ORIGINAL ARTICLE

PREVALENCE OF PSYCHOACTIVE SUBSTANCE USE AMONG COMMERCIAL MOTORCYCLISTS AND ITS HEALTH AND SOCIAL CONSEQUENCES IN ZARIA, NIGERIA

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Abstract

Background: In recent years commercial motorcyclists (Okada riders) have come to bridge the huge public transport gap in most cities across the country. However, this is not without the dangers they pose to themselves, passengers and to other road users. It is claimed that some of these Okada riders operate under the influence of drugs and other substances. But there are few community-based studies that have investigated the problem in this part of Nigeria. Therefore, this study was conducted to determine the prevalence, health and social consequences of psychoactive substance use among commercial motorcyclists (Okada) in Zaria, northern Nigeria.

Method: Multi-stage sampling technique was used to sample commercial motorcyclists registered with commercial motorcyclists union in Zaria city, Kaduna state, Nigeria. Structured, closed ended and interviewer administered questionnaires were used to collect information on socio-demographic characteristics, factors influencing psychoactive substance use, impact on health status, motor cycle riding experience and work performance.

Results: Two hundred commercial motor cyclists were interviewed, majority of them were in the age group 21-25 years (55.5%) with a mean age of 25.4±3.9 years. All the motorcyclists were male, (60.5%), had no formal education, (79.5%) are of Hausa extraction and (69%) worked for more than 10 hours per day. A high prevalence of 59.5% of road traffic accident that was associated with the use of psychoactive drugs was found among the motorcyclists. Commonly identified psychoactive substance/drugs used were: marijuana [Indian hemp] 25.8%, solution 24.5%, caffeine (Kola) 15.8%, and coffee 4.8%. Keeping awake, suppression of fatigue, and peer group effect were the identified factors influencing psychoactive substance use. The commonest types of injuries sustained were bruises and lacerations (62.5%) and fractures of upper and lower limbs (10.5%).

Conclusion: Road traffic accidents among commercial motorcyclists are a frequent occurrence in this part of the country. There is need for public awareness campaigns on road safety education and health consequences of psychoactive substance use among commercial motorcyclists. It is further recommended that law enforcement agencies (NAFDAC, NDLEA and FRSC) need to work in tandem so as to curb the problem of substance abuse in our society and reduce the rate of accidents on Nigerian roads.

Key words: Commercial motorcyclists, psychoactive substance, health consequences

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Résumé

Culture générale: de nos jours, les motocyclistes utilitaires sont les sauveurs de nos jours en ce qui concerne la transportation publique ; pourtant, a cause de leurs activités, ils se livrent aux dangers ; ils mettent aussi les passagers et les autres véhicules en danger il se peut que certains de ces motocyclistes soient toujours sous l'influence de la drogue. A travers les études de certaines communautés, on a pu déterminer la prévalence de cette facteur et les conséquences sociales et sanitaires de la prise de cette drogue psycho active parmi les motocyclistes utilitaires dans la cite de Zaria au du Nigeria.

Modalité: On a fait le sondage sur les motocyclistes utilitaires, ceux qui sont inscrits chez le syndicat des motocyclistes à Zaria. Ensuite, on a distribué les questionnaires pour tirer information sur les characteristiques sociodémographiques, l'influence par la prise de drogue psycho active et leur impact sur la santé. On avait également enquêté sur l'expérience d'un motocycliste au volant et sa performance au travail.

Résultat: On a interviewé deux cents motocyclistes utilitaires. La plupart d'entre eux avaient entre (21-25) ans (55.5%). L'age moyen était 25.4+3.9 ans. Tous les motocyclistes surtout les hommes, étaient non scolarises, parmi eux, il y avait des haoussas qui représentent 79.5%. Et 69% d'eux travaillent dix heures par jour. Les motocyclistes représentent 59.5% de tous les accidents de circulation liés directement a la prise de drogue psycho active. Les drogues les plus fréquemment prises sont: marijuana (indien hemp) 25.8%, solution 24.5%, caféine (kola) 15.8% et coffee 4.8%. Les plus dominants facteurs qui influencent l'abus de cette drogue psycho active sont: la veille de nuit, suppression de fatigue, et l'effet des pairs. Les blessures les plus connus qu'on épreuve sont: des égratignures et des lacérations 62.5% et des fractures des membres inférieure et superieure10%.

Conclusion: les accidents routiers parmi les motocyclistes se produisent souvent dans cette partie du pays ; il faudrait donc sensibiliser le publique sur la sécurité routière, sur les conséquences sanitaires de la prise de drogue psycho active parmi les motocyclistes utilitaires. En plus, nous recommandons a l'organisme chargé de faire respecter la loi comme: (NAFDAC \ NDLEA \ FRSC) de travailler ensemble pour pouvoir éradiquer le problème de l'abus de drogue dans notre société et par conséquent, réduire le taux des accidents routiers sur les routes nigérianes.

Mots clés: motocyclistes utilitaires, la drogue psycho active, conséquence sanitaire

Introduction

Drug and substance is now a global problem causing both social and public health havoc in many countries. Without doubt drugs have been of tremendous benefit to man but it has been acknowledged that the inappropriate use of same can do incalculable harm not only to individuals but to society at large. Drug abuse has been defined as any use of drugs that cause physical, psychological, legal or social harm to the individual or to others affected by the drug user's behavior.[1]

The use of motorcycles as means of public transport became popular in Lagos in 1992, as a result of dearth of other means of public transportation. It was reported that in 1995, an estimated 45 000 motorcycles were in use for public transportation in Lagos metropolis alone.[2]

Like in other urban areas, motorcycles in Zaria LGA are manned by youths. Riding the two wheel machine which is exposed to the open entails a lot of risk, but the fact that it is risky, makes it more popular with the youths.[3] When this youthful exuberance is compounded by abuse of drugs, the scenario can only be worse.

There are few community based studies that have investigated the problem in this part of the country. The aim of this study was to determine the prevalence, health and social consequences of psychoactive substance use among commercial motorcyclists in Zaria, a Northern Nigerian city of Kaduna state.

Materials and Methods

The study was conducted in Zaria, a city of ancient historical importance in Northern Nigeria. The estimated population of the area is 440 386 with an annual growth rate of 3.8%.[4] It is a predominantly Muslim Hausa-Fulani community with settlers from other ethnic nationalities. Commercial motorcycles constitute a major source of transportation in the city.

The study which was cross-sectional and descriptive in design was under taken over a three-month period from November 2004 through to February 2005.

Multi-stage sampling technique was used to sample respondents of commercial motorcyclists registered with the central union after consent was obtained. At the time of the study there were 3621

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registered members distributed among the thirty six commercial motorcyclists' terminals who constituted the study population. The list of the terminals formed the primary sampling unit, while the registered motorcyclists formed secondary sampling unit. Based on this, six terminals were chosen at random for the study and the list of registered motorcyclists was used to select the sample size.

In each of the selected terminals, structured closed ended and interviewer administered questionnaires were used to collect information on socio-demographic characteristics, factors influencing psychoactive substance use, duration of working hours and impact on health.

The data collected was coded and analyzed using EPI. Info version-6 software package. Statistical methods used included frequency counts and tables. There were a few limitations to the study that should be borne in mind; injuries would have been reported only by survivors and those who were mildly wounded in the accident. Thus information was not obtained on severe/fatal injuries. The data for the study was obtained from the respondents; this could not be independently validated. There is tendency to underreport injury due to poor recall which will affect the data collected for the study. Despite these short comings the study provides important vital information on Road Traffic Accidents among commercial motorcyclists that can be used for road safety interventions.

Results

Of the two hundred commercial motorcyclists interviewed majority (55.5%) were in the age group 21-25 years with a mean of 25.4±3.9 years. All the motorcyclists were males. Among the respondents 60.5% had no formal education and (79.5%) belonged to Hausa ethnic group (Table 1).

Most of the respondents 138 (69%) worked for more than 10hours per day (Table 2). A breakdown of commonly abused psychoactive drugs showed respectively; marijuana (India hemp) 52 (25.8%), solution 49 (24.5%), caffeine (Kola) 32 (15.8%) and coffee 9 (4.5%) (Table 3). Factors influencing psychoactive substance used were: to keep awake 73 (36.5%), Suppression of fatigue 64 (32%) and peer group effect 28 (14%) (Table 4). Fifty nine percent of the respondents were involved in at least an accident with resultant injury to self or passenger (Table 5). Most of the motorcyclists sustained bruises/laceration 125 (62.5%), upper and lower limb fractures 21(10.5%), or experience dizziness (Table 6). At the time of this study none of the motorcyclists wore safety helmet.

Table 1. Socio-demographic characteristics of respondents

Age group	No.	%
15-20	10	5
21-25	111	55.5
26-30	46	23
31-35	27	13.5
36-40	5	2.5
40+	1	0.5
Total	200	100

X = 25.4 SD = 3.9

Educational status

Educational level	No.	%
No formal education	121	60.5
Formal education	79	39.5
Total	200	100

Ethnic distribution

Ethnic group	No.	%
Hausa	159	79.5
Yoruba	5	2.5
Ibo	-	-
Others	36	18
Total	200	100

Table 2. Distribution of working hours

Working hours	No.	%
<5	9	4.5
6-9	53	26.5
≥10	138	69
Total	200	100

Table 3. Drug use of respondents within the last 12 months

Drugs	No.	%
Marijuana (Indian hemp)	52	25.8
Solution	49	24.5
Caffeine (Kola)	32	16.0
Coffee	9	4.5
Others	21	10.5

Table 4. Factors influencing drug use among respondents

Factors	No.	%
To keep awake	73	36.5
To suppress fatigue	64	32
Peer group effect	28	14
Stimulate/Elevate mood	25	12.5
Others	11	5.5

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Table 5. Accidents and drug use among respondents

Characteristics	No.	%
Had accident	119	59.5
No accident	81	40.5
Total	200	100

Table 6. Health effects of drug use among respondents

Health effects	No.	%
Bruises/ laceration	125	62.5
Limb fractures (upper and lower)	21	10.5
Severe headache	13	6.5
Sleepy	6	3.0
Dizziness	15	7.5
Others	8	4.0

Discussion

Intra-city commercial transportation by motorcyclist has become one of the major means of public transport system in virtually all the towns and cities in Nigeria. This is not without its attendant risks of road traffic accidents among this sect of road users and/or their passengers. This study revealed that most of the motorcyclists were in the age-groups 21-25 years and 26-30 years and most of them were Hausa.

This is similar with findings in other studies conducted in Nigeria.[5] None of the motorcyclists in this study wore helmets. Andrews et al reported 3.4% of helmet use among motorcyclists in Kampala, Uganda.[6] Also WHO reported that helmet use in developing countries ranges between from slightly zero to 100%, in countries were laws on helmet are enforced.[7] The pattern of drug used among commercial motorcyclists in this study are similar to those of other populations in Nigeria.[8] Kola nut use rate is low among respondents (16%) though the rate is lower than that reported by Adelekan (47%).[9] This is surprising as Kola is readily available in all cities in Northern Nigeria.

Factors influencing drug use were respectively: to keep awake, suppress fatigue, peer pressure and mood elevation, which together constituted 95%. This was due to the psychoactive effects of these substances. It is not surprising therefore that majority of respondents worked for more than 10 hours per day; mainly for economic reasons. This might have accounted for the high prevalence of accidents among this study population. The use of psychoactive drugs and other substances was found to be associated with the occurrence of road traffic accidents among motorcyclists.[10,11] Though it may be

difficult to prove that any drug/s contributes to RTA, any substance or drug that impairs the motorcyclist's sense of judgement, vision, emotional stability increases his vulnerability to accident. This is because his dexterity to ride and control the machine is reduced remarkably, though not necessarily below a level comparable with freedom from accidents in the long term.[10,12]

Regarding the types of injuries sustained, bruises and lacerations were the most common. This finding is similar with a study reported from South-West Nigeria.[5] Also the upper and lower limb fractures reported in this study is similar to that reported by Oluwadiya.[13]

In conclusion, this study showed that accidents among commercial motorcyclists are a frequent occurrence and the factors contributing to this were psychoactive drug use which has an effect on their mental faculty and behavior. The high prevalence of 59.5% among motorcyclist having had at least an accident is very worrisome. Road worthiness of the motorcycle and the environment (bad roads, hamattan and heavy rains etc) may be seen as contributing factors. There is need for public awareness campaigns on road safety education and health consequences of psychoactive substance use among commercial motorcyclists. Law enforcement agencies; National Agency for Food and Drug Administration and Control, National Drug Law Enforcement Agency and Federal Road Safety Corps (NAFDAC, NDLEA and FRSC) need to work in tandem so as to curb this societal menace.

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