



Drug Intake among Commercial Motorcyclists and its Implications on Travelling Behaviour in Lagos (Nigeria) Environment

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Abstract	Original Research Article
<p>In recent time commercial motor cyclists contributed significantly to the improvement in efficient service delivery in our society. The presence of commercial motorcycle in our major cities also constitutes a serious threat to the environment. The threat has been traced to drug in- take by the operators of the commercial motor- cycles. This study, therefore, assess drug intake among commercial motorcyclists and its implications on travelling behaviour in Lagos State, Nigeria. Data were collected in ten motor-cycle parks through randomly sampling method for the research. From these ten parks, two hundred and thirty eight (238) commercial motorcycle riders were sampled. Information collected from the Okada riders include; frequency of intake of alcohol, cigarettes, kolanuts, Indian hemp etc. The effects of these drugs on them and their job deliveries and reasons for taking such drugs were also asked. Data collected were analyzed, using descriptive statistics and Chi square techniques. The results indicated that the incidence of drugs abuse among commercial motorcyclists ranged from 23.8% (Sedatives) to 88.9% (Analgesics). It was also discovered that involvement in accidents in the study area is influenced by age of riders. However, the general view was that commercial motorcyclists should be persuaded from taking drugs of any form for purposes of energizing themselves because of their health and that of others whom they profess to serve.</p> <p>Keywords: Drug, Intake, Commercial, Motorcyclists, Travelling and Environment</p>	

INTRODUCTION

It has been recognized that Road Traffic Accidents (RTAs) are increasingly being recognized as a public health problem all over the world with about 1million deaths and 23million injuries per year and that 85% of these deaths occur in developing countries (United Nations, 2004). This is alarming and it has become a thing of concern to road users as well as a serious concern to some state Governments such as Lagos, Rivers, Imo, Oyo and FCT among others. In recent time, Nigeria has witnessed a great increase in road mishaps with the use of commercial motorcycle both in urban and in the rural areas coupled with various cases of serious injuries.

One of the unavoidable consequences of using motorized means of mobility in most of the Nigeria roads is traffic accidents, either by vehicles, tricycles or commercial

motorcycles. It is on this note that transport is therefore regarded as the major cause of death in Nigeria. According to Aderamo (2002), urban environments are more prone to motor traffic accident, this is simply because 75% of traffic accidents that occurs in the built-up areas or in the cities can be associated with the operators of both vehicles and commercial motorcycles. This he traced to the underlying factors of undue concentration while driving on the urban high ways, traffic mix and the resultant flow conflicts. Odedokun (1991) also identified the various negative consequences of high accident rate on the urban environment. These include loss of present and future manpower resources, inability to fulfill social obligation, lost of lives and properties (widows and orphans) among others. As long as the urban population continues to increase the demand for transport and the use of automobiles would also increase while the rate of accident continues to be

on the increase (Hoyles and Knowles, 1998).

The introduction and use of commercial motorcycles in Nigeria arose with the changes in the socio-economic structure of the country when the conventional vehicular means could not meet the astronomical rise in the demand for transport services. Ever since then, the proliferation of its use had been on the increase not only in the rural areas where it started but also in the urban centres where it is largely used to satisfy mobility demand of the people.

It has been noted that commercial motor cyclists contributed significantly to the improvement of transportation system and efficient service delivery in our society. Although, their presence in our major cities also constitutes a serious threat to the environment, in that road accidents among commercial motorcyclists are a frequent occurrence in Nigeria. In addition to this, the operational delay caused by commercial motorcyclists when they maneuver in traffic as well as when they park indiscriminately constitutes part of traffic congestion in cities. According to Ogunsanya (1985), in his study of Lagos operational delays, he observed that about 50.79% of the delays occurred at road intersections while operational delays account for about 45.2% of the total traffic hold up identified in Lagos State as in the case of any other urban centres in Nigeria.

Drug intake, in its various forms in terms of quantity has impact on travel behavior of motorists. The major consequences have been exhibited through sleepiness and drowsiness of cyclist and other vehicular operators in both developed and developing nation of the world. Sleepiness has been defined as the neurobiological need to sleep resulting from physiological wake and sleep drives as well as fatigue (Johns, 2001). Fatigue on the other hand has been associated with task performance which also has a psychological meaning of not having the energy to do anything, and a subjectively experienced reluctance to continue with a task (Brown, (1994). Thus, sleepiness is the urge for sleep while fatigue can be seen as a signal from the body that we should end the ongoing activity whether physical or mental activity. However, sleeplessness can therefore lead to fatigue which can as well result to fatal or a minor accident. Both sleepiness and fatigue have been noted to be caused or triggered off by drug intake though not necessarily restricted to it as some other factors could cause such symptoms (Jones, 2004),

Fatigue and sleepiness have specific consequence on driving behavior that could be traced to drug intake. Thus, a driver with drug abuse is likely to be confronted with effects of alcoholism such as tiredness, irritability, depression and dizziness (Terhune and Fell 1982). These characteristics are well noted amongst our commercial motorcyclists as some of them exhibit odours of alcohols. In some cases, the way they ride the motorcycles also give room for suspicion that some of

them are under the influence of alcohols.

STATEMENT OF THE PROBLEM

A high prevalence of about 59.5% of road traffic accident that occurred in Nigeria today can be attributed with the use of psychoactive drugs among commercial motorcycle operators in Kaduna (Alti-Muazu, 2009). The commonly identified psychoactive drugs were marijuana, kola-nuts, and coffee among others. In another development, a neuron-trauma study carried out in South Eastern Nigeria, (Jude-Kennedy, Ofodile and Timothy, 2009), there were 658 (88%) cases of head injury, 61 (8.1%) cases of spinal injury and 29 (3.9%) concomitant head and spinal injuries. It is of interest to note that motorcycle accident accounted for 367 (68.3%) of the cases where young male adults have largely been the victims.

Despite the various measures undertaken by governments, agencies and other private organization through the media to reduce high rate of commercial motorcycle accident occurrences. This implies that there are other factors responsible for these accidents of which drug intake could be one of such factors that have been overlooked. Fatigue generally causes low attention and alertness in all discipline of life and work of which driving is not an exemption. In Benin City, motorcyclists constitute a high proportion of fatalities in road crashes and 39.8% of the 996 motorcyclists involved in regular intake of alcohol (Iribhogbe and Odai, 2009). have been involved in crashes.

Similarly Oggini, Ugboko and Adewole (2007) observed in two South Western Nigeria locations that 30% of the 224 motorcyclists interviewed are involved in alcoholic consumption and 45.8% of them have also been involved in crashes. This is a serious concern to any Government that has alternate uses to its scarce resources and preservation of human lives. According to information, most of the patients at Orthopaedic hospital in Lagos state were victims of accidents involving commercial motorcycles

AIM OF THE STUDY

The aim of this study is to examine Psychological health of commercial motorcyclists and its impact on road crashes. To do this, the study examined the incidence of abuse of drugs among commercial motorcyclist on their travelling behaviours that often result in road accident

Significance of Study:

- There is need to intervene and rehabilitate commercial motorcyclists that are already addicted in order to reduce spate of accidents as well as casualties arising from same.

- Expose commercial motorcyclists to clinical psychological practices through collaboration with Federal Road Safety Corps

METHODOLOGY

The study was conducted in two LGAs of Lagos State, Nigeria. The LGAs are Agege and Alimosho Local Government Areas (see Figure 1) and they were purposively sampled because the people in these areas rely heavily on the use of commercial motorcycle to carry out their daily activities within the study area. Ten motor-cycle parks were randomly sampled for the research. From these ten parks, two hundred and thirty eight (238) commercial motorcycle riders were made to respond to the instrument for collecting data for the study, using random sampling techniques. Information collected from the Okada riders include; frequency of intake of alcohol, cigarettes, kola nuts, Indian hemp etc. The effects of these drugs on them and their job deliveries and reasons for taking such

drugs were also asked.

- These questions were packaged using Alcohol Use Disorder Identification Test (AUDIT) (Babur, Higgins-Biddle; Sanders and Montero, 2001) and Psycho Physiological Symptoms Checklist (PSC) (Omoluwabi, 1988) in a structured questionnaire. Both AUDIT and PSC already have acceptable psychometric properties and have been widely used in Nigeria.
- The instruments were individually administered as a battery in the ten randomly selected motor-cycle parks in the two LGAs of Lagos. All the 238 copies of the questionnaire were returned and processed. Pearson product moment correlations as well as Student T-test statistical analysis were applied to process the data and the analyses arising from the exercise were as presented

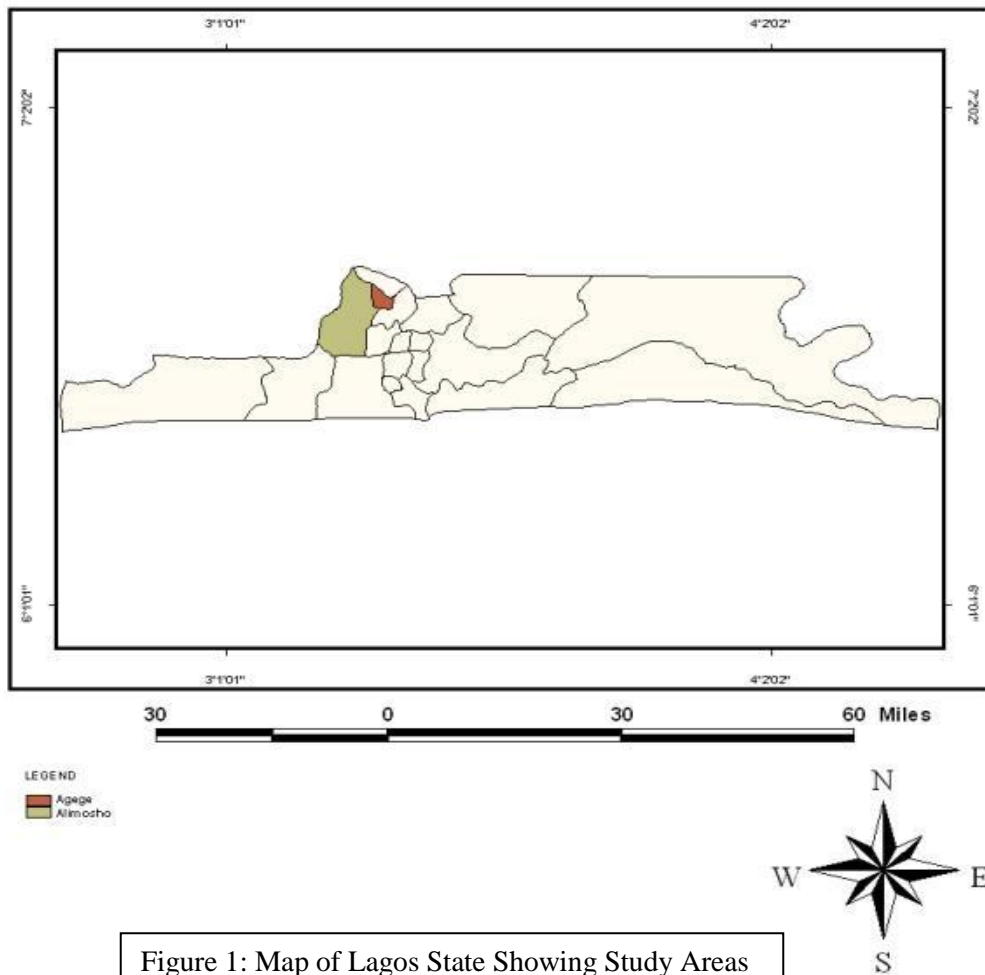


Figure 1: Map of Lagos State Showing Study Areas

ANALYSIS AND DISCUSSION

• Demographic Characteristics of Respondents

Table 1 shows the demographic characteristics of respondents in the study area. From the table, higher proportions (51.3%) of the respondents were still single while only 45.4% were married. Similarly, larger percentage (64.7%) of the

respondents has below NCE certificate in qualification and the remaining 32.3% of the respondents were those with higher degree certificate from various Institutions. In respect of the age of the respondents, it is vividly evidenced from the table that higher proportions (84.1%) of the respondents were of 40 years and below in terms of age bracket.

Table 1: Demographic Characteristics of the Respondents

variables		Frequency	Percentage
Marital Status	Single	122	51.3
	Married	108	45.4
	No Response	08	3.3
	Total	238	100
Educational qualification	Below SSCE	73	30.7
	SSCE	81	34
	ND/ NCE	56	23.5
	HND/ B.Sc	21	8.8
	No response	07	3.0
	Total	238	100
Age	Below 21 Years	23	9.7
	21 – 30 Years	108	45.4
	31- 40 Years	69	29
	Above 40 Years	35	14.7
	No Response	3	1.2
	Total	238	100

Source: Field Survey, 2022

The study also revealed that about 52.1% of the respondents are unemployed while about 42% are into business as a means of livelihood (see Table 2). The study further revealed that 58 % of the respondents own their motorcycles while 41.2% are employed to use the motorcycle for commercial purposes. From

the table, it was revealed that 40.8% of the respondents never had accidents as at the time of this research while 42 % have had between 1 to 4 accidents since they started using their motorcycles for commercial purposes.

Table2: Motorcycle Ownership

variables		Frequency	Percentage
Occupation	Business	100	42
	Unemployment	124	52.1
	Self Employment	11	4.6
	Others	03	1.3
	Total	238	100
Motorcycle Ownership	Self	138	58
	Employed	98	41.2
	No response	2	0.8
	Total	238	100
Accident involvement	Never	97	40.8
	1 -4 time	100	42
	Above 4 times	25	10.5
	No Response	16	6.7
	Total	238	100

Source: Field Survey, 2022

Causes of Drivers' Accident

A number of factors have been identified as major causes of accident in Nigeria environment. Such factors include the road factor, the human factor, the weather factor and the environment factor. The human factor is very relevant in this study because the drivers of these commercial motor cycles fall under these categories and within the research interest. Therefore, the knowledge of the causes of drivers' fatigue is important for determining to some extent, the reasons why the occurrence of accident is common amongst these categories of drivers. Brown (1994), identified 5 general causes of fatigue in general and driver fatigue in particular which are lack of sleep, internal body problems, time-on-task, monotonous tasks and individual body characteristics. Ogunbodede (2004), in another study on transport and environment observed that distraction while driving could be in form of eating or smoking, talking or making phone calls, greeting and thinking had been found to result in accidents on our roads.

In this study, correlation analysis between variables such as age,

tenure, involvement in accidents, alcoholism, psycho-physiological symptoms and abuse of other drugs were carried out on studying accident situation in the study area. Table 3 revealed positive correlation (r) of 0.23 between age and involvement in accident at 0.01 significant levels (see Table 3). The coefficient of variation (r^2) is 0.0529, thus percentage of variation is 5.29%. This therefore shows a very weak influence of abuse of other drugs on psychophysical symptoms of commercial motorcycle riders in the study area.

Similarly, there is positive correlation between age and involvement in accident in the study area. Table 3 shows a correlation (r) of 0.43 between the two factors at 0.01 significant levels. The coefficient of variation (r^2) is 0.1849, thus percentage of variation is 18.49%. This shows that involvement in accidents in the study area is influenced by age of riders. The summary is that, abuse of other drugs has a significant relationship with alcoholism and psycho physiological symptoms, while there is no significant relationship between psycho physiological symptoms and alcoholism.

Table 3: Relationship between the variables

Variables	Age	Tenure	Involvement in accident	Alcoholism	Psycho physiological Symptoms	Abuse of other drugs
Age						
Tenure	.65**					
Involvement in accident	.43**	.50**				
Alcoholism	.10	.14*	.08			
Psycho physiological Symptoms	-.18	-.23**	.01	.04		
Abuse of other drugs	-0.1	-.04	.16*	.21**	.23**	

Source: Field Survey, 2022

- $P < 0.05$
- ** $P < 0.01$

Table 4 shows that 41.2 % of the respondents abuse alcohols in

the study area, 29.4% abuse Indian hemp/tobacco, 69.7% abuse kola-nuts, 88.9% abuse analgesic and 23.8% abuse sleeping drugs (sedatives). Thus, the study shows that the most commonly abused drug was analgesics, followed by Kola-nut, while the least abused drug was sleeping drugs (Sedatives).

Table 4: Percentage of Abusers and Non Abusers of Drugs in the study area

variables	Percentage of abusers (incidence)	Percentage of Non-abusers	Percentage of No Response
Alcohol	41.2	57.6	1.2
Indian hemp/tobacco	29.4	70.6	0

Kola-nuts (Nicotine)	69.7	28.6	1.7
Unspecified capsules	65.3	34.0	0.7
Analgesic	88.9	9.0	2.1
Sleeping drugs (sedatives)	23.8	74.8	1.4

Source: Field Survey, 2022

Information gathered from drivers and road users depicted that fatigue actually had significant effects on driving and as such is an important predictor of road accidents in the study area. Taking drugs to remain agile by these commercial motorcyclists therefore are common in these two LGAs of Lagos State. It was therefore noted that motor-cyclists were not only aware of the effect of fatigue on their driving skills but developed strategies to overcome fatigue. Such strategies include smoking, chewing kola - nuts and gins (hot drink) soaked in herbs. The summary of finding are as stated below:

- The incidence of drugs abuse among commercial motorcyclists ranged from 23.8% (Sedatives) to 88.9% (Analgesics).
- The incidence of Psycho physiological symptoms among participants was 41.4%
- Alcoholism and abuse of other drugs were positively correlated with the level of manifested psycho physiological symptoms of the commercial cyclists
- Alcohol consumption have significant influence on abuse of other drugs
- Analgesics and kola - nuts were the most commonly abused drugs while sedatives and tobacco were the least commonly abused drugs

CONCLUSION

Commercial motor-cyclists should be discouraged from taking drugs; any energy induced alcohol and or smoking in whatever form before embarking on riding exercises. All these will help to reduce factors which can trigger off occurrence of fatigue to motor-cyclists while riding and by extension reduces accident on our roads. This paper therefore, recommends the following for all commercial motorcycle riders in order to minimize the rate of motorcycle accidents in urban environment.

- Psycho – education (focus on drug issues) for commercial motor cyclists.
- Sales of drugs in parks (alcohol and Indian hemp) should be banned.

- Provision of less risky means of transportation such as tri-cycles should be encouraged in urban environment
- Training and re - training of commercial motorcycle riders and traffic offenders should be carried out periodically

In view of these, accidents arising from operators of commercial motorcycles will be highly reduced if some of the measures highlighted in the study are implemented and well adhered to in Nigerian urban environment.

REFERENCES

- Aderamo , A. J (2002) “Transport and the Nigeria urban environment”. Paper delivered at the 45th Annual Conference of the Nigeria Geographical Association held at university of Ilorin between 30th June and 3rd July 2002
- Brown, I.D. (1994) Driver Fatigue, Ergonomics, 36, pp. 298-314
- Odedokun, R (1991) “Accident and Productivity level in the transport industry” in Bolade Tunji and Ogunsanya, A. A. (eds) Accident control and safety measures in Mass Transit Operations in Nigeria, JUP, Ibadan.
- Oginni, O. F., Ugboko, I. V., & Adewole, A. R. (2007). Knowledge, Attitude and Practice of Nigerian Commercial Motorcyclists in the Use of Crash Helmet and other Safety Measures. Traffic injury prevention, 8:137-141
- Ogunbodede, E.F. (2004). Transportation and Urban Environment in I. Vandu-Chikolo, Ogunsanya, A.A. and A.G. Sumaila (eds.), Perspectives on Urban Transportation in Nigeria, Published by the Nigerian Institute of Transport Technology, Zaria, M.O.D. Press, Kaduna, Nigeria. pp 101 – 200
- Ogunsanya, A. A. (1985) The Negative Aspect of

- Technology Development in the Transport Industry in Adeniyi, J.S.O and Ibiejugba, M. A. (eds). Technological Development and Nigerian Industries, Nigeria. University of Ilorin Press pp 390-400
- Omoluwabi, 1988 Omoluabi, P.F. (1988). Differences between psycho physiological and psychometric measures of anxiety. Nigerian Journal of Basic and Applied Psychology, 1(2), 69-78.
- United Nations, (2004): World reports on traffic injury prevention
- Hoyles, B and Knowles, R (1998): Modern Transport Geography. Brittan
- Johns, A. (2001), 'Psychiatric effects of cannabis', British Journal of Psychiatry 178: 116–122.
- Terhune, K., Fell, J. (1982): 'The role of alcohol, marijuana and other drugs in the accidents of injured drivers', Alcohol and Driving 3(6): 3–6.
- Alti-Muazu Aliyu A.A (2008): Prevalence of psychoactive substance use among commercial motorcyclists and its health and social consequences in Zaria, Nigeria. Ann. Afr. Med. 7:67-71.
- Jude-Kennedy, E.C, Offodile, E.C. and Timothy, N. (2009): The burden of motorcycle related Neuron trauma in Southeast Nigeria. Journal of Clinical Medicine and Research. Vol. 1(1), 13 - 17
- Iribhogbe PE, Odai ED (2009): Driver related risk factors in commercial motorcycle (Okada) crashes in Benin City Nigeria: Brief report. Prehospital Disaster Med. 24(4):356-359.
- Babor,T.F, Higgins, J.C, Sanders, J. B and Monteiro, M.G (2001): The Alcohol Use Disorders Identification Test: World Health Organization. A Guideline for use in primary health
- Jones, A. W. (2004): 'Update on Sweden's zero-concentration law for narcotic drugs in blood of Drivers', in Oliver, J., Williams, P., Clayton, A. (eds), Alcohol, drugs and traffic safety Scottish Executive, Glasgow, UK.