

## Common Drugs of Abuse and Their Perceived Effects on Prison Inmates in Ghana

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### Abstract

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*This study investigated common drugs of abuse and their perceived effects on prison inmates in the Ankaful Main Camp Prison and Sekondi Female Prison in the Central and Western Regions of Ghana. The study adopted a mixed method, (specifically, a concurrent triangulation design). The sampling techniques used were the purposive, census and snowball. A total of 274 inmates were selected for the quantitative data while 12 inmates were selected for the qualitative data. Data were collected using structured questionnaire and interview guide. Both descriptive (Frequencies; Means and Standard Deviations) and inferential (Independent Samples t-test) statistics were used to analyse the quantitative data while the qualitative data were analysed using inductive approach. Marijuana (wee) was the most abused drug by the inmates followed by cigarette. The study also discovered that male inmates abused drugs more than the female inmates. The study recommended that drug education should be intensified in the various prisons. The study also included in the findings, implications of counselling.*

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**Key Words:** Drugs of Abuse, prison inmates, perceived effects

Globally, according to Ogeil, and Phillips, (2015), the most widely abused substances are the following: caffeine and related stimulants (commonly used in the form of coffee, tea, and many soft drinks); nicotine (currently most often used by smoking tobacco cigarettes) and alcoholic beverages (which come in many forms, including beer, wine and distilled spirits). This is to say that, caffeine, nicotine (tobacco) and alcohol are the most widely abused drugs.

Data on drugs abuse globally from UNODC-WHO showed large-scale seizures of cocaine, heroin, cannabis, amphetamines-type stimulants in different parts of the world (Volkow, Icaza, Poznyak, Saxena, Gerra, & UNODC-WHO, 2019). The presence of cocaine, heroin, and cannabis depend on the level of cultivation in source countries and on the success or failure of trafficking organisations. This implies that cocaine, tobacco, alcohol which comes in different forms are abused globally and their availability depends on the country. However, even with increased levels of law enforcement activities there always seem to be enough drugs available to users (Assabil, 2010).

The risks associated with drug abuse bring about clear threats to prison health care services, and consequently to public health services (Wheatley, 2016). Prisoners on short-term sentences, who use drugs, pose a particular problem, as they are unable to access treatment programmes and return to their families and communities with communicable diseases contracted in the prison, putting them at additional risk (WHO, 2001).

Blood-borne infections (e.g. HIV, Hepatitis B and C) that are transmitted among drug users by unsafe injections, tattooing, and piercing are massively over-represented in prisons compared to the community (Lines, 2006). The additional problems faced by prison administrations in addressing health concerns of prisoners include the higher incidences of drug-related deaths in prisons and shortly after release, suicide attempts, self-harm and mental health problems (Bird & Hutchinson 2003; Spaulding, Sharma, Messina, Zlotorzynska, Miller, & Binswanger 2015). These problems can also put prison staff at additional risk, for example, needle stick injuries during cell searches (Bögemann, 2007).

According to the Bureau of Justice Statistics in the US, as given by Beck and Maruschak (2012), almost 1 in 6 state prisoners reports having a physical health problem, 1 in 3 reports having a physical or mental health problem, and more than 1 in 10 report having multiple health problems. Moreover, almost 22% of inmates report a medical problem that occurred during their imprisonment. This was supported by Freudenberg (2001), indicating that infectious diseases like HIV/AIDS, sexually transmitted diseases (STDs), Hepatitis B and C, and tuberculosis are prominent and appear at much higher rates among imprisoned populations than in the general community. For many inmates, their health problems are attributable, at least in part, to drug abuse.

Fishbein and Reuland (1994), in order to identify specific types of psychopathology as they relate to drug preferences and frequency of use among drug-using offenders, conducted a study on psychological correlates of frequency and type of drug use among jail inmates at the Baltimore City Detention Center. During extensive interviews, drug-abusing arrestees provided information pertaining to their backgrounds, childhood histories, biological relatives, present behaviours, and criminal and drug histories. Additionally, several psychological inventories were administered to evaluate the presence of depression, anxiety, psychopathy, and impulsivity. Results indicate that the frequency of which subjects reported using specific drugs and drug of choice were significantly associated with particular measures of psychopathology. A composite measure of psychopathy was especially related to the frequency of alcohol, marijuana, and cocaine use. Subjects who reported using cocaine on a frequent basis scored high on measures of hostility and reported committing more property crimes, while violent crimes were more likely to be reported by subjects scoring high on the measure of psychopathy.

Complex mental health illnesses have often been associated with prisoners with a history of drug use. Differences in psychiatric morbidity between the prison population and the general population are demonstrated by several studies, with prisoners more often presenting a problematic mental health profile. This involves both severe pathologies, such as psychosis and personality disorders (especially antisocial and borderline disorders), and other problems such as anxiety and depression (Montanari et al., 2014). Fazel and Danesh (2002) conducted a systematic review on the serious mental disorder in 23,000 prisoners. Findings from the study showed that 3.7% of men had psychotic illnesses, 10% (9–11) major depression, and 65% (61–68) a personality disorder, including 47% (46–48) with antisocial personality disorder, 4.0% of women had psychotic illnesses, 12% (11–14) major depression, and 42% (38–45) a personality disorder, including 21% (19–23) with antisocial personality disorder. Although there was substantial heterogeneity among studies (especially for antisocial personality disorder), only a small proportion was explained by differences in prevalence rates between detainees and sentenced inmates. Prisoners were several times more likely to have psychosis and major depression, and about ten times more likely to have antisocial personality disorder, than the general population. Those disorders represent a serious risk factor for suicide, which is the leading cause of death among prisoners (Fazel & Danesh, 2002).

In many European countries, increased mortality from all causes, and particularly from drug overdoses on release, has been documented (Zlodre & Fazel, 2012). There is the need for prisoners to receive particular attention during the period following release because of their extreme vulnerability on return to the community. This is when there is a very high risk of overdose, frequently due to their relapse into heroin use and reduced tolerance to opioids (European Monitoring Centre for Drugs and Drug Addiction, 2011). A review of drug-related deaths soon after release from prison in Australia, Europe, and the United States showed that 6 out of 10 deaths in the first 12 weeks after release were drug-related. The authors concluded that there is an increased risk of drug-related death during the first two weeks after release from prison and that the risk remains elevated up to at least the fourth week (Merrall, Kariminia, Binswanger, Hobbs, Farrell, Marsden, & Bird, 2010).

Farrell and Marsden (2008) also conducted a study on the acute risk of drug-related death among newly released prisoners in England and Wales. Findings from the study also showed that 6 out of 10 deaths were drug-related and that the risk of death was extremely acute in the first and second weeks following release from prison.

Male prisoners were 29 times more likely to die and female prisoners were 69 times more likely to die compared to the general population during the week following their release (Farrell & Marsden, 2008). In Ireland, Lyons, Walsh, Lynn and Long (2010) conducted a study on drug-related deaths among recently released prisoners in Ireland, 1998 to 2005. Findings from the study showed a considerable risk of death at the time of release. Of 105 deaths observed after release from prison, 28% occurred within the first week of release and a further 18% in the first month.

The most extensive research in Ghana on substance use among the youth done by the Ministry of Health/World Health Organization (2003), indicated that the average age at first use of substances ranged between 14 and 19 years. The findings indicated that substances most commonly used by the youth included alcohol, cigarette, cannabis, cocaine, tranquilizer, and heroine. The uses of these substances were more common either at the school or at home. The most widely used psychoactive substances include: caffeine, and related stimulants (which are commonly used in coffee, tea, and many soft drinks); nicotine (which is most often used by smoking tobacco, cigarettes) and alcoholic beverages (which come in many forms, such as beer, wine and distilled spirits) (Simons, 2008).

It appears that research work on drug abuse is always targeted towards the youth or the adolescent placing little or no emphasis on prison inmates, thereby leaving a gap. It is on the basis of this gap that this research work was undertaken to unveil the practice of drug abuse among inmates in the Ankafu and Sekondi prisons.

Niveau and Ritter (2008) also conducted a study on the route of administration of illicit drugs among remand prison entrants. Among 17 European Union countries reporting data on drugs and prison since 2000, the proportion of prisoners who have ever used any drug ranges from 16% in Romania to 79% in the United Kingdom (England and Wales) and the Netherlands, with 9 countries reporting percentages higher than 50%. The most common drugs ever used by prisoners are, in descending order, cannabis, cocaine, heroin and amphetamines, the same as in the general population even if the latter presents a substantially lower prevalence for all those substances (Niveau & Ritter, 2008). This indicates that cannabis, cocaine, heroin and amphetamines are the most abused drugs even in the prisons.

The effects of drug abuse cannot be overemphasized, since it has both psychological and physical health effects on the individual who abuses it. Psychologically, drug abuse leads to memory loss, depression among others. The physical effects may include loss of contact with reality, fatigue, aches, liver cirrhosis among others. Inmates who abuse drugs are not exempted from these psychological and physical effects of drug abuse.

There are few studies on drug abuse among inmates in Africa as compared to their western counterparts. One of the few studies found that the lifetime drug use among inmates in Uganda was 65% and that the most commonly abused drugs in descending order were tobacco/cigarettes, marijuana, *khat* and alcohol (Uganda Prisons Service, 2009). Another study was conducted by Kinyanjui and Atwoli (2013) on substance use among inmates at Eldoret Prison in Western Kenya. Their study found that, the lifetime prevalence of substance use among these inmates was 66.1%, while that of alcohol use was 65.1% both significantly associated with male gender, urban residence and higher level of education.

However, apart from these few studies which focused on drug abuse among inmates, it appears that studies conducted on drug abuse mostly focus on the youth and adolescents in Africa. For example, Peltzer (2009) conducted a study on substance use among school-going adolescents in six African countries (Kenya, Namibia, Swaziland, Uganda, Zambia and Zimbabwe). Peltzer's study revealed that 6.6% of students surveyed engaged in risky alcohol use (two or more per day for the last 20 days or more in the past month) and 10.5% engaged in illicit drug use (three or more times ever). Fatoye (2003), found from his study on the prevalence of drug abuse among secondary school students in southwestern Nigeria that 13% of the students had consumed alcohol while 26% had ever consumed alcohol. And in Ghana, Amankwaah (2014) conducted a study on a comparative study of Ghana and the United States on incarcerating drug users. His study did not focus on the prevalence of drug abuse among inmates but rather how Ghana can adopt the United States' drug court system in incarcerating drug users/offenders. It appears that there are a few empirical studies on drug abuse by inmates in Africa and Ghana. This has, therefore, created a gap in the literature and hence the need to investigate drug abuse in Africa specifically among inmates in Ghanaian prisons.

This study addressed the following research questions and hypotheses

### Research Questions

The following research questions guided the conduct of the study:

1. What are the common drugs abused by inmates in the Ankaful and Sekondi prisons?
2. What are the perceived effects of drug abuse on inmates in the Ankaful and Sekondi prisons?

### Research Hypotheses

- H<sub>01</sub> There is no significant difference in the pattern of drug abuse among inmates on the basis of age.  
H<sub>11</sub> There is a significant difference in the pattern of drug abuse among inmates on the basis of age.  
H<sub>02</sub> There is no significant difference in the pattern of drug abuse among inmates on the basis of years spent in prison.  
H<sub>12</sub> There is a significant difference in the pattern of drug abuse among inmates on the basis of years spent in prison.

### Method

#### Research Design

The research design for this study was the concurrent triangulation design. It is a one-phase design in which researchers implement the quantitative and qualitative methods during the same timeframe and with equal weight (concurrent triangulation design). Questionnaire was used to collect the quantitative data while interview guide was used to collect the qualitative data.

#### Population

The population consisted of all 274 inmates in the Ankaful Main Camp Prison and the Sekondi Female Prison in the Central and Western Regions of Ghana with 252 and 22 inmates respectively. In terms of gender, 92.0% of the participants were males while 8.0% were females). The majority of participants (72.3%), were between 18 and 36 while 27.7% were above 36 years.

#### Sample and Sampling Procedures

Purposive sampling was used to select Ankaful Main Camp Prison and the Sekondi Female Prison in Ghana for the study because these two prisons have separate female and male prison inmates. The census method of sampling was used for collecting data because the whole population is taken into account for the study. Participants for the interview were obtained through snowballing sampling was used to select participants for the interview (focus group discussion) due to the sensitiveness of the research. Participants were put into groups of two of six participants each.

#### Instruments

The research instruments used for the study were developed by the researchers. (Questionnaire for Inmates on Drug Abuse) and interview (An Interview Guide for Inmates on Drug Abuse). The use of these instruments made it possible for data triangulation. Bekoe (2006) opined that triangulation in research is to test for consistency of findings obtained through the use of different instruments.

The questionnaire was made up of six sections. Section A dealt with the background information. The main part of the questionnaire includes B common drugs abused by the inmates The items on the questionnaire were dichotomously scored as 1=yes and 2=no. The "Yes Response" implies that participants use the drug while the "No Response" implies that participants do not use the drug. Section C includes some of the perceived effects of drug abuse among the inmates. The questionnaire is made of thirty-three items (n of items = 33), A four-point Likert-type rating scale was provided for participants to indicate the strength of their opinions on these research questions as follows: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The scale ratings read as follows: Strongly Agree (SA) as 4, Agree (A) as 3, Disagree (D) as 2 and Strongly Disagree (SD) as 1. The cut-off point for deciding whether a participant agrees or disagree to the statement was 2.50. A score of 2.5 or higher on an item indicates an agreement to the statement. While a score below 2.5 then it means the participant disagree with the statement. The reliability coefficient of .82 was obtained for the instrument.

## Procedures

The study was approved by the Institution Review Board of the University of Cape Coast. Before administering the instruments, an approval letter was given from the Director General of Prisons to conduct the study at the two Prisons. The researchers visited the Officers-In-Charge of the prisons under study with the approval letters and also to familiarise herself with the inmates. A date and time were set for data collection from the two prisons and the researchers administered the questionnaire to the participants after explaining the purpose of the data collection and giving them the assurance of confidentiality and anonymity of their responses. Participants who consented to take in the study were then recruited to take part of in the study. The items on the questionnaire were explained to participants to fully understand and give the right response to each item correctly. The questionnaire was administered to the participants and a maximum of an hour was given to them to respond to the items on the questionnaire.

After the questionnaire was administered and collected, participants for the focus group discussion were already gathered for the interview. A maximum of twelve participants selected and put into groups of two consisting of six participants each. With the help of the research assistant, the interview was carried out within two hours.

## Data Processing and Analysis

Data obtained from the participants were filtered to remove any irrelevant responses and thereafter coded. The quantitative data were analysed with the aid of Statistical Product for Service Solution (SPSS version 21). A combination of descriptive and inferential statistics was used to analyse the data to get the relevant results. The demographic characteristics of participants, research question one was analysed using frequencies and percentages. Items on Research question two focused on the perceived effects of drug abuse among inmates were analysed using mean and standard deviation. The mean was used to determine inmates' feeling on each of the items on the questionnaires. The standard deviation provided information on the congruence of the responses given by the inmates.

Research hypothesis one looked at the difference in the pattern of drug abuse among inmates on the basis of age. Ages of inmates were the independent variables and drug use in prison was the dependent variable. The hypothesis was tested using Kruskal Wallis H test at a significant level of 0.05. Shapiro-Wilk was used to test for the normality of the variables while Levene Statistics was used to test for homogeneity of variances. Research hypothesis two sought to find out the difference in the pattern of drug abuse on the basis of years spent in prison. The number of years spent in prison was the independent variables while drug use in prison was the dependent variable. The hypothesis was tested using Kruskal Wallis H test at a significant level of 0.05. Shapiro-Wilk was used to test for the normality of the variables while Levene Statistics was used to test for homogeneity of variances.

## RESULTS

### Research Question One: What are the common drugs abused by inmates in the Ankaful and Sekondi prisons?

The essence of this research question was to know the common drugs abused by inmates. The items on the questionnaire were dichotomously scored as 1=yes and 2=no. The "Yes Response" implies that participants use the drug while the "No Response" implies that participants do not use the drug. The results of the data analysis are presented in Table 1.

**Table 1- Common Drugs Abused by Inmates**

Drug	Yes		No		Rank
	Freq	%	Freq	%	
1. Marijuana (Wee)	130	47.4	144	52.6	1 <sup>st</sup>
2. Cigarette	98	35.8	176	64.2	2 <sup>nd</sup>
3. Tobacco	11	4.0	263	96.0	3 <sup>rd</sup>
4. Alcohol	8	2.9	266	97.1	4 <sup>th</sup>
5. Cocaine	0	0.0	274	100.0	5 <sup>th</sup>

Source: Field Data, (2017)

Table 1 shows that, in sum, participants involved in the study indicated that marijuana (wee) is the most abused drug. It was revealed that 47.4% of the participants were abusing it. This was followed by Cigarette with 35.8%, Tobacco with 4.0%, alcohol with 2.9% and Cocaine with a 0.0%.

The interview (focus group discussion) further showed that marijuana and cigarette were the most abused drugs by participants. This is a direct quotation from one of them;

*“As for the wee we smoke ‘paa’, I won’t lie to you especially when you go to the place of convenience”.*

This is an indication that, marijuana is the most abused drug by the inmates. Results from both the quantitative and qualitative data give clear evidence that marijuana (wee) is the commonly abused drug among inmates.

This finding is consistent with Niveau and Ritter’s (2008), research finding that cannabis (marijuana) was the most common drug abused by inmates in 17 European countries. Furthermore, other studies confirmed this (Johnson 2004, Montanari et al. 2014). Therefore it appears that the use of marijuana has become the most prevailing drug abused by inmates.

### **Research Question Two: What are the perceived effects of drug abuse on inmates in the Ankafu and Sekondi prisons?**

The purpose of this research question was to identify some of the perceived effects of drug abuse among inmates from the selected prisons. To answer this research question, participants were asked series of questions in relation to the perceived effects of drug abuse. The question was assessed on a 4-point Likert-type scale (ranging from 1-4). Means and standard deviation were used for the data analysis. For the interpretation of the means, the following cut-off-points were used (1-1.5 = strongly disagree, 1.6-2.5 = disagree, 2.6-3.5 = agree and 3.6-4.0 = strongly agree). The results of the data analysis are then presented in Table 2.

**Table 2- Perceived Effects of Drug Abuse (n=274)**

Statement	Mean	SD
1. Mental health problem	3.65	.79
2. HIV/ Hepatitis	3.56	.72
3. Increase hostility	3.40	.88
4. Early death	3.28	.88
5. The risk for staff	2.91	1.08
Overall mean	3.36	

Source: Field Data, (2017)

All participants agreed or strongly disagreed that drugs abuse have effects on inmates.

In proving that drug abuse among these prisoners can lead to HIV/Hepatitis, all the participants explained how they smoke the ‘wee’ and other drugs available to them by passing the stick of ‘wee’ from one person to the other without thinking about the health status of the other person so long as he can smoke. Thus this becomes dangerous when the health status of the other person is unknown. If any of the inmates who smoke is HIV positive or Hepatitis C positive, the implication is that anyone else who smokes from the same stick of ‘wee’ or cigarette is at risk of acquiring any of these diseases. This is a direct quotation from one of the participants describing how inmates smoke ‘wee’.

*“Sharing is caring so even for the drugs we share among ourselves. Oh our main term here is ‘pass’ meaning after you inhale you passes it on to a waiting partner”*

These inmates believe they are helping their colleagues by way of sharing a smoking piece of wee, where in actual fact they are doing more harm than good. It reveals inmates’ ignorance on issues relating to their health so far as sharing of a smoked wee is concerned. Thus, creating avenue for various transmitted diseases.

To support this finding, blood-borne infections (e.g. HIV, Hepatitis B and C) that are transmitted among drug users by unsafe injections, tattooing, and piercing are massively over-represented in prisons compared to the community (Lines, 2006).

In addition, Wheatley (2016) indicated that drug abuse brings about clear threats to prison health care services and consequently to public health services out of which we cannot rule HIV/Hepatitis out. And again, Freudenberg (2001) indicated that infectious diseases like HIV/AIDS, sexually transmitted diseases (STDs), hepatitis B and C, and tuberculosis are prominent and appear at much higher rates among imprisoned populations than in the general community. Inmates showed much ignorance about the dangers/health implications of their popular term 'pass' causing them or might have caused them, thus the need to educate them on this.

Considering the effects of drugs on the inmates' mental health problem, the result is not quite different from the general findings. The mean and standard deviation of (Mean=3.65, SD=.788) means that taking of drugs have effects on their mental health. Interestingly, inmates shared an incident that happens to one of them when he first tried to smoke 'wee' while in custody.

*"It was an eyesore, he was calling out names that do not exist and was absolutely acting like a mad man. It was quite scary but funny as well"*

Supporting this finding, Beck and Maruschak (2012) study from the Bureau of Justice Statistics showed that almost 1 in 6 state prisoners' reports having a physical health problem, and 1 in 3 reports having a mental health problem. The inmates also revealed other effects that they consider drugs abuse can lead to – loss of weight; darkening of skin colour, and becoming lazy and dizzy. This seriously implied that even inmates are not exempted from both physiological and psychological issues associated with drug abuse.

Responses from the inmate confirmed that taking of drugs leads to increased hostility, early death and risk for staff. These findings were supported by Bögemann (2007) when he indicated that problems associated with drug abuse among inmates can put prison staff at additional risk. Again, Dillon (2011), supports this view that drug abuse imposes a lot of risk for the prisoners themselves and a threatening working environment for the prison officers. Not only that, Bird and Hutchinson (2003), also identified early death after release and other risks factors as some of the effects of the abuse of drugs by inmates.

Again inmates gave out some other perceived benefits they derived from the use/abuse of drugs from the interview. These include: to help them eat well; bring joy to their hearts; give them strength in their daily routine as well as during sex and to help them meditate. Some of these benefits as perceived by the inmates were listed below.

*"Drugs are good ooh, especially 'wee', it gives much strength during sex and any other work"*

The negative impact of drug abuse is not seen here, rather inmates believed drugs (wee) as an energy booster, which give them strength to work.

*"When you smoke 'wee', you can really eat well. It has really helped us to survive here"*

Again, inmates see wee as an appetizer which increases their ability to eat and eat well, thus not noticing its<sup>2</sup> negative impact.

*"Madam, smoking 'wee' helps us meditate peacefully, we forget almost all our burdens and are able to look ahead"*

These findings confirm that of Boys, Marsden and Strang (2001) when they found out from young people their reasons for using drugs. Their report indicated relaxation, enhancing activity, for euphoric, enhancing sex, and work productivity as many of their reasons for abusing drugs.

It may be concluded that mental and physiological health issues, HIV/Hepatitis, hostility, early death, work productivity, sexual energy among others are the perceived effects inmates derived from drug abuse. Thus inmates know the negative and perceived effects of these drugs but choose to abuse drugs.

### **Hypothesis One**

H<sub>0</sub>: There is no significant difference in the pattern of drug abuse among inmates on the basis of age.

H<sub>1</sub>: There is a significant difference in the pattern of drug abuse among inmates on the basis of age.

The purpose of research hypothesis two was to find out whether there was a significant difference in the pattern of drug abuse among inmates on the basis of age.

Kruskal Wallis H test was presumed to be the appropriate tool to measure hypothesis one. Kruskal Wallis H test is presented in table 3.

**Table 3- Kruskal-Wallis H Test of Age and Drug Abuse**

	Age	n	Mean Rank	Chi-Square	df	p. value
Drug abuse	18-23years	47	155.43	88.922*	3	.000
	24-30years	85	174.66			
	31-36years	66	159.12			
	Above 36years	76	66.07			
	Total	274				

\*Significant,  $p < 0.05$

The Kruskal-Wallis H test showed that there was a significant difference in drug abuse within the different age categories,  $\chi^2 (3df) = 88.922$ ,  $p < 0.05$ , with a mean rank drug abuse of 155.43 for 18-23 years, 174.66 for 24-30 years, 159.12 for 31-36 years and 66.07 for Above 36 years. This implies that inmates who are between the ages of 24-30 years abuse drugs more than any other age group followed by those between the ages of 31-36 years which were also followed by those between 18-24 years and lastly those above 36 years.

Thus, inmates who were above 36 years abused drugs lesser than any other age group to indicate that as they matured in age, their choice of abusing drugs diminishes. Thus, it could be concluded that abuse decline as the age of its user increases. The prevalence of drug abuse among inmates between the ages of 24-30 years could imply that the youth are more inclined to the abuse of drugs. It could also be that, before their imprisonment, these young inmates were abusing drugs as a way of experimenting it or for the fun it. This was true since the findings indicated inmates between the ages of 18-23 year, 24-30 years and 31-36 years abused drugs more than those above 36 years.

This is an indication that inmates who are within their youthful years are prone to drug abuse. Boys et al. (2001) also found out that age difference plays a major role in relation to drug abuse with individuals within the younger age groups abusing drugs more than those who are matured in age for so many reasons.

Therefore, the null hypothesis which stated that "There is no significant difference in the pattern of drug abuse among inmates on the basis of age" once again was rejected [ $\chi^2 (3df) = 88.922$ ,  $p < 0.05$ ] in favour of the alternative hypothesis that "There is a significant difference in the pattern of drug abuse among inmates on the basis of age."

### Hypothesis Two

$H_0$ : There is no significant difference in the pattern of drug abuse among inmates on the basis of years spent in prison.

$H_1$ : There is a significant difference in the pattern of drug abuse among inmates on the basis of years spent in. Kruskal Wallis H test was used for the test.

**Table 4- Kruskal-Wallis H Test of Number of Years Spent in Prison and Drug Abuse**

	Years spent in prison	n	Mean Rank	Chi-Square	df	p. value
Drug abuse	Less than six months	13	113.81	76.340*	3	.000
	Six months to a year	53	175.25			
	1 year to 5 years	128	163.00			
	More than 5 years	80	75.54			
	Total	274				

\*Significant,  $p < 0.05$ .

The Kruskal-Wallis H test showed that there was a statistically significant difference in drug abuse within the different number of years spent in prison,  $\chi^2 (3df) = 76.340$ ,  $p < 0.05$ , with a mean rank of 113.81 for Less than six months, 175.25 for Six months to a year, 163.00 for 1 year to 5 years and 75.54 for More than 5 years.

This is an indication that inmates who have spent six months to a year abuse drugs more than all the other terms of imprisonment. Inmates who have spent six months to a year and were abusing drugs more than other inmates may be as result of they having spent quite enough time in prison and may be losing hope due to the living conditions they experience in the prisons. This was rightly followed by those who have spent 1 year to 5 years term who also have similar experience as those who have spent six months to a year in prison.



Thus, those who have spent less than six months in prison as a result of they being in a new environment and therefore may abuse drugs as a way of coping with their new environment. Finally, those who have spent more than five years in prison and are having a minimal level of drug abuse may also be related to the fact that imprisonment might have taught them some lessons about drug abuse and life as a whole. Rowell, Wu, Hart, Haile and El-Bassel (2012) agree to the fact that, the number of years one is sentenced to jail has a significant influence in their use and abuse of drugs.

Therefore, the null hypothesis which stated that “There is no significant difference in the pattern of drug abuse among inmates on the basis of years spent in prison” was rejected [ $\chi^2 (3df) = 76.340, p < 0.05$ ] in favour of the alternate hypothesis that “There is a significant difference in the pattern of drug abuse among inmates on the basis of years spent in prison”.

### **Conclusions**

In conclusion, marijuana was the most abused drug due to the fact that inmates have easy access to it. In addition to this, inmates believed that the abuse of drugs can lead to many health issues (both physical and psychological) and many other risks associated with the use of drugs. Again, mental and psychological health issues, HIV/Hepatitis, hostility, early death, work productivity, sexual energy among others are the perceived effects/benefits inmates derived from drug abuse. There was also a significant difference between the ages of inmates and drug abuse. Finally, the study discovered a significant difference between the number of years spent in prison and drug abuse.

### **Implication for Counselling**

For drug abuse to be curtailed among inmates, the following implications for counselling were gathered from the findings of the study.

1. Marijuana (wee) was the most abused drug followed by cigarette implies that the counsellor should educate inmates on the various implications of each drug on their health. This could be done by pointing out the immediate satisfaction one may get from using drugs as being temporal with lasting consequences on their life in totality.
2. Since stress is a contributing factor to drug abuse, counsellors should be able to assist inmates to develop a more balanced lifestyle by helping inmates to identify the sources of their stress and pleasure/self-fulfillment. Thereafter, they can develop and implement plans to avoid or deal with stress, and engage themselves in fulfilling and interesting endeavours.

The counsellor must be able to encourage inmates who are serving long term of imprisonment to cope positively in the prison other than using drugs.

### **Suggestions for Further Research**

The study employed a mixed method approach for both data collection and analyses. Further research efforts can consider the effects of drug abuse on the national economy.

### **Delimitations and Limitations**

The scope of this study was to investigate drug abuse among inmates. The study thus, excluded how inmates come about these drugs. It also did not include treatment of problematic users of drugs and its assessment. .

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