PATTERNS OF PSYCHOACTIVE SUBSTANCE USE AMONG TWO-WHEEL COMMERCIAL RIDERS IN MAIDUGURI, BORNO STATE, NIGERIA

Aliyu, Umar RN, PGDE, MSc.
Department of Nursing Services, National Hospital, Plot 132 Central District (Phase II)
P.M.B. 425, Garki-Abuja Nigeria.
Email: ualiyum@yahoo.co.uk or aliyu_mayo@yahoo.com
Oladele, E.O. RN, Msc Department of Nursing Science,
Ladoke Akintola University of Technology, Osogbo
Adejumo, Prisca Olabisi RN, PhD.
Department of Nursing Science,
University of Ibadan, Ibadan
Email: bisiandbayo@yahoo.com
Onibokun, A. C. RN, PhD.
Department of Nursing Science, University of Ibadan, Ibadan
Aliyu, Isa NCE Post Primary Schools Management Board, Yola, Adamawa State.

Abstract

When any psychoactive substance is taken before driving, lives of both passengers and other motorists operating on the highway are endangered. This survey study designed to determine the patterns of psychoactive substance use among two-wheel commercial riders in Maiduguri, Borno State, Nigeria. The population of this study was 4141 two-wheel commercial riders operating in Maiduguri, Borno State. Multi-stage sampling technique was used to select 18 substations from the sampling frame. However, only 297 respondents constituted the study sample. Data were collected with the help of research assistants using a questionnaire. Descriptive statistics were used to analyze the data generated. The results of the study reveal that the commonly used psychoactive substances were kola nut, cigarette, alcohol and marijuana. Oral and sniffing were the routes used by the respondents. Seventy-five percent of the respondents used these substances daily, mostly kola nut (31.31%) and cigarette (24.24%) that were obtained within garage. Alcohol (8.41%) and marijuana (7.74%) were obtained outside the garage. Analysis of problems associated with psychoactive substance use in the last one year shows that road traffic accident was the highest (Z–value of 6), followed by work and social problems (Z–value of 5 and 4) respectively. It is recommended that an intervention studies be conducted by the government and Non-Governmental Organizations (NGOs) to give the two-wheel commercial riders information on the types, use and consequences of psychoactive substances. Finally, government should enforce laws against psychoactive substance use and provide high-tech tools to help law enforcement agencies to tract substance users.

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Introduction

Gupta (1990) states that the rates of psychoactive substance use vary substantially in both time and space. Although the psychoactive substance user is a willing victim, the well being of millions of people is threatened. Each year millions of people are involved in road accidents leading to injuries and death. Some of these road traffic accidents that occurred are because of use of psychoactive substances. The death toll exacted by psychoactive substance use is especially heavy among young people. For instance, recent psychoactive substance use has been associated with both traffic accidents and road accident culpability (Drummer, Gerostamoulos, Batziris, Chu, Caplehorn, Robertson et al., 2003). Also driving accidents studies, such as of drivers admitted to a Maryland trauma centre reveals increasing prevalent poly-drug use (Kelly, Darke and Ross, 2004).

Psychoactive substances act on the brain and can alter perception, cognition, balance, coordination and other faculties required for safe driving. Mireku (2002) sees psychoactive drugs as mind- altering drugs that have a greater potential for abuse. They cause more physical and psychological harm to the individual than non- psychoactive drugs. The effects of specific psychoactive substance vary depending on their mechanism of action, the amount consumed and the history of the user among other factors. An ugly fact that is with us in the recent time is road traffic accident related to psychoactive substance use. But a number of measures are put in place to check this development. This include the establishment of the National Drug Law Enforcement Agency (NDLEA) through Decrees 48 of 1989 and 33 of 1990 and the NDLEA approach to drug trafficking and control in Nigeria (Odejide, 1995). Despite these efforts the well being of millions of Nigerians is threatened. It appears that no matter what public policies are adapted in response to drug use related road accidents, it is likely to continue in nearly all parts of Nigeria and the world at large. In Nigeria, due to the level of development in mass transportation most of the people may have to rely on commercial motorcycle riders. Thus, commercial motorcycle riders' patterns of

choactive substance use need to be studied. It is this reason that this study is designed to assess the erns of psychoactive substance use among two-eel commercial riders in Maiduguri, Borno State, geria.

terials and methods

sign and study area:- Survey design was used for study. Maiduguri (Yerwa) an urban centre has an mated population of 1,197,497 (The World zetteer, 2007) out of the total state population of 51,193 (Onuorah, 2007). It has a very high ulation density with a projected annual growth rate 12.06 percent. The citizens are largely Muslim, inated by the Kanuri (Borno State Executive ry, 1993). Maiduguri attracted migrants from rby towns and states. The inhabitants engage in a ber of activities of economic value e.g. trading, ing and transportation of which motor cycle riding ne.

ulation:- The target population for this study was the 4141 registered two-wheel commercial riders rating in Maiduguri town, the Borno State capital. town is selected because of the popularization of motorcycle as a means of transportation.

mple and Sampling technique:- For this study, the mple comprises of 297 two-wheel commercial riders cted from 18 units in Maiduguri. Twelve units e from Maiduguri Metropolitan Council (MMC) six units from Jere Local Government Area. mples of 240 were from MMC and 57 were from LGA. This gave the total of 297 samples.

A multistage sampling technique was used to ain a representative sample of the population. A list 2 registered two-wheel commercial riders units in iduguri was obtained from the state chairman and used as sampling frame. A selection of 25% of the mple units was done using random sampling nique (by ballot method). A total of 12 and 8 units e selected out of the units in Maiduguri tropolitan Council (47) and Jere Local Government a (25) respectively that constituted the units in iduguri.

Lists of all the registered two-wheel mmercial riders in the selected units were obtained. roportional sampling method of 25% from each cted unit was determined. Respondents were tematically selected from the register. estionnaires were administered to the respondents ally until the quota for each unit was filled. The pondents were met at their "joint" between 8: 00 a.m. and 4: 00 p.m. daily. The data collection took three weeks.

Research instrument:- Researchers developed questionnaire consisting of 28 items were used. The questionnaire was divided into sections. Section one contains demographic information of the respondents, while section two contains information on the patterns of substance use and section three contains information about complications of substance used by two-wheel commercial riders. The respondents were required to either choose from the list of supplied options or fill in the needed information.

Validity and Reliability: - The instrument was given to expert in trauma care research, a psychiatrist and a consultant psychologist for both face and content validity. The instrument was modified according to the recommendations of the experts. To ensure consistency of the instrument, a test-retest within an interval of three weeks was conducted using 30 two-wheel commercial riders in Mayo–Belwa, Adamawa State, Nigeria. A reliability coefficient of 0.81 was obtained.

Data collection procedure:- The researchers contacted the Chairman, two-wheel commercial riders, Maiduguri Branch and he granted the approval to carry out the study. Respondents' consent was obtained after some explanations about the nature and purpose of the study. The researchers and two trained research assistants administered the questionnaire to the respondents in the selected units. The literate respondents filled the questionnaire themselves. A translated version of the questionnaire into Hausa Language was used as structured interview guide for the illiterate respondents to elicit the correct responses.

Method of data analysis: - Data generated in the study were analyzed using descriptive statistics in the form of frequency and percentages to analyze types and patterns of psychoactive substance used. Others were respondents' initiators into substance use, number of times of accidents and the involvement of law enforcement agency with two-wheel commercial riders. The z-score analysis was used to analyze problems (road traffic accident, work, social, psychological, physical and problems with law enforcement agency such the police, custom, etc.) associated with psychoactive substance used in the last one year.

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(n = 297)

Characteristic	Group	Frequency	Percentage
Age in years	≤24	37	12.45
	25 – 34	72	24.24
	35 – 44	103	34.68
	≥ 45	85	28.61
Sex	Male	297	100
Religion	Christianity	114	38.38
	Islam	183	61.61
Marital status	Married	185	62.28
	Single	108	36.36
	Separated	3	1.01
	Widower	1	0.33
Education	No formal	13	4.37
	Primary (Incomplete)	41	13.8
	Primary (Complete)	31	10. 43
	Secondary (Incomplete)	21	7.07
	Secondary (Complete)	127	42.76
	Post Secondary/University	64	21.88
Learnt trade	Carpentry	10	3.36
	Brick laying	22	7.40
	Vulcanizing	12	4.04
	Driving	253	85.18
Occupation	Wishful	23	7.74
	Out of no job	254	85.52
	Through friend (peer)	20	6.73
Parental marital status	Living together	112	37.71
	Separated	83	27.94
	Divorced	10	3.36
	One parent dead	58	19.52
	Both parents dead	34	11.44
Tribe	Kanuri	76	25.58
	Fulani	19	6.39
	Hausa	28	9.42
	Yoruba	18	6.06
	Marghi	25	8.41
	Highi	23	7.74
	Tiv	14	4.71
	Gwari	10	3.36
	Nupe	14	4.71
	Babur-Bura	10	3.36
	Mandara	10	3.36
	Shuwa	8	2.69
	Gwoza	7	2.35
	Kilba	6	2.02
	Kare-Kare	5	1.68
	Chibok	4	1.34
	Fali	3	1.01
	Bachama	3	1.01
	Others	14	4.71

Source: Field survey, 2007

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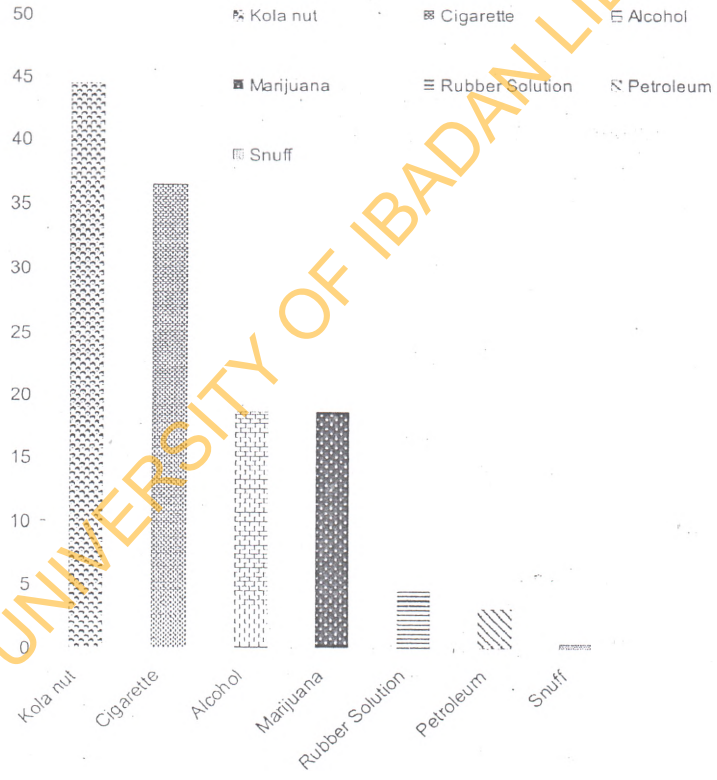
Table 1 shows that majority of the respondents, 103(34.68%) were between the age of 35 – 44 years, followed by 45 years and above, 85(28.61%) and 25 – 34 years, 72(24.24%). While 24 years and below constituted only 37(12.45%). All 297(100%) the respondents are males, 114(38.38%) of the respondents were Christians, while 183(61.61%) were Muslims. Majority 127(42.76%) of the respondents had completed secondary education, followed by 64(21.88%) who had post secondary/ university education. While . 41(13.80%) did not complete primary education, 31(10.43%) had full primary education and 13(4.37%) had no formal education.

With respect to marital status, 185(62.28%) were married, 108(36.36%) were single, 3(1.01%) were separated and 1(0.33%) were widowed. The parental marital status of the respondents reveals that 112(37.71%) were living together, 83(27.94%) separated, 58(19.52%) and 34(11.44%) constituted either one or both parents dead respectively. And 10(3.36%) were divorced.

Table 1 also shows that majority 253(85.18%) of the respondents learnt operating motorcycle, bricklaying 22(7.40%), 12(4.04%) vulcanizing and 10(3.36%) carpentry. While 254(85.52%) of the respondents were in the occupation out of no job, 23(7.74%) were wishfully in the occupation and 20(6.73%) found themselves in the occupation through their friends. Majority of the respondents 76(25.58%) are Kanuri, 28(9.42%) Hausa, 25(8.41%) Marghi and 23(7.74%) Highi. Others are Fulani 19(6.39%), Yoruba 18(6.06%), Tiv and Nupe 14(4.71%) respectively. And Gwari, Babur–bura and Mandara constituted 10(3.36%) each.



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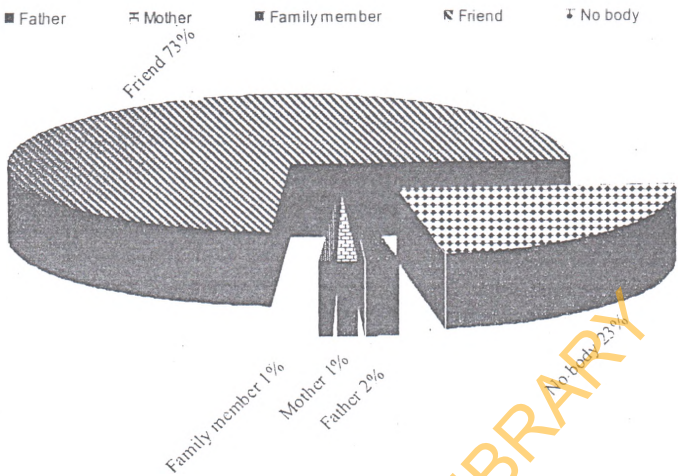
Source: Field survey, 2007.

Figure 1 Types of psychoactive substance used by the two–wheel commercial riders.

Figure 1 indicates that the psychoactive substances used by two–wheel commercial riders in Maiduguri were kola nuts (44.44%) and cigarette (36.36%). In addition, alcohol (18.51%) and marijuana (18.51%) were equally consumed. Other substances used were rubber solution (4.37%), petroleum (3.03%) and snuff (0.33%).



Source: Field survey, 2007.

Figure 2 Distribution of respondents by those who initiate them in the use of psychoactive substance.

Figure 2 shows that most (73.12%) of the respondents were lured into psychoactive substance use by their peers. The father (1.87%), mother (1 and family members (0.62%) lured the respo into psychoactive substance use on a lesser c However, some (23.12%) respondent psychoactive substance on their own initiative.

Table 2 Patterns of psychoactive substance used by two- wheel commercial riders (n=297)

Variable	Kola nut	Cigarette	Alcohol	Marijuana	Rubber solution	Petroleum	Snuff
Route	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Oral	132	108	55	55	8	3	-
	(44.44)	(36.36)	(18.51)	(18.51)	(2.69)	(1.01)	-
Sniffing	-	-	-	-	5	6	1
	-	-	-	-	(1.68)	(2.02)	(0.33)
Source of supply	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Within garage	93	72	15	13	6	5	-
	(31.31)	(24.24)	(5.05)	(4.37)	(2.02)	(1.68)	-
Outside garage	6	6	25	23	-	-	-
	(2.02)	(2.02)	(8.41)	(7.74)	-	-	-
Both	33	30	15	19	7	4	1
	(11.11)	(10.10)	(5.05)	(6.39)	(2.35)	(1.34)	(0.33)
Frequency of use	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Every day	120	104	53	53	13	9	1
	(40.40)	(35.01)	(17.84)	(17.84)	(4.37)	(3.03)	(0.33)
Not every day	12	4	2	2	-	-	-
	(4.04)	(1.34)	(0.67)	(0.67)	-	-	-

Source: Field survey, 2007.

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Note: The figures in brackets are the percentages of raw scores.
*n > 297. This is because multiple responses exist for the types and patterns of psychoactive substance used.

The results in table 2 reveals that 44.44% of kola nut, 36.36% of cigarette, 18.51% each of alcohol and marijuana, 2.69% of rubber solution and 1.01% of petroleum users take psychoactive substances orally. Respondents who consume kola nut and alcohol mostly employ this route. The least of the respondents sniff rubber solution (1.68%), petroleum (2.02%) and snuff (0.33%). Majority of the respondents use psychoactive substance daily, mostly kola nut (40.40%) and cigarette (35.01%). While the least use of kola nut (4.04%), cigarette (1.34%) alcohol and marijuana (0.67%) each, were not on every day basis.

Considering the source of supply of psychoactive substance used by the respondents, kola nut (31.31%), cigarette (24.24%), alcohol (5.05%) and marijuana (4.37%) were obtained within garage. On the other hand, 2.02% of rubber solution and 1.68% of petroleum constitute another category that depends on the same source of supply. Majority of alcohol (8.41%) and marijuana (7.74%) users got the supply of psychoactive substances outside the garage. Some respondents who consume kola nut (11.11%), cigarette (10.10%), marijuana (6.39%) and alcohol (5.05%) depend on both within and outside the garage supply of these substances.

Table 3 Problems associated with psychoactive substance use in the last one year.

Problem	R	F	CF*	CFM	CPM	Z	(Z+2)2
Road Traffic Accident	1	100	440	390	0.89	1.22	(1.2+2) 2 = 6.44 = 6
Work	2	72	340	304	0.70	0.52	(0.52+2) 2 = 5.04 = 5
Social	3	72	268	232	0.53	0.08	(0.08+2) 2 = 4.16 = 4
Law Enforcement Agency	4	67	196	162.5	0.37	-0.33	(-0.33+2) 2 = 3.34 = 3
Psychological/ Emotional	5	66	129	96	0.22	-0.77	(-0.77+2)2 = 2.46 = 2
Physical/ Health	6	63	63	31.5	0.07	-1.48	(-1.48+2) 2 = 1.04 = 1

Source: Field survey, 2007.

Note: The scores in brackets are the percentages of frequencies.

*Multiple responses exist leading to CF more than 297.

R = Rank

F = Frequency

CF = Cumulative Frequency

CFM = Cumulative Frequency of Midpoint

CPM = Cumulative Proportion of Midpoint

Table 3 presents the Z–score distribution ofproblems associated with psychoactive substance use in the last one year by two-wheel commercial riders. The problem that ranked highest with Z–value of 6 is road traffic accident. The second and third been work and social problems with Z–value of 5 and 4 respectively. Law enforcement agency ranked fourth with Z-value of 3. Psychological and physical problems ranked fifth and sixth (Z-value of 2 and 1) respectively.

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Table 4 Rates of accident involvement by two-wheel commercial riders.

(n = 100)

Time	Frequency	Percentage
Once	9	9
Twice	51	51
Thrice	29	29
More than four times	11	11

Source: Field survey, 2007.

Table 4 indicates the rates of road traffic accident by the respondents. Very few of the respondents had accident once (9%). Others were twice (51%), th (29%) and more than four times (11%).

Table 5 Two-wheel commercial riders' involvement with law enforcement agency.

(n = 67)

Variable	Frequency	Percentage
National Drug Law Enforcement Agent	34	50.74
Police	32	47.76
Custom	1	1.49

Source: Field survey, 2007.

Table 5 shows that 50.74% of the respondents had problem with National Drug Law Enforcement Agents (NDLEA), 47.76% had problems with the police and less than 2% with the custom officials.

Discussions of findings

The results presented in table 1 reveals that many of the commercial motorcycle operators were in their prime age. This indicates that the respondents can engage in occupations such as commercial motorcycle operation that demand for more strength and energy. However, the National Highwayll Traffic Safety Administration (NHTSA, 2004) reports that in America 16,000 people are kied annually due to drunk and drugged driving. An estimated 10.9 million people reported driving under the influence of an illicit drug. This corresponds to 4.8% of the population aged years or older, but 14.1% among young adults agec –25 years.

All the respondents in this study are ma This implies that in this study area only males eng in commercial motorcycle operation. Hence, occupation is exclusively male reserve, at least Maiduguri. This could be as a result of religious : socio-cultural factors affecting females who may w to engage in the commercial motorcycle operati Another is as observed in Cardiff and Merthyr Ty by Ferguson, Swain–Campbell and Horwood (20 that risky driving behavior is common among youn drivers, particularly males prone to externalized behavi (including psychoactive substance use).

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Majority of the respondents were Muslims. This is an indication that Muslims predominates in this study area. However, Enekwechi (1984) stresses that there is no concept of 'typical' psychoactive substance user. This is because it cuts across all social strata, including religion (Imogie, 1993). Table 1 also shows that only few of the respondents had no formal education. The remaining respondents had formal education, including full secondary education, post secondary or university education. While some did not complete primary education, others either had full primary education or did not complete secondary education. The educational preparations of the respondents as observed in this study vary significantly. Recognition of such difference is important when considering the operation of motorcycle, which requires literacy. An educated commercial motorcycle operator is expected to observe traffic regulations more knowledgeably than would do the no formally or less educated.

The table also shows that most of the respondents were married, whereas others were single, separated or widowed. Thus, problems attributable to motorcycle operators' population due to psychoactive substance use may give rise to problems (e.g. health and social) on the members of the society. In a study in France by Laumon, Gadegbeku, Martin and Biecheler (2005), the prevalence of cannabis (2.9%) estimated for the driving population is similar to that for alcohol (2.7%). However, fatal crashes were estimated as being attributable to alcohol (28.6% - 30.5%) and cannabis, 1.5% - 3.5%. This is a serious phenomenon, which represents a cross section of every socioeconomic, geographical, and occupational group.

Other findings were the respondents' parental marital status while they were still very young. It was found that some respondents were living together with their parents, while others were separated with one or both parents due to either dead or divorce. It can be noted that the respondents' parents brought up some of the respondents. Nevertheless, parental influence is a strong factor in determining whether motorcycle operators take psychoactive substance or not. For instance, young people smoke to imitate their parents Shuttleworth, 2005) and problem drinkers have parents who use suggested a learnt behaviour (Awake! 2005; Mireku, 2002).

Most of the respondents learnt operating motorcycle, while brick laying, vulcanizing and carpentry were learnt by some of the respondents. Although majority of the respondents reported operating motorcycle as learnt occupation, some have acquired skills in other occupations. The high–stress jobs have a high incidence of psychoactive substance use (Mireku, 2002). More importantly most of the respondents were in motorcycle operation out of no job and some of them joined the occupation because of peer pressure.

Majority of the respondents are Kanuri, while Hausa, Marghi , Highi and Fulani were among the next major ethnic groups. Yoruba, Tiv, Nupe, Gwari, Babur–Bura and Mandara constituted other ethnic groups in the study area. Kanuri, as can be observed from the results of this study is the dominant ethnic group. The multiethnic grouping found in this study agrees with the official bulletin of Borno state government (Borno State Executive Diary, 1993).

The most frequently consumed psychoactive substance by the respondents is kola nuts. This may be because kola nuts have several roles in social functions (such as marriage ceremony) in the study area. As such, it easily gain social acceptance. Another reason for kola nuts use is its ability as a stimulant to increase mental activity (Maduako and Aguwa, 2002). It is also to keep the respondents awake and alert (Karch, 2005). Cigarette, another highly addictive stimulant consumed by the respondents is not surprising as some people claim that cigarette help them to concentrate or they use it because of peer pressure in order to "belong" (Mireku, 2002) or imitate other adults they admire (Shuttlworth, 2005). Kola nuts and cigarettes are also cheaper and readily available. Moreover the respondents were mainly low income earners.

Alcohol is a hypnotic–sedative agent capable of slowing down the Central Nervous System (CNS) resulting in the relaxation of tension and allays anxiety (Maduako, et al., 2002). This effect encourages its use. Moreover, alcohol is society sanctioned and readily available (Prime Minister's Strategy unit, 2004). However, Kenny (2005) observes strong association between alcohol and scores of problems, including motorcycle accidents. Marijuana has established sedative effects, with users reporting mental slowness, tiredness, anxiety, paranoia and euphoria (Parrot, Morinau, Moss and Scholey, 2004). Solowij (1998) warns that long–term effects of marijuana use leads to subtle and selective impairments of specific higher cognitive functions, and impairs driving skills (Laumon, et al., 2005).

The respondents used rubber solution and petroleum. These substances are deliriants, which produces mind-altering effects by depressing the CNS. These effects are capable of claiming the life of the respondents. Mireku (2002) states that damage to the CNS can affect the mental and physical capabilities of the users. Lucas, Parente, Picanco, Conceicao, Costa, Magalhaes, et al. (2006) reports a different result from the one in this study. In their report in Amazonas in Brazil, alcohol consumption was 87.7% as compared to 30.7% for tobacco, solvents (11.9%) and marijuana (9.4%). The results in this study have implication for motorcycle riders as a variety of drugs such as marijuana and alcohol have been reported in both fatal and non-fatal motor vehicle crashes.

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Drummer, et al. (2003) found in Australia drugs in 26.7% of fatally injured motor vehicle drivers; almost 10% of the cases involved both alcohol and drugs such as marijuana. Edwards (2004) stresses that tobacco smoking causes serious long-term health problems, frequently resulting in disability and deaths. Consequently, tobacco users die prematurely (Schultz, 1991). Observation by World Health Organization (WHO) reveals that almost 84% of cigarette users live in poor countries, Maiduguri inclusive where tobacco and poverty have become a vicious cycle (Awake!, 2005). This means commercial motorcycle riders who use psychoactive substance are likely to suffer serious health problems. From the above, it can be seen that psychoactive substance use is detrimental to the commercial motorcycle riders.

The results of this study agree with shuttleworth (2005) that most people smoke tobacco and chew kola nut. This means psychoactive substances are consumed orally. Marijuana and alcohol are also taken orally (Maduako, et al., 2002). However, rubber solution and petroleum are volatile chemical substances (Mireku, 2002) and hence can be sniffed or taken orally. The emerging pattern is poly-drug use with dose increasing per use (Kelly, et al., 2004). Majority of the respondents use psychoactive substance daily, mostly kola nut 40.40%) and cigarette (35.01%). While the least use of kola nut (4.04%), cigarette (1.34%) alcohol and marijuana (0.67%) each, were not on every day basis. This could be attributable to the respondents' life styles or past socialization process. For instance, the social acceptance of the offending substance is a key issue in substance use (Mireku, 2002). Hanson (1999) notes that teen smoking accounts for 85 – 90% of new smokers despite the surgeon General landmark report on the health risks of smoking. Increasing evidence shows that young people learn not only from real people (such as parents and family members) but also from characters whose live they witness through the media (Mireku, 2002).

Considering the source of supply of psychoactive substance used by the respondents, kola nut, cigarette, alcohol and marijuana were obtained within garage. And also rubber solution and petroleum constitute other category obtained through the same source of supply. Majority of alcohol and marijuana users got their supply of psychoactive substances outside the garage. However, some respondents who consume kola nut, cigarette, marijuana and alcohol depend on both within and outside the garage supply of these substances.

The patterns of psychoactive substance use observed in this study contradict some laid down rules and regulations. These Evans (2001) stresses exist to control the manufacture, supply and use of psychoactive substances. Nevertheless, most of the respondents use psychoactive substances daily and obtain supply both within and outside the garage. This trend follow what Emenike, and Ogbonna (1995) affirms, that generally there are no enforced legal controls of psychoactive substances, particularly the socially accepted, unless the user endangers his/her life, the lives of others or offends society.

The problem that ranked highest among the two-wheel commercial riders is road traffic accident. Mireku (2002) observes that people have used various substances to alter their mood, perception or behaviour. Both on chronic or toxic level, these substances depress motor output resulting in motor in-coordination such as ataxia and nystagmus in the user (Karch, 2005). Such individuals have problems in performing tasks that require thinking and judgment and they are prone to accidents. The National Highway Traffic Safety Administration (NHTSA) (2004), reports that in America 16,000 people are killed annually due to drunk and drugged driving. A number of psychoactive substances have increasingly been recognized as hazards to road safety. This results in both fatal and non-fatal motor vehicle crashes. This is similar with Lucas, et al. (2006) study in Amazonas, Brazil that reports consumption of psychoactive substances that record events that followed the use which include fights, accidents, job absenteeism, etc.

The work and social problems that ranked second and third among the respondents course includes difficulty maintaining successful relationships, which often leads to isolation, divorce and separation (Maduako, et al., 2002). Others are loss of job and aggression (Mireku, 2002; Shuttleworth, 2005). Law enforcement agency ranked fourth among the problems experienced by two-wheel commercial riders in Maiduguri. The agency has association with scores of problems, including motorcycle accidents, domestic violence, sexual assault etc (Kenny, 2005).

According to Gambo (1995) users of psychoactive substances are often induced to getting involved in theft, burglary and robbery. There are numerous agencies such as police and custom, which are concerned with drug laws implementation.

The common responses to contemporary drug problems are legal repression, education (to prevent use), treatment and rehabilitation of offenders (Maduagwu and Alemika, 1995). In Australia, a similar study of 300 respondents reveals that, 50% had legal problems relating to drug use, 21% had been in prison and one-third had surrendered their children to care (Swift, Copeland and Hall, 1996).

Psychological and physical problems ranked fifth and sixth respectively. This could be likened with

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similar estimates that there are approximately 287,670 problem drug users in England (U.K. Focal Point, 2004). Tobacco kills 430,000 per year, 47 million are hooked on cigarette and 14 million each on drugs and alcohol (Alter, 2001). There is evidence that the mental and physical health of 7.7 million young people is strongly affected by the degree to which they engage in risky activities (Viner and Macfarlane, 2005).

Conclusions and Recommendations:- This study was designed to determine patterns of psychoactive substance use among two–wheel commercial riders in Maiduguri, Borno State, Nigeria. The findings of the study reveals that commonly used psychoactive substances were kola nut, cigarette, alcohol and marijuana. Others were rubber solution, petroleum and snuff. The study also shows that oral and sniffing were the routes used by the respondents. Majority of the respondents used psychoactive substance daily. Most kola nut and cigarette users obtain these substances within garage. Nevertheless, most of alcohol and marijuana users got the supply of these substances outside the garage.

However, some respondents do get these substances both within and outside the garage for their use. Analysis of problems associated with psychoactive substances use by the respondents' reveals that road traffic accident was the highest. Over half of the respondents were been involved in accident, two or more times and had problems with National Drugs Law Enforcement Agency (NDLEA).

Based on the findings of this study the following recommendations were made:

1. There is need for an intervention studies by the government and Non-Governmental Organizations (NGOs) to give the two-wheel commercial riders information on the types, use and consequences of psychoactive substances.
2. The government as a condition for the renewal of licence should organize periodic seminars and workshops on issues related to problems associated with psychoactive substance use.
3. Government should ensure the enforcement of anti-psychoactive substance laws. To achieve this, high-tech tool that helps law enforcement agencies to track users of substances need to be provided. This will enable evidential chemical test (blood, breath, urine test) to determine whether two-wheel commercial riders are under the influence of psychoactive substance or not.

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