
Once a day or more	1	1.9	1	9.1	2	2.5	14	60.8	9	36.0	-	-
Number of Partners												
Nil	13	34.2	1	11.1	9	12.9	-	-	4	22.2	24	63.2
1	11	28.9	4	44.4	17	24.3	1	5.6	3	16.7	7	18.4
> 1	14	36.9	4	44.4	44	62.7	17	94.7	11	61.1	7	18.4
Usual Place of Sex									2	10.5	10	55.6
My Apartment	5	13.9	3	37.5	30	46.9	2	8.7	2	10.5	1	5.6
Partners Apartment	2	5.6	1	12.5	6	9.4	1	4.3	14	73.7	1	5.6
Hotel room	26	72.2	3	37.5	14	21.9	19	82.6	1	5.3	6	33.4
Guest house	3	8.3	1	12.5	10	15.6	1	4.0	-	-	-	-
Bar	-	-	-	-	-	-	-	-	-	-	-	-
Beer parlour	-	-	-	-	4	6.2	-	-				

Table 13: Alcohol use by subjects at Sex with Primary Partners

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
Before Sex												
Never	44	47	11	57.9	26	27.1	6	54.5	8	61.5	43	86.0
Occasionally	28	29.1	7	36.8	42	43.7	5	45.5	5	38.5	6	12.0
Mostly/Always	21	22.6	1	5.3	28	29.2	-	-	-	-	1	2.0
During Sex												
Never	80	86.0	18	100.0	76	80.9	8	80.0	15	100	47	95.9
Occasionally	12	12.1	-	-	12	12.8	2	20.0	-	-	2	4.1
Mostly/Always	1	1.1	-	-	6	6.4	-	-	-	-	-	-
After Sex												
Never	62	66.7	17	94.4	51	54.8	8	72.7	13	86.7	48	96.0
Occasionally	27	29.1	1	5.6	26	27.9	3	27.3	2	13.3	1	2.0
Mostly/Always	4	4.3	-	-	11	17.2	-	-	-	-	1	2.0

Table 13A: ALCOHOL USE Before SEX WITH PRIMARY PARTNERS

```
              |NO      YES  Total
-----------+----------------+-----
 HD BEER   |     44      49 |    93

 LD BEER   |     26      70 |    96

-----------+----------------+-----
 Total |     70     119 |   189

                  Chi-Squares   P-values

  Uncorrected:         8.29     0.00398876
  Mantel-Haenszel:     8.25     0.00408629
  Yates corrected:     7.44     0.00636422
```

Table 14: Alcohol use by subjects at Sex with Casual Partners

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	N	%	n	%	n	%	n	%
Before Sex												
Never	9	24.3	3	37.5	13	20.6	8	40.0	9	42.9	36	92.5
Occasionally	14	37.8	5	62.5	23	36.4	7	35.0	9	42.9	3	7.5
Mostly/Always	14	37.8			27	42.8	5	25.0	3	14.3	-	-
During Sex												
Never	26	72.2	8	100	42	66.7	18	85.7	18	85.7	40	97.6
Occasionally	6	16.7	-	-	11	17.5	3	14.3	3	14.3	1	2.4
Mostly/Always	4	11.2	-	-	10	15.9	-	-	-	-	-	-
After Sex												
Never	14	38.9	7	87.5	21	33.9	14	66.7	17	81.0	41	100
Occasionally	18	50.0	1	12.5	22	35.4	6	28.5	2	9.5	-	-
Mostly/Always	4	11.2	-	-	19	30.6	1	4.7	2	9.5	-	-

Table 14A: ALCOHOL USE AFTER SEX WITH CASUAL PARTNER

```
           |NO       YES | Total
-----------+---------------+-----
     HD BEER   |      14       22 |    36
           |
     HD PWD    |       7        1 |     8
-----------+---------------+-----
     Total |      21       23 |    44


            Chi-Squares   P-values

 Uncorrected:         6.20     0.01277736
 Mantel-Haenszel:     6.06     0.01383735
 Yates corrected:     4.40     0.03584840
```

Table 15: Alcohol use by Primary Partners

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
Use of alcohol Ever used												
Nil	62	81.6	10	76.9	49	60.5	4	36.4	5	33.3	32	66.7
Once or more/day	14	18.4	3	23.1	32	39.5	6	63.7	10	66.7	16	33.3
Use in lat 3 mths												
Nil	60	81.1	9	69.2	47	60.3	4	36.4	6	42.9	33	70.2
Once or more/day	14	18.9	4	30.8	31	39.7	7	63.7	8	57.1	14	29.7
Frequency of use												
Nil	74	82.2	15	75.0	62	66.0	4	36.4	5	38.5	38	76.0
< Once a week	11	12.2	5	25.0	18	19.2	-	-	4	30.8	4	8.0
1–6 times a week	5	5.5	-	-	10	10.7	5	45.5	3	23.1	4	8.0
Once or more/day	-	-	-	-	3	3.2	2	18.2	1	7.7	4	8.0
Before Sex												
Never	82	88.2	18	100.0	75	78.9	4	36.4	6	40.0	45	90.0
Occasionally	6	7.3	-	-	13	13.7	6	54.5	8	53.3	2	4.0
Mostly/Always	4	4.8	-	-	7	7.5	1	9.1	1	6.7	3	6.0
During Sex												
Never	91	97.8	18	100.0	85	89.5	7	70.0	14	93.3	49	98
Occasionally	2	2.2	-	-	6	6.4	3	30.0	1	6.7	1	2
Mostly/Always	-	-	-	-	4	4.2	-	-	-	-	-	-
After Sex												
Never	92	97.9	17	94.4	51	54.8	8	72.7	13	86.7	48	96
Occasionally	2	2.1	1	5.6	26	27.9	3	27.3	2	13.3	2	4
Mostly/Always	-	-	-	--	16	17.2	-	-	-	-	-	-

Table 16: Alcohol use by Casual Partners

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
Ever used Alcohol												
Nil	10	38.5			15	30.0	1	6.7	1	6.7	25	80.6
Yes	16	62.5	3	100.0	35	70.0	14	93.3	14	93.3	6	19.4
Frequency of use												
Less than once a week	21	70.0	6	75.0	36	61.1	1	7.7	2	22.2	32	86.5
1 – 6 times a week	3	10.0	2	25.0	16	27.1	6	46.2	5	55.5	2	5.4
Once a day or more	6	20.0	-	-	7	11.9	6	46.2	2	22.2	5	13.5
Before Sex												
Never	16	44.4	6	75.0	25	39.7	8	36.4	4	20.0	38	92.7
Occasionally	10	27.8	2	25.0	22	34.9	1	4.5	12	60.0	2	4.8
Mostly/Always	8	22.2	-	-	16	25.1	13	59.1	4	20.0	1	2.4
During Sex												
Never	31	86.1	8	100.0	44	69.8	9	40.7	16	76.2	41	100
Occasionally	2	5.6	-	-	9	14.3	5	22.7	3	14.3	-	-
Mostly/Always	1	2.8	-	-	10	15.9	8	36.3	2	9.5	-	-
After Sex												
Never	22	61.1	7	87.5	29	46.0	1	13.6	8	38.1	39	95.1
Occasionally	7	19.4	1	12.5	19	30.2	8	36.3	10	47.6	1	2.4
Mostly/Always	5	13.9	-	-	15	23.8	11	50.0	3	14.3	1	2.4

Table 17: Role of Alcohol on Sex and condom use by Subjects with Primary Partners

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
Desire/Performance of Sex												
No role	60	66.7	11	61.1	41	43.2	5	50.0	7	77.8	40	87.0
Some role	24	26.7	6	33.3	41	43.2	4	40.0	1	11.1	4	8.7
Major role	6	6.7	1	5.6	13	13.6	1	10.0	1	11.1	2	4.3
Desire for Sex												
No role	45	59.2	11	64.7	32	36.4	3	37.5	1	25.0	30	85.7
Reduced desire for sex	5	6.6	-	-	2	2.3	-	-	-	-	-	-
Increased desire for sex	25	32.9	6	35.3	54	61.3	5	62.5	3	75.0	5	14.3
Performance of Sex												
No role	54	67.5	8	47.1	34	40.0	3	37.5	1	25.0	31	83.8
Reduced sexual perfor.	6	7.5	-	-	10	11.8	1	12.5	-	-	-	-
Increased my sexual perfor.	19	23.8	9	52.9	41	48.3	4	50.0	3	75.0	3	16.2
Use of Condoms												
No role	66	81.5	12	85.7	66	71.0	7	70.0	6	85.7	47	94.0
Careless	10	12.4	1	7.1	13	14	1	10.0	-	-	2	4.0
More careful	5	6.2	1	7.1	14	15.1	2	20.0	1	14.3	1	2.0

Table 17A: ROLE OF ALCOHOL ON SEX WITH PRIMARY PARTNER

	NO	YES	Total
HD BEER 1	45	30	75
LD BEER 2	32	55	87
Total	77	85	162

	Chi-Squares	P-values
Yates corrected:	7.80	0.00522314

Table 18: Role of Alcohol on Sex and Condom use by Subjects with Casual Partners

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
Desire/Performance of Sex												
No role	15	41.7	5	62.5	20	31.7	10	45.5	13	68.4	34	91.9
Some role	13	36.1	3	37.5	28	44.4	10	45.5	5	26.3	3	8.1
Major role	7	19.4			15	23.8	2	9.1	1	5.3	-	-
Desire for Sex												
No role	12	38.7	4	50.0	14	25.5	14	70.0	7	50.0	25	92.6
Reduced desire for sex	1	3.2	1	12.5	2	3.6	3	15.0	1	7.1	2	7.4
Increased desire for sex	18	58.1	3	37.5	39	70.9	3	15.0	6	42.9	-	-
Performance of Sex												
No role	13	41.9	3	37.5	20	35.7	14	73.7	7	50.0	24	88.9
Reduced sexual perfor.	2	6.5	-	-	7	12.5	2	10.5	1	7.1	-	-
Increased my sexual perfor.	16	51.6	5	62.5	29	51.8	3	15.8	6	42.9	3	11.1
Use of Condoms												
No role	24	70.6	7	100	39	63.9	19	90.5	18	94.7	38	97.5
Careless	5	14.7	-	-	9	14.8	1	4.8	-	-	-	-
Careful	5	14.7	-	-	13	21.3	1	4.8	1	5.3	1	2.6

Table 19: Use of condoms by Subjects and Partners 3 months before interview

	High Density Area				Low Density Area		CSW				**STD**	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
Subject with Primary Partners												
Never	44	52.4	11	68.8	29	31.2	4	30.8	7	53.8	30	62.5
Occasionally	17	20.2	3	18.8	21	22.6	5	38.5	1	7.7	10	20.9
Mostly/Always	23	27.4	2	12.6	43	46.2	4	30.8	5	38.5	8	16.7
Subject with Casual Partners												
Never	11	32.4	3	42.9	5	8.2	1	4.5	6	30.0	29	72.5
Occasionally	4	11.8	2	28.6	6	9.8	4	18.2	1	5.0	5	12.5
Mostly/Always	19	55.8	2	28.6	50	82	17	77.2	13	65.0	6	15
Primary Partners with subject												
Never	74	93.7	13	100.0	78	88.6	3	23.1	2	14.3	44	86.3
Occasionally	4	5.1	-	-	4	4.5	5	38.5	4	28.6	6	11.8
Mostly/Always	1	1.3	-	-	6	6.8	5	38.5	8	57.1	1	2.0
Casual Partners with Subject												
Never	20	69.0	7	100.0	47	87.0	-	-	-	-	34	87.2
Occasionally	2	6.9	-	-	2	3.7	1	4.5	2	10.0	4	10.3
Mostly/Always	7	24.1	-	-	5	9.4	21	95.4	18	90.0	1	2.6

Table 20: Method of Contraception used by Subjects with Primary Partners

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
None	23	29.1	2	25.0	6	7.5	-	-	2	11.8	11	35.5
Condoms	36	45.6	5	62.5	43	53.8	6	50.0	9	52.9	13	41.9
Female Condoms	2	2.5	-	-	2	2.5	-	-	2	11.8	1	3.2
Oral contraceptives	14	17.7	1	12.5	15	18.8	3	25.3	1	5.9	5	16.1
Intramuscular contraceptive	1	1.3	-	-	3	3.8	-	-	2	11.8	-	-
Intrauterine device	1	1.3	-	-	4	5.0	1	8.3	1	5.9	-	-
Diaphragm/cap	-	-	-	-	1	1.3	-	-	-	-	1	3.2
Sponge or spermicide	1	1.3	-	-	5	6.3	-	-	-	-	-	-
Rhythm method of Setrilization	1	1.3	-	-	1	1.3	-	-	-	-	-	-

Table 21: Commercial Sex work by Subjects last 3months

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	N	%	n	%	n	%	n	%
Receiving Money/goods for sex												
Nil	21	84.0	3	60.0	52	89.7	1	4.5	2	6.9	38	92.7
Yes	4	12.0	2	40.0	6	10.3	21	95.5	27	93.1	3	7.3
Giving money/Goods for sex												
No	18	42.9	6	60.0	28	68.3	27	100.0	30	100.0	38	95.0
Yes	24	57.1	4	40.0	13	31.7	-	-	-	-	2	5.0
Receiving Alcohol for sex												
No	20	95.2	5	83.3	53	94.6	27	96.4	29	90.6	41	100.0
Yes	1	4.8	1	16.7	3	5.4	1	3.6	3	9.3	-	-
Giving Alcohol for sex												
No	36	83.7	10	100.0	30	75.0	25	100.0	29	100.0	40	100.0
Yes	7	16.3	-	-	10	25.0	-	-	-	-	-	-
Receiving other drugs for sex												
Nil	19	90.5	6	100.0	48	96.0	28	100.0	31	96.9	41	100.0
Yes	2	9.6	-	-	2	4.0			1	3.1		
Mean number of clients/month												
Mean	1.3		1.3		1.5		11.3		16.1		0.7	
sd	1.5		1.3		1.9		8.9		6.6		1.8	
Range	0 - 5		0 - 3		0 - 6		0 - 30		7 - 24		0 - 9	
Freq. of condom use when money/alcohol is received for sex												
Never	11	30.6	4	44.4	10	34.5	1	6.7	8	50.0	29	74.4
Occasionally	24	11.1	3	33.3	3	10.3	-	-	-	-	5	12.8
Mostly/Always	21	58.3	2	22.2	16	55.1	14	93.3	8	50.0	5	12.8
Role of money/alcohol in use of condoms												
No role	24	88.9	9	100.0	25	83.3	19	73.1	18	69.2	35	94.6
Facilitated non use	2	7.4	-	-	3	10.0	-	-	1	3.8	-	-
Facilitated use	1	3.7	-	-	2	6.7	7	26.9	7	26.9	2	5.4

Table 22: Sexual Practices by Subjects

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Alcohol		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
Oral sex with clients												
Nil	15	88.2	-	-	19	67.9	22	91.7	24	85.7	23	88.5
Yes	2	11.8	-	-	9	32.2	2	8.4	4	14.3	2	11.5
Male on Male Sex	70	98.6	-	-	69	100.0	24	100	15	100	33	91.7
Nil	1	1.4	-	-	-	-	-	-	-	-	3	8.3
Yes												
Female on Female Sex	-	-	11	100.0	-	-	11	100.0	14	93.3	14	70.0
Nil	-	-			-	-	-	-	1	6.7	6	30.0
Yes												

Table 23: HIV/AIDS Knowledge and Behaviour of Subjects

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
Ever Heard of HIV/AIDS												
No	2	1.9	-	-	1	0.9	2	7.1	-	-	-	-
Yes	103	98.1	23	100.0	105	99.1	26	92.9	33	100.0	53	100.0
Frequency of talking about HIV/AIDS with Sex Partners												
Not at all/Rarely	64	60.9	27	53.0	52	49.5	10	27.0	14	42.5	27	53.0
Frequently	40	38.1	23	45.1	52	49.5	17	63.0	19	57.6	23	45.1
No sex Partner	1	1.0	1	2.0	1	1.0	-	-	-	-	1	2.0
Frequency of talking about HIV/AIDS with alcohol using friends												
Not at all/ rarely	68	64.8	9	39.1	42	39.6	8	33.3	13	41.9	30	58.9
Frequently	36	34.3	12	52.2	63	59.4	15	62.5	17	54.8	12	23.5
No sex Partner	1	1.0	2	8.7	1	0.9	1	3.2	1	3.2	9	17.6
Frequency of talking about HIV/AIDS with Family Members												
Not at all/rarely	67	65.1	21	90.3	66	62.8	14	60.9	26	81.3	48	71.7
Frequently	34	33.0	2	8.7	39	37.1	6	26.1	6	18.8	15	28.3
No sex Partner	2	1.9					3	13.0				
HIV infection and individual looking well												
No	52	54.2	9	64.3	15	14.9	17	70.8	20	66.7	14	29.2
Yes	44	45.8	5	35.7	86	85.1	7	29.2	10	33.3	34	70.8
What Subjects have done to prevent HIV infection												
Increased Condom Use	-	-	-	-	-	-	-	-	-	-	-	-
Safer Sex Practice	33	39.8	4	30.8	33	32.7	23	92.0	31	96.9	8	19.0
Made Sex Related Changes	29	34.9	4	30.8	48	47.6	-	-	1	3.1	18	42.9
Less Drug/alcohol Use	3	3.6	4	30.8	11	10.9	1	4.0	-	-	13	31.0
Other Drug Related Change	4	4.8	1	7.7	9	8.9	1	4.0	-	-	3	7.2

Table 24: HIV Test History of Subjects

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
Patients current Health												
Poor	18	17.6	4	17.4	38	36.5	6	20.7	6	18.2	6	13.0
Fair	73	71.6	19	82.6	59	56.7	20	69.0	24	72.7	18	39.1
Good/Excellent	11	10.8			7	6.8	3	10.3	3	9.1	22	17.4
Ever Had Pretest Counselling												
No	92	91.1	22	91.7	84	82.4	29	100.0	27	84.4	46	88.5
Yes	9	8.9	2	8.3	18	17.6	-	-	5	15.6	6	11.5
Ever Had Post test Counselling												
No	6	85.7	-	-	25	89.3	1	100.0	3	75.0	25	89.3
Yes	1	14.3			3	10.7	-	-	1	25.0	3	10.7
Ever Had HIV test												
No	80	77.7	23	100.0	57	53.8	21	77.8	20	60.6	40	75.5
Yes	23	22.3	-	-	49	46.2	6	22.2	13	39.4	13	24.5
Where Testing was done												
STD clinic	1	4.5	-	-	6	11.8	1	16.7	12	100.0	10	83.3
Hospital	18	81.8	-	-	41	80.4	5	83.3	-	-	2	16.7
Private doctor	2	9.0	-	-	4	7.8	-	-	-	-	-	-
							-	-	-	-	-	-
Has Subject Ever been told that He/She is HIV positive			-	-								
No	22	91.7	-	-	47	95.9	6	100.0	7	100.0	32	100.0
Yes	2	8.3			2	4.1	-	-	-	-	-	-

Table 25: Factors Affecting Sexual Behaviour Change By Subjects

	High Density Area				Low Density Area		CSW				STD	
	Beer		PWD		Beer		HDA		LDA			
	n	%	n	%	n	%	n	%	n	%	n	%
Factors that prevent reduction												
Continued alcohol use	9	16.4			8	8.4	1	5.9	2	7.4	4	11.1
Availability of Sex Partners	7	12.7			27	28.4	3	17.6	5	18.5	10	27.8
Refusal of Sex Partners to use condom	10	18.2	1	14.3	41	43.2	9	52.9	17	63.0	12	33.3
Does not believe in HIV infection and AIDS	1	1.8	1	14.3	3	3.2	-	-	1	3.7	2	5.6
Believe in sexual HIV transmission	1	1.8	5	71.4	-	-	-	-	-	-	3	8.5
Other	27	49.1	-	-	16	16.8	4	23.5	2	7.4	5	13.9
Factors inhibiting change in alcohol use												
Easy Availabilty	6	22.2	-	-	9	14.1	2	50.0	2	20.0	2	10.0
Fear of withdrawal symptoms	5	18.5	1	50.0	4	6.3	-	-	3	30.0	5	25.0
Sex Partners use it	2	7.4			5	7.8	-	-	1	10.0	-	-
Friends use it	4	14.8			27	42.2	2	50.0	2	20.0	7	35.0
I use it to cope with Psychological Problems	6	22.2			11	17.2	-	-	2	20.0	-	-
I crave for it	2	7.4	1	50.0	6	9.4	-	-	-	-	1	5.0
Lack of awareness of alcohol T&R facility	2	7.4	-	-	2	3.1	-	-	-	-	5	25.0
Factors that may enable change in alcohol use												
Life threatening accident after intoxication	8	13.1	-	-	6	6.6	-	-	-	-	2	7.1
Increase in cost of alcohol	2	3.3	-	-	2	2.2	-	-	-	-	2	7.1
Physical illness from alcohol	8	13.1	-	-	36	39.6	2	22.2	1	8.3	4	14.3
Knowledge of adverse health effects	-	-	-	-	-	-	-	-	-	-	-	-
Treatment for alcohol	17	27.9	4	44.4	33	36.3	4	44.4	7	58.3	16	57.1
Knowledge of sexual risk	6	9.8	-	-	2	2.2	-	-	1	8.3	1	3.6
Others	-	-	-	-	-	-	-	-	-	-	3	10.7
	20	32.8	5	55. 6	12	13.2	3	33.3	3	25.0	-	-

APPENDIX 1

LIST OF PARTICIPANTS

1.	Dr. R. A. Lawal	Principal investigator. Consultant Psychiatrist.
2.	Dr. A. O. Akinhanmi	Consultant Psychiatrist.
3.	Dr. Michael Ekpo	Consultant Psychiatrist.
4.	Dr. A. Y. A. Haruna	Consultant Psychiatrist
5.	Dr. O. A. Coker	Consultant Psychiatrist
6.	Dr. B. L. Bassey	Consultant Psychiatrist
7.	Dr. J. D. Adeyemi	Consultant Psychiatrist
8.	Dr. O. O. Ogunsemi	Residence in Psychiatry
9.	Dr. O. A. Owoeye	Residence in Psychiatry
10.	Dr. S. Enenebiaku	Residence in Psychiatry
11.	Dr. C. Esimai	Residence in Psychiatry
12.	Dr. M. A. Tijani	MD
13.	Dr. Kolade	MD
14.	Dr. Mojeed Bello	MD
15.	Dr. Sanni Gwarzo	NASCP, Federal Ministry of Health, Abuja
16.	Dr. Mukhtar Muhammed	NACA, Federal Ministry of Health, Abuja
17.	Mr. Adeyinka	Statistician
18.	Mr. G. O. Bello	Medical Health Records
19.	MR. G. Ita	Registered Psychiatric Nurse
20.	Mr. O. O. Olufolabo	Statistician
21.	Mr. Rotimi Odubitan	Data entry officer
22.	Mr. A. Luyiola	Pharmacy technician
23.	Mr. Taiwo	Field officer
24.	Mr. O. A. Talabi	Registered Psychiatric Nurse
25.	Mr. A. Adeniyi	Secretarial duties

APPENDIX 2

INFORMED CONSENTS FOR PARTICIPATION

BEFORE INTERVIEWING A SUBJECT, PLEASE OBTAIN THEIR INFORMED CONSENT TO PARTICIPATE IN THE STUDY. PLEASE EXPLAIN/DISCUSS THE NATURE AND PURPOSE OF THE STUDY AND CONFIDENTIALITY WITH THEM. IN CASE OF PARTICIPATION TWO COPIES ARE TO BE SIGNED BY THE RESEARCHER, ONE TO BE RETURNED TO THE RESEARCH-COORDINATOR, ONE TO BE HANDED OUT TO THE PARTICIPANT.

INFORMED CONSENT FORM: SURVEY - ALCOHOL USERS

Hello, my name is ..... I am from the Federal Psychiatric Hospital, Calabar and we are carrying out a study into alcohol and sexual behaviour. The reason for carrying out this study is to help us understand patterns of alcohol use and sexual behaviour. This information will be used to develop initiatives to prevent people from becoming infected with HIV and other sexually transmitted diseases.

We would like to ask you some questions concerning drinking patterns and sexual behaviour. We will be using a questionnaire containing these questions, and we will be writing down your answers.

We can assure you that all your answers will be in the strictest confidence. Any information presented will be grouped so that no one will know what you said. At any point, you can refuse to answer any question or indeed stop the whole interview.

During the interview, you may experience stress in answering some questions, and there is the possibility of discrimination if your answers are disclosed to unauthorized persons. If something like this happens, we would counsel you personally on how to minimise any problems that might arise, including questions on law procedures.

However, in order to avoid such a possibility, we do not want to know your name. Instead, we will ask you to choose whatever name you want and write on this form. We call this your “code name”.

The interview will take about 20 minutes of your time.

If you agree to participate, we would be happy to provide you with more information on HIV and other Sexually Transmitted Infections. We will also offer you free condoms.

For more information about the study, contact Dr.R.A. Lawal, of Psychiatric Hospital, Yaba, Lagos, Tel: 861743, 861 796. If you feel the need for help or just want someone to talk to, because you feel upset or anxious or troubled in your relations with your family or friends, you can call this number 7743174, ext. 151 at any time during the study and for a month later, a trained counsellor will be able to help you. You may also feel the need for further support. This is available from the following organisations:

i. Action Health Incorporated, Plot 54, Somorin Street, Off Ketu – Oworonsoki Express way, Ifako Bus Stop, Ifako – Gbagada, Lagos. Tel: 774 3745.
ii. Health Matters Incorporated, Block 1, suites 3 & 4 LSDPC Building, Esther Osiyemi Street, Near Police Station, Ilupeju, Lagos. Tel. 4931737
iii. Stop AIDS Organisation. 95, Suites A & B East Pavilion, Tafawa Balewa Square Complex, Lagos. Tel. 2635219

I agree to participate in the study.	I certify that, in my presence, the participant has been fully informed on the above and has been granted the opportunity to discuss any related questions.
Code Name of Participant	Representative of Research Team: Name and Signature
Date	Place

CONSENT TO PARTICIPATE IN THE STUDY. PLEASE EXPLAIN/DISCUSS THE NATURE AND PURPOSE OF THE STUDY AND CONFIDENTIALITY WITH THEM. IN CASE OF PARTICIPATION TWO COPIES ARE TO BE SIGNED BY THE RESEARCHER, ONE TO BE RETURNED TO THE RESEARCH-COORDINATOR, ONE TO BE HANDED OUT TO THE PARTICIPANT.

INFORMED CONSENT FORM: SURVEY - STD CLINIC ATTENDEES

Hello, my name is ..... I am from the Federal Psychiatric Hospital, Calabar and we are carrying out a study into alcohol (and other substances) and sexual behaviour. The reason for carrying out this study is to help us understand patterns of alcohol use and sexual behaviour. This information will be used to develop initiatives to prevent people from becoming infected with HIV and other sexually transmitted diseases.

We would like to ask you some questions concerning drinking patterns, sexual behaviour and infection with sexually transmitted diseases. We will be using a questionnaire containing these questions, and we will be writing down your answers. Your participation or otherwise in this study will not affect your treatment in any way.

We can assure you that all your answers will be in the strictest confidence. Any information presented will be grouped so that no one will know what you said. At any point, you can refuse to answer any question or indeed stop the whole interview.

During the interview, you may experience stress in answering some questions, and there is the possibility of discrimination if your answers are disclosed to unauthorized persons. If something like this happens, we would counsel you personally on how to minimise any problems that might arise, including questions on law procedures.

However, in order to avoid such a possibility, we do not want to know your name. Instead, we will ask you to choose whatever name you want and write on this form. We call this your “code name”.

The interview will take about 20 minutes of your time.

If you agree to participate, we will be happy to provide you with more information on HIV and other Sexually Transmitted Infections. We will also offer you free condoms.

For more information about the study, contact Dr.R.A. Lawal, of Psychiatric Hospital, Yaba, Lagos, Tel: 861743, 861 796. If you feel the need for help or just want someone to talk to, because you feel upset or anxious or troubled in your relations with your family or friends, you can call this number 7743174, ext. 151 at any time during the study and for a month later, a trained counsellor will be able to help you. You may also feel the need for further support. This is available from the following organisations:

iv. Action Health Incorporated, Plot 54, Somorin Street, Off Ketu – Oworonsoki Express way, Ifako Bus Stop, Ifako – Gbagada, Lagos. Tel: 774 3745.

v. Health Matters Incorporated, Block 1, suites 3 & 4 LSDPC Building, Esther Osiyemi Street, Near Police Station, Ilupeju, Lagos. Tel. 4931737

vi. Stop AIDS Organisation. 95, Suites A & B East Pavilion, Tafawa Balewa Square Complex, Lagos. Tel. 2635219

I agree to participate in the study.	I certify that, in my presence, the participant has been fully informed on the above and has been granted the opportunity to discuss any related questions.
Code Name of Participant	Representative of Research Team: Name and Signature
Date	Place

APPENDIX 3
INFORMED CONSENTS FOR IN-EPTH INTERVIEW

BEFORE INTERVIEWING A SUBJECT, PLEASE OBTAIN THEIR INFORMED CONSENT TO PARTICIPATE IN THE STUDY. PLEASE EXPLAIN/DISCUSS THE NATURE AND PURPOSE OF THE STUDY AND CONFIDENTIALITY WITH THEM. IN CASE OF PARTICIPATION TWO COPIES ARE TO BE SIGNED BY THE

RESEARCHER, ONE TO BE RETURNED TO THE RESEARCH-COORDINATOR, ONE TO BE HANDED OUT TO THE PARTICIPANT.

INFORMED CONSENT FORM: IN-DEPTH INTERVIEW

Hello, my name is ..... I am from the Federal Psychiatric Hospital, Calabar and we are carrying out a study into alcohol and sexual behaviour. The reason for carrying out this study is to help us understand patterns of alcohol use and sexual behaviour. This information will be used to develop initiatives to prevent people from becoming infected with HIV and other sexually transmitted diseases.

We would like to ask you some questions concerning drinking patterns and sexual behaviour, particularly recalling events where drinking was associated with sex over the past month

We can assure you that all your answers will be in the strictest confidence. Any information presented will be grouped so that no one will know what you said. At any point, you can refuse to answer any question or indeed stop the whole interview. The interview will take about an hour of your time.

During the interview, you may experience stress in answering some questions, and there is the possibility of discrimination if your answers are disclosed to unauthorized persons. If something like this happens, we would counsel you personally on how to minimise any problems that might arise, including questions on law procedures.

However, in order to avoid such a possibility, we do not want to know your name. Instead, we will ask you to use the name you have chosen for the survey, and write it on this form. We called this your “code name”. You should use your “code name” during the discussion. This is simply to make the discussion easier, but the name will be erased after the discussion.

If you agree to participate, we will be happy to provide you with more information on HIV and other Sexually Transmitted Infections. We will also offer you free condoms.

For more information about the study, contact Dr.R.A. Lawal, of Psychiatric Hospital, Yaba, Lagos, Tel: 861743, 861 796. If you feel the need for help or just want someone to talk to, because you feel upset or anxious or troubled in your relations with your family or friends, you can call this number 7743174, ext. 151 at any time during the study and for a month later, a trained counsellor will be able to help you. You may also feel the need for further support. This is available from the following organisations:

i. Action Health Incorporated, Plot 54, Somorin Street, Off Ketu – Oworonsoki Express way, Ifako Bus Stop, Ifako – Gbagada, Lagos. Tel: 774 3745.

ii. Health Matters Incorporated, Block 1, suites 3 & 4 LSDPC Building, Esther Osiyemi Street, Near Police Station, Ilupeju, Lagos. Tel. 4931737
iii. Stop AIDS Organisation. 95, Suites A & B East Pavilion, Tafawa Balewa Square Complex, Lagos. Tel. 2635219

I agree to participate in the study.	I certify that, in my presence, the participant has been fully informed on the above and has been granted the opportunity to discuss any related questions.
Code Name of Participant	Representative of Research Team: Name and Signature
Date	Place

APPENDIX 4
INFORMED CONSENT FOR FOCUS GROUP DISCUSSION

BEFORE STARTING A FOCUS GROUP DISCUSSION, PLEASE OBTAIN PARTICIPATNS' INFORMED CONSENT TO PARTICIPATE IN THE STUDY. PLEASE EXPLAIN/DISCUSS THE NATURE AND PURPOSE OF THE STUDY AND CONFIDENTIALITY WITH THEM. IN CASE OF PARTICIPATION TWO COPIES ARE TO BE SIGNED BY THE RESEARCHER, ONE TO BE RETURNED TO THE RESEARCH-COORDINATOR, ONE TO BE HANDED OUT TO THE PARTICIPANT.

INFORMED CONSENT FORM: FOCUS GROUP DISCUSSION

Hello, my name is ..... I am from the Federal Psychiatric Hospital, Calabar and we are carrying out a study into alcohol and sexual behaviour. The reason for carrying out this study is to help us understand patterns of alcohol use and sexual behaviour. This information will be used to develop initiatives to prevent people from becoming infected with HIV and other sexually transmitted diseases.

We would like to explore issues concerning drinking patterns and sexual behaviour in a group discussion.

We can assure you that all your answers will be in the strictest confidence. Any information presented will be grouped so that no one will know what you said. At any point, you can refuse to answer any question or indeed stop the whole interview. The focus group discussion will take about an hour of your time.

During the discussion, you may experience stress in answering some questions, and there is the possibility of discrimination if your answers are disclosed to unauthorized persons. If something like this happens, we would counsel you personally on how to minimise any problems that might arise, including questions on law procedures.

However, in order to avoid such a possibility, we do not insist that you your real name. Instead, we will ask you to choose whatever name you want and write it on this form. We call this your “code name”. You may also use your real name if you like. During the discussion, you are asked to only use the name you choose bear (real or code). This is simply to make the discussion easier, but the name will be erased after the discussion.

Anything you disclose will be heard by other members of the focus group and that you only need disclose information that you are comfortable disclosing.

Anything you say takes place in a group situation and any information you choose to disclose is entirely a matter of individual violation.

If you agree to participate, we will be happy to provide you with more information on HIV and other Sexually Transmitted Infections. We will also offer you free condoms.

For more information about the study, contact Dr.R.A. Lawal, of Psychiatric Hospital, Yaba, Lagos, Tel: 861743, 861 796. If you feel the need for help or just want someone to talk to, because you feel upset or anxious or troubled in your relations with your family or friends, you can call this number 7743174 ext. 151 at any time during the study and for

a month later, a trained counsellor will be able to help you. You may also feel the need for further support. This is available from the following organisations:

i. Action Health Incorporated, Plot 54, Somorin Street, Off Ketu – Oworonsoki Express way, Ifako Bus Stop, Ifako – Gbagada, Lagos. Tel: 774 3745.
ii. Health Matters Incorporated, Block 1, suites 3 & 4 LSDPC Building, Esther Osiyemi Street, Near Police Station, Ilupeju, Lagos. Tel. 4931737
iii. Stop AIDS Organisation. 95, Suites A & B East Pavilion, Tafawa Balewa Square Complex, Lagos. Tel. 2635219

I agree to participate in the study.	I certify that, in my presence, the participant has been fully informed on the above and has been granted the opportunity to discuss any related questions.
Code Name of Participant	Representative of Research Team: Name and Signature
Date	Place

APPENDIX 5

WORLD HEALTH ORGANIZATION
SEX-RAR STUDY

SURVEY QUESTIONNAIRE

SECTION A: INTERVIEW & RECRUITMENT INFORMATION

QA01 Interviewer's code number __ __

QA02 Date of interview __ __ __ __ __ __ __ __
Day *Month* *Year*

QA03 Where is the interview being carried out?

Hotel 1
Beer Parlour 2
Club House 3
STD Clinic 4
Public place, e.g., street 5
Private room 6
Other (_____) 7
Specify

QA04 Recruitment location

HD 1
LD 2

QA05 Is the interview being conducted with the respondent alone or with others able to overhear?

Alone 1
Others able to overhear 2

AQ06 What is your date of birth? __ __ __ __ __ __
Day *Month* *Year*

QA07 Age *(Approximate age acceptable if true age not known)* __ __

QA08 Sex

Male 1
Female 2

QA09 Ethnicity

Yoruba 1
Ibo 2
Hausa 3
Edo 4
Efik 5
Others (Specify…….……) 6

QA10 Religion

1 Christianity
2 Islam
3 Traditional
4 No religion
5 Others (specify) ……

SECTION B: DEMOGRAPHICS

QB01 In what country were you born? _____
Specify

QB02 How long have you been living in Lagos area? __ __ __
Months

QB03 Highest level of education

1 No School attended
2 Primary not completed
3 Primary completed
4 Secondary not completed
5 Secondary completed
6 Post Secondary University
7 Post Secondary non-university
8 Others (_____)
Specify

QB04 What other vocational training, certificates, or licences have you received?

1 Tailoring
2 Barbing/Hairdressing
3 Mechanics
4 Carpentry
5 Electrical
6 Driving
7 Others (_____)
Specify

QB05 During the last 6 months what was your <u>main</u> source of income?

Regular job, employed with a regular salary (full or part-time)	01
Temporary work (include odd jobs, off-the-books, etc.)	02
Work at family business or farm	03
Self-employed (in a particular trade)	04
Government benefits (Welfare, Public assistance, Unemployment insurance, etc.)	05
Spouse, partner, relative, or friend's income	06
Student financial aid/loans/grants	07
Street begging/panhandling etc.	08
Selling drugs	09
Sex for money	10
Theft, robbing, or stealing	11

Other illegal, or possibly illegal, activities 12
Refused 98
Others (_____) __ __
Specify *Local code*

QB06 Are you now living alone?
No 0
Yes 1
Refused 8

QB07 Are you living with any of the following (in the same household)?
[Read out each category in turn. Circle one response for each.]

		No	*Yes*	*Ref*
1	A sex partner of the opposite sex	0	1	8
2	A sex partner of the same sex	0	1	8
3	Your parents	0	1	8
4	Other adult relatives (aged 18 or over), not sex partners	0	1	8
5	Your own children (biological/adopted/foster)	0	1	8
6	Children who are not your own	0	1	8
7	Friends	0	1	8
8	Other adults, not sex partners or friends	0	1	8

QB08 What is your current marital status?

Legally married 1
Living as married ("common law") 2
Widowed 3
Legally separated 4
Divorced 5
Never married/single 6
Refused 8

QB09 Are you and your spouse living together?
No 0
Yes 1
Some of the time 2
Refused 8

QB10 During the last 6 months, where did you live most of the time?
[Do not read out response options. Circle one response.]

My own (or my spouse or partner's) house, flat, or apartment (owned not rented) 01
House, flat, apartment, or room rented (leased) by me (or my spouse or partner) 02
Room rented on a daily basis or rooming house 03
Someone else's (including parents, relatives, friends) house flat or apartment 04
Government housing for Government employees 05
Drug treatment institution 06
Other treatment institution/hospital 07
Other (_____) 98
Specify

QB11 What is your father's social class?
International Standard Classification of Occupations (ISCO-88)

1. Legislators, Senior Officials and Managers
2. Professionals
3. Technicians and Associate Professionals
4. Clerks
5. Service Workers and Shop Market Sales Worker
6. Skilled Agriculture and Fishery Worker
7. Craft and Related Trades Worker
8. Plant and Machine Operators and Assemblers
9. Elementary Occupation
0. Armed Forces
x. Workers not Classifiable by Occupation

QB12 What is your current social class? (ISCO-88)

1. Legislators, Senior Officials and Managers
2. Professionals
3. Technicians and Associate Professionals
4. Clerks
5. Service Workers and Shop Market Sales Worker
6. Skilled Agriculture and Fishery Worker
7. Craft and Related Trades Worker
8. Plant and Machine Operators and Assemblers
9. Elementary Occupation
1. Armed Forces
x. Workers not Classifiable by Occupation

SECTION C: BACKGROUND INFORMATION

QC01 Have you ever received any treatment intended to help you modify your alcohol use?

No 0
Yes 1
Refused 8

QC02 In the last 6 months how often have you had contact or involvement with any of the following AIDS prevention activities?
[Read out each item in turn. Circle one response for each.]

SHOW PROMPT CARD A

Never	A	4 to 6 times a week	F
Less than once a month	B	About once a day	G
1 to 3 times a month	C	2-3 times a day, almost every day	H
About once a week	D	4 or more times a day, almost every day	I
2 to 3 times a week	E	Refused	J

Frequency of contact

	per month			*per week*			*per day*			
0	*<1*	*1-3*		*1*	*2-3*	*4-6*		*1*	*2-3*	*4+*	*R*

01	Group counseling	A B C D E F G H I J
02	Individual counseling	A B C D E F G H I J
03	Group education	A B C D E F G H I J
04	Individual education	A B C D E F G H I J
05	Street outreach	A B C D E F G H I J
06	Mass media	A B C D E F G H I J
07	HIV testing	A B C D E F G H I J
08	Bleach provided	A B C D E F G H I J
09	Condoms provided	A B C D E F G H I J
10	Needle/Syringe Exchange Program	A B C D E F G H I J
11	Drug Users' Organization	A B C D E F G H I J
91	Other (_____) *Specify*	A B C D E F G H I J
92	Other (_____) *Specify*	A B C D E F G H I J

SECTION D: DRUG USE

Now I am going to ask you some questions about your drug use.

QD01 How old were you when you first used cigarettes/tobacco? __ __
[If "never" enter "00"] *Years old*

QD02 How often did you smoke cigarette in the last 3 months?
[Read out all response options (exc. refused). Circle one response.]

Never	A
Less than once a month	B
1 to 3 days a month	C
About one day a week	D
2 to 3 days a week	E
4 to 6 days a week	F
One stick a day	G
2 to 10 sticks a day	H
11 to 20 sticks a day	I
More than 20 sticks a day	J
Refused	K

QD03 Did you use cannabis, hashish, or marijuana in the last 3 months?

No	1
Yes	2
Refused	8

QD04 How old were you when you first drank any alcohol? __ __
[If "never" enter "00"] *Years old*

QD05 Who introduced you to alcohol use?

My father	1
My mother	2
My brother	3
My sister	4
Other relations	5
A male friend	6
A female friend	7
My spouse	8
Other (_____)	9

specify

QD06 Why did you start using alcohol?

Because my father used it	1
Because my mother used it	2
Because my brother used it	3
Because my sister used it	4
Because my friends used it	5
Because of peer pressure	6
To experiment	7
Other (_____)	8

specify

QD07 What types of alcohol do you drink?

Beer 1

Wine 2

Spirits 3

Ogogoro 4

Palm wine 5

Burukutu 6

Others 7

QD08 Why do you drink alcohol?
(*Tick more than one if applicable*)

To feel happy 1

To become bold 2

To give me courage 3

To forget my problems 4

To maintain my normal self 5

To fight my opponents 6

To commit crime 7

To give me sexual urge 8

To increase my sexual endurance 9

To improve my appetite 10

To induce sleep 11

Others (_____) 12

specify

QD09 How often did you drink alcohol in the last 3 months?

- *[Read out all response options (exc. refused). Circle one response.]*

Never A

Less than once a month B

1 to 3 days a month C

About one day a week D

2 to 3 days a week E

4 to 6 days a week F

At least once a day G

Refused J

QD10 In a typical week, when you drank alcohol in the last 3 months, how many drinks (units) did you <u>usually</u> have?
_____units
(1 unit = ½ bottle of beer = 1 Shot of Spirit =1 Glass of Wine= ½ a bottle of small stout)

[Do not read out response options. Circle one response.]

QD11 Drinking category subject belongs to:

	Male	Female	
Light	0 – 10 units	0 – 5 units	1
Medium	11 – 35 units	6 – 20 units	2
Heavy	36 or more units	21 or more units	3

QD12 When you drink in the last 3 months, where did you drink most commonly? Beer Parlour1
Club House 2
Hotel 3
Bars 4
At Home 5
Social Gathering 6

QD13 Why do you drink alcohol in the bar/beer parlour/club house/hotel/at home? (*you may tick more than one*)

To socialize 1
To get a job 2
To get contracts 3
To stay away from home 4
To get drunk 5
To get free drinks 6
To meet with commercial sex workers 7

QD14 If not at home, why ? (*Tick more than one if applicable*)

To socialise 1
To belong 2
To get relieve from pressure at home 3
To be able to get drunk 4
To have sex with casual partners 5
To while away the time 6
To be like my friends 7
To have sex with commercial sex workers 8
To develop/enhance sexual urge 9

QD15 When you drink, with whom do you drink? (*Tick more than one if applicable*)

Alone 1
With male friends only 2
With male and female friends 3
With female casual sex partner 4
With female regular sex partner 5
With a male commercial sex worker 6
With a female commercial sex worker 7

QD16 Which of the situations in QD14 is most common …….

QD17 Have you ever thought that you should cut down your drinking? No 1
Yes 2
Refused 3

QD18 Have you ever felt annoyed by people criticizing your drinking?
No 1
Yes 2
Refused 3

QD19 Have you ever felt guilty or bad about your drinking?

No 1
Yes 2
Refused 8

QD20 Have you ever had a morning eye opener to relieve hangover or nerves

No 1
Yes 2
Refused 8

QD21 What factors do you think may reduce your alcohol use?

(*Tick more than one if applicable*)

Poverty 1
Non availability of money 2
Accidents from alcohol use 3
Violence from alcohol use 4
When my spouse disapprove of it 5
Doctor's advice 6
Illness resulting from alcohol use 7
When cost goes up 8
When my family/relations disapprove of it 9
Legal problem(s) resulting from alcohol use 10
Others 11
Don't know 12

QD22 What factors may increase your alcohol use?

Availability of money 1
Easy availability of alcohol 2
Peer group influence 3
Being in the club/bar/hotel 4
Being under stress 5
Being at social gathering 6
Interaction with commercial sex worker 7
Seeking spiritual enhancement 8
Being with primary sex partner 9
Being with casual sex worker 10

QD23 What effect does alcohol has on your use of condoms?

No effect 1
I become more careful about condom use 2
I become more careless about condom use 3
I become indifferent about condom use 4

QD24 During your lifetime have you ever used or injected a drug not prescribed for medical purposes?

No 1
Yes 2

Refused 8

SECTION E: SEXUAL BEHAVIOR

I would now like to ask you a few questions about your sexual relationships with a primary partner, casual partners and clients. You may find some of these questions of a personal nature, but remember we are asking everyone in the study group to answer these questions. Some of them may therefore not apply to you. All replies you give will be treated in strictest confidence.

QE01 How often do you have sexual intercourse (vaginal, anal, or oral) with someone of the opposite sex in the last 3 months?

SHOW PROMPT CARD A

Never/none	A
Less than once a month	B
1 to 3 times a month	C
About once a week	D
3 times a week	E
4 to 6 times a week	F
About once a day	G
2-3 times a day, almost every day	H
4 or more times a day, almost every day	I
Refused	J

The next questions are about sex with your primary partner of the opposite sex. By a primary partner, I mean someone who is your most important regular sex partner of the opposite sex.

QE02 In the last 3 months, how often have you had vaginal or anal intercourse with a primary partner of the opposite sex?

SHOW PROMPT CARD A

Never/none	A
Less than once a month	B
1 to 3 times a month	C
About once a week	D
2 to 3 times a week	E
4 to 6 times a week	F
About once a day	G
2-3 times a day, almost every day	H
4 or more times a day, almost every day	I
Refused	J

QE03 With how many primary partners of the opposite sex have you had vaginal or anal intercourse in the last 3 months? __
__

QE04 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, where does it usually take place?

SHOW PROMPT CARD C

My apartment	1
My partner's apartment	2
A hotel room	3
A Guest house	4

A bar 5
A beer Parlour 6
Others(_____) 7
specify
Refused 8

QE05 How many of these opposite-sex primary partners had ever used Alcohol?

— —

QE06 How many of these opposite-sex primary partners have used Alcohol in the past 3 months?

— —

QE07 How often did your primary sex partner(s) of the opposite sex drink alcohol in the last 3 months?
[Read out all response options (exc. refused). Circle one response.]

Never A
Less than once a month B
1 to 3 days a month C
About one day a week D
2 to 3 days a week E
4 to 6 days a week F
At least once a day G
Refused J

QE08 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, how often did you drink alcohol before sexual intercourse?

SHOW PROMPT CARD C

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4
Always (100%) 5
Refused 8

QE09 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, how often did your partner drink alcohol before sexual intercourse?

SHOW PROMPT CARD C

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4
Always (100%) 5
Refused 8

QE10 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, how often did you drink alcohol during sexual intercourse?

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4

Always (100%) 5
Refused 8

QE11 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, how often did your partner drink alcohol during sexual intercourse?

SHOW PROMPT CARD C

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4
Always (100%) 5
Refused 8

QE12 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, how often did you drink alcohol after sexual intercourse?

SHOW PROMPT CARD C

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4
Always (100%) 5
Refused 8

QE13 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, how often did your partner drink alcohol after sexual intercourse?

SHOW PROMPT CARD C

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4
Always (100%) 5
Refused 8

QE14 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, do you think alcohol played any role in your desire for or performance of sex?

No role1(If no, go to QE17)
Some role 2
Major role 3
Refused 8

QE15 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, what role do you think alcohol played in your desire for sex?
(*You can tick more than one*)

No role 1
Reduced my desire for sex 2
Increased my desire for sex 3

Refused 8

QE16 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, what role do you think alcohol played in your performance of sex?

No role 1
Reduced my sexual performance 2
Increased my sexual performance 3
Refused 8

QE17 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, what role do you think alcohol played in your use of condoms during of sex?

No role 1
Made me to care less about use of condom during sex occasionally 2
Made me to care less about use of condom during sex all the time 3
Made me more careful about use of condom during sex occasionally 4
Made me more careful about use of condom during sex all the time 5
Refused 8

QE18 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, how often did you use condoms or female condoms ?

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4
Always (100%) 5
Refused 8

QE19 In the last 3 months, when having vaginal or anal intercourse with your primary partner(s) of the opposite sex, how often did your partner use condoms or female condoms ?

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4
Always (100%) 5
Refused 8

QE20 As far as you know, has any of these opposite-sex primary partners ever ...
[Read out each item in turn. Circle one response for each.]

		No	*Yes*	*Ref*
1	Been told that they were HIV positive or that they had the AIDS virus?	0	1	8
2	Been diagnosed with hepatitis?	0	1	8

3	Had sex with (other) men?	0	1	8

QE21 In the last 3 months, what methods of contraception have you and your primary partner used at any time?
[Do not read out list. Circle more than one "yes" if mentioned. Probe only with "anything else?".]

			Mentioned	
			No	*Yes*
01	None		0	1
02	Condoms		0	1
03	Female condoms		0	1
04	Oral contraceptives		0	1
05	Intramuscular contraceptive (e.g., Depo-Provera)		0	1
06	Intrauterine device		0	1
07	Diaphragm/cap		0	1
08	Sponge or spermicide		0	1
09	Rhythm method		0	1
10	Sterilization		0	1
91	Other (_____) *Specify*	__ __ *Core code*	0	1
92	Other (_____) *Specify*	__ __ *Core code*	0	1

The next questions are about sexual intercourse with casual partners of the opposite sex. By a casual partner, I mean someone you have had sexual relations with other than your primary partner. Do not include paying "clients" in your answers to questions about casual partners.

QE22 In the last 3 months, how often have you had vaginal or anal intercourse with any casual partners of the opposite sex?

SHOW PROMPT CARD A

Never/none	A
Less than once a month	B
1 to 3 times a month	C
About once a week	D
2 to 3 times a week	E
4 to 6 times a week	F
About once a day	G
2-3 times a day, almost every day	H
4 or more times a day, almost every day	I
Refused	J

QE23 With how many casual partners of the opposite sex have you had vaginal or anal intercourse in the last 3 months? — —

QE24 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, where does it usually take place?

SHOW PROMPT CARD C

My apartment	1
My partner's apartment	2
A hotel room	3
Guest house	4
A bar	5
A beer Parlour	6
Refused	8

QE25 How many of these opposite-sex casual partners had ever used Alcohol? — —

QE26 How many of these opposite-sex casual partners have used Alcohol in the past 3 months? — —

QE27 How often did your casual sex partner(s) of the opposite sex drink alcohol in the last 3 months?
[Read out all response options (exc. refused). Circle one response.]

Never	A
Less than once a month	B
1 to 3 days a month	C
About one day a week	D
2 to 3 days a week	E
4 to 6 days a week	F
At least once a day	G
Refused	J

QE28 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, how often did you drink alcohol before sexual intercourse?

Never (0%)	1
Occasionally (1-25%)	2
About half the time (26-74%)	3
Mostly (75-99%)	4
Always (100%)	5
Refused	8

QE29 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, how often did your partner drink alcohol before sexual intercourse?

Never (0%)	1
Occasionally (1-25%)	2
About half the time (26-74%)	3
Mostly (75-99%)	4
Always (100%)	5
Refused	8

QE30 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, how often did you drink alcohol during sexual intercourse?

Never (0%)	1
Occasionally (1-25%)	2
About half the time (26-74%)	3
Mostly (75-99%)	4
Always (100%)	5
Refused	8

QE31 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, how often did your partner drink alcohol during sexual intercourse?

Never (0%)	1
Occasionally (1-25%)	2
About half the time (26-74%)	3
Mostly (75-99%)	4
Always (100%)	5
Refused	8

QE32 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, how often did you drink alcohol after sexual intercourse?

Never (0%)	1
Occasionally (1-25%)	2
About half the time (26-74%)	3
Mostly (75-99%)	4
Always (100%)	5

Refused 8

QE33 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, how often did your partner drink alcohol after sexual intercourse?

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4
Always (100%) 5
Refused 8

QE34 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, do you think alcohol played any role in the desire for or performance of sex?

No role1(If no, go to QE37)
Some role 2
Major role 3
Refused 8

QE35 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, what role do you think alcohol played in your desire for sex?

No role 1
Reduced my desire for sex 2
Increased my desire for sex 3
Refused 8

QE36 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, what role do you think alcohol played in your performance of sex?

No role 1
Reduced my sexual performance 2
Increased my sexual performance 3
Refused 8

QE37 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, what role do you think alcohol played in your use of condoms during of sex?

No role 1
Made me to care less about use of condom during sex occasionally 2
Made me to care less about use of condom during sex all the time 3
Made me more careful about use of condom during sex occasionally 4
Made me more careful about use of condom during sex all the time 5
Refused 8

QE38 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, how often did you use condoms or female condoms ?

Never (0%)	1
Occasionally (1-25%)	2
About half the time (26-74%)	3
Mostly (75-99%)	4
Always (100%)	5
Refused	8

QE39 In the last 3 months, when having vaginal or anal intercourse with your casual partner(s) of the opposite sex, how often did your partner use condoms or female condoms ?

Never (0%)	1
Occasionally (1-25%)	2
About half the time (26-74%)	3
Mostly (75-99%)	4
Always (100%)	5
Refused	8

QE40 As far as you know, have any of these opposite-sex casual partners ever ...
[Read out each item in turn. Circle one response for each.]

		No	*Yes*	*Ref*
1	Been told that they were HIV positive or that they had the AIDS virus?	0	1	8
2	Been diagnosed with hepatitis?	0	1	8
3	Had sex with (other) men?	0	1	8

The next questions are about sexual activity with clients of the opposite sex(Commercial sex) - by this I mean people who gave you money, goods or drugs for sex.When I refer to sex here, I mean vaginal intercourse, anal intercourse, oral sex and hand jobs.

QE41 In the last 3 months, how often have you had a client who gave you money or goods for sex?

SHOW PROMPT CARD A

Never/none	A
Less than once a month	B
1 to 3 times a month	C
About once a week	D
2 to 3 times a week	E
4 to 6 times a week	F
About once a day	G
2-3 times a day, almost every day	H
4 or more times a day, almost every day	I
Refused	J

QE42 In the last 3 months, how often have you had a client who gave you alcohol for sex?

SHOW PROMPT CARD A

Never/none	A
Less than once a month	B
1 to 3 times a month	C
About once a week	D
2 to 3 times a week	E
4 to 6 times a week	F
About once a day	G
2-3 times a day, almost every day	H
4 or more times a day, almost every day	I
Refused	J

QE43 In the last 3 months how often have you had a client who gave you other drugs for sex?

SHOW PROMPT CARD A

Never/none	A
Less than once a month	B
1 to 3 times a month	C
About once a week	D
2 to 3 times a week	E
4 to 6 times a week	F
About once a day	G
2-3 times a day, almost every day	H
4 or more times a day, almost every day	I
Refused	J

[Do not ask if "never" to both QE42 and QE43.]

QE44 In the last 3 months, how many different clients did you have in an <u>average</u> month? — — —
[Probe for best estimate. If "too many to count" enter "995".]

[Do not ask if "never" to both QE42 and QE43.]

Now I want you to think about all your clients you had in the last 3 months.

QE45 How often were condoms or female condoms used when you had vaginal or anal intercourse with clients?

SHOW PROMPT CARD C

Never (0%)	1
Occasionally (1-25%)	2

About half the time (26-74%)	3
Mostly (75-99%)	4
Always (100%)	5
Refused	8

[Do not ask if "never" to both QE42 and QE43.]

QE46 In the last 3 months, how often did you have oral sex with a client?

SHOW PROMPT CARD A

Never/none	A
Less than once a month	B
1 to 3 times a month	C
About once a week	D
2 to 3 times a week	E
4 to 6 times a week	F
About once a day	G
2-3 times a day, almost every day	H
4 or more times a day, almost every day	I
Refused	J

QE47 In the last 3 months, did you give money or goods to have sex with anyone of the opposite sex?

No 0
Yes 1
Refused 8

QE48 In the last 3 months, did you give alcohol to have sex with anyone of the opposite sex?

No 0
Yes 1
Refused 8

Now I want you to think about all the times in the last 3 months, you gave money, goods, alcohol or other drugs to have sex with anyone of the opposite sex.

QE49 How often were condoms or female condoms used when you had vaginal or anal intercourse with these partners?

SHOW PROMPT CARD C

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4
Always (100%) 5
Refused 8

Q50 What role do you think giving you money, alcohol or other drugs play in your use of condoms

No role 1
Made it easy for me insist on non use of condom during sex 2
Made me to concede to sex without condom easily 3
Made me indifferent about the use of condom 4
Made me to insist on the use of condom 5

[Ask only if respondent is male.]

QE51 In the last 5 years, at any time have you had sexual intercourse (anal and/or oral sex) with another man (voluntary or for money? Whether in your chosen location or when restricted, e.g. in prison?)

No 0
Yes 1
Refused 8

[Ask only if respondent is male.]

QE52 About how many men partners have you had sex with (anal and/or oral) in the last 3 months

__ __
If "00"

[Ask only if respondent is male.]

QE53 How often did you use condoms when having sex with another man in the last 3 months

SHOW PROMPT CARD C

Never (0%)	1
Occasionally (1-25%)	2
About half the time (26-74%)	3
Mostly (75-99%)	4
Always (100%)	5
Refused	8

QE54 What situations do you think facilitate or increase your alcohol use habit

Happiness
1
Unhappiness
2
Loneliness
3
Attending social Parties
4
Going to hotel/club houses/beer parlors
5
Going to brothels
6
Having sex with a primary partner
7
Having sex with casual partner
8
Others (specify)
9

QE55 What situations do you think discourage or reduce your alcohol use habit

Happiness
1
Unhappiness
2
Loneliness
3
Attending social Parties
4
Going to hotel/club houses/beer parlours
5
Going to brothels
6
Having sex with a primary partner
7
Having sex with casual partner
8
Others (specify)
9

QE56 What times of the year do you use alcohol most

New year celebrations
1
Period of Easter
2

Independence anniversary celebrations
3
Christmas celebrations
4
During my birthday celebrations
5
Other times (specify)
6

QE57 What times of the year do you use alcohol least
New year celebrations
1
Period of Easter
2
Independence anniversary celebrations
3
Christmas celebrations
4
During my birthday celebrations
5
Other times (specify)
6

QE58 What times of the year is your sexual activity at its highest
New year celebrations
1
Period of Easter
2
Independence anniversary celebrations
3
Christmas celebrations
4
During my birthday celebrations
5
Other times (specify)
6

QE59 What times of the year is your sexual activity at its lowest
New year celebrations
1
Period of Easter
2
Independence anniversary celebrations
3
Christmas celebrations
4
During my birthday celebrations
5
Other times (specify)
6

[Ask only if respondent is female.]

QE60 In the last 5 years, at any time have you had sex with another <u>woman</u> (voluntary or for money? Whether in your chosen location or when restricted, e.g. in prison?)

No 0
Yes 1
Refused 8

[Ask only if respondent is female.]

QE61 About how many women partners have you had sex with in the last 3 months?

__ __
If "00"

[Ask only if respondent is female.]

QE62 How often did you use female condoms (or dental dams etc.) when having sex with another woman in the last 3 months

<u>*SHOW PROMPT CARD C*</u>

Never (0%) 1
Occasionally (1-25%) 2
About half the time (26-74%) 3
Mostly (75-99%) 4
Always (100%) 5
Refused 8

SECTION F: AIDS KNOWLEDGE AND

BEHAVIOR CHANGE

I would now like to ask you some questions about HIV and AIDS.

QF01 Have you ever heard of HIV or AIDS?

No 0
Yes 1
Refused 8

QF02 How often do you talk about HIV or AIDS with your sex partners?
[Read out all response options (exc. refused). Circle one response.]

Not at all 0
Rarely 1
Frequently 2
Not applicable (no sex partners) 7
Refused 8

QF03 How often do you talk about HIV or AIDS with your alcohol using friends?
[Read out all response options (exc. refused). Circle one response.]

Not at all 0
Rarely 1
Frequently 2
Not applicable (no drug using friends) 7

		Refused	8

QF04	How often do you talk about HIV or AIDS with members of your family? *[Read out all response options (exc. refused). Circle one response.]*	Not at all	0
		Rarely	1
		Frequently	2
		Not applicable (no family)	7
		Refused	8

QF05	Do you think a person can be infected with HIV (the virus that causes AIDS) and look well?	No	0
		Yes	1
		Refused	8
		Don't know	9

QF06 Now can you tell me all the ways that people can become infected with HIV?
[Do not read out list. Circle more than one "Yes" if mentioned. Probe only with "anything else?".]

			Mentioned No	Mentioned Yes
01	Don't know any ways		0	1
02	Sharing needles and/or syringes		0	1
03	Sharing other injecting equipment/drug solutions		0	1
04	Having sex *(protection not specified)*		0	1
05	Having unprotected sex		0	1
06	Contact with infected blood		0	1
07	Transfusion of blood/blood products		0	1
08	Perinatally, from mother to child		0	1
91	Other (_____) *Specify*	__ __ *Core code*	0	1
92	Other (_____) *Specify*	__ __ *Core code*	0	1

QF07 What percent of people who are infected with HIV do you think will become seriously ill?

SHOW PROMPT CARD B

None (0%)	1
A few (1-25%)	2
About half (26-74%)	3
Most (75-99%)	4
All (100%)	5
Refused	8
Don't know	9

QF08 Since you first heard about HIV/AIDS have you done anything to avoid catching the virus yourself or to prevent someone else getting it from you?

No	0
Yes	1
Refused	8

QF09 What have you done?
[Do not read out list. Circle more than one "yes" if mentioned. Probe only with "anything else".]

	SEX	Mentioned No	Mentioned Yes
01	Started/increased condom use	0	1
02	Other safer sex practice (not specified)	0	1
03	Fewer sex partners	0	1
04	Fewer male gay/bisexual partners	0	1
05	Fewer injection drug user partners	0	1
06	Stopped having sex	0	1

07	Other sex-related change (_____)	__ __	0	1
	Specify	*Local code*		
08	Other sex-related change (_____)	__ __	0	1
	Specify	*Local code*		
	DRUGS			
09	Less drug use in general		0	1
09	Less alcohol use in general		0	1
10	Reduced injection of drugs		0	1
11	Stopped injection of drugs		0	1
12	Reduced sharing equipment/drug solutions		0	1
13	Stopped sharing equipment/drug solutions		0	1
14	Started/increased cleaning works		0	1
15	Other drug-related change (_____)		0	1
	Specify			
16	Other drug-related change (_____)		0	1
	Specify			
	OTHER			
17	Other change (_____)		0	1
	Specify			
18	Other change (_____)		0	1
	Specify			

QF10 Do you know any of the following people who are infected with HIV or who have AIDS?
[Read out each item in turn. Circle one response for each. N/A (not applicable) should be coded if the respondent knows no-one at all of the type described in the item.]

		No	*Yes*	*N/A*	*Ref*
1	Current or former alcohol users	0	1	7	8
2	Other current or former drug users	0	1	7	8
3	Anyone who has been your sex partner	0	1	7	8
4	Anyone living with you (in your household)	0	1	7	8
5	Friends or relatives	0	1	7	8
6	Any other people that you know	0	1	7	8

SECTION G: MEDICAL HISTORY

QG01 How would you describe your current health? Would you say it is ...
[Read out all response options (exc . refused and DK). Circle one response.]

Excellent	1
Good	2
Fair	3
Poor	4
Refused	8
Don't know/not sure	9

QG02 Have you ever been told by a doctor, nurse, other health professional or counselor that you had _____ *[Infection type]*.
[Read out each item in turn. Circle one response for each]
[If "yes"]
QG03 When was the last time (year) you had _____ *[Infection type]*.

		QG02 Ever told?				*If "yes"*
		No	*Yes*	*Ref*	*DK*	*QG03 Year*
01	Tuberculosis (TB)?	0	1	8	9	__ __ __ __
02	Endocarditis (heart infections)?	0	1	8	9	__ __ __ __
03	Pneumonia (not PCP)?	0	1	8	9	__ __ __ __
04	Cirrhosis of the liver	0	1	8	9	__ __ __ __
05	Mouth infections such as candida or thrush, due to fungus or yeast?	0	1	8	9	__ __ __ __
06	Syphilis?	0	1	8	9	__ __ __ __
07	Gonorrhea?	0	1	8	9	__ __ __ __
08	Genital warts?	0	1	8	9	__ __ __ __
09	Genital herpes	0	1	8	9	__ __ __ __
10	Chlamydia (non-gonococcal urethritis)?	0	1	8	9	__ __ __ __
11	Hepatitis?	0	1	8	9	__ __ __ __
12	Malaria	0	1	8	9	__ __ __ __
	[Ask items 16-17 only if respondent is female]					
13	Pelvic inflammatory disease?	0	1	8	9	__ __ __ __
14	Cervical cancer?	0	1	8	9	__ __ __ __

QG04 Have you ever had pre-test counseling concerning an HIV test?

No	0	
Yes	1	
Refused	8	

QG05 Have you ever been tested for the HIV virus?

No	0	-->**QG13**
Yes	1	
Refused	8	-->**QG13**
Don't know	9	-->**QG13**

QG06 Where did you get tested?
[Do not read out list. Circle more than one "yes" if mentioned. Probe only with "anywhere else?".]

			Mentioned *No*	*Yes*
01	Drug treatment center		0	1
02	STD clinic		0	1
03	Hospital		0	1
04	Private doctor		0	1
05	Home test kit		0	1
06	Jail/prison		0	1
91	Other (_____) *Specify*	__ __ *Core code*	0	1
91	Other (_____) *Specify*	__ __ *Core code*	0	1

QG07 Did you get the results of any HIV test?

No	0	-->**QG13**
Yes	1	
Refused	8	-->**QG13**
Don't know	9	-->**QG13**

QG08 Did you ever get a positive test result, meaning you were infected with HIV?

No	0	-->**QG11**
Yes	1	
Refused	8	-->**QG11**

QG09 Did you receive post-test counseling?

No	0
Yes	1
Refused	8

QG10 When was the **first** time you were told you were positive for HIV?

__ __ *Month* __ __ __ __ *Year*

QG11 Did you ever get a negative test result?

No 0 -->**QG13**
Yes 1
Refused 8 -->**QG13**

QG12 When was the **last** time you were told you were negative for HIV?

__ __ *Month* __ __ __ __ *Year*

QG13 In the last 6 months, have you taken any anti-AIDS medication such as AZT, DDI, protease inhibitors, or some other?

No 0 -->**QG15**
Yes 1
Yes, but don't know which type 2 -->**QG15**
Refused 8 -->**QG15**

QG14 In the last 6 months, which anti-AIDS medications have you taken?
[Read out each item in turn. Circle one response for each.]

		No	*Yes*	*Ref*
01	AZT	0	1	8
02	DDI	0	1	8
03	DDC	0	1	8
04	Protease inhibitors	0	1	8
05	Something else but you don't know name	0	1	8

QG15 Have you ever been told by a doctor, nurse, other health professional or counselor that you had the AIDS disease?

No 0 -->**Sec.H**
Yes 1
Refused 8 -->**Sec.H**

QG16 When was the first time you were told you had AIDS?

__ __ *Month* __ __ __ __ *Year*

SECTION H: HEPATITIS
(MOSTLY LOCAL OPTION MODULE, EXCEPT FOR FIRST FOUR QUESTIONS)

Now I am going to ask you some questions about a disease called hepatitis.

QH01 Could you tell me what are the different types of hepatitis?
[Do not read out list. Circle more than one "yes" if mentioned. Probe only with "any others?".]

			Mentioned *No*	*Yes*
1	Cannot name any types		0	1
2	Hepatitis A		0	1
3	Hepatitis B		0	1
4	Hepatitis C		0	1
5	Hepatitis D or E		0	1
6	Other (_____) *Specify*	__ __ *Local code*	0	1

If respondent cannot name any types of hepatitis, omit the remainder of Section H and skip to Section I

QH02 Have you ever received the hepatitis B vaccine?

No	0	**-->QH04**
Yes	1	
Received hepatitis vaccine of unknown type	3	
Refused	8	**-->QH04**
Don't know	9	**-->QH04**

QH03 How many shots did you receive? __ **-->QH05 or Sec.I**

QH04 If you were offered the opportunity for hepatitis B vaccination, would you take it?

No	0
Yes	1
Refused	8

If respondent mentioned hepatitis B and/or C in question QL01 ask each question XL05 through XL20 in turn for "hepatis B" and/or for "hepatitis C" separately. If he/she did not mention B or C ask questions for "hepatitis" and record in the "hep (any)" column.

QH05-QH07 How is hepatitis (B/C) transmitted?
[Do not read out list. Circle more than one "yes" if mentioned. Probe only with "any other way?"]

			QH05 Hep B Mentioned No	Yes	*QH06 Hep C Mentioned* No	Yes	*QH07 Hep (any) Mentioned* No	Yes
01	Does not know of any way		0	1	0	1	0	1
02	Sharing needles and/or syringes		0	1	0	1	0	1
03	Sharing other injecting equipment/drug solution		0	1	0	1	0	1
04	Having sex *(protection not specified)*		0	1	0	1	0	1
05	Having unprotected sex		0	1	0	1	0	1
06	Contact with infected blood		0	1	0	1	0	1
07	Contact with other infected body fluids		0	1	0	1	0	1
08	Sharing eating/drinking utensils		0	1	0	1	0	1
09	Sharing toothbrush, comb, razor, towel		0	1	0	1	0	1
10	Infected tattoo/body piercing instruments		0	1	0	1	0	1
11	Transfusion of blood/blood products		0	1	0	1	0	1
12	Perinatally, from mother to child		0	1	0	1	0	1
13	Other (_____) *Specify*	__ __ *Local code*	0	1	0	1	0	1
14	Other (_____) *Specify*	__ __ *Local code*	0	1	0	1	0	1

QH08-QH10 Where did you hear about hepatitis (B/C)?
[Do not read out list. Circle more than one "yes" if mentioned. Probe only with "any other way?"]

			QH08 Hep B Mentioned No	Yes	*QH09 Hep C Mentioned* No	Yes	*QH10 Hep (any) Mentioned* No	Yes
01	Doctor/nurse/other health worker		0	1	0	1	0	1
02	Newspaper/magazine/radio/TV		0	1	0	1	0	1
03	Family/friends		0	1	0	1	0	1
04	School/work		0	1	0	1	0	1
05	Poster/pamphlets		0	1	0	1	0	1
06	Other alcohol users		0	1	0	1	0	1
07	Alcohol users' organization(s)		0	1	0	1	0	1
08	Outreach workers		0	1	0	1	0	1
19	Fellow jail/prison inmates		0	1	0	1	0	1
10	Other (_____) *Specify*	__ __ *Local code*	0	1	0	1	0	1
11	Other (_____) *Specify*	__ __ *Local code*	0	1	0	1	0	1

QH11-
QH13 How concerned are you about getting hepatitis (B/C)? Would you say you are ...
[Read out all response options (exc. refused). Circle one response.]

	QH11 Hep B	*QH12 Hep C*	*QH13 Hep (any)*
Not at all concerned	1	1	1
Somewhat concerned	2	2	2
Very concerned	3	3	3
Not applicable - already immunized/vaccinated *[Applies to hepatitis B only]*	7		
Refused	8	8	8

QH14-
QH16 What percent of people who have hepatitis (B/C) do you think will become seriously ill?

<u>*SHOW PROMPT CARD B*</u>

	QH14 Hep B	*QH15 Hep C*	*QH16 Hep (any)*
None (0%)	1	1	1
A few (1-25%)	2	2	2
About half (26-74%)	3	3	3
Most (75-99%)	4	4	4
All (100%)	5	5	5
Refused	8	8	8
Don't know	9	9	9

QH17-
QH19 Do you know any of the following people who are infected with hepatitis (B/C)?
[Read out each item in turn. Circle one response for each. N/A (not applicable) should be circled if the respondent knows no-one at all of the type described in the item.]

		QH17 Hep B	*QH18 Hep C*	*QH19 Hep (any)*
		No Yes NA Ref	*No Yes NA Ref*	*No Yes NA Ref*
1	Current or former alcohol users	0 1 7 8	0 1 7 8	0 1 7 8
2	Other current or former drug users	0 1 7 8	0 1 7 8	0 1 7 8
3	Anyone who has been your sex partner	0 1 7 8	0 1 7 8	0 1 7 8
4	Anyone living with you (in your household)	0 1 7 8	0 1 7 8	0 1 7 8
5	Other friends or relatives	0 1 7 8	0 1 7 8	0 1 7 8
6	Anyone else	0 1 7 8	0 1 7 8	0 1 7 8

QH20-QH22 Have you ever discussed hepatitis (B/C) with any of the following?
[Read out each item in turn. Circle one response for each. N/A (not applicable) should be circled if the respondent knows no-one at all of the type described in the item.]

		QH20 Hep B No	Yes	NA	Ref	*QH21 Hep C* No	Yes	NA	Ref	*QH22 Hep (any)* No	Yes	NA	Ref
1	Current or former alcohol users	0	1	7	8	0	1	7	8	0	1	7	8
2	Other current or former injecting drug users	0	1	7	8	0	1	7	8	0	1	7	8
3	Anyone who has been your sex partner	0	1	7	8	0	1	7	8	0	1	7	8
4	Anyone living with you (in your household)	0	1	7	8	0	1	7	8	0	1	7	8
5	Friends or relatives	0	1	7	8	0	1	7	8	0	1	7	8
6	Anyone else	0	1	7	8	0	1	7	8	0	1	7	8

If respondent has been answering all questions for hepatitis (any), without differentiating between types, skip to Section I. **-->Sec.I**

QH23 Have you ever been tested for hepatitis C?

No 0 **-->Sec.I**
Yes 1
Refused 8 **-->Sec.I**
Don't know 9 **-->Sec.I**

QH24 Did you get the results of any hepatitis C test

No 0 **-->Sec.I**
Yes 1
Refused 8 **-->Sec.I**
Don't know 9 **-->Sec.I**

QH25 Did you ever get a negative test result?

No 0 **-->QH27**
Yes 1
Refused 8 **-->QH27**

QH26 When was the <u>last</u> time you were told you were negative for hepatitis C?

__ __ *Month* __ __ __ __ *Year*

QH27 Did you ever get a positive test result?

No 0 **-->Sec.I**
Yes 1
Refused 8 **-->Sec.I**

QH28 When was the <u>first</u> time you were told you were positive for hepatitis C?

__ __ *Month* __ __ __ __ *Year*

SECTION I: SERVICE UTILIZATION

QI01 How long ago did you last receive any medical services? I'm talking about services intended to help you when you were sick or ill, or to check on your health. Don't include alcohol treatment services.
[Do not read out response options. Circle one response.]

Never	0	
Within the last 6 months	1	
More than 6 months ago but within the last year	2	
More than 1 year ago but within the last 2 years	3	
More than 2 years ago	4	
Refused	8	

QI02 Do you currently have difficulty getting medical treatment if you are sick or ill?

No	0	-->**QI04**
Yes	1	
Refused	8	-->**QI04**

QI03 Why can't you get medical treatment if you need it?
[Do not read out list. Circle more than one "yes" if mentioned. Probe only with "anyone else?".]

		Mentioned *No*	*Yes*
01	No service exists	0	1
02	No service nearby	0	1
03	No way to get there	0	1
04	Not always open/inconvenient hours	0	1
05	They speak a different language	0	1
06	Don't like/trust/believe in doctors	0	1
07	Treatment available but cannot pay for it	0	1
08	Treatment available, but it can't help me, not what I need	0	1
09	Treatment available, but I don't satisfy the criteria to get it	0	1
10	Afraid of painful treatment procedure	0	1
11	Afraid of interference or arrest by authorities	0	1
12	Treatment facilities are very unfriendly to alcohol users	0	1
92	Other (_____) *Specify*	0	1

[Ask only if respondent is recruited from non-treatment setting.]

QI04 Do you currently have difficulty getting alcohol treatment if you need it?

No	0	**-->QI06**
Yes	1	
Refused	8	**-->QI06**

QI05 Why can't you get alcohol treatment if you need it?
[Do not read out list. Circle more than one "yes" if mentioned. Probe only with "anyone else?".]

		Mentioned *No*	*Yes*
01	No service exists	0	1
02	No service nearby	0	1
03	No way to get there	0	1
04	Not always open/inconvenient hours	0	1
05	They speak a different language	0	1
06	Don't like/trust/believe in treatment services	0	1
07	Treatment available but cannot pay for it	0	1
08	Treatment available, but it can't help me, not what I need	0	1
09	Treatment available, but I don't satisfy the criteria to get it	0	1
10	Afraid of painful treatment procedure	0	1
11	Afraid of interference or arrest by authorities	0	1
92	Other (_____) *Specify*	0	1

QI06 Were there ever <u>any medical, HIV prevention, drug-related, or other services</u> that you didn't want to use because you were afraid of the police or other authorities?

No	0	**-->Sec.J**
Yes	1	
Refused	8	**-->Sec.J**

QI07 What were those services?
[Do not read out list. Circle more than one "yes" if mentioned. Probe only with "anyone else?".]

			Mentioned *No*	*Yes*
01	All services because I didn't want the authorities to learn about me		0	1
02	HIV-related medical treatment		0	1
03	Hepatitis-related medical treatment		0	1
04	STD-related medical treatment		0	1
05	Treatment for overdose/psychotic episode		0	1
06	Drug treatment		0	1
07	Needle/Syringe Exchange Program		0	1
08	Treatment for trauma from violence		0	1
09	General medical treatment		0	1
10	Psychiatric treatment		0	1
92	Other (_____) *Specify*	__ __	0	1

SECTION J: BEHAVIOR CHANGE

QJ01 Which of the following factors do you think may inhibit your likelihood to reduce your sexual behavior

1. Continued alcohol use
2. Availability of sex partners
3. Refusal of sex partners to accept condom use
4. Does not believe that I can be infected with HIV virus
5. I don't believe that AIDS exists
6. I don't believe in transmission of HIV by sex
7. Others (specify) ----------

QJ02 What factors do you think may inhibit change in your alcohol use

1. Easy availability of alcohol
2. Fear of painful withdrawal symptoms
3. My sex partners use it
4. My friends use it
5. I use it to cope with my psychological problems
6. I crave for it
7. Lack of awareness of availability of treatment facilities for alcoholism
8. Others (specify) ----------

QJ03 What factors do you think may enable change in your alcohol use

1. Fear of HIV infection
2. Life threatening accident after intoxication
3. Increase in the price of alcohol
4. Physical illness due to alcohol use
5. Knowledge of adverse health effects of alcohol use
6. Treatment of alcoholism
7. Others (specify) ----------

QJ04 Do you think that more knowledge about the sexual risk behavior of alcohol users can reduce your Alcohol use and sexual behavior

1. No
2. Yes

QJ05 What areas of education do you think may benefit you and other alcohol users

1. Knowledge of adverse health effects of alcohol use
2. Education about the association of HIV and sex
3. Education on the sexual risk behaviors associated with alcohol use
4. Education on the mode of spread of HIV
5. Education on STDs and the importance treatment

6. Others (specify) ----------

SECTION K: CONCLUSION

Just a few more questions now.

QK01 Do you consider yourself to be
[Read out all response options that apply (exc. refused). Circle one response.]

Straight or heterosexual	1
[Ask men only] Gay or homosexual	2
[Ask women only] Lesbian or homosexual	3
Bisexual	4
Refused	8

QK02 How many biological children have you had? __ __

QK03 Do you plan to ever have a (another) child?

No	0
Yes	1
Self or partner currently pregnant	2
Refused	8
Don't know	9

QK04 Think ahead to about twelve months from now. Do you expect any change in any of the following?
[Read out each item in turn. Circle one response for each.]

		No	*Yes*	*Ref*
1	Your level of alcohol consumption	0	1	8
2	Your sexual practices	0	1	8
3	Your employment status	0	1	8
4	Your main source of income	0	1	8
5	Your health status	0	1	8

APPENDIX 6

RAPID SITUATION ASSESSMENT OF ALCOHOL IN RELATION TO HIV SEXUAL RISK BEHAVIOUR
SEX-RAR SURVEY LAGOS, NIGERIA

1-DAY TRAINING PROGRAMME FOR FIELD WORKERS
PSYCHIATRIC HOSPITAL, YABA CONFERENCE HALL LAGOS
DATE: 26 JANUARY 20020

AGENDA

1. Registration of participants/self introduction
2. Project overview Dr. R. A. Lawal
3. Objectives and General Overview of Methods Dr Akinhanmi
4. Individual field worker discusses job expectations and remuneration with principal investigator

5.0 Rapid Assessment and Response Dr. R. A. Lawal

6. Survey Instrument Dr. B. L. Bassey
7. Accessing target populations Dr. R. A. Lawal
8. Interviewing Dr. A.Y.A. Haruna
9. Focus Group Discussion Dr. A.Y.A. Haruna
10. Ethical Issues Dr. R. A. Lawal
11. Record keeping including audio-visual recordings/report writing Dr. R. A. Lawal.
12. Pilot Testing Dr. R. A. Lawal
13. Groupings and job allocations Dr. O. A. Coker
14. Step-by-step activities from now on Dr. O. A. Coker
15. Group report back/finalization of strategic planning
16. Administrative issues
17. Project Planning committee meeting
18. Closing remarks