REPORT ON ALCOHOL, DRUGS AND SUBSTANCE ABUSE AMONG PERSONS WITH DISABILITY IN NAIROBI, COAST AND CENTRAL REGIONS KENYA

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ABBREVIATIONS AND ACRONYMS

ADA	Alcohol and Drug Abuse
NACADA	National Authority for the Campaign against Alcohol and Drug Abuse
PWD	Persons with Disability

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EXECUTIVE SUMMARY

1. Context of the study

Although some data existed on the prevalence of drug use among the general Kenyan population, (NACADAA, 2007, 2009a, b), there was a general absence of comprehensive data on the extent and magnitude of drug use among special populations such as persons with disability. Such data would be useful to guide the development, and implementation of policies that would address the unique needs of such populations. This was particularly important considering that persons with various forms of disability vary in terms of the nature of their impairments and this may make them unique in their needs with regard to drug related interventions.

2. Study objectives

The study sought to establish the extent, magnitude, factors and impact of drug use among persons with various types of disabilities in the Kenyan population, as well as identify the risk factors for drug use and drug peddling among these persons. In addition, it sought to establish the strategies that can be used to address such drug related issues

3. Methodology

The study targeted persons with various forms of disability, namely; those with physical, visual, hearing and intellectual challenge (both institution based as well as community-based) and Key Informants (stakeholders who interacted with PWD in different settings). A combination of stratified and purposive sampling was used to obtain a sample of 486 respondents in three regions of Kenya, namely Nairobi, Coast and Central.

4. Key findings

(a) Knowledge levels about drugs

The study revealed relatively low levels of awareness among PWD, with 16.0% indicating they had knowledge about tobacco products, 15.1% had knowledge on alcoholic beverages, and 14.5% had knowledge about *khat*, while 12.1% had knowledge about inhalants.

(b) Extent and patterns of use

Personal ever use of drugs was reported by 35% of the respondents, with majority of those who had ever used reporting having first used them at the age of 15- 19 (43/3%) followed by 10-14 (22.8%).Some of the PWD had first used drugs as early as ages 5-9 years**.** The study found that 13.6% of the respondents had used at least one substance in the past one year, 7.4% had used in the past one month (current use) and 3.9% were using daily. The findings showed that some of the PWD were using more than one substance indicating poly substance use. Most were combining tobacco with alcohol, while others were adding *khat* (*miraa)*. A few were combining these with narcotics and some with prescription drugs and inhalants. In terms of types of drugs used, majority (28.2%) had used alcoholic beverages, followed by those who used tobacco

products (19.6%), *khat* (14.8%) and marijuana (9.2%). The study's figures for PWD are higher than those of the general population for tobacco products where use among the PWD was (19.6%) compared to that obtained by NACADA (2012) of 17.3% for the general population Similarly, ever-use of *miraa*/*muguka* among PWD was 14.8% which is higher than that for the general population (10.4%) obtained by NACADA (2012). Similarly notable are the findings on ever-use of narcotics. The findings revealed a reasonably high use considering that these are illegal drugs as per the laws of Kenya. From the current study findings, PWD who had used marijuana were 9.2%, heroin 5.6% and cocaine 5.6%.

(c) Sources of drugs and factors for use

The leading sources of drugs for persons with disability were friends at home (24.5%), kiosks around home (22.8%), and fellow students (15.9%). Almost 20% of persons with disability use drugs in order to cope with stress, 15.6% used drugs for acceptance among peers, 13.1% due to bad treatment by the society, 12.2% for curiosity and 9.4% to be liked by others.

(d) Link between disability and drug use and drug peddling

In terms of link between disability and drugs, some of the PWD (19%) indicated that the disability was a contributing factor to their drug abuse. Majority (41.6%) of the respondents stated that persons with disability are at risk of being used to sell drugs due to among others unemployment. One third (30%) of the respondents stated that persons with disability sell drugs because they are not easily suspected by the public or by the law enforcers. 7% indicated that they have ever supplied drugs while 4% said that they were currently selling drugs. In terms of link between drugs and disability, (7%) of the PWDs reported that they had acquired a disability through ADA, another 16% of the PWDs reported that they had a family member with a disability acquired through ADA, while 26% had a friend with a disability acquired through ADA.

(e)Perceived impact of drugs

The negative effects of drug abuse mentioned by respondents included health hazard (28.3%), followed by enhancing of disability (14.1%) and affecting the brain (14.1%). Only 7% of the respondents indicated that their disability was due to use of drugs, while 80% mentioned that their disability was not linked to drug use.

(f) Strategies to deal with challenges of drug abuse prevention and treatment

Lack of awareness of where to get information and discrimination by society in terms of ensuring accessibility to drug information emerged as the most prevalent challenges faced in accessing information on drugs as mentioned by 47.4% and 31% of the respondents respectively. Most (42%) of the respondents suggested that seminars would be the best strategy to increase access to drug related information, followed by use of churches (20%) and accommodating all forms of disabilities in dissemination of information (20%).

5. Conclusions and recommendations

The study concludes that PWD are affected by the problem of alcohol and drug use just like the general population. However they are more vulnerable due to the unique challenges presented by their impairments which make accessibility to drug information difficult therefore resulting in low levels of awareness about drugs. Secondly feelings of stress are common due to the day to day challenges of coping with disability, as well as struggling to find acceptance and overcome stigmatization by society .This puts them at additional risk of being involved in drug use and in the drug supply chain.

Based on the findings it is recommended that there is need for policies to guide ADA interventions that target PWD and especially addressing their vulnerabilities to drug use and drug peddling. In addition there is need to increase access to drug information as well as treatment and rehabilitation by PWD. This requires that among others NACADA institutes the development of policies that make it mandatory to translate drug information to modes accessible to all PWD as well as to make drug treatment/rehabilitation for PWD accessible, available and disability friendly. This would go a long way towards promoting mainstreaming for PWD. Further there is need for comprehensive efforts by stakeholders such as government ministries mandated to address issues of PWD, the National Council for Persons with Disability and other well-wishers to step up campaigns to promote societal acceptance, as well as reduction of stigma towards PWD in order to reduce their vulnerability to drug use. In addition, these organs need to partner with NACADA to develop an integrated drug prevention campaign, specifically targeting PWD that seeks to empower them economically, in order to reduce their risk of involvement in supplying/selling drugs as the easier option to earning a living or using drugs to deal with the frustrations of economic dependence.

CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND

Generally available data on the number of people with disabilities in Kenya does not give an accurate picture of the number of disabled people living in the country. According to ILO (2009), applying the WHO recommended 10 per cent to today's Kenyan population of approximately 36 million, one would conclude that there may be some 3 million disabled people. The Kenya government has over the years made significant progress in its effort to promote the rights of its citizens living with disability. This is evidenced by among others the enactment of the Disability Act (2003).in addition the Ministry of Gender, Children and Social Development is mandated to look into issues touching on the needs of those living with disabilities. Other efforts are seen in the action by the Ministry of Education to provide for children with physical and mental disabilities to be placed in mainstream schools.

1.2 PROBLEM STATEMENT/JUSTIFICATION

Some literature from the rest of the world suggests that Persons with disability are also affected by alcohol and drug abuse. Self-reported data from a Multi-State Survey on substance use/abuse among persons with disabilities suggests that respondents used alcohol at least as much as the general population, with a high incidence of substance abuse symptoms reported by some disability groups. People with quadriplegia, traumatic brain injury, and mental illness were significantly more likely to abuse alcohol than were people with other disabilities. Additional disability-related factors (e.g. acquired versus congenital, early versus late onset of disability, and attitude toward disability) were also significantly related to alcohol abuse. This study yielded some indications that disability-related factors, such as belief in entitlement to use due to the disability, and age of disability onset are culpable factors in the development of substance abuse among this population (Moore, Greer, & Li, 1994).

Although some data existed on the prevalence of drug use among the general Kenyan population, (NACADAA, 2007, 2009a, b), there was a general absence of comprehensive data on the extent and magnitude of drug use among special populations such as persons with disability. This situation had been articulated by a workshop organized by NACADAA in 2011 which recommended the need for research to investigate if persons with disability were in any way affected by the drug use problem observed in the general Kenyan population. It is with the need to fill this gap in mind that this study was conceptualized.

1.3 JUSTIFICATION

In Kenya efforts to manage drug related problems have been on the increase. The Kenya government's commitment is seen in the enactment into law of the Alcoholic Drinks Control Act (2010). While this law was informed by data on the general population, little data exists on the

magnitude and patterns of drug use among specialized groups in the population such as persons with disability.

Such data would be useful to guide the development, and implementation of policies that would address the unique needs of such populations. This is particularly important considering that persons with various forms of disability vary in terms of the nature of their impairments and this may make them unique in their needs with regard to drug related interventions. Therefore research that would provide data on such vulnerable populations would be timely and this was the aim of the current study.

1.4 Research questions

1. What is the magnitude, extent and pattern of alcohol and drug use among persons with various types of disabilities in Kenya?
2. What are the risk factors for alcohol and drug use persons with various types of disabilities?
3. What is the level of involvement of persons with disabilities in the drug supply chain
4. What is the perceived impact of alcohol and drug use/ abuse among persons with various types of disabilities?
5. What is the linkage between alcohol and drug abuse and the various types of disabilities?
6. Which strategies can be used to address alcohol and drug related issues among persons with disabilities?

1.5 General Objective

To establish the extent, magnitude, risk factors and impact of drug use among persons with various types of disabilities in the selected regions of Kenya

1.5.1 Specific Objectives

1. To establish the magnitude, extent and patterns of alcohol and drug use among persons with various types of disabilities in Kenya
2. To identify the risk factors for alcohol and drug use/ abuse among persons with various types of disabilities
3. To establish the level of involvement of persons with disabilities in the drug supply chain
4. To document the perceived impact of alcohol and drug use/ abuse among persons with various types of disabilities
5. To determine the linkage between alcohol and drug abuse and the various types of disabilities
6. To identify strategies that can be used to address alcohol and drug related issues among persons with disabilities

1.6 SIGNIFICANCE OF THE STUDY AND IMPLICATIONS FOR POLICY

The study has generated data on the extent, magnitude, patterns, and impact of drug use among persons with various types of disabilities.

In addition it has provided data on the risk and protective factors for involvement in drug use as well as drug peddling for persons with various types of disabilities.

Further the study has provided evidence on the role of drugs use in resultant disabilities. It is hoped that these findings will be useful to several stakeholders such as NACADA who develop drug related policies and programs, the Department of Gender and Social Development which is mandated to look into the welfare of persons with disability as well as line Ministries such as Ministries of Education, Health, and Devolution all of whom in one way or another contribute to the promotion of the well-being of persons with disability. The study will provide these stakeholders with solid evidence that will guide the development, amendment and implementation of relevant policies and programs that are responsive to the unique needs of persons with disability, with a view to promoting their rights and well-being in line with the Kenya Constitution (2010) and the Disability Act (2003).

CHAPTER TWO: LITERATURE REVIEW

2.1 SUBSTANCE USE AMONG PERSONS WITH DISABILITIES

Persons with disability may have varying forms of impairments such as physical, mental, visual, and hearing, which impact adversely on their social, economic or environmental participation. There are many factors that may make a person with disability vulnerable to drug and substance use. Firstly, persons with disability are more likely to have low self-esteem due to the common frustrations of managing day to day life as well as the fact that many struggle to find acceptance with little support system from both family members and society in general. This is supported by literature such as that by Wamocho (2003). Such may drive them to seek refuge in alcohol and drug use.

Researchers such as Alston *et al*., (1995), propose that predisposing factors such as isolation are operative in the dynamics of disability and drugs with phrases such as "compensation for guilt," "ease the pain," "excessive frustration," "choosing an escape," "oppressed minority," "relief from oppression," "placatory behaviors," "hostile encounters," "stressful demands," "feelings of helplessness," "stigmatized and dependent," and "isolation and loneliness" emerging as some reasons for substance abuse. Such literature pointed to the need to investigate whether persons with disability in Kenya used drugs for similar reasons.

Another factor that may increase risk of drug use among PWD is the fact that some of the persons with disability, such as the deaf and the blind, may not readily access information on drugs like the rest of the population due to the nature of their impairments .This may mean that they may be ignorant on the dangers of drug abuse and hence be at greater risk of such abuse. PWD may also suffer from community stigmatization that may drive them into reacting negatively by participating in deviant activities such as illicit drug use (Li and Moore, 2001). In addition, several persons with disability end up achieving low levels of education hence find it difficult to secure steady jobs leaving most engaged in road side businesses or begging in the streets. Such persons are at high risk of being used to peddle drugs as well as being lured to use drugs. The problem is further complicated by the fact that for a person with disability, accessing general social services is a challenge. This means that accessing treatment options in case of drug use problems may be equally challenging for these persons. All these realities pointed to the need for research on PWD in Kenya to understand if and how they have been affected by alcohol and drugs.

2.2 SUBSTANCE ABUSE TREATMENT

Empirical evidence has shown that treatment is a cost-effective method for addressing substance abuse (Scanlon, 2002). Treatment for substance abuse and dependence is offered through a network of public, non profit, and private service providers, and it may include detoxification services, residential services, outpatient services, intensive outpatient services, case management,

or methadone treatment. The success of treatment depends on a variety of factors, including the characteristics of both the individual and the treatment provider organization.

Substance abuse treatment is not an exact science, and relapse is fairly common. Some forms of treatment, however, have been found to have better rates of success than others. A 2003 study by Morgenstern *et al* found that between 40% and 50% of treatment clients completely abstained from drug and alcohol use during the 9 months after entering treatment (Metschand Pollack, 2005). After 12 months, nearly half of the participants in a form of integrated, multiservice intervention abstained from all substance use over the previous 6 months (Metschand Pollack, 2005). Cognitive–behavioral forms of relapse prevention, an intervention designed to prevent and manage relapse in individuals who have received, or are receiving, treatment for addictive behavior problems, have been found to be more effective than no treatment and equally as effective as other active treatments (e.g. supportive therapy, interpersonal therapy) in improving substance use outcomes (Witkiewitz and Marlatt, 2004). Intensive case management services have also been found to produce positive treatment outcomes (Metsch and Pollack, 2005). Only a certain percentage of those with a substance abuse disorder will seek treatment in a given year. Demand for treatment reflects the portion of the substance abusing population who are projected to avail themselves for treatment. The "rational allocation" approach to demand estimation states that 15% to 20% of substance abusers should be targeted for treatment in a given year (Ford and Luckey, 1983; Ford *et al*., 1978).

The frequency with which people with disabilities recognize substance abuse problems and seek treatment has not been well documented, but research has shown that traditional substance abuse treatment providers are often ill-equipped to provide accessible and appropriate services to persons with disabilities (Bachman*et al*., 2004). The costs associated withtreatment services may be covered by private health insurance, public health insurance, or out-of-pocket expense. As substance abuse treatment services are commonly included as part of mental health treatment services offered through insurance plans, issues of parity are cause for concern. Insurers often cover mental health services at lower levels than other types of health services (SAMHSA, 2004). As public and private insurers do not cover substance abuse treatment at the same level as other health programs, state governments are often left to fill the gaps (Scanlon, 2002).

2.3 EMOTIONAL FACTORS INVOLVED IN SUBSTANCE ABUSE AMONG PERSONS WITH PWD

Sociological factors associated with drug abuse by persons with disabilities have been reviewed by Alston*et al*., (1995). Those authors proposed that predisposing factors such as isolation are operative in the dynamics of disability and drugs much as they are in youth, delinquency, and drugs. Phrases such as "compensation for guilt," "ease the pain," "excessive frustration," "choosing an escape," "oppressed minority," "relief from oppression," "placatory behaviors," "hostile encounters," "stressful demands," "feelings of helplessness," "stigmatized and dependent," and "isolation and loneliness" are found in literature that seeks rationale for substance abuse and leads to development of intervention strategies.

Emotional factors associated with adjustment to disability have been discussed by Vash (1981), Deloach and Greer (1981), Marshak and Seligman (1993), and Ferguson, Dodds, Craig, Flannigan, and Yates (1994). Much of such discussion centers around anxiety, anger, and depression. For example, Ferguson *et al* (1994) found anxiety and depression impacted feelings of self-worth. Although rehabilitation personnel may view anger outbursts as an indicator of hostility, Marshak and Seligman (1993) discussed the need for rehabilitation personnel to allow clients to express anger more freely. Such outbursts may be attempts to compensate for a perceived loss of control over their lives. Anxiety, according to Deloach and Greer (1981), is a result of the uncertainty of the individual in coming to terms with disability and the future. Both Deloach and Greer (1981) and Vash (1981) saw the use of alcohol as one way to deal with anxiety. Marshak and Seligman (1993) stated that depression is another stage or phase of adjustment to disability. Depression includes feelings of worthlessness, self blame, and suicidal thoughts. In addition to potential relationships of anxiety, anger, and depression to substance abuse, a measure of bizarre thoughts was included in the present research. Little is written regarding bizarre thoughts in relation to substance abuse or adjustment to disability, except in relation to psychiatric conditions per se.

CHAPTER THREE: METHODOLOGY

3.1 STUDY PROCESS

The survey process entailed the following steps:

1. Reviewing relevant documents and records that would guide the study
2. Developing a sound analytical framework (identifying key variables of study, sources of data and techniques)
3. Generating a sample for both the quantitative and qualitative data collection, which included key decisions makers
4. Developing appropriate instruments to collect both quantitative and qualitative data on the variables under study
5. Collecting data from the various respondents using appropriate methods such as questionnaires, interviews and focus groups discussions
6. Analyzing and interpreting data, and writing the final report

3.2 RESEARCH DESIGN

A cross-sectional study was conducted utilizing a mixed methods approach, balancing between quantitative and qualitative approaches in order to gather comprehensive data with quantitative methods providing quantitative data on the study variables and qualitative methods providing deeper insights into the phenomena under study.

3.3 SCOPE OF THE SURVEY

The study targeted persons with disability both in institutions as well as those outside institutions (those in the community) to provide comprehensive data on usage of drugs, patterns of use, risk and protective factors for use and peddling as well as impact of drug use across different settings. In addition the study targeted key stakeholders who interact with persons with disability in a variety of settings and who were likely to have information about the extent, risk and impact of drug use among the disabled. These included; heads of educational institutions catering for the disabled, law enforcement agencies and representatives of disabled welfare organizations. Also targeted were heads of rehabilitation institutions for persons with various disabilities such who may interact with drug related disabilities to provide information on the contribution of drugs to disability.

3.4 SITE OF THE STUDY

In view of the uneven distribution of the study target respondents across the country, and the need to reach the various categories of disability for inclusion in the study, the study focused on

Nairobi, Coast and Central regions in order to generate comprehensive data to meet the study objectives. Nairobi and Mombasa were targeted as they were urban areas where drug availability and drug use prevalence in the general population is reportedly high, hence it was likely that people with disability living in these areas may also be vulnerable to drug use. Central region was targeted because, in addition to a reported high prevalence of alcohol use among the general population, it hosts several of the institutions that cater for persons with different disabilities such as the visually, the physically and the hearing challenged. Specifically Thika and Nyeri were selected to represent Central region as they host several of the educational institutions targeted.

3.5 SAMPLING AND SAMPLE

A mix of stratified and purposive sampling was utilized to obtain the respondents for the survey. Stratified sampling is used to ensure that all unique characteristics of a target population are captured in the sample, thus eliminating bias in selection of respondents. In this study stratified sampling was used to ensure representation of the various categories of disability as well as PWD within and outside of institutions. In addition, it ensured inclusion of the various categories of stakeholders considered to be key informants. On the other hand, purposive sampling targets specific participants, based on their perceived likelihood to hold the required information. In this study, it was used, and specifically, snowballing to obtain the sample of community based respondents with disability, who were likely to be found in different places within the community. A combination of the 2 sampling techniques ensured a balanced sample that was representative of the various dynamics of PWD and hence one that provided rich and comprehensive data to give the necessary insights on the phenomena under study. The sampling framework comprised different categories of respondents, as follows:

TABLE 3.1: CATEGORY OF RESPONDENTS

Category	Respondents	Type of data
Persons with various types of disabilities including physical, mental, visual and hearing challenges	Persons with various types of disabilities in **educational and vocational institutions**	Data on usage of drugs, patterns of use, risk and protective factors for use and peddling as well as impact of drug use
	Persons with various types of disabilities in the **community (outside institutions)**	Data on usage of drugs, patterns of use, risk and protective factors for use and peddling as well as impact of drug use
	Persons with various types of disabilities in **rehabilitations setting for PWD**	Data on role played by drugs in contributing to various types of disabilities
Key informants	Heads of **educational and vocational institutions**	Data on cases of persons with disability involved with drug use or drug peddling
	Law enforcement agencies/	Data on cases of persons with disability

Category	Respondents	Type of data
	Local administration (police, chiefs)/local council officers	involved with drug related crimes, perceptions on risk of disabled persons involvement with drugs as well as impact, role of drugs in contributing to disability
	Representative personnel of **rehabilitations settings** which rehabilitate persons with disabilities	Data role of drugs in contributing to disabilities

3.5.1 Sample Size Determination

The prevalence of alcohol, drug and substance abuse by persons with disabilities in Kenya is not known and 50% was assumed. To estimate the true prevalence to within 5 percentage points with 95% confidence, a minimum sample of 385 was required. The following formula by Fisher *et al* (1998) was used for sample size estimation:

$$n = \frac{Z^2 1-\alpha/2\ p\ (1-p)}{d^2}$$

Where: n = Sample size to be determined, Z_1-α/2 = Standard errors from the mean corresponding to 95% confidence level, P = Prevalence of alcohol, drug and substance abuse among disabled persons, d = Absolute precision (margin of error)

The sample composition was finalized after review of key documents from disability organizations, and receiving comments on the inception report from the NACADAA technical team. In this study a total of 486 persons with disability in Nairobi, Coast and Central regions formed the final sample.

3.6 Study variables

The study variables were; magnitude, extent and patterns of alcohol and drug use among PWD, risk and protective factors for alcohol and drug use, level of involvement of PWD in the drug supply chain, perceived impact of drug use among PWD, role of drugs in contributing to various types of disabilities, strategies to deal with drug related issues among PWD.

3.7 Methods of Data Collection

To generate comprehensive data and for purposes of triangulation both quantitative and qualitative methods were used. Questionnaires were used to obtain quantitative data while in-depth interviews and focus group discussions were used to obtain qualitative data to help shed more light on the nature of the phenomena under study.

The key instruments used were:

1. Questionnaire for the institution-based respondents and the community based respondents.

2. Interview guide for the key informants

3. Focus Group Discussion (FGD) guide for institutional and community based respondents.

Questionnaires were appropriate for the institution based respondents as their literacy levels were assumed to be high enough to enable them respond to a self-administered questionnaire. The method also gave the informants an assurance of confidentiality (anonymity), and allowed for inclusion of a large sample. Researcher aided questionnaires were used for the community based respondents whose literacy levels were low hence could not respond to a self-administered questionnaire. In addition key informant interviews and Focus Group Discussions were useful in yielding more in-depth data that provided deeper insights into the phenomena under study.

3.8 Training of Research Assistants and Piloting of Tools

The research assistants underwent intensive one day training in Nairobi. This involved being inducted on the objectives of the study, the various instruments and how to use them to collect data from the different categories of respondents. In addition emphasis was laid on how to interact with PWD in a way that is not demeaning such as avoiding usage of terms that are demeaning (like crippled) and how to adopt an attitude that is appreciative of them (i.e. the use of the social appreciative enquiry approach). In addition mock interviews using the participants were conducted during the induction exercise. A pretesting of the instruments was conducted in Kasarani sub-county, Nairobi, using respondents similar to those targeted. Those subjects used in the pilot were however excluded from the final study. The feedback from the pre-test was used to guide the revision of the instruments in order to enhance their usefulness.

3.9 Field Work

Data was collected for approximately four weeks (30th January to 28th February). Data collection was done in the three regions of Coast, Nairobi and Central simultaneously. Each region had a team of two research assistants (a male and a female) and a supervisor. The supervisors were the principal investigator and the co-investigators. Two among the six research assistants (RAs) were persons with disability for purposes of inclusiveness.

The team experienced several challenges. One of the challenges faced was that sometimes the process of data collection could not move as quickly as planned due to the unique nature of PWD. For instance for the category of respondents with intellectual challenges, the teams were advised by the institutional heads on the need to spend some time (such as a day) with the respondents in order to build rapport before embarking on data collection.

The teams had to be flexible and adjusted accordingly to ensure smooth flow of the process. Similarly accessing PWD in the community tended to take longer than anticipated since they were not generally in specific places hence the team had to use snowballing to identify them and to visit them wherever they were, sometimes in far off places. For some categories of PWD such as those with intellectual impairment, it proved extremely difficult to get any community based respondents in regions like Coast possibly because of the associated socio-cultural stigma. All in all the fieldwork continued smoothly and the team was able to surmount any challenges to ensure the fieldwork was concluded smoothly though with additional duration to what was initially planned.

3.10 Data Analysis

Quantitative data was coded, sorted, entered into the computer and processed using SPSS software version 17.0. Descriptive statistics namely frequencies and percentages were used to analyze the data and the emerging findings were presented by means of pie charts, tables and bar graphs. Qualitative data obtained from open-ended questions, key informant interviews and FGDs was analyzed using content analysis, summarizing data into emerging themes. The generated information was used to complement, further explain and interpret the quantitative data.

3.11 Ethical Considerations

Prior to conducting the study, all necessary ethical requirements of social science research were integrated into the study. A permit and letter of authority to conduct the study was obtained from the National Commission for Science, Technology and Innovation (NACOSTI) after obtaining clearance from the Kenyatta University Ethics Review Committee. Authority was then obtained from the respective heads of institution to conduct research in each of the institutions sampled. In addition, authority was obtained from the respective representatives of the government administration in each region visited for the study. The sampled respondents and their custodians (who were the heads of institutions for the institutional based respondents) were carefully briefed on the purpose of the research using means that they could understand before their informed consent was sought. All data collected has been treated with utmost confidentiality and does not bear any individual identifying information.

CHAPTER FOUR: RESULTS ANALYSIS AND PRESENTATION

This chapter presents the findings of the study on alcohol and drug abuse among persons with disability. The chapter begins with a presentation of demographic characteristics of the respondents, and then proceeds to present the findings against each of the research questions.

4.1 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

The total number of respondents reached was 486.The following is their distribution in terms of demographic characteristics that included; region, location (whether educational institution-based or community- based), age, gender, marital status, religion, educational level, occupation, type of disability and onset of disability. In addition the respondents' family background characteristics are presented in terms of parents' education and occupation as well as in terms of family income. Tables 4.1 and 4.2 show these characteristics.

TABLE 4.1: RESPONDENTS' DEMOGRAPHIC CHARACTERISTICS

Characteristic		*Percent*
Region	Nairobi	42.0
	Coast	23.8
	Central	34.2
Institutional vs. community based	**Where based**	**Percent**
	Institution based	73.0
	Community based	27.0
Age	**Age category**	**Percent**
	10-14	7.4
	15-65	92.6
Gender	**Gender**	**Percent**
	Male	60.9
	Female	35.4
	No response	3.7
Marital status	**Status**	**Percent**
	Single/ never married.	83.1
	Married	13.2
	Divorced/ separated	0.4
	Widowed	1.0
	No response	2.3
Religion	**Religion**	**Percent**
	Christian	84.4
	Muslim	9.7
	Buddhism	0.8
	No response	5.1

Characteristic		*Percent*
Level of Education	**Level**	**Percent**
	Primary	33.3
	Secondary	36.8
	College/university	18.7
	Post-graduate	0.2
	No formal schooling	2.3
	Special school	7.0
	No response	1.7
Occupation	**Occupation**	**Percent**
	Student	73.0
	Self- employed	7.6
	Unemployed	6.0
	Employed	5.6
	No response	7.8
Type of Disability	**Type**	**Percent**
	Physical impairment	28.6
	Intellectual impairment	22.6
	Visual impairment	20.4
	Hearing impairment	23.5
	No response	4.9
Onset of Disability	**Onset**	**Percent**
	At Birth	28.0
	During Childhood	43.8
	During Adulthood	5.3
	Don't know	22.9

As shown in table 4.1, more than half of the respondents were male (60.9%). In terms of age, majority were below 20 years and in terms of regional distribution, most of them were in Nairobi, followed by Central region. Most of the respondents were Christians (84.4%) and majority were single (83%). Further, more than half of the respondents had attained secondary education. In terms of occupation, most of the respondents were students (73.0%) while 13.2% were either in self-employment or employed. Some 5.6% were unemployed. In terms of disability type and onset, most of the respondents were physically disabled (28.6%) while 20.4% were visually impaired. The onset of the disability was mostly during childhood (43.8%) while 28.6% of the respondents had congenital disability (at birth).

TABLE 4.2: RESPONDENTS' FAMILY BACKGROUND CHARACTERISTICS

Parental education level	**Level**	**Percent**
Father's Education	Primary	17.5
	Secondary	24.7
	College/university	23.3
	Post-graduate	4.9
	No formal schooling	13.2
	No response	16.4
Mother's Education	Primary	22.8
	Secondary	23.5
	College/university	19.3
	Post-graduate	3.9
	No formal schooling	17.3
	No response	13.2
Parents' occupation	**Occupation**	**Percent**
Father's occupation	Student	2.9
	Self- employed	26.7
	Unemployed	17.7
	Employed	29.2
	No response	23.5
Mother's occupation	Student	3.1
	Self- employed	35.6
	Unemployed	26.5
	Employed	20.0
	Others (specify)	1.4
	No response	13.4
Family income	**Level**	**Percent**
Family Income	High (Living below basic needs)	9.3
	Average (meeting basic needs)	34.0
	Low (struggling to meet basic needs)	32.3
	Very low(unable to meet basic needs)	16.5
	No response	7.9

As shown in table 4.2, majority of the respondent's parents had secondary education, at 52.9% and 46.7% for their fathers and mothers respectively. As for their parents' occupations, more than half of their parents were in employment (self-employed or employed) with 55.9% and 55.6% for the fathers and mothers respectively. Majority considered their family incomes to be average and low (at 34% and 32.3% respectively).

4.2 Extent, magnitude and pattern of drug use among persons with various types of disabilities in Kenya

Data was collected on various indicators of the extent, magnitude and patterns of ADA. These included awareness of commonly abused drugs, awareness of persons using drugs, awareness of a friend using drugs, personal use of drugs, pattern of drug use, types of drugs used, and frequency of drug use. The following are the results.

4.2.1 Awareness of Commonly Abused Drugs

Data on awareness of commonly abused drugs was generated using an item that required respondents to tick from a list of commonly abused drugs that they were aware of as well as add any other that they were aware of that was not on the list provided. Figure 4.1 gives the findings that were obtained.

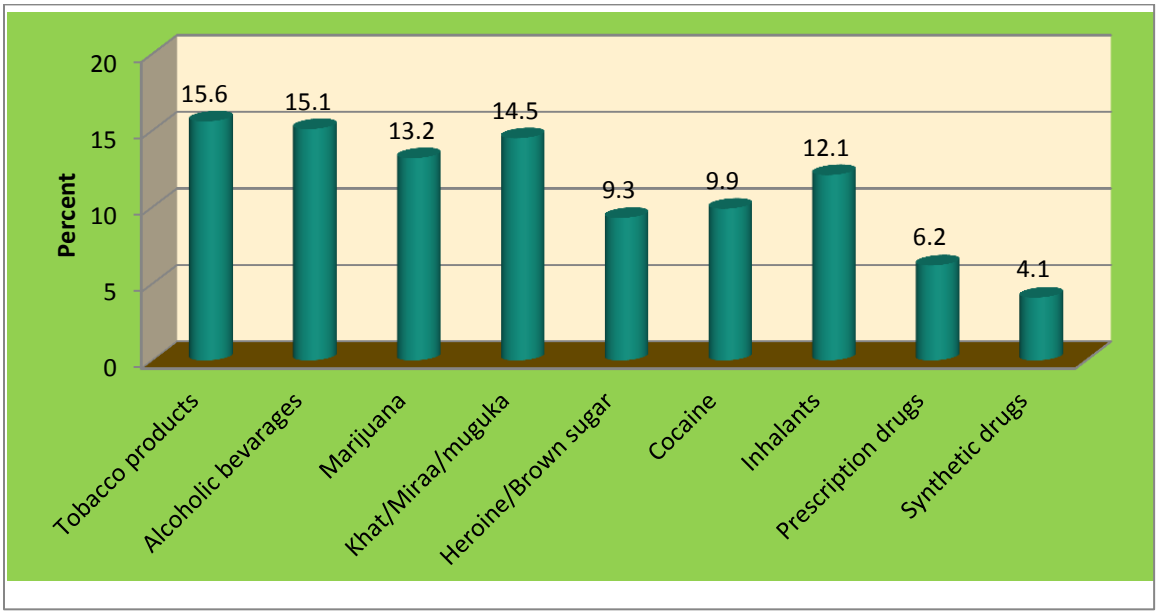

Figure 4.1: Awareness of Commonly Abused Drugs

As shown in Figure 4.1, the three leading drugs in terms of percentage of respondents who were aware of them were tobacco products at 15.6%, alcoholic beverages at 15.1%, khat at 14.5%. Of the illegal drugs in Kenya, marijuana was known by the highest percentage at 13.2% followed by cocaine (9.9%) and heroine (9.3%).

4.2.2. Awareness of Persons Using Drugs

The following is the distribution of respondents in terms of awareness of somebody using drugs

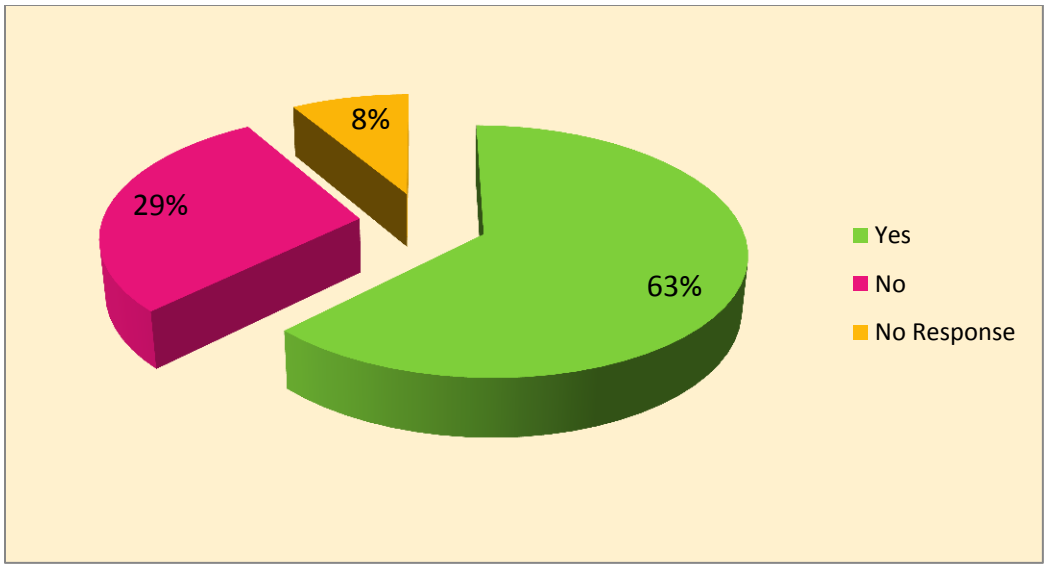

FIGURE 4.2: AWARENESS OF SOMEBODY WHO USE DRUGS

More than half of the respondents were aware of someone who uses drugs (63%) while 29% were not aware of a person who uses drugs as shown in the figure 4.2 above.

4.2.3 AWARENESS OF A FRIEND USING DRUGS

The following is the distribution of respondents in terms of awareness of a friend using drugs.

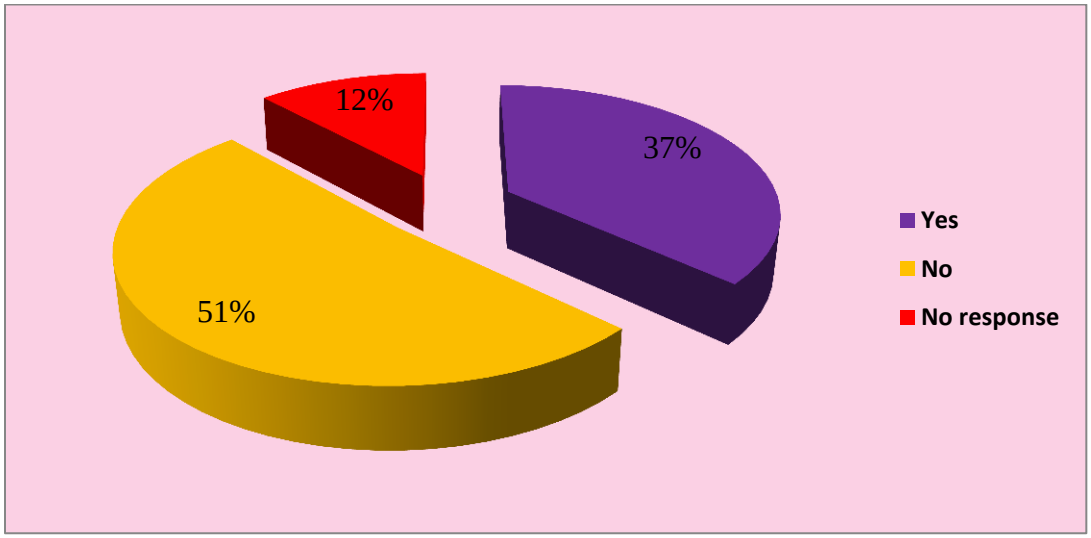

FIGURE 4.3: AWARENESS OF A FRIEND WHO USES DRUGS

As indicated in Figure, 4.3 above, 37%of the respondents had friends using drugs while 51% were not aware of any of their friends using drugs.

4.2.4 PERSONAL USE OF DRUGS-EVER USED AT LEAST ONE SUBSTANCE

The following is the distribution of respondents by personal use of drugs, that is whether the respondent had ever used drugs or not.

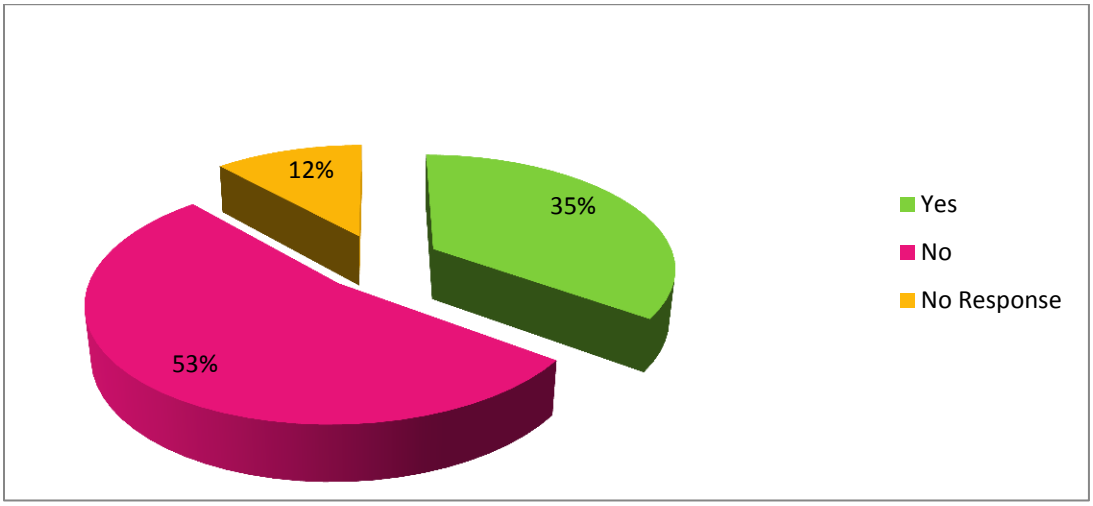

FIGURE 4.4: PERSONAL USE OF DRUGS- EVER USED AT LEAST ONE SUBSTANCE

As indicated in figure 4.4 above, 35% of the respondents had used drugs while 53% said they had never used drugs. Some 12% did not respond. It is possible that they could be in the category of users but lacked the courage to admit so considering that this was a sensitive question. When data was analyzed separately for institutional based and community based respondents, the findings revealed higher levels for community based (38.2%) compared to institutional based (33.8%).

4.2.4.1 PERSONAL USE-EVER USE OF AT LEAST ONE SUBSTANCE BY AGE CATEGORY

Data was analyzed separately for age categories to compare ADA use among the 10-14 years category and the 15-65 years category. The findings are as shown in Table 4.3

TABLE 4.3 PERSONAL USE-EVER USE OF AT LEAST ONE SUBSTANCE BY AGE CATEGORY

Ever use		
Age Category	Percent	N
10-14 years	25.9%	27
15-65 years	36.3%	339
Past one year use		
10-14 years	3.7%	27
15-65 years	16.5%	123
Current use (past one month)		
10-14 years	3.7%	27
15-65 years	9.1%	123
Daily use		

Ever use		
10-14 years	7.4%	27
15-65 years	4.7%	123

Table 4.3 indicates that 25.9% of the 10-14 years category reported having ever used at least one substance, and 3.7% had used in the past one year. These figures are significant considering that these are minors.

4.2.5 Age at First Use

Respondents who had ever used drugs were asked to indicate the age at which they first used a drug. The results are as shown below:

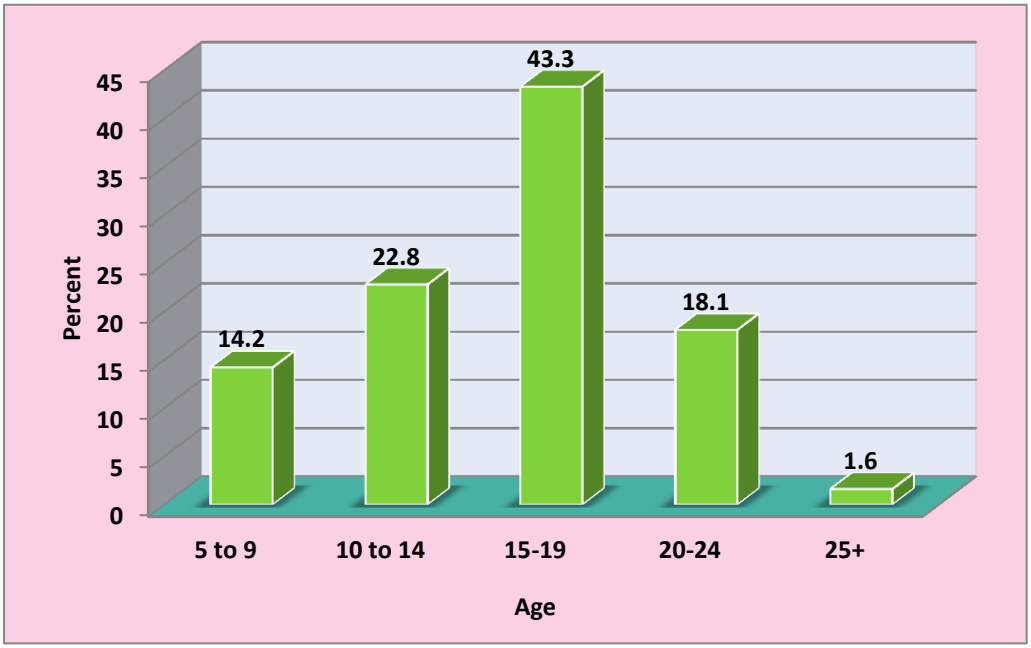

Figure 4.5 Age at first use

From Figure 4.5 , majority of those who had ever used drugs first used them at the age of 15- 19 (43/3%) followed by 10-14 (22.8%). Some of the PWD used drugs as early as ages 5-9 years**.**

4.2.6Frequency and Patterns of Use

Data was further collected on patterns of use. Participants were asked to indicate substance(s) they had used within the past one year, the past one month (current use), and those that they used daily. The findings were as follows:

TABLE 4.4: PATTERNS OF USE FOR COMBINED GROUP AND BY LOCATION OF RESPONDENTS

Pattern of use		Percent	N
Ever use of at least one substance	Combined group	**35%**	486
	Educational Institution based respondents	**33.8%**	355
	Community based respondents	**38.2%**	131
Past one year use of at least one substance	Combined group	**13.6%**	486
	Educational Institution based respondents	**13.5%**	355
	Community based respondents	**13.7%**	131
Current use of at least one substance(past 1 month)	Combined group	**7.4%**	486
	Educational Institution based respondents	**5.1%**	355
	Community based respondents	**13.7%**	131
Daily use of at least one substance	Combined	**3.9%**	486
	Educational Institution based respondents	**3.1%**	355
	Community based respondents	**6.1%**	131

From table 4.4, 13.6% of the respondents had used at least one substance in the past one year, 7.4% had used in the past one month (current use) and 3.9% were using daily. The figures were higher for community based when compared to institutional based respondents especially for current use (13.7% and 5.1% respectively) and daily use (6.1% and 3.1%) respectively.

4.2.4.1 AGE AT FIRST USE OF DRUGS

Respondents who had ever used drugs were asked to indicate the age at which they first used a drug. The results are as shown below:

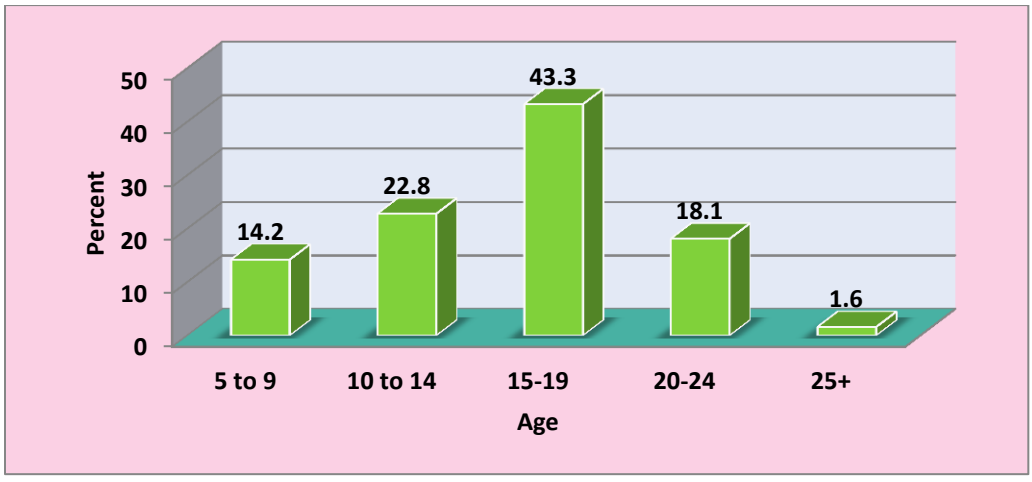

FIGURE 4.4 AGE AT FIRST USE OF DRUGS

From the figure above, majority of those who had ever used drugs first used them at the age of 15-19 (43/3%) followed by 10-14 (22.8%).Some of the PWD used drugs as early as ages 5-9 years**.**

4.2.6.1TYPE OF DRUG USED

Data was sought on the drugs PWD used. The findings are as shown in figure 4.6

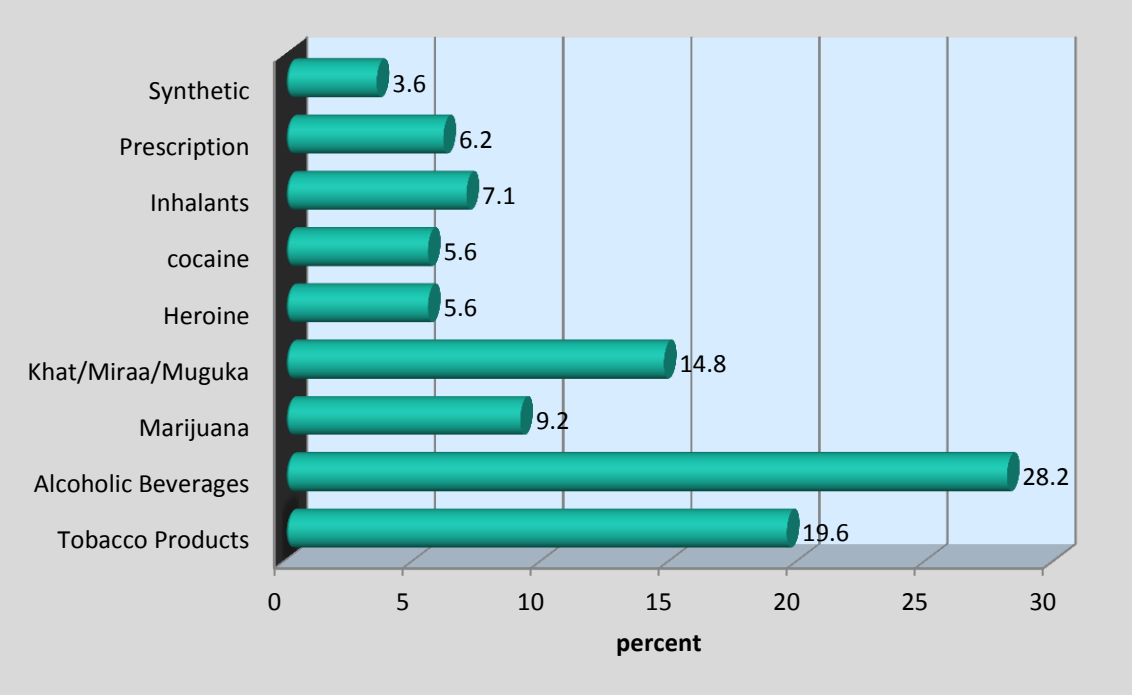

FIGURE 4.6: TYPE OF DRUG USED

From figure 4.6 among the PWD who abused drugs, majority (28.2%) had used alcoholic beverages, followed by those who used tobacco products (19.6%), *khat* (14.8%) and marijuana (9.2%). Other types of drugs emerging from the interviews and FGDs include *chuchura* and *mnazi* mentioned by law enforcement key informants, and *kuber* mentioned by parents of PWD in Nairobi and Coast.

4.2.6.2FREQUENCY OF DRUG USE FOR SPECIFIC SUBSTANCES.

Data was collected on frequency of use for specific substances, using indicators such as daily usage, use in the past 1 month and use in the past 12 months .The results are as follows.

TABLE 4.5 FREQUENCY OF DRUG USE FOR SPECIFIC SUBSTANCES

	Use within last one year	Current use (past one month)	Daily use
N=486	**Percent**	**Percent**	**Percent**
Tobacco products	5.6	2.9	2.3
Alcoholic beverages	7.0	4.5	1.2
Marijuana	2.7	2.3	0.4
Khat	4.7	1.2	0.4
Heroine	1.2	0.4	0.4
Cocaine	0.4	0.4	0.2

From table 4.5 under current use, 2.9 % reported using tobacco, 4.5% alcoholic beverages, 1.2% *khat*. Similarly the table shows that the current use of narcotics is as follows; marijuana at 2.3%, heroin 0.4 % and cocaine0.4 %.

4.2.6.3 PATTERNS OF POLY -SUBSTANCE USE

Data was analyzed to evaluate the number of substances being used by those using drugs. Table 4.6 shows the findings

TABLE 4.6: POLY-SUBSTANCE USE

	Within last 1 year	Within last 1 month	Daily use
	Percent N=486	**Percent N=486**	**Percent N=486**
1 substance	8%	5.6%	2.5%
2 substances	2.3%	1.0%	0.8%
3 substances	2.1%	0.6%	-
4 substances	0.6%	-	0.4%
5 substances	0.6%	0.2%	0.2%

Table 4.6 above reveals that some of the PWD are using more than one substance indicating poly-substance use. Most were combining tobacco with alcohol, while others were adding *miraa*. A few were combining these with narcotics and some with prescriptive drugs and inhalants. For almost all cases of poly-substance use, either alcohol or tobacco was involved, sometimes both of them, suggesting that they are likely to be the gateway drugs which probably open the way for use of other drugs.

4.2.7SOURCES OF DRUGS AND THEIR ACCESSIBILITY

Data was collected on sources of drugs and their accessibility to persons with disability and sources of money for buying drugs. The following are the findings.

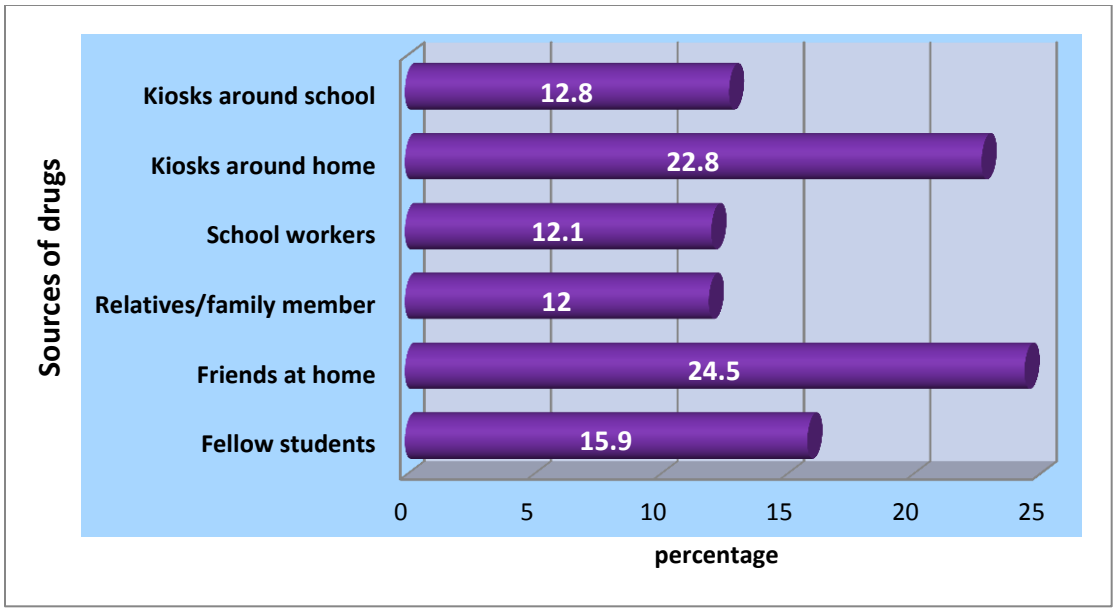

FIGURE 4.7: SOURCES OF DRUGS

As shown in figure 4.7, the leading sources of drugs for persons with disability were friends at home (24.5%), kiosks around home (22.8%) and, fellow students (15.9%).

4.2.7.1 SOURCES OF MONEY TO BUY DRUGS.

The following is the distribution of respondents by their sources of money used to buy drugs.

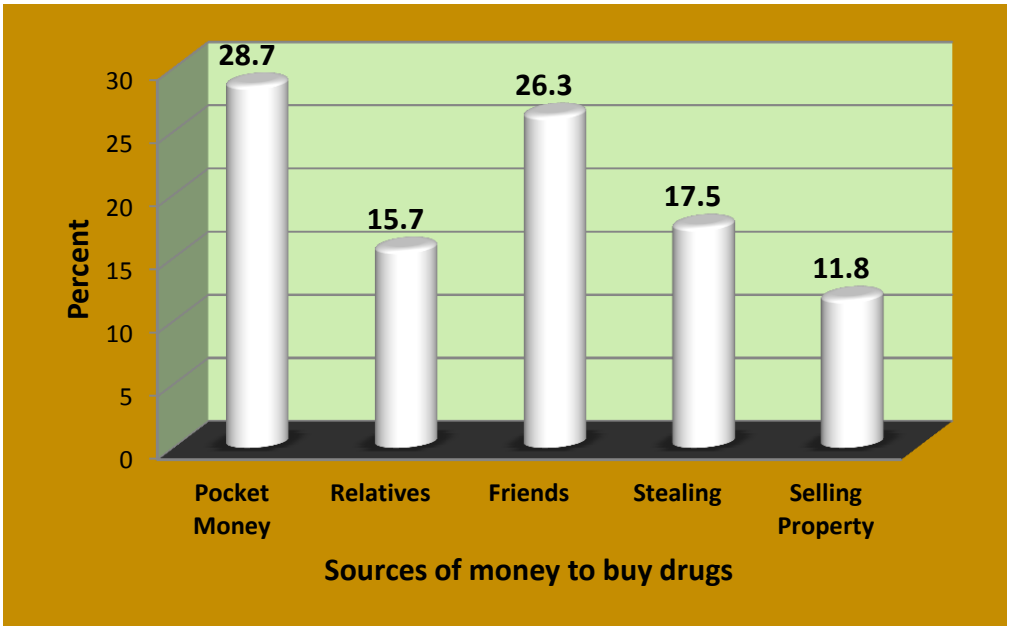

FIGURE 4.8: SOURCES OF MONEY TO BUY DRUGS

From figure 4.8, the main sources of money for buying drugs were from pocket money and friends at (28.7% and 26.3%) respectively. Other sources were from relatives, stealing and selling property.

4.3. Risk Factors for Drug Use among Persons with Disability

Data was collected on various risk factors for drug use. These included accessibility of drugs, disability as a risk factor for drug use as well as reasons why persons with disability use drugs.The findings were as follows;

4.3.1 Accessibility of Drugs.

On accessibility of drugs, respondents gave the following feedback:

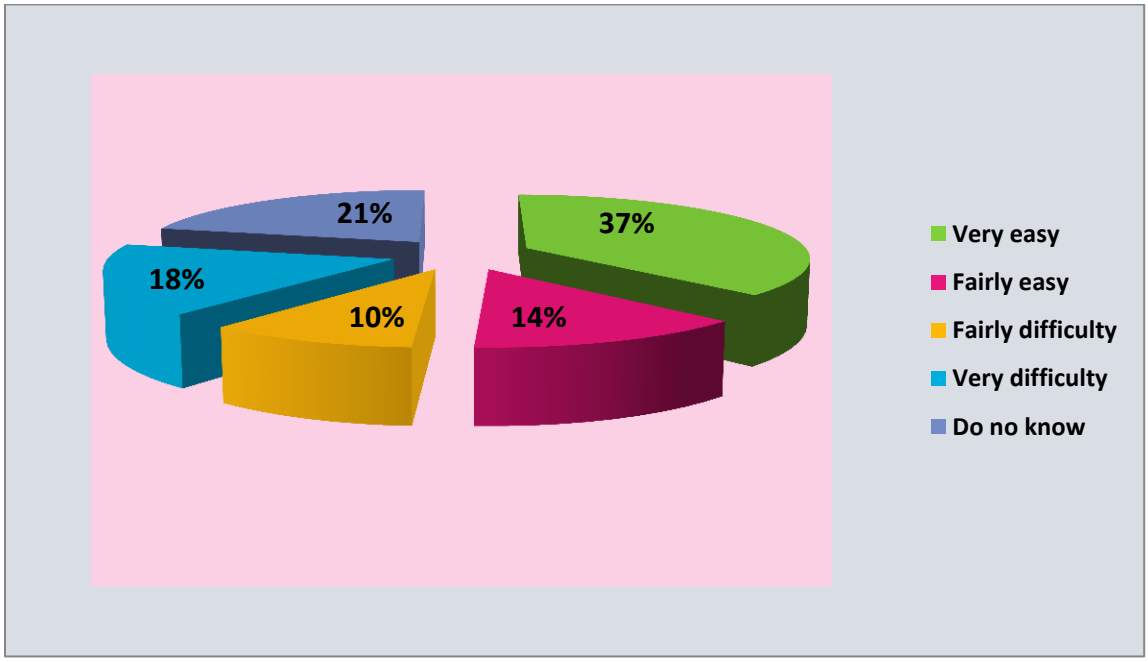

Figure 4.9: Accessibility of Drugs

As shown in the figure 4.9 above 37% of the respondents indicated that drugs are very easily accessible, 14% indicated that they are fairly easy to access while 18% thought it was very difficult to access drugs.

4.3.2 ACCESSIBILITY of Specific Drugs.

In terms of accessibility of specific drugs, the following were the findings

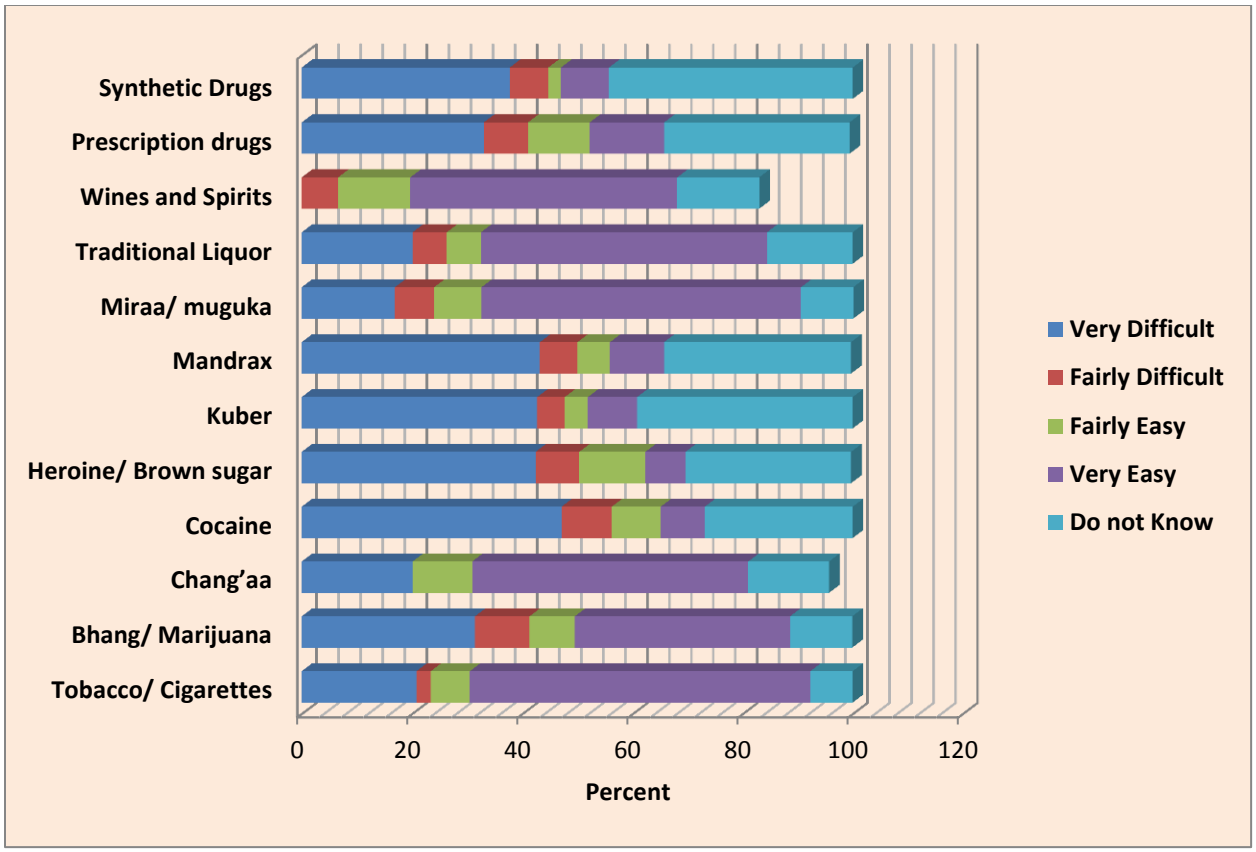

FIGURE 4.10: ACCESSIBILITY OF SPECIFIC DRUGS

The respondents were asked whether it was very easy, fairly easy, fairly difficult or very difficult to access some specific drugs. Figure 4.10 shows that drugs that were considered to be very easily accessible included tobacco/ cigarettes (62%), *miraa*/*muguka* (58%) and traditional liquor (52%), while those that were very difficult to access included; cocaine (46%), heroin (42%) , kuber (42%) and mandrax (42%). Mandrax is classified as a synthetic drug alongside amphetamine and hallucinogens. Accessibility to drugs is related to their availability, which may also fuel demand.

4.3.3 DISABILITY AS RISK FACTOR FOR DRUG USE

The following were the responses to the question of whether disability was a risk factor for drug use.

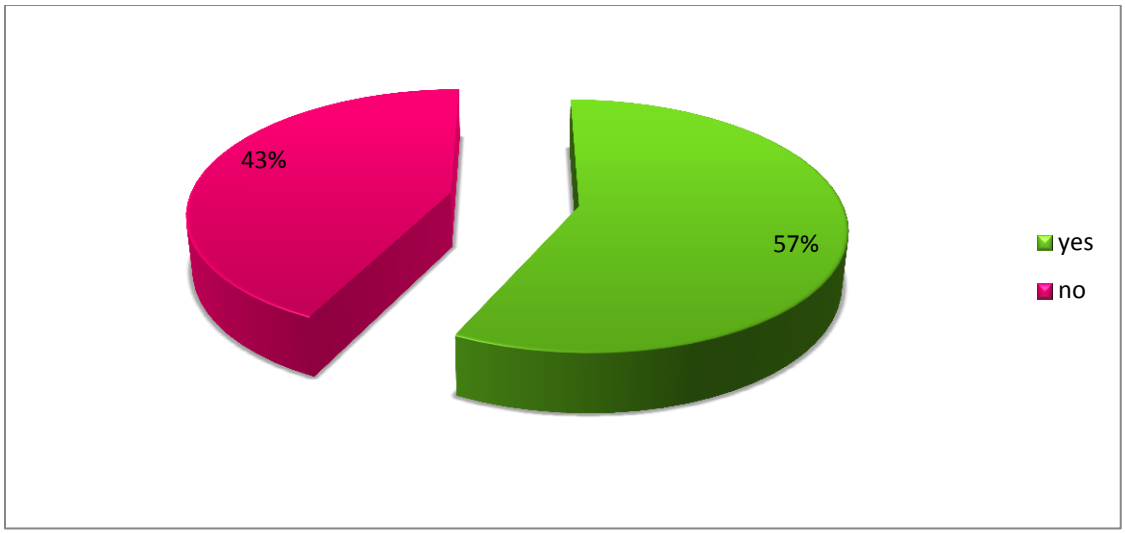

FIGURE4.11: ARE PERSONS WITH DISABILITY AT RISK OF USING DRUGS?

From figure 4.11 , over half of the respondents (57%) answered affirmatively, that PWD are at risk of using drugs.

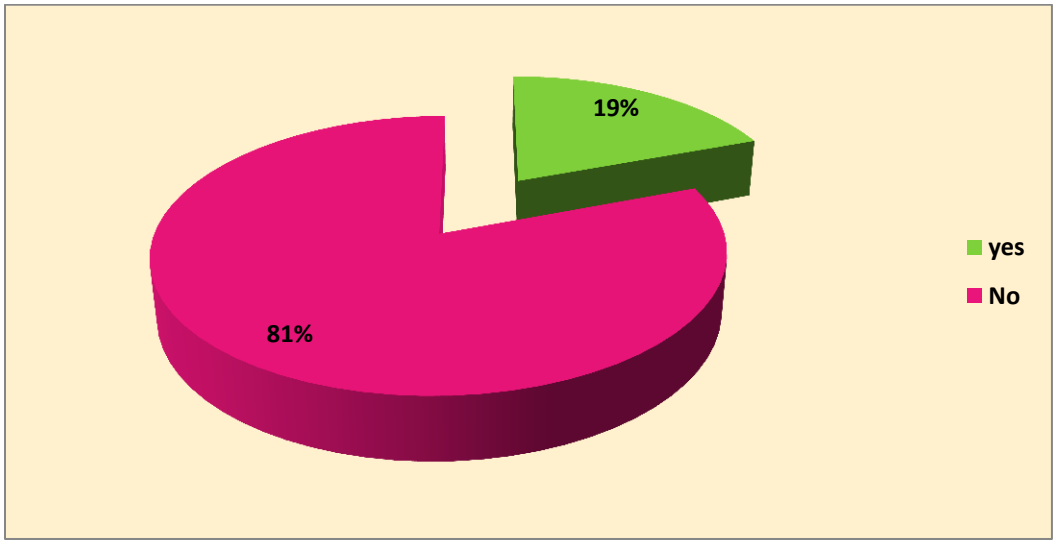

FIGURE 4.12: IS DISABILITY CONTRIBUTING TO DRUG USE AMONG USERS?

As can be seen in figure 4.12, majority (81%) of the respondents using drugs, indicated that disability was not a contributing factor to their use of drugs. However, almost one fifth (19%) indicated that the disability was a contributing factor to their drug abuse. These findings are in agreement with the findings on risk factors for taking drugs by PWD, where over half (57%) of the respondents mentioned that an existing disability has a positive influence on drug abuse among PWD. Respondents who were not using drugs were asked whether having a disability may put them at risk of using drugs. The following are the findings.

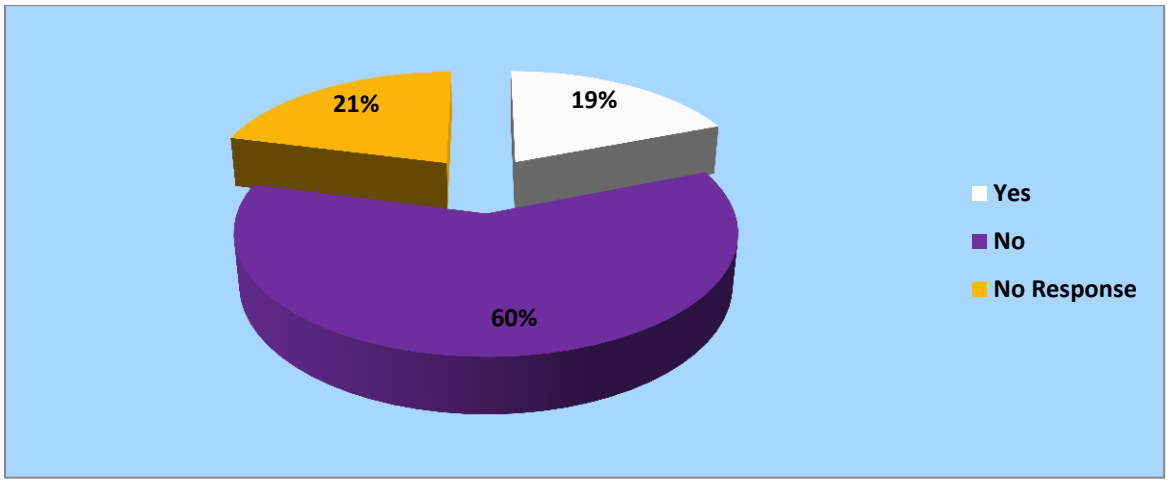

FIGURE 4.13: DISABILITY IS A RISK FOR DRUG USE AMONG NON-USERS

Figure 4.13 shows that 19% of the respondents stated that their disability was putting them at risk of using drugs while 60% stated that having a disability does not pose any risk of abusing drugs by PWD.

4.3.4 REASONS WHY PEOPLE WITH DISABILITY USE DRUGS.

The following were given as reasons for using drugs by PWD

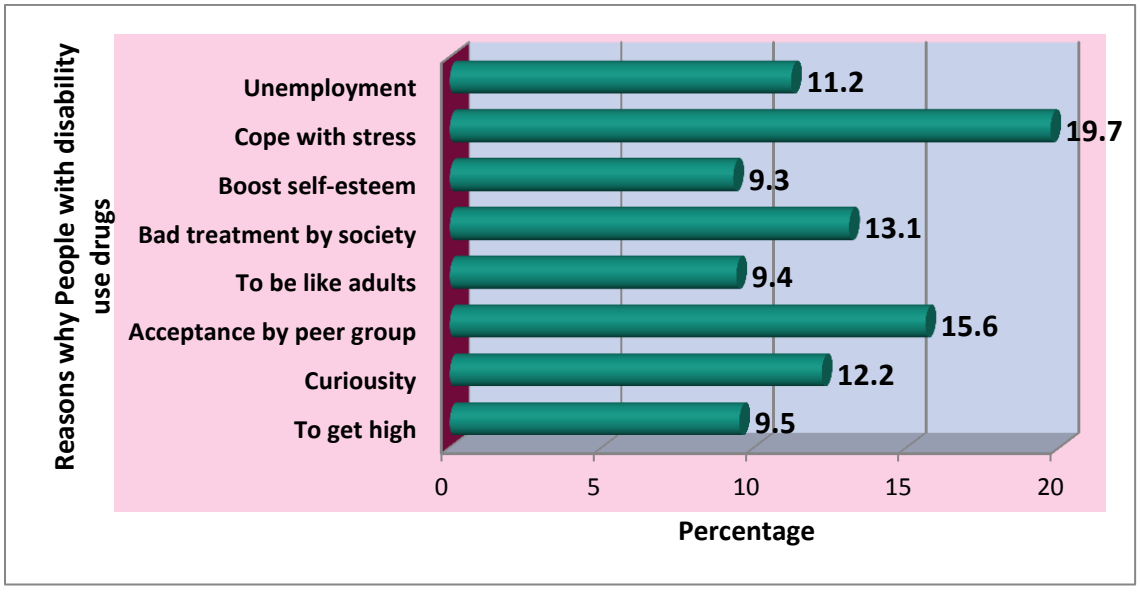

FIGURE 4.14: REASONS WHY PEOPLE WITH DISABILITY USE DRUGS

Figure 4.14 shows that according to the respondents, coping with stress (19.7%), followed by acceptance by peer group (15.6%), bad treatment by society (13.1%), and curiosity (12.3%) were the leading reasons for abuse of drugs. These were followed by unemployment (11.2%), copying the behavior of adults (9.4%), desire to boost self-esteem (9.3%), and in order to get high (9.5%).

The following additional insights emerged from key informants interviews and focus group discussions on reasons why PWD use drugs:

TABLE 4.7: PERCEPTIONS OF KEY INFORMANTS ON REASONS FOR USING DRUGS BY PWD

Category of respondents	Reasons for ADA among PWD
Parents of PWD	- Peer pressure/experimentation - Stress/frustration (immobility makes the use the main per-occupation) - Ignorance/ lack of awareness of side-effects - Family factors (poor parenting, conflicts) - Exclusion (stigma, being neglected) - Unemployment and idleness - Low self esteem - Excess money (from begging, sponsors) - State of helplessness - Low level/lack of education
Institution based key informants	-Low self-esteem and self-denial (using drugs to temporary escape from reality) -Stress and frustrations resulting from perceptions of the disability -Environmental influence – to gain acceptance, curiosity, pleasure, peer pressure, exposure within the family, -Segregation by society and neglect (exclusion), resulting in very difficult lives for the PWD -When being used by family/guardian to go begging in the streets -Forced to take by thugs who use them to carry illegal arms (guns) -Ignorance owing to lack of exposure and neglect -Communication difficulties both at home and at school among the deaf result to frustration at home and at school
Law enforcement key informant	- Neglect/stigma (public putting drugs in their food or drinks with evil motives) - For esteem and Low self-esteem (don't care attitude) - Excess cash i.e. from begging and sponsors - Vulnerability - Environment (some live in slums where they are exposed to ADA) - Idleness - Weak family bonds - lack of parental love - Lack of finances
Community	- Ignorance / lack of information

based PWD	- Peer pressure - Idleness - Over trusting others (family and friends) - Street life - Amusement and enjoyment (recreation), curiosity and experimentation - Frustration and rejection - Low self esteem - Lack of accountability for deviant behaviour/ascribing to misleading myths suggesting positive effects of drug abuse.

4.4 Risk of Persons with Disability being involved in the Drug Supply Chain

Data was collected on several indicators of the likelihood of persons with disability being involved in selling/supplying/peddling drugs either among persons with disability or in the general population. The findings are as follows.

4.4.1 Are Disabled Persons at Risk of Selling Drugs?

Respondents were asked if persons with various types of disability are at risk of selling drugs or not. The following are the responses.

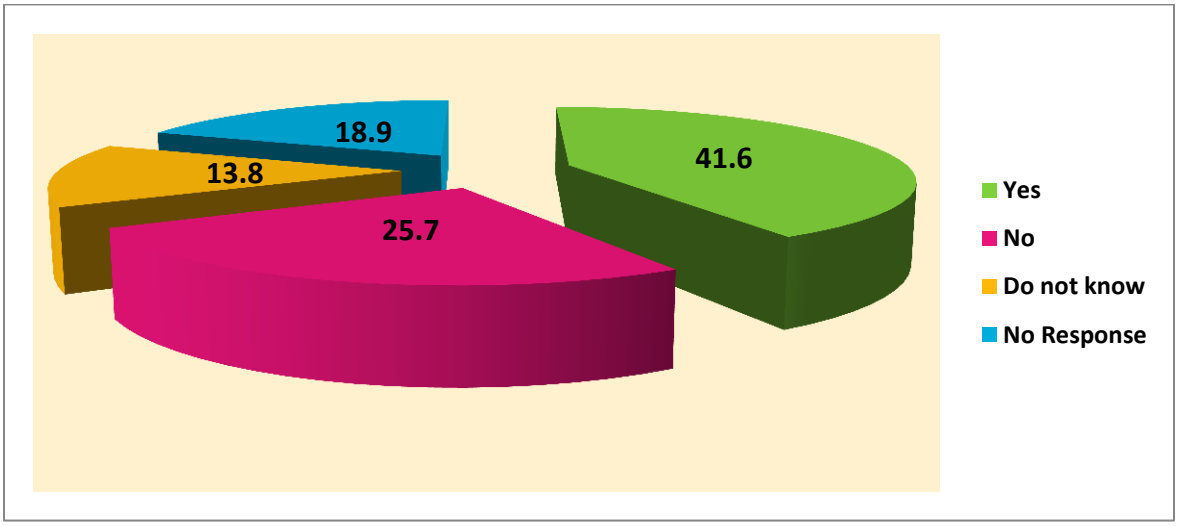

Figure 4.15: Risk of Persons with Disability Being Used To Sell Drugs

According to figure 4.15, the findings reveal that majority (41.6%) of the respondents indicated that they are at risk of being used to sell drugs, whereas (13.8%) were not aware of whether they were at risk or not.

TABLE 4.8: REASONS WHY PERSONS WITH DISABILITY SELL DRUGS.

1.	**Poverty/unemployment**
2.	**Peer pressure**
3.	**Forced by others in society**
4.	**Not easily suspected by the authorities**
5.	**Ignorance on dangers involved**

From Table 4.8, a variety of reasons were mentioned by the respondents as to why persons with disability are inclined to sell commonly abused drugs. These included the fact that they were not easily suspected by the public or by the law enforcers, lack of employment, peer pressure and being forced by others in society.

4.4.3 ACTUAL INVOLVEMENT OF DISABLED PERSONS IN SUPPLYING DRUGS

Respondents were asked if they knew of persons with disability who supply drugs. The following were the findings.

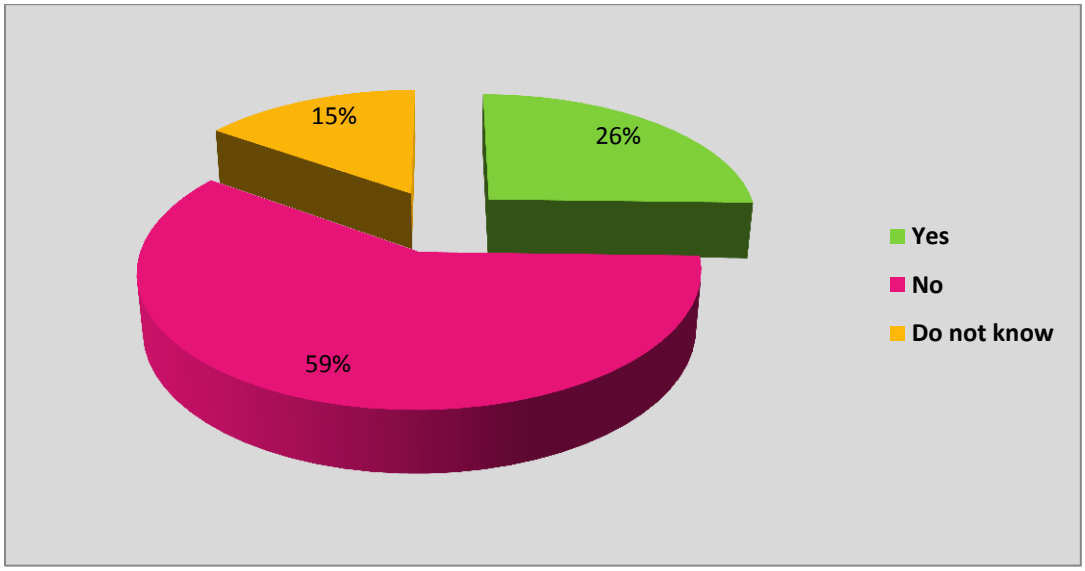

FIGURE 4.16: KNOWS A DISABLED PERSON SUPPLYING DRUGS

As indicated in the Figure 4.16 above, 26% of the respondents indicated that they knew of a person with disability who supplies commonly abused drugs.

4.4.4 FRIENDS WITH DISABILITY SUPPLYING DRUGS

Respondents were further asked if they knew a friend who supplied commonly abused drugs. The responses are shown in Figure 4.17.

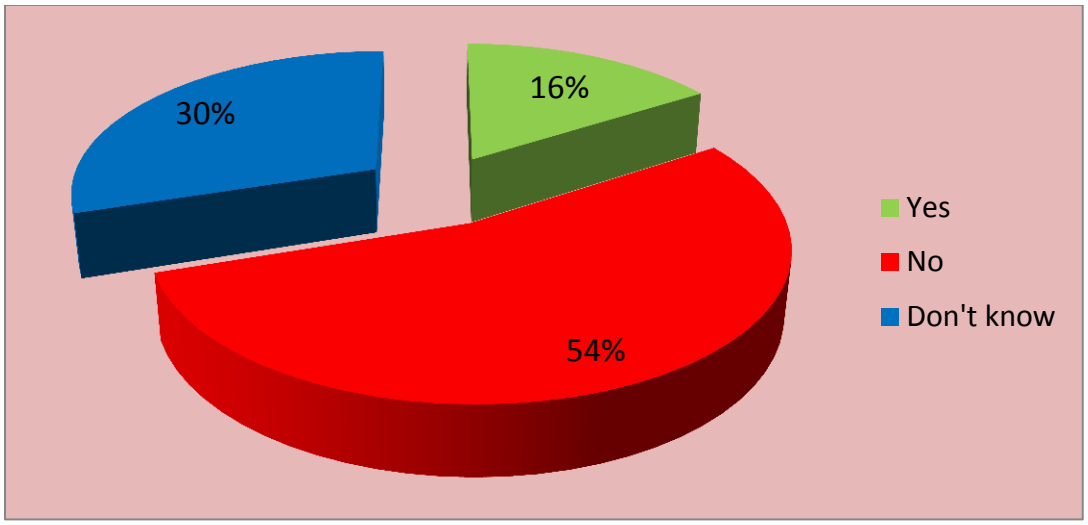

FIGURE 4.17: KNOWS FRIENDS WITH DISABILITY SUPPLYING DRUGS

As indicated in the Figure 4.17, 16% of the respondents had friends with disability supplying drugs, while 54% indicated that they did not have friends with disability who supplied drugs.

4.4.5 MEMBER OF FAMILY SUPPLYING DRUGS.

Respondents were further asked if they knew of a member of their respective families supplying drugs. Below are the findings:

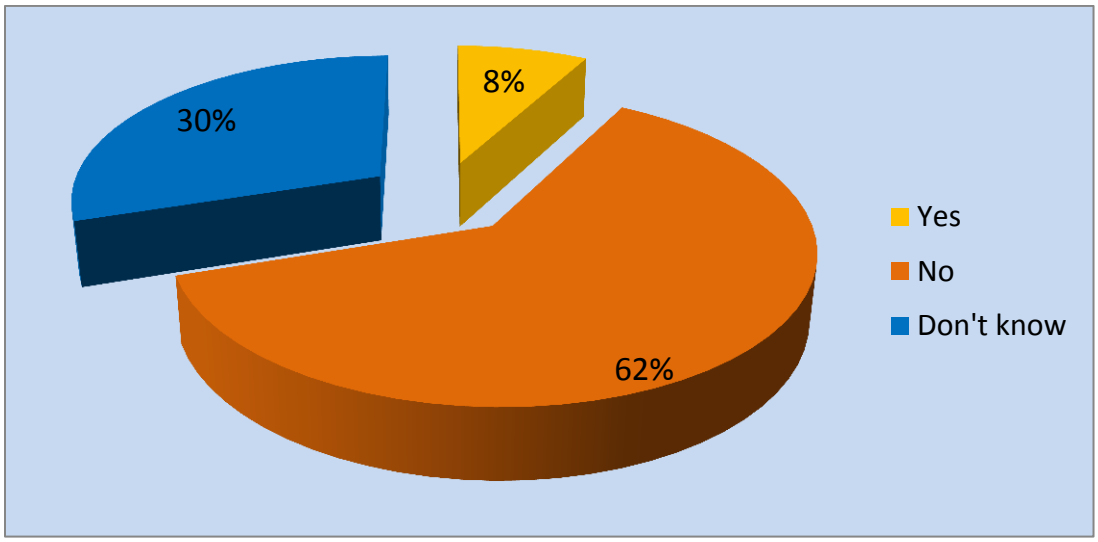

FIGURE 4.18: KNOWS MEMBER OF FAMILY SUPPLYING DRUGS

From figure 4.18 , 8% of the respondents knew a family member involved in supplying drugs while 62% did not know a family member who supplied drugs.

4.4.6 Personal Involvement in Supplying Drugs.

Respondents were asked whether they have ever supplied drugs and their answers are shown in Figure 4.19.

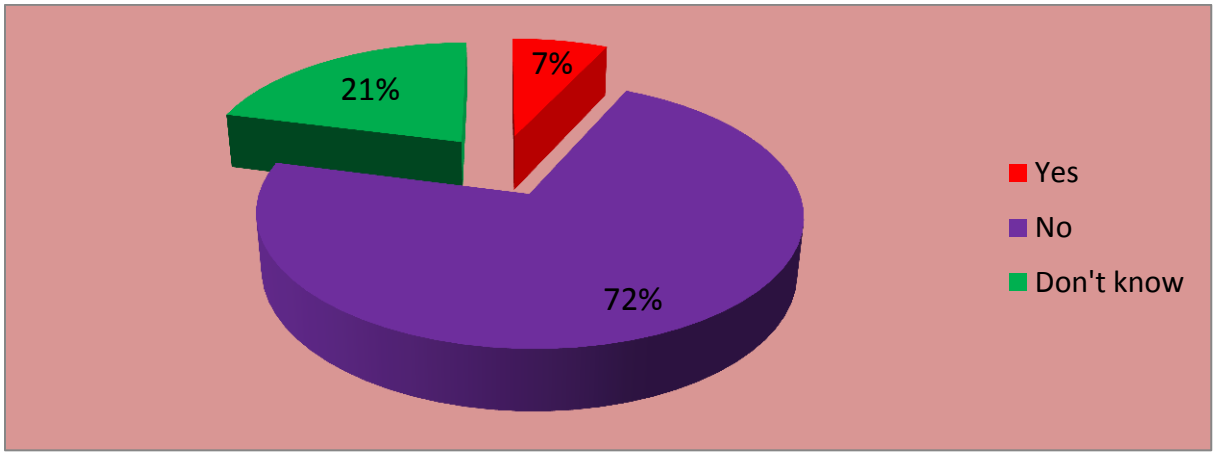

Figure 4.19: Ever Supplied Drugs

According to figure 4.19, regarding any involvement in supplying drugs, a majority of the respondents (72%) indicated that they have never supplied drugs, whereas 7% indicated that they have ever supplied drugs.

4.4.7 Currently Selling or Supplying Drugs.

Current practice of supplying drugs was of interest in our study. When respondents were asked whether they were currently supplying drugs, they gave varying responses as follows:

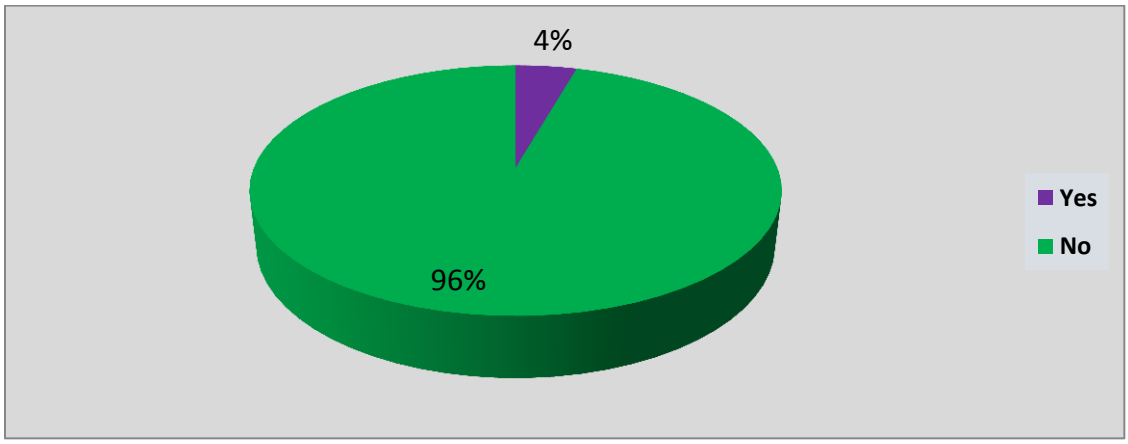

Figure 4.20: Respondents Currently Selling or Supplying Drugs

Figure 4.20 shows that while a majority (92%) of the respondents indicated that they were not currently selling or supplying drugs, some 4% indicated that they were currently selling or supplying drugs.

4.5 Perceived Impact of Drug Use among Persons with Disability

Data was collected on several indicators of impact of drug use among persons with disability. These included positive and negative impacts. The following were the findings.

4.5.1 Positive Effects of Drugs.

The following emerged as the positive effects of drugs mentioned by the respondents:

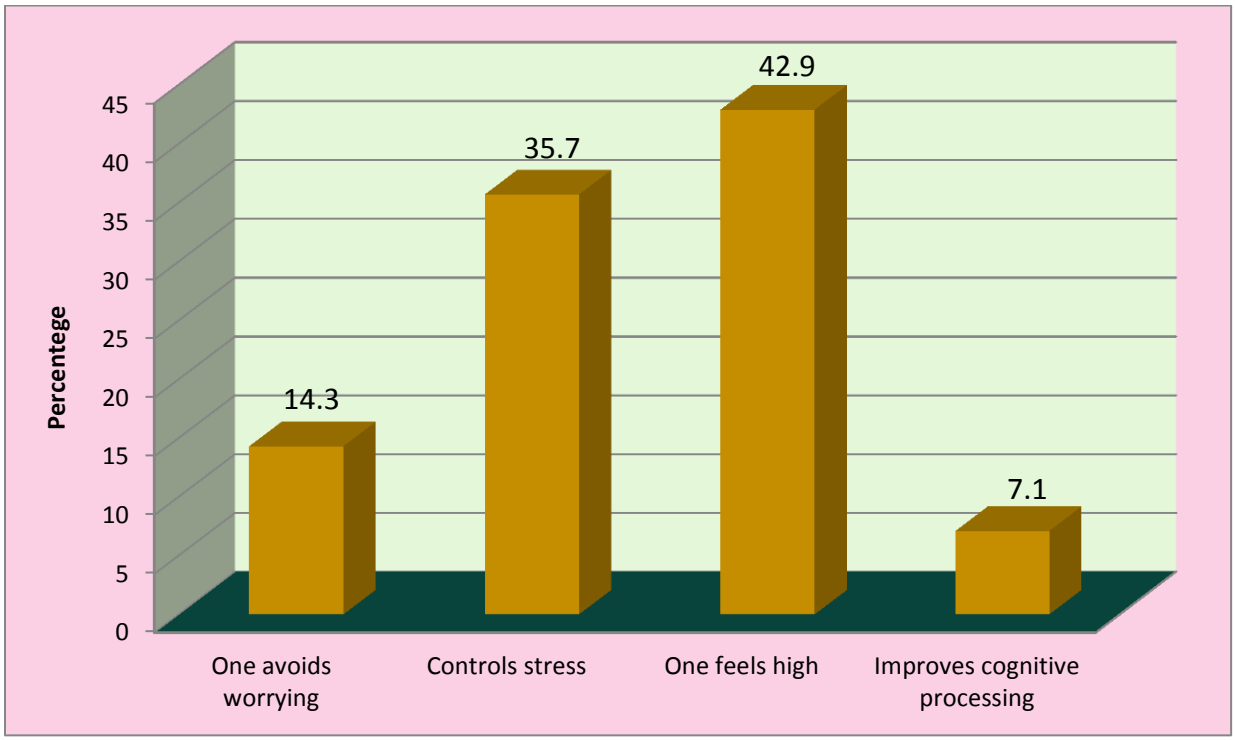

Figure 4.21: Positive Effects of Drugs

Majority of the respondents (42.9%) stated that one of the positive effects of drugs is that it makes one feel high, while 35.7% stated that it controls stress according to figure 4.21.

4.5.2 Negative Effects of Drugs.

The following were indicated as the negative effects of drug abuse among persons with disability:

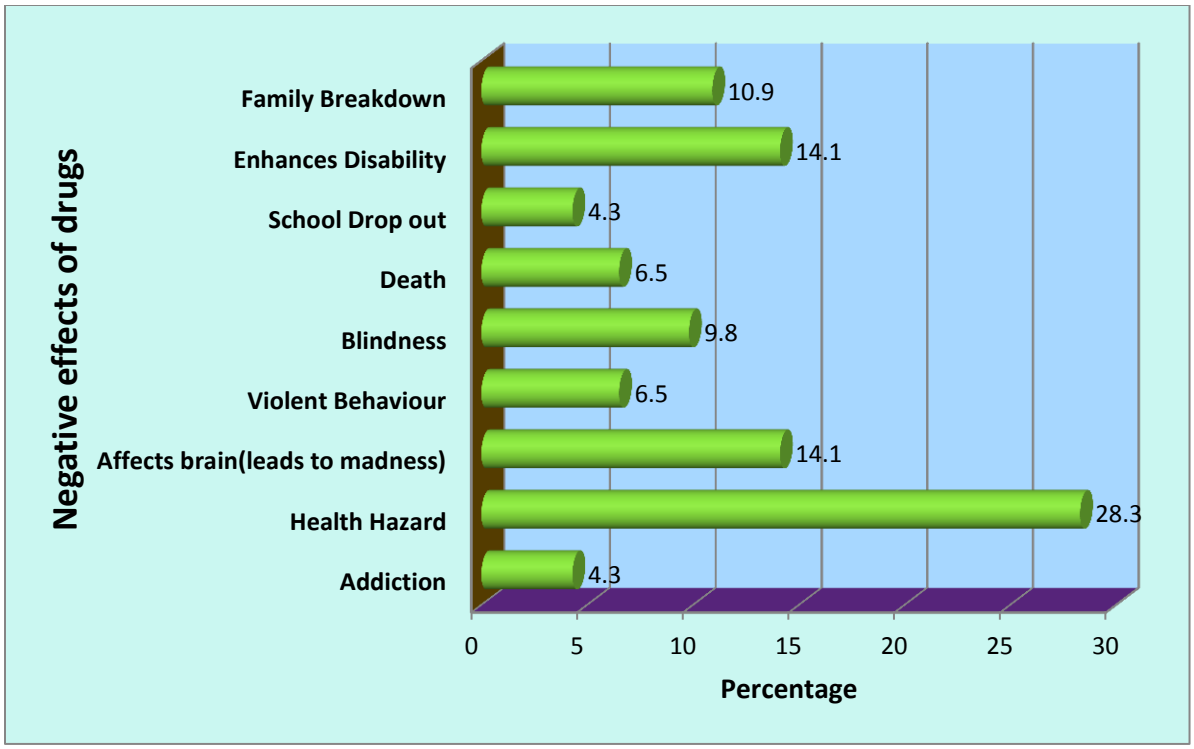

FIGURE 4.22: NEGATIVE EFFECTS OF DRUGS

According to the respondents, as shown in figure 4.22, health hazard as a negative effect of drug abuse was mentioned by 28.3%, followed by enhancing of disability (14.1%) and affecting the brain leading to mental illness (14.1%). Other negative effects mentioned were Family breakdown (10.9%), blindness (9.8%), violent behaviour (6.5%) and problem of addiction (4.3%).

4.6 ROLE PLAYED BY DRUGS IN CONTRIBUTING TO VARIOUS TYPES OF DISABILITIES

This study also looked at the link between drugs and disability. The findings are as shown below:

4.6.1 DRUGS AND DISABILITY

The following is the distribution of respondents in terms of whether their disability was due to alcohol and drug abuse or not.

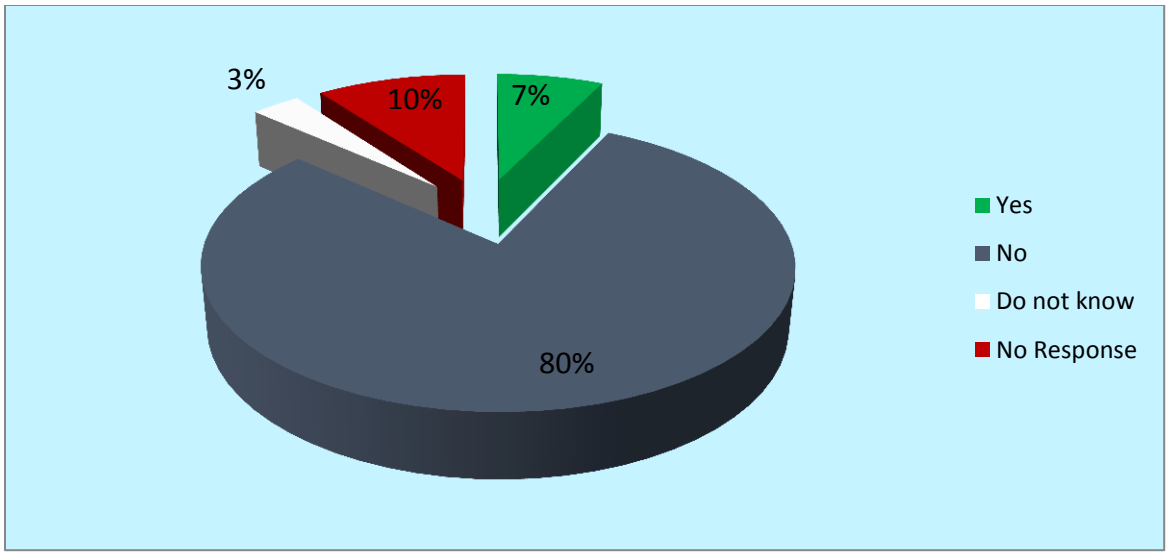

FIGURE 4.23: IS YOUR DISABILITY DUE TO DRUGS?

From the findings in figure 4.23, 7% of the respondents indicated that their disability was due to alcohol and drug abuse, while the bulk of the respondents (80%) mentioned that their disability was not linked to ADA.

4.6.2 FAMILY MEMBER WITH ALCOHOL/ DRUG USE- RELATED DISABILITY.

Respondents were asked if they have a member of their family with a disability related to drug use. The following are the findings

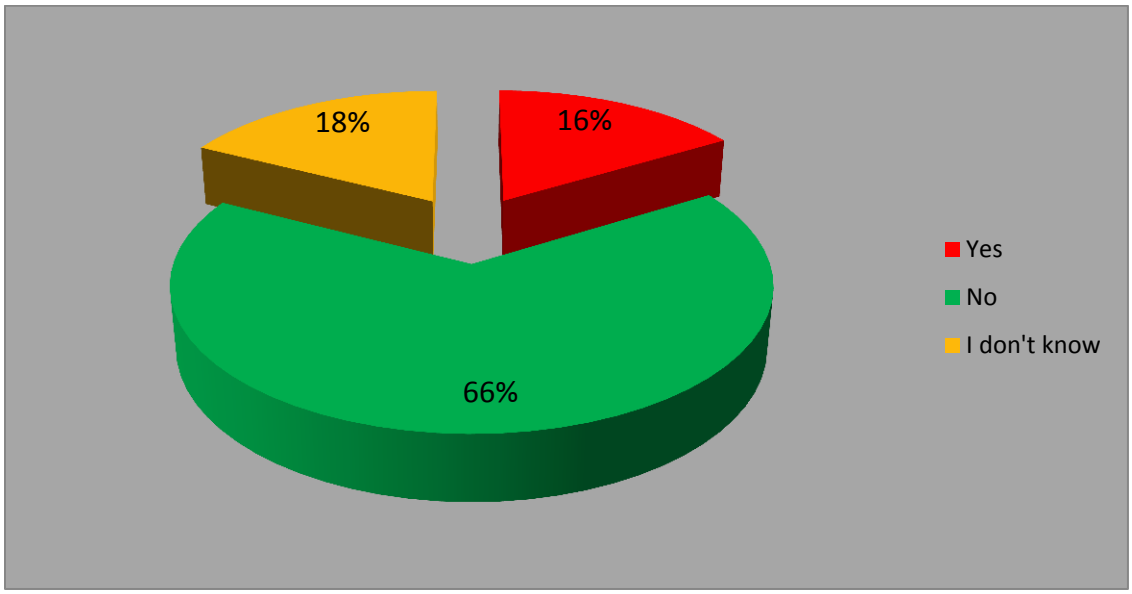

FIGURE 4.24: FAMILY MEMBER WITH ALCOHOL/ DRUG USE DISABILITY

As indicated in the figure above (4.24), 16% of the respondents stated that a member of their family had alcohol/ drug abuse related disability, 18% did not know whether they had a family member with alcohol/ drug abuse disability or not, while the rest (66%) did not have a family member with ADA related disability.

4.6.3 Friend with Alcohol/ Drug Use- related Disability

The following is the distribution of respondents in terms of whether their friends had alcohol/ drug-related disability.

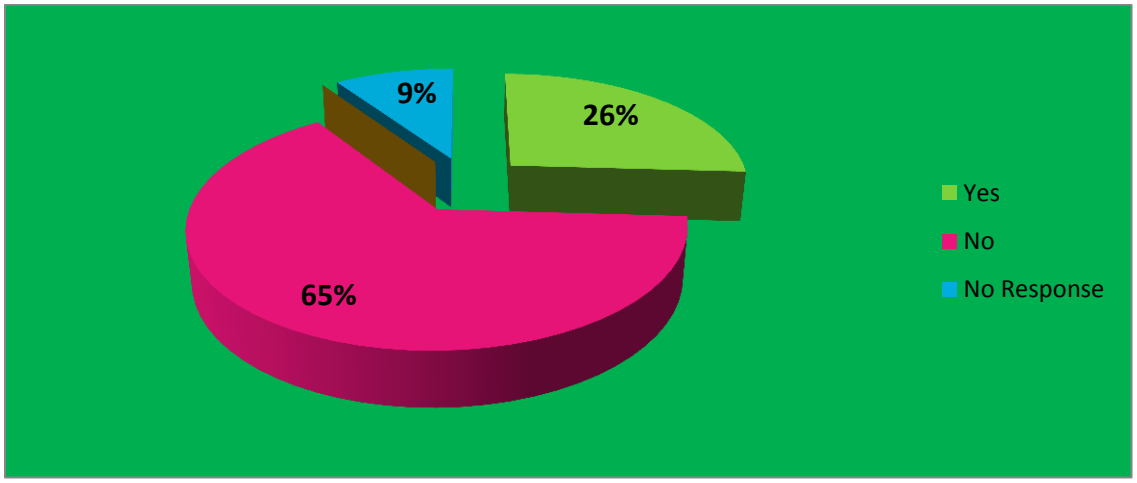

Figure 4.25: FRIEND with Disability caused by Drug use

As shown in the figure (4.25) above, while 65% of the respondents mentioned that they did not have friends who had disabilities caused by drug abuse, over one quarter (26%) indicated that they had friends whose disability was linked to drug abuse.

4.7 Strategies that Can be Used to Address Drug Related Issues among Persons with Disability

The study also generates data on the strategies that can be used to deal with the issues of alcohol and drug abuse among persons with disability. Information of interest included sources of information on commonly abused drugs, accessibility of drug information, challenges faced in accessing information on drugs, strategies to increase access of drug information, places where to find treatment, ease of accessing treatment/ counseling/ rehabilitation. Below are the findings.

4.7.1 Source of Information on Commonly Abused drugs.

The following is the distribution of respondents by sources of information on commonly abused drugs.

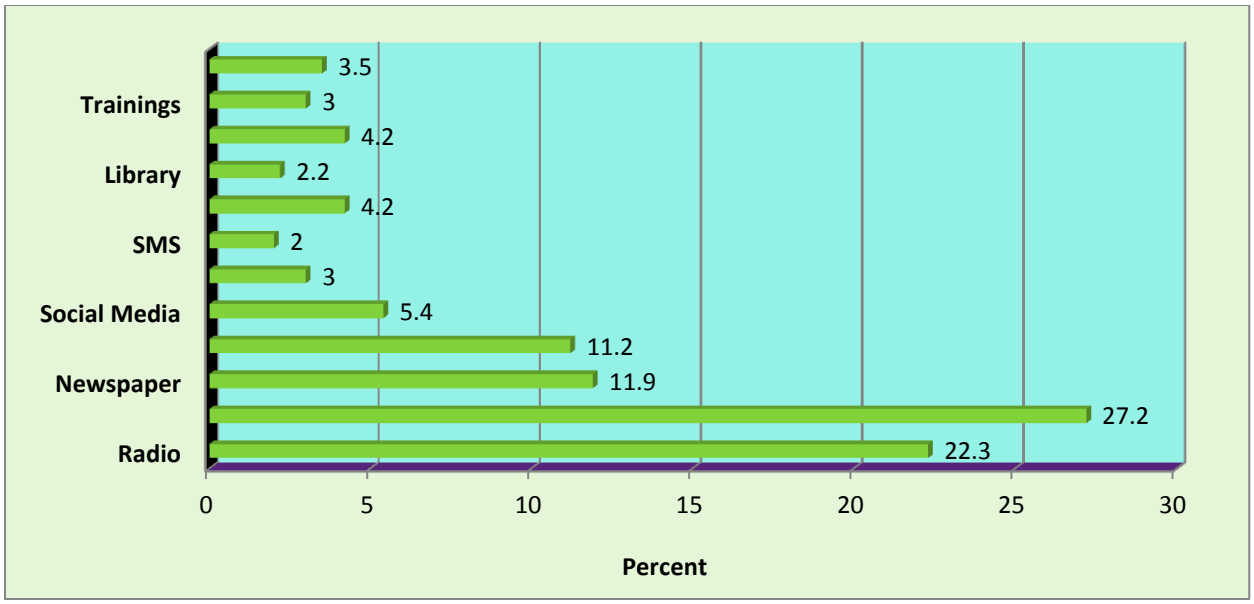

FIGURE 4.26: SOURCES OF INFORMATION ON COMMONLY ABUSED DRUGS

According to Figure 4.26, most of the respondents' sources of information on commonly abused drugs were; through television (27.2%) followed by radio (22.3%), newspaper (11.9%), and friends (11.2%). Other sources of information included, social media at 5.4%, internet and social grouping tying at 4.2%, teachers (3.5%), trainings and email both at (3.0%) while library and Short Message Service (SMS) accounted for 2.2% and 2.0% respectively.

4.7.2 ACCESSIBILITY OF DRUG INFORMATION

The following is the distribution of respondents by accessibility of drug information

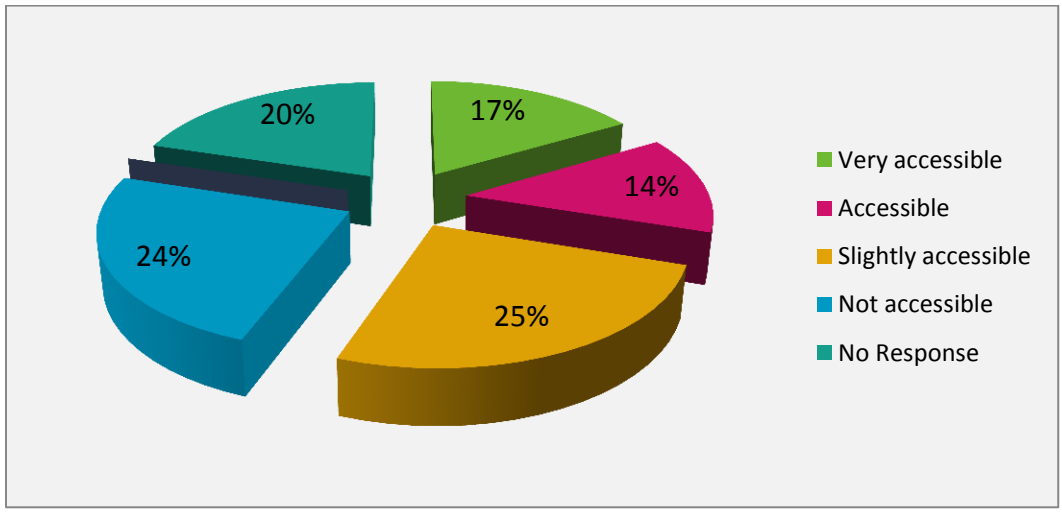

FIGURE 4.27: ACCESSIBILITY OF DRUG INFORMATION

As indicated in Figure 4.27above, 17.0% of the respondents stated that information about commonly abused drugs was very accessible, followed by 14.0% who indicated that information

was accessible. One quarter (25.0%) mentioned that it was slightly accessible, while an almost equal number (24.0%) mentioned that information on such drugs was not accessible to them. One fifth (20.0%) of the respondents did not respond to the question on accessibility of information, probably due to the type and/or level of their disability.

Further insights emerged from the key informants. Four of the institution based key informants also cited unavailability of information as a serious challenge to accessing drug related information among the PWD. One of them said that most PWD lack basic communication facilities such as television and radio at home. The second informant pointed out that with respect to provision of information NACADA had failed to fulfill its mandate of providing and distributing drug related information and materials to communities. The teacher counselor continued to say, "*Resource persons like me…. Do not have access to materials on drug abuse which NACADA should make available to us…. NACADA does not have an office in coast region unless I am not aware of it*". These sentiments clearly point to lack of information on alcohol and drug abuse for the PWD and resource persons.

4.7.3 Challenges Faced in Accessing Information on Drugs

The following is the distribution of respondents by the challenges they faced in accessing information on drugs:

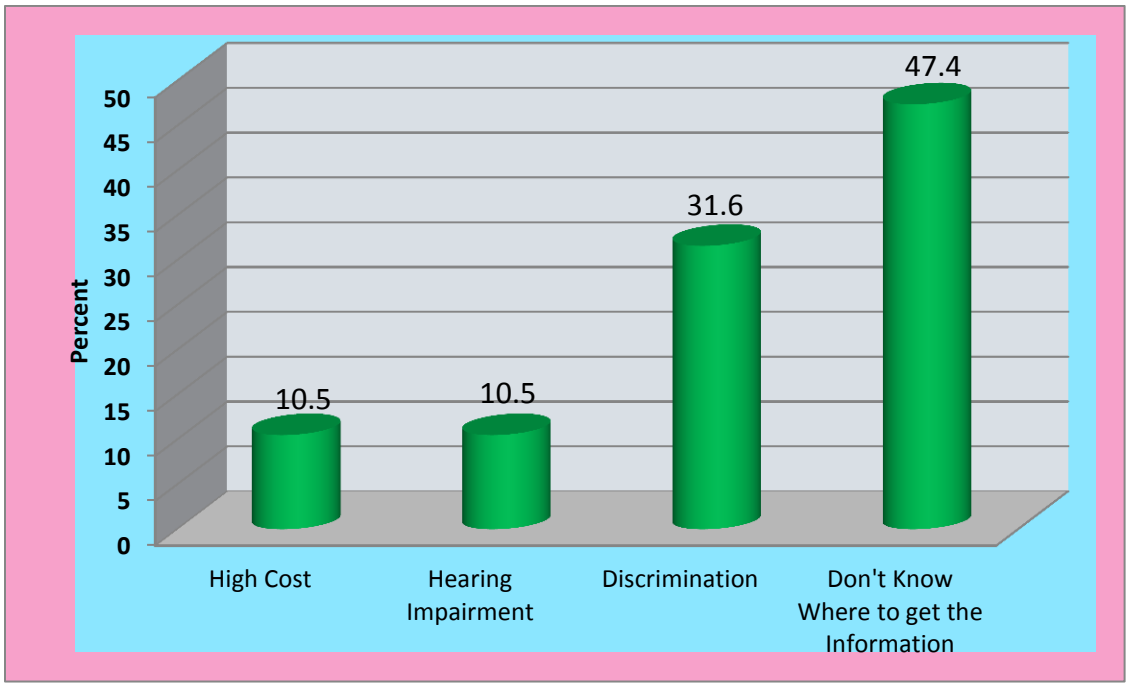

Figure 4.28: Challenges Faced In Accessing Information on Drugs

With regard to accessing drug related information, figure 4.28 shows that 47.4% of the respondents stated that the biggest challenge they faced was that they did not know where to get such information. Another 31.6% mentioned discrimination in the process of accessing

information, while hearing impairment and high cost of accessing information were mentioned by 10.5% of the respondents.

Additional data from key informants revealed further challenges. Some community based PWD reported that language barrier was a major problem because; Braille print was too expensive and prohibitive to most blind people, and the regular print media was inaccessible due to blindness. One visually impaired community based PWD also commented that their deaf peers were also language barred from announcements made on radio which is the main source of information in the rural areas.

4.7.4 Strategies to Increase Access of Drug Information

The following is the distribution of respondents by strategies to increase access of drug information

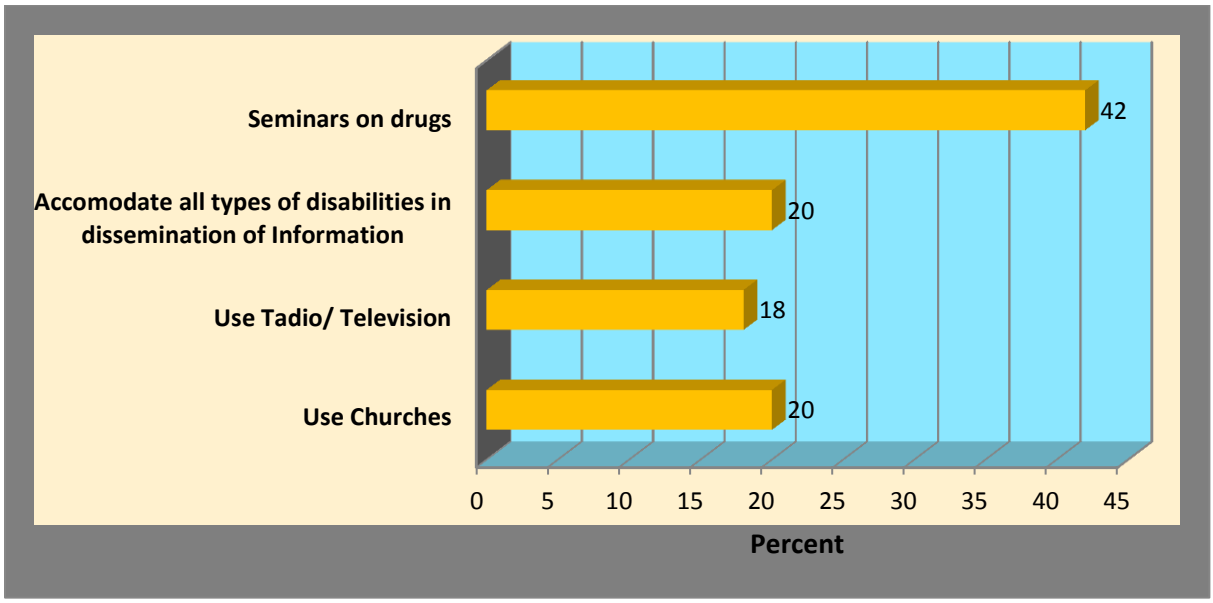

Figure 4.29: Strategies to Increase Access of Drug Information

From figure 4.29, most (42.0%) of the respondents suggested that seminars on drugs would be the best strategy to increase access of drug information, use of churches (20.0%) and accommodating all types of disabilities in dissemination of information respectively (20%), while 22.3% and 27.2% stated that the use of radio and television respectively, would increase accessibility of drug information.

4.7.5 Places Where to Find Treatment.

When asked to indicate where they would seek treatment in case of drugabuse problems, respondents gave varying responses:

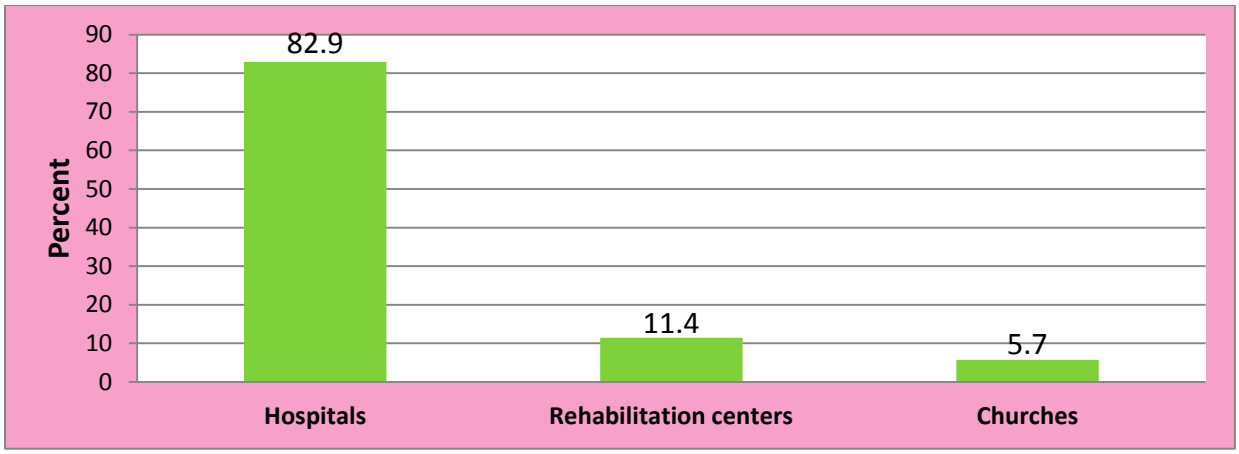

FIGURE 4.30: PLACES WHERE TO FIND TREATMENT

As shown in the Figure 4.30, most of the respondents stated that hospitals accounted for 82.9% of places to obtain alcohol and drug abuse related treatment/ rehabilitation, while 11.4% mentioned rehabilitation centers as places to get drug abuse related treatment. Only 5.7% indicated that one could find drug related treatment in church. An additional question sort to find out how easy it was for PWD with drug related problems to access treatment and rehabilitation. Majority indicated that it was very difficult (34%).

4.7.6 STRATEGIES TO IMPROVE ACCESS TO DRUG TREATMENT AND REHABILITATION FOR PWD

When asked about strategies to increase access to treatment for PWD, the responses were as follows:

TABLE 4.9: STRATEGIES TO IMPROVE ACCESS TO DRUG TREATMENT AND REHABILITATION FOR PWD

1	Provide more rehabilitation centers/treatment centers that are accessible and friendly to PWD
2	Create more awareness on drugs and treatment /rehabilitation opportunities
3	Ban some dangerous drugs
4	Arrest drug dealers

From table 4.9 above, some of the strategies given were, the need to provide accessible and disability friendly rehabilitation centers as well as create awareness on treatment and rehabilitation activities. The FGD gave further insights with suggestions such as:

- Establish special drug rehabilitation units for PWD in public hospitals at district levels.
- Make rehabilitation services friendly, available and accessible
- Establish public residential rehabilitation centers in each county
- Use mobile clinics to treat PWD who have drug related problems, and at the same time offer VCT services and counsel injecting drug users.

CHAPTER FIVE: DISCUSSIONS

This chapter presents the discussions of the findings of the study on alcohol and drug abuse among persons with disability, highlighting the key findings under each study objective.

5.1 Extent, Magnitude and Pattern of Drug Use among Persons with Various Types of Disabilities in Kenya

5.1.1 Awareness of Commonly Abused Drugs

The findings indicated that the three leading drugs in terms of percentage of respondents who were aware of them were tobacco products at 15.6%, alcoholic beverages at 15.1%, *khat* at 14.5%. Of the illegal drugs in Kenya, marijuana was known by the highest percentage at 13.2% followed by cocaine (9.9%) and heroine (9.3%). These findings reveal that the levels of knowledge regarding commonly used drugs are lower compared to the findings of awareness in the general population obtained by NACADA (2012). These findings could be attributed to the possibility that some of the persons with disability, such as the deaf and the blind, may not readily access information on drugs like the rest of the population due to the nature of their impairments. Such low levels of awareness may place them at greater risk of being inducted into the use of these drugs.

5.1.2. Awareness of Persons Using Drugs

More than half of the respondents were aware of someone who uses drugs (63%) while 29% were not aware of a person who uses drugs. This indicates that majority of PWD, like the general population, encounter persons using drugs within their environments. This would mean that they possibly know where to get drugs if they wished to use them just like those in the general population. Similarly, 37% of the respondents had friends using drugs while 51% were not aware of any of their friends using drugs. These findings point to an increased risk for PWD to use drugs. This is because peers generally play a key role in influencing behavior. These findings could imply that PWD who have friends using drugs may be at greater risk of being induced to drug use due to peer influence unlike those who do not have friends using drugs. This points at a need to use the peer-to-peer campaigns in educating PWD on the dangers of drugs.

5.1.3 Personal use of Drugs-Ever Used at least one Substance

The findings revealed that 35% of the respondents had used drugs .These figures are comparable to those of NACADA (2012) that found 37.1% of the general population had ever used at least one substance. They may be slightly lower because the majority of the respondents in the current study were based in educational institutions (73%) and only 27% were community based.

Within institutions there are rules and regulations that may restrict use of drugs hence contribute to reduction in likelihood of use and possibly to the lower figures for the current study. When data was analyzed separately for institutional based and community based respondents, the findings revealed higher levels for community based (38.2%) compared to institutional based (33.8%). These community based findings are higher than those of NACADA (2012) cited above of 37.1% suggesting that the problem of drug use among PWD may actually be more serious among the PWD compared to the general population.The findings tally with other literature (NAADD, 1999) which show that in the United States of America, PWDs abuse alcohol and drugs at equal rate or higher than the general population. This calls for need for programs that target these persons as a high risk group with regard to alcohol and drug abuse (ADA) campaigns.

In addition, when data was disaggregated by age category to compare ADA use among the 10-14 years category and the 15-65 years category separately, 25.9% of the 10-14 years category reported has ever used at least one substance. These figures are significant considering that these are minors hence the need to target this age group in ADA campaigns for PWD.

5.1.4 Age at First Use of Drugs

Respondents who had ever used drugs were asked to indicate the age at which they first used a drug. The findings showed that majority of those who had ever used drugs first used them at the age of 15- 19 (43.3%) followed by 10-14 (22.8%). Some of the PWD used drugs as early as ages 5-9 years**.** This again tallies with the findings earlier that the gage category of 10-14 seems at high risk of being introduced to drugs. Similarly of concern is the evidence that persons as young as 5 years are at risk of using drugs. This means that there is need to begin ADA prevention campaigns as early as possible for PWD.

5.1.5. Frequency and Patterns of Drug Use

The study found that 13.6% of the respondents had used at least one substance in the past one year, 7.4% had used in the past one month (current use) and 3.9% were using daily. The figures were higher for community based when compared to institutional based respondents especially for current use (13.7% and 5.1% respectively) and daily use (6.1% and 3.1%) respectively. These findings on current use at 7.4% for the combined group and 13.7 % for the community based respondents are worth noting. They suggest that indeed PWD like the general population are affected by the problem of drug use. This coupled with the daily use findings of 3.9% for combined group and 6.1% for community based respondents. These findings suggest that among PWD are persons who may have drug use problems and possible addiction to one or more substances and who may be spending substantial resources on drugs. Considering that many PWD may generally be more disadvantaged economically compared to the rest of the society, such drug use patterns may only serve to make them more vulnerable.

This calls for urgent intervention measures to address not only ADA prevention but also treatment targeting the PWD who may have drug use problems.

5.1.6 Type of Drug/s Used

Data on the types of drugs used revealed that among the PWD who abused drugs, majority (28.2%) had used alcoholic beverages, followed by those who used tobacco products (19.6%), *khat* (14.8%) and marijuana (9.2%). Other types of drugs emerging from the interviews and FGDs include chuchura and mnazi mentioned by law enforcement key informants, and *kuber* mentioned by parents of PWD in Nairobi and Coast and also by institution based key informants. The findings on alcoholic beverages use at 28.2% are slightly lower than those of NACADA (2012) that found that among 15-65 years, 30% had ever used alcohol.

However the current study's figures for PWD are higher than those of the general population for tobacco products where use among the PWD was (19.6%) compared to that obtained by NACADA (2012) of 17.3% for the general population Similarly, ever use of *miraa*/*muguka* among PWD was 14.8% which is higher than that for the general population (10.4%) obtained by NACADA (2012). Similarly notable are the findings on ever use of narcotics. The findings revealed a reasonably high use considering that these are illegal drugs as per the laws of Kenya. From the current study findings, PWD who had ever used marijuana were 9.2%, heroin 5.6% and cocaine 5.6%. These figures are worrying when compared with those of NACADA (2012) for the general population which were at 5.4% for marijuana (down from 6.5% in 2007), 0.7% for heroin and 0.6 % for cocaine.

Similarly, the findings on current use of narcotics, that is, marijuana at 2.3%, heroin 0.4 % and cocaine 0.4 %, were higher than those obtained by NACADA (2012) which gave marijuana at 1.0%, heroine at 0.1% and NACADA (2007) which found cocaine at 0.2%. This shows that there is heavier drug use among PWD particularly of the narcotics (marijuana, heroin and cocaine), *miraa* and tobacco products. It is possible that these high figures may be attributed to low awareness levels about the dangers of drugs as well as the illegality of certain drugs. These findings point to an urgent need for ADA interventions among PWD especially targeting narcotics (marijuana, heroin and cocaine).

5.1.7 Poly -substance Use among PWD

Data was analyzed to evaluate the number of substances being used by those using drugs. The findings showed that some of the PWD were using more than one substance indicating poly substance use. Most were combining tobacco with alcohol, while others were adding *miraa*. A few were combining these with narcotics and some with prescriptive drugs and inhalants. For almost all cases of poly-substance use, either alcohol or tobacco was involved, sometimes both of them, suggesting that they are likely to be the gateway drugs which probably open the way for use of other drugs.

This suggests that there is need for ADA prevention campaigns for PWD to target alcohol and tobacco, which though legal drugs in Kenya may lead the users to the more deadly and illegal drugs.

5.2 Risk and Factors for Drug Use among Persons with Various Types of Disabilities

There are various factors that can influence alcohol and drug abuse among persons with disablity. Some increase the chance of engaging in drug abuse and are referred to as risk factors, while others are protective factors, which reduce the risk for use and abuse of drugs. Data was collected on various factors that increase likelihood of PWD to use drugs. This included a question on sources of drugs, sources of funds to buy drugs as well as on accessibility of drugs.

5.2.1 Sources of drugs

The findings showed that the leading sources of drugs for persons with disability were friends at home (24.5%), kiosks around home (22.8%) and, fellow students (15.9%). The main sources of money for buying drugs were from pocket money and friends at (28.7% and 26.3%) respectively. Other sources were from relatives, stealing and selling property.

This finding suggests that peer influence is a leading factor in drug use considering that friends were the leading source of drugs as well as a key source of funds to purchase drugs. This is not unusual considering that most of the participants in the study were young persons for whom peer conformity is of importance. This finding implies that using a peer model in ADA prevention campaigns for PWD would probably be effective since the peer seems a key factor in promoting drug use.

5.2.2 Accessibility of Drugs

On accessibility of drugs to PWD, 37% of the respondents indicated that drugs are very easily accessible, 14% indicated that they are fairly easy to access while 18% thought it was very difficult to access drugs. In terms of accessibility of specific drugs, it was noted that marijuana was relatively easy to access in spite of being an illegal drug in Kenya. Some few PWD said that some of the illegal drugs like cocaine, heroin and mandrax are very easily accessible. This suggests that there is need to step up law enforcement geared at reduction of supply of illegal drugs.

5.2.4 Reasons Why People With Disability Use Drugs

Among the leading reasons for drug use were; coping with stress (19.7%), followed by acceptance by peer group (15.6%), bad treatment by society (13.1%), and curiosity (12.3%) were the leading reasons for abuse of drugs. These were followed by unemployment (11.2%), copying the behavior of adults (9.4%), desire to boost self-esteem (9.3%), and in order to get high (9.5%). These factors seem in line with those documented in literature by among others (Alston, Harley, & Lenhoff, 1995).

Other factors may be experimentation, and rebellion against society and authorities. It is worth noting that persons with disabilities on a daily basis are exposed to and confronted by developmental, social, economic and environmental challenges including lower educational levels, lower incomes, and higher unemployment than people without disabilities (Iezzoni, 2011). These day to day challenges could be responsible for the stress that drives these persons to seek refuge in drugs. This puts them in a cycle of negativity since drug dependence or persistent use of drugs interferes with important activities, and causes a person to spend a lot of time and resources trying to get the substance, hence increasing the economic and social vulnerability for PWD.

5.3 Link between Disability and Drug Use

The study sought to find out the link between drugs and disability.

5.3.1 Does Disability Increase Risk of Drug Use?

Some of the PWD (19%) indicated that the disability was a contributing factor to their drug abuse. These findings are in agreement with the findings on risk factors for taking drugs by PWD, where over half (57%) of the respondents mentioned that an existing disability is a contributing factor to drug abuse among PWD. The results agree with literature by Moore and Greer, (2012) indicating that disability-related factors are culpable features in the development of ADA among PWDs. They further established that those with acquired disabilities were at greater risk of ADA than those born with disabilities. This may be attributed to despair and feelings of reduced self-esteem that accompany an acquired disability. Similarly persons with disability experience a spiral of exclusion from all spheres of the society (Wambugu, 2010) which may impact their self-esteem and consequently result to self-injurious behaviours which may include drug use. Among persons with intellectual disability, evidence suggests that they are more exposed to substance use than persons with other categories of disability and that there is an association between severity of cognitive function and drug abuse (Edgerton, 1986).

5.3.2 Is Drug Use Responsible for Disability?

Seven percent (7%) of the PWDs reported that they had acquired a disability through ADA, another 16% of the PWDs reported that they had a family member with a disability acquired through ADA, while 26% had a friend with a disability acquired through ADA. These figures give an average of 16.3% cases of disability acquired through ADA related factors. Literature does give disability as one of the effects of drug abuse, such as through accidents caused by drunken driving. Some of the PWD who indicated that their disability was drug induced, blamed drugs like adulterated alcohol for causing blindness. Others blamed tobacco products for worsening their disability through chest complications. This suggests that indeed drugs can be linked to disability. Considering that disability brings with it serious challenges, it is important to emphasize in ADA campaigns the possible contribution of drugs to disability as one of the key effects of drug use.

5.4 Risk of Persons with Disability Being Involved in the Drug Supply Chain

Data was collected on several indicators of the likelihood of persons with disability being involved in selling/supplying/peddling drugs.

5.4.1 Actual involvement of Disabled persons in supplying drugs

The findings reveal that majority (41.6%) of the respondents indicated that they are at risk of being used to sell drugs. In terms of involvement in supplying drugs, 26% of the respondents indicated that they knew a person with disability who supplies commonly abused drugs, 16% of the respondents had friends with disability supplying drugs. 7% indicated that they have ever supplied drugs, while 4% indicated that they were currently selling or supplying drugs. While it has been speculated that persons with disability are involved in the drug supply chain, there was generally absence of data to support this speculation. The observed statistics of 4% and 7% for currently supplying and ever supplied respectively, support the speculation that indeed PWD are involved in the drug supply chain. It is possible that the figures could be an underestimate considering the sensitivity of the topic. This is supported by the finding that 26% reported knowledge of a PWD supplying drugs and 16% knew a friend with disability supplying drugs. Considering that these people known to supply drugs are PWD, then the figures of PWD supplying drugs could indeed be higher.

5.4.2 Reasons why Persons with Disability Sell/Supply Drugs.

The reasons for peddling abused drugs were attributable to the state of having a disability, lack of employment, and least suspicion by the public and law enforcers. Other reasons were lack of employment, peer pressure and being forced by others in society. These findings relate to personal attributes, economic factors and lapse in law enforcement. It may be that strict law enforcement would encourage law enforcers to inspect mobility aids, for example, the wheelchair and crutches for the physically disabled, or the white cane for the visually impaired which as the present study has established are used to hide and supply abused drugs. Some reasons given for supplying drugs touch on the exclusion that characterizes PWD in society. The PWD are thrown into a spiral of exclusion from all spheres of the society (Wambugu, 2010) which may impact on their self-esteem and consequently drive them to seek refuge in drugs selling for economic gain as well as to find acceptance.

It is worth noting that some of the PWD reported being forced to sell /supply drugs by others in society including family members. PWD are vulnerable since many times they rely on fellow society members for support on fundamental life manoeuvres such as movement for some like the blind and some of those with physical impairment. If they fall into the hands of unscrupulous family and society members, it is not surprising that they would become victims and be forced to supply drugs in exchange for the day to day support on basic life activities.

Such activities infringe on the fundamental human rights of these PWD. It is therefore important that ADA campaigns address the fundamental underlying vulnerabilities that make PWD at risk of being forced to supply drugs in return for basic support that is owed to them by society.

Families of PWD need education and support on what they need do to assist their members with disability.

5.5 Percieved Impact of Drug Use among Persons with Disability

There were both perceived positive and negative effects of drug use reported by the PWD. Some of the PWD identified some of the positive effects of drugs such as making one feel high (42.9%), controlling stress (35.7), avoidance of worry (14.3%), and improving cognitive processing (7.1%). The phenomenon of keeping the brain alert to improve cognitive processing is a situational factor (Schuckit, 1995), which gives persons who abuse ADA a false perception that this can improve intellectual performance. Some of these perceptions may be based on low levels of awareness as observed in the findings earlier and point to an urgent need for intervention to raise awareness levels among PWD on the dangers of drugs.

In addition, the following emerged as negative effects drugs have had on PWD; health hazard (28.3%), followed by enhancing of disability (14.1%) and affecting the brain leading to mental illness (14.1%). Other negative effects mentioned were family breakdown (10.9%), blindness (9.8%), violent behaviour (6.5%) and problem of addiction (4.3%). These findings tally with those of many studies that have consistently shown that there is a positive association between drug abuse and health disorders (Acuda, 1983; Havassy, 2004; Othieno *et al*., 2000). For example, a wide range of psychiatric disorders, *inter alia*, personality disorders, anxiety, and mood fluctuations are associated with abuse of drugs.

Apart from factors that directly affect health, well-being and quality of life of individual persons with disability, the study also looked at other negative effects of drug abuse. From the findings, 10.9% of the respondents mentioned family breakdown while dropping out of school accounted for almost one in every twenty respondents. The family, apart from the basic role of nurturing, is also the primary unit of socialization, counsel, support, and emotional warmth for its members including those who have various types of disabilities (Harris, 2002). Thus when such family environments are threatened by drug abuse, then this serves to further increase the vulnerability of the environment for the PWD and could further result in drug abuse for the exposed family members.

The impact of ADA among special populations such as persons with disability makes prevention, rehabilitation and other means of referral for treatment for drug abuse an important part of intervention programmes in our setting.

5.6 Strategies that Can be Used to Address Drug Related Issues among Persons with Disability

The study also generated data on the strategies that can be used to deal with the issues of alcohol and drug abuse among persons with disability including challenges and strategies to enhance accessibility to drug information as well as those to address treatment/ counseling/ rehabilitation.

5.6.1 Challenges of Accessibility of Drug Information

Generally accessibility of drug information was a challenge with 25% mentioning that it was only slightly accessible, and an almost equal number (24%) indicating that information on such drugs was not accessible to them. Further insights from the key informants suggested that most PWD lack basic communication facilities such as television and radio at home. Others suggested that the ADA information is inaccessible as it is put in modes that some PWD cannot access, such as print media for the blind and audio messages for the hearing impaired. Another 47.4% of the respondents stated that the biggest challenge they faced was that they did not know where to get such information. 31.6% mentioned discrimination in the process of accessing information, while for others the high cost of accessing information was the problem. These challenges point to a need for a systematic ADA intervention that addresses the unique needs of PWD.

5.6.2 Strategies to Increase Accessibility of Drug Information

Among the suggested strategies were; the need for seminars on drugs (42.0%), the use of churches (20.0%) for these seminars, use of radios, television and social media. The use of a variety of methods to accommodate all disability types was emphasized. Considering that PWD have diverse and unique needs, there is need for ADA campaigns to address specifically the unique needs presented by each impairment among this special group of people if these campaigns are to yield results. This would include for example, ensuring that the visually impaired have print information available in braille, the hearing impaired have acces to a sign language interpretor for audio messages.

5.6.3 Strategies to Improve Access to Drug Treatment and Rehabilitation for PWD

Majority (34%) felt that accessing treatment was very difficult . Several suggested the need for provision of accessible, affordable and disability friendly rehabilitation centers as well as creating awareness on treatment and rehabilitation activities among PWD. There was a further feeling that there is need to establish special drug rehabilitation units for PWD in public hospitals at district levels which are accommodative of the unique needs of PWD. Considering that majority of PWD are generally economically disadvantaged, and suffer the added burden of meeting costs related to the disability, having a drug related problem can only worsen the already delicate situation. It can increase the vulnerability of the PWD as they may not have the resources to meet rehabilitation costs and hence may end up wasting away in addiction. There is an urgent need for efforts at making drug rehabilitation services available, accessible and affordable for PWD who have drug related problems.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

The following conclusions may be drawn from the study findings

6.1.1 EXTENT, MAGNITUDE, PATTERNS AND FACTORS OF DRUG USE AMONG PWD

- The level of knowledge and awareness about drugs is lower among PWD than the general population
- PWD like the general population are affected by the problem of drugs
- Leading drugs used by PWD include alcoholic beverages, followed by tobacco products, *khat* and marijuana.
- There is heavier use of narcotics(marijuana, cocaine and heroin) among PWD compared to the general population
- Some PWD use the drugs daily suggesting that there could be dependence or the risk of it.
- Drugs are easily accessible to PWD especially the legal dugs like tobacco/ cigarettes, *miraa*/*muguka*, and traditional liquor. The illegal drugs too are accessible though with difficulty
- Among the key reasons for drug use among PWD
    - to cope with stress
    - to be accepted by peers
    - due to bad treatment by the society

6.1.2 RISK FACTORS FOR INVOLVEMENT OF PWD IN PEDDLING DRUGS

In terms of risk of involvement in peddling drugs

- Majority (57%) felt PWD were at risk of being used to sell or peddle drugs particularly because of the following reasons:
    - The mobility devices like wheelchair and white cane may be used to disguise drugs
    - PWD are least suspected by law enforcement agencies
    - Some PWD are coerced to use their mobility devices to hide drugs by family members and others in society
- Therefore, there is a link between drug abuse and disability with some disability types resulting from drug use

- There is a link between disability and drug use with disability being perceived as a risk factor for drug use

6.1.3 Impact of drugs on PWD

Some of the effects that emerged were

- Negative effects on general health
- Worsening the impairment/disability

6.1.4 Suggestions to deal with drug issues among PWD

- Increase access to drug information
- Have methods of dissemination of drug information that accommodate all types of disability
- Improve accessibility to treatment and rehabilitation by having affordable disability friendly treatment facilities

6.2 Policy Recommendations

From the study findings and conclusions the following recommendations were made:

6.2.1 Recommendations for NACADA

- Need for policies to guide ADA prevention methods that target PWD and especially addressing the factors that increase their vulnerabily to drug use and drug peddling
- Need for policies that make it mandatory to translate drug information to modes accessible to all PWD such as brailed print material and use of sign language interpretation for audio materials
- Need for policies that address the need to make accessibility to drug treatment and rehabilitation for PWD mandatory, including creation of environments that are disability friendly
- Need for training of personnel that deal with drug treatment and rehabilitation on handling special needs clients with variety of disabilities
- Need for policies on additional funding for research on PWD to cater for unique costs such as brailing of tools, de-brailing of responses, special writing materials, sign language interpretation among others.

6.2.2 Recommendations for Relevant Government Ministry, National Council for Persons with Disability and other stakeholders

- Need for comprehensive efforts to promote acceptance and reduce stigma towards PWD in order to reduce their stress and vulnerability to drug use
- Need for programs targeting economic empowerment of PWD in order to reduce their risk of getting into drug use out of frustration as well as to reduce the risk of being wooed into supplying/ selling drugs as a means of economic empowerment
- Need for programs geared at raising the self-esteem of PWD and promoting their self-efficacy in order to reduce their vulnerability to being induced to drug use as a way of coping.

6.3 Recommendations for Further Research

- Need for replication of study in other parts of the country
- Need for study that focuses on specific categories of disability as well as additional categories of disability that were not included in this study ,as different categories have unique needs
- Need for study investigating the accessibility of available treatment and rehabilitation services for PWD
- Need for study investigating level of preparedness among service providers to handle PWD with drug related issues

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APPENDICES

APPENDIX I -INFORMED CONSENT FORM FOR RESPONDENTS

Good morning/afternoon. My name is Dr Beatrice Kathungu. I am leading a team of researchers in collaboration with NACADAA to conduct a study on alcohol, drugs and commonly abused substances among persons with disability in Nairobi, Coast and Central regions. The purpose of this study is to provide data that will help the government and stakeholders understand how alcohol, drugs and commonly abused substances affect persons with disability and therefore enable them to develop programs and interventions that are sensitive and meet the unique needs of persons with different types of disability.

You have been identified as a potential respondent who can provide useful information to assist in meeting the study objectives. Please note that the data collected in this study will only be used for the intended research purposes. It will be treated with privacy and utmost confidentiality. Please respond to the following questions as truthfully as possible. In addition please be informed that at no one time will you be required to provide your name as you provide the data. Instead codes will be used for purposes of identifying the data collected.

From our perspective as researchers, there are no foreseen dangers of participating in this study. The study may not have direct benefits to you as a person; however your responses will provide important information to the Government and other stakeholders that may in future help them plan programs that take into considerations the needs of persons with disability.

Although some of the questions in the study may cause some discomfort as they feel rather personal, you are encouraged to respond to them as honestly as possible as your honest responses are important to this study and will be treated with utmost confidentiality and will not bear your name or any identifying information. You are also informed that you are at liberty to decline from participating as a respondent in this study at this point or at any stage during the data collection process should you feel that the study process is causing you any unwanted psychological effects.

You are encouraged to ask any questions and seek clarifications on any aspects of the study that are not clear to you. If you have understood the nature and purpose of the study and have had all your questions answered and issues clarified, kindly confirm your willingness to participate in this study as a respondent by signing below.

I do hereby confirm that I have read, been explained to and clearly understood what being a respondent in this study on alcohol, drugs and commonly abused substances among persons with disability entails. I am satisfied that the said study has no foreseen dangers and therefore do hereby freely consent to participate in the study as a respondent.

Signature ……Date……