

Commercial Motorcycling Operations, Public Health and Safety Issues in Ibadan Metropolis

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Abstract— This paper investigated commercial motorcycling operations, public health and safety issues in Ibadan metropolis. Motorcycle injuries have greater implications on public health commuters' safety in developing countries and particularly Nigeria. The study embraced a case study research design in Ibadan metropolis. The study area covered six Local Government Areas; Akinyele, Ibadan North, Ibadan North East, Ibadan Northwest, Ibadan Southeast and Ibadan Southwest. The sample population comprised a purposive 36 commercial motorcyclists from different points across the six local government areas under study. Data collected from both primary and secondary sources; In-Depth Interviews and Focus Group Discussions. Data gathered from the interviews and FGDs were transcribed, processed, pooled together and categorized into themes based on the research objectives. The data was content analyzed using descriptive and narrative styles. Finding revealed that commercial motorcycle riders failed to comply with the Federal Road Safety Act. They contravene the Acts deliberately for the purposes of generating more income. They carry more than one passenger at a time and fail to use safety equipment like helmets. They do not wear protective clothing when driving, riding motorcycle without license, they take alcohol and drive. And commuters are exposed to differentiated levels of health issues; arms and legs injuries or fracture, serious brain and spinal cord challenges' including mental health and untimely deaths which become detrimental to the public health. Also, findings revealed that emissions from motorcycles are very dangerous to the public health and it is concluded that commercial motorcycling affects public health and insecurity. It is therefore recommended that non-compliance to traffic rules among commercial motorcyclists and the use of helmet including commuters should be considered punishable under the safety laws to control for these noticeable safety challenges and thereby promoting public safety while minimizing health hazards in Ibadan. Further research should focus on government prevention and control measures aimed at reducing threats posed by commercial motorcycling to commuters' safety and public health through implementation of emission test policy.

Index Terms— commercial motorcycling operations, public health, safety issues.

I. INTRODUCTION

Background to the Study

It is generally not far-fetched that commercial motorcyclists are gaining acceptance by all and sundry as a

means of public transport which are adapted to the contemporary Nigerian society. However, exposure to all hazards including accidents are further worsened by the lack of proper knowledge on road safety measures of the commercial motorcycle riders. Also, commercial motorcycling is paired with disregard to traffic rules, accidents and deadly injuries to thousands of people. Similarly, studies have revealed that most of these riders suffer from at least one health challenge as a result of their continuous use of the motorcycle, alcohol use and substance abuse.

Public transport operation in many developing countries is poorly organised and provides inefficient service to the largely captive users in these countries. This partly explains the reason why different para-transit modes operate in these places, and make worse the already bad transport situation rather than improve it (Sietchiping et al., 2012). However, these para-transit modes provide an indispensable service in these places (Júnior and Filho, 2002). One of these para-transit modes is the commercial motorcycle.

Commercial motorcycle transport, though a para-transit mode, has some peculiar characteristics which often makes it a favoured transport mode both for operators (drivers) and users for relatively short distances. These include its reliability, ability to navigate more easily through congested roads/roads impassable for other vehicle types, provision of door to door service, avoidance of waiting time and many more for the user. It is also a source of employment for drivers many of who might otherwise have no alternative reliable means of livelihood. In spite of these benefits, this transport is plagued by some problems.

Some of these problems include accident, criminality, pollution, and congestion, amidst others. (Menzel, 2011). Accident occurrence, for instance, is a widely reported problem. This is more so as motorcycle safety is an issue the world over. Thus, street robbery and other crimes are associated with commercial motorcyclists. Consequently, it is paramount to investigate commercial motorcycling operations as it relates to the public health and safety issues in Ibadan metropolis.

II. STATEMENT OF PROBLEM

Motorcycle injuries constitute a major but neglected emerging public health problem in developing countries (Owatunmise, 2010) and particularly Nigeria. They are among the leading causes of disability and deaths, the main victims being motorcyclists, passengers and pedestrians in the young reproductive age group (Solagberu et al., 2006). In

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essence, injuries related to motorcycle contribute significantly to the number of road traffic injuries seen. In Ghana, a study reported that motorcyclists constituted about 46-55% of total number of road accidents and 60% of traffic fatalities (Efobi and Anierobi, 2014).

Also, a study in a private hospital in Port Harcourt, Nigeria documented that 47.3% of Road Traffic Accidents (RTAs) seen were motorcycle accidents (Ekere and Ibeanusi, 2003). Although the risk of being involved in a road accident is over eight times as great for a motorcycle as for a car, a motorcyclist is 24 times as likely to be killed or seriously injured per kilometer travelled than a car driver (The ROSPA Guide to road safety projects, 2005). The reported prevalence of motorcycle injuries varies around the world, from 22.8% in China (Zhang et al., 2004) to as high as 62% in Vietnam (Nantulya and Reich, 2002). In Nigeria, prevalence of motorcycle injury ranging from 12.8-60% have been reported in different studies (Igwe, *et al*, 2013). Long established patterns of injury risk suggest that the lower limbs are the body parts most likely to be injured in motorcycle accidents.

Moreover, themes in most literature about transport system and security in Nigeria explored the evolution of *okada* business in Nigeria (Ikuomola, Okunola and Heap, 2009). In view of this, it is crucial to examine commercial motorcycling operations, public health and safety issues in Ibadan metropolis. The research question of interest is that; how do commercial motorcycling operations connected to the public health and safety among passengers and Okada riders in Ibadan Metropolis?

III. OBJECTIVE OF STUDY

The main objective of this study is to investigate commercial motorcycling operations, public health and safety issues in Ibadan metropolis. Also, the specific objective that will guide this study may include; (i) assessing commercial motorcycling operations in Ibadan metropolis, (ii) identifying public health and safety issues associated with commercial motorcycling.

IV. SIGNIFICANCE OF STUDY

The study will raise awareness among CM operators and users especially in relation to public-health and safety concerns. The study intends to make recommendations that will be useful for policy making and regulation of urban transport system. The study will add to the body of literature on urban planning and management.

The evolution and activities of commercial motorcycle riders have attracted scholarly examination (Ogunsanya, 2003; Adesanya, 1998; Ikuomola, Okunola and Heap, 2009; Ogunrinola, 2011). One common trend of the majority of these studies is their focus on the dynamics of the emergence and activities of *okada* operators. These perspectives are basically reductionist in approach. The dysfunctional urban transport system and the economic dislocation of the vast majority of the populace are given scant attention in the literature. Thus, the narratives of *okada* business have neglected the connection given that they have rarely asked questions investigating how *okada* business interacts with urbanisation and threatens the human person. This leaves a

yawning gap in understanding how collapsed infrastructure interacts with the transport system and threatens the individual's freedom from want, freedom from fear and a undignified living.

This study however seeks to extend the discourse by making a connection between the emergence of motorcycle as a form of business and the dimension embedded in this mode of transportation. This is necessary given the increasing urbanisation and the dynamics of *okada* as a popular mode of intra-urban mobility. If this gap in the literature of urbanisation and urban transports system and discourse is not filled, the academic community is likely to remain unaware of the implications of commercial motorcycle operations in Ibadan metropolis. Also, if these issues are not interrogated, the policy making community is unlikely to draw a connection between commercial motorcycle operations and commuters' security and safety in Ibadan. Hence, the relationship between commercial motorcycle operation and commuters' security and safety is an object of academic investigation.

V. METHODOLOGY

Research design: the study embraced a case study survey research design and investigated a contemporary phenomenon within its real life context. This approach is suitable when a research seeks to answer the 'what,' 'why,' and 'how' question (Bryan, 2004: 46).

Setting: the study area was Ibadan, the Oyo State capital. Ibadan metropolis is inhabited predominantly by a Yoruba speaking community in the South-western region of Nigeria. The approximate population is 2.8 million (National Population Commission, 2006). Ibadan is inhabited by virtually all ethnic groups found in Nigeria. Ibadan has 11 local government areas, there are six local councils within the metropolis and five are located outside the city.

Population: this comprises the total number of registered motorcycle riders in the six local governments within the Ibadan metropolis and the residents selected for this study. According to the 2006 Census, the total population of residents in the six Local Government Areas comprised; Akinyele, Ibadan North, Ibadan North East, Ibadan Northwest, Ibadan Southeast and Ibadan Southwest, estimated to be 1,554,958 (NPC, 2006).

Sample/Sampling Method

The sample population comprised 36 commercial motorcyclists from different points across the six local government areas under study, 24 executives of commercial motorcyclists, 24 residents/commuters of the selected communities, 2 traditional bone setters and 2 staff at the accident and emergency ward of the University Teaching Hospital (UCH).

The sampled population was purposively drawn. Those that were sampled include respondents from the 24 motorcycle units selected, 12 focus group discussions with the branch heads and union members of the motorcycle unions and the six purposively selected commuters across the city.

Method of data collection: Data was collected from both

primary and secondary sources. The primary sources include in-depth interviews and focus group discussions. The secondary sources were obtained from books, journals, and newspaper commentaries. Data was collected using qualitative techniques. Twenty-eight in-depth interviews and twelve focus group discussions were conducted.

Instrumentation: two major instruments were Employed In-depth interview guide (IDI) and the focus group discussion (FGD) guide. The interview schedule was in the form of semi-structured and open-ended questions designed to cover all the objectives of the study. Twenty-eight (28) in-depth interviews and twelve (12) focus group discussions were conducted.

Data Management: Data gathered from the interviews and FGDs were transcribed, processed, pooled together and categorised into themes based on the research objectives. The data was content analysed using descriptive and narrative styles.

Ethical consideration

In the process of carrying out this research work, care was taken to ensure that the various rights and freedom of individual respondents were adequately respected and protected. No respondent was placed under duress, fear or favour of any sort. Informed consent of individual respondents; secrecy and confidentiality of respondents, and the integrity of individual respondents were respected. All these were emphasized in order to ensure truthful, reliable and quality information.

VI. DISCUSSION OF FINDINGS

This study found that in many cities such as Ibadan, the urban areas offer few jobs to the youths as well as social amenities of city life. In fact, investigation revealed that the organisation of commercial motorcycle transport in Ibadan could be traced down to virtually all areas of Ibadan, Oyo State. The operators form different groups that are found at various junctions, towns and villages. For example, they are found at Moniya, Ojoo, Ajibode, Orogun, Agbowo, Sango, Agodi, Iwo, Bashorun, Dugbe, Aleshilonye, Eleyele, Molete, Orita to mention a few. Junctions are chosen because they are convenient spots for connecting people coming back from different places via other modes of transportation like taxi cabs; minibuses; etc. The *Okada* operators form route associations through which they operate. Groups are identified by the cloth jerseys of different colours and logos worn by their members. The secretary of Aleshilonye junction unit of Amalgamated Commercial Motorcycle Riders Association of Nigeria (ACOMORAN) noted:

There is a standing rule of territorial ownership among different groups. An *Okada* operator who drops a passenger in someone else's territory will return to his base without picking a passenger back. No operator is allowed to pick up passengers within another rider's territory but a motorcyclist can pick up a passenger accidentally along the way where no group operates or by out-smarting other operators in a particular domain (FGD and Interview at Aleshilonye Junction, April 14, 2017).

The organisation of commercial motorcycles in Ibadan metropolis is synonymous to that of other urban centres in

Nigeria, and neighbouring countries such as Ghana, Uganda and Benin Republic where route associations are essential in regulating the activities of commercial motorcyclists and also in protecting them from the harassment of the law enforcement agents.

Safety is used widely in the framework of protection from personal harm. It is described to mean an assurance of safety from all insecurities and hazardous conditions which may lead to injury and other serious health challenges (Talla and Song, 2014). It is a protection against injury and traumatic issues. Related terms are often used when discussing safety.

Findings showed that personal security is a greater challenge facing commuters as they move from one place to the other using commercial motorcycles as mobility. Nowadays, the issue of personal safety is even more important not only for the community of operations, but has also been indispensable condition for commuters when they travel. Hence, the importance of access to safe transportation cannot be over-emphasized. However, regardless of where they go and the distance covered, commuters believed to be exposed to different levels of risk or crime and health hazards resulting from road accidents (Yusuff, 2013). Further investigation revealed that:

The situation of bad roads in the towns is not funny at all. Most of them are deadly, especially at night when there is no electricity and during the raining seasons, it is even more deadly. This is the responsibility of the government, instead of them to repair the pot holes on the roads; they are interested in imposing more taxes on *okada* riders (Indepth-Interview at Oje Junction, 14, March, 2017).

The presence of these pot holes have been major cause of road accidents. Potholes and detours will definitely make motorcycles and other means of transportation to break down. Several roads observed in Apete, Oje, Ajibode, Moniya, Orogun and other parts of Ibadan metropolis are bad. Motorcycles and vehicles regularly plying these routes always go to a mechanic workshop frequently. The poor roads in the study area are identified by commuters as a causal factor to motorcycle accidents. A group of respondents emphasised that: "poorly maintained roads cause accidents which endanger both *Okada* riders and passengers" (FGD at Apete, March 23, 2017).

Also, there are evidences according to FGD conducted;

It is true, in fact, because of the bad roads, robbers have continued to be a threat especially during the night. Such criminals often pretend as passengers or lay ambush at bad parts of the roads where they are sure motorcycle operators will reduce their speed to the barest minimum (FGD at Oje Roads, 23, March, 2017).

Hence, commuters are facing serious health challenges in the area of road safety as it is not possible to plan a trip or calculate arrival time when the roads are bad. In addition, bad roads have an effect on commercial activities giving rise to increased prices in almost every item. Even though, accidents often happen as a result of bad roads and inability of motorcyclists to follow traffic rules. They act as if they are "the king on the roads" (FRSC, 2007). FRSC (2007) maintained that motorcycle accidents are very rampant at certain periods especially during the raining seasons in

Nigeria as cited in Ogagaoghene (2011).

Moreover, health-related complications are peculiar to commercial motorcycle business. Generally, common health challenge daily encountered by riders and passengers is chronic exposure to pollutants. Research has shown that the environmental pollutants like and gases such as sulphur dioxide and carbon monoxide among others have a tendency to cause lung diseases (Odufuwa, 2009). Passengers also having problems such as asthma undergo so much trouble travelling from one location to the other since due to the fast wind movement, it greatly worsens the state of the respiratory problem. This is due to the fact that commercial motorcyclists operate under unkind weather conditions which apart from causing asthma often result in illnesses such as fever, headache, back ache, respiratory diseases, and chest pain, pneumonia, to mention but few. These illnesses are harmful and detrimental to their wellbeing. Responding to the challenges, an *okada* operator stated:

Many of the operators drink alcohol such as *paraga*, *Alomo bitters* and others due to cold that *okada* operators are exposed to. Many of us use the opportunity to abuse alcohol and drugs (Interview with Okada Rider at Oje junction on 11 March, 2017).

Health experts caution that *okada* riders may experience eyesight-related problems due to the wind and dust that blows straight to the eyes as it has been noticed that many of them ride without using helmets or glasses. According to experts, extensive time spent on motorbikes is harmful to a rider's reproductive organs.

"Due to the dusty roads and cold weather, they contract pneumonia, bronchitis, and acute flu. Some develop kidney stones as a result of the body emptying a lot of acid" (cited in Nakiyamba, 2012).

Another major problem encountered is that the exhaust pipe gets heated very quickly from the exhaust gases being emitted to the atmosphere. If the passenger is not careful, he/she may encounter serious burns on their legs. When there are defective parts built into a motorcycle, the risk of a motorcycle burn increases drastically. However, these types of burns can still occur on a motorcycle that is in good working order if the heated parts are still exposed. This is why one of the pre-requisite for motorcycle licensing requires some training. Before motorcycle license is issued to a rider, they must be taught motorcycle safety and treatment for injuries such as burns. They in turn transfer the knowledge to the passengers to evade such injuries.

Nevertheless, observation while on the field for this study revealed that many of the motorcycles used for transportation business are inadequately maintained, thereby causing extremely nasty and polluting fumes from the exhausts into the air, consequently causing pollution and other environmental hazards. Pollution is a major problem in many urban areas such as Ibadan due to commercial motorcycles' operations. It impacts negatively on Ibadan residents in terms of health and the quality of life. Fumes and carbon monoxide emitted by motorcycles aggravates the concentration of carbon Green House Gases (GHGs) in the atmosphere, thereby resulting in global warming and climate change. The fumes also have deleterious effects on individuals making

them unable to breathe in clean air all the time. In the words of Briggs et al., (2000) stated that the effects of exposure of an individual to pollutions emanating from traffic is yet to be scientifically determined both in the long, medium and short terms. Therefore, Brehm, Kassin and Fein, 2002, calculated emissions from motorcycles to be around 5 times more carbon monoxide and other environmentally unfriendly gases per kilometre than a vehicle. In effect, there is a serious environmental degradation.

Iginla (2007) in addition ascertained that motorcycles increase greenhouse gas emissions and air pollution. Also, Igwe (2013) submits that as a result of motorbike riders adding engine oil to fuels purchased so as to grease the engines of the motorbikes, the effect can be felt not only on human beings with the risk of eye infections and skin cancer but also on the environment causing environmental pollution as well as fuels becoming more opaque and burning slowly. It is apparent that air pollution caused by numerous motorcycles plying the streets is an issue of concern that needs to be addressed by the Government of Oyo State. Noise hazard from motorcycles constitute a threat to Ibadan residents; though it is often underestimated, its effects are seen as insignificant compared to air pollution. Studies have indicated that several individuals particularly in large conglomeration are exposed to transport noise levels which have an effect on their health and quality of life. Road traffic which is the major source of exposure to transport noise has extensive effects on human health and well-being and a matter in need of attention by several authorities.

Apart from worsening the noise of the atmosphere, riders are also subjected to extreme vibrations as a result of running engine, inappropriate structural design of the motorbike, missing or faulty parts and poor road conditions. The vibrations are more dangerous to health if it is more than the limit of mostly between 5 and 1000 Hz but the greatest risk is between 50 and 150 Hz (Hurt et al, 1981). A study by Hedlund, et al., (2008) observed that poor health conditions such as fingers stiffness and numbness as well as hurting and stiff shoulders are common among traffic motorcyclists in relation to non riders. Vibration is responsible for the aforementioned ill-health issues.

Another study by Kraus et al., (1999) revealed that riders may suffer from impotence and urinary-related challenges due to the heat generated as a result of vibration of the motorcycle and sitting for long on the motorcycle. The study indicated that roughly 70 percent bike riders who spend approximately three hours each weekend riding their motorbikes had trouble gaining an erection or emptying their bladders (Kraus et al., 1999). Many motorbikes put too much pressure on the perineum, which is the area between the anus and the scrotum, thereby restricting the flow of blood to the penis. Vibrations from bike engines reduce the growth hormones in the bladder and prostate. Most motorcycles in Nigeria have been found to generate extremely low frequency electromagnetic field (ELF EMF) radiation penetrating the seat directly into the riders groin and torso. The prostate is of utmost importance as it is one of the leading deadly cancer cases (Lubano, 2015). However, the most disturbing health risks of commercial motorcycle operators are the harms

arising from accidents.

Motorcycle injuries are fast becoming a serious budding public health problem in Third World countries and contribute extensively to all road traffic injuries (Peden *et al.*, 2002). Injuries arising from motorcycle accidents are recognised as a primary cause of disability and deaths in several third world nations. Peden (2004) and Solagberuet *et al.*, (2006) submit that passengers, pedestrians and the motorcyclists themselves remain the primary victims. Motorcycle-related injuries contribute a lot to the number of traffic injuries in Ibadan health institutions, and it costs the state significant resources and the health worker's time. The problem is escalating at a faster rate in Third World nations as a result of rapid motorisation, poverty, ignorance and other related factors (Kabir and Makinde, 2010).

Solagberuet *et al.*, (2006) aver that to reduce road traffic injuries, motorcyclists are the main target as they are the most vulnerable. Motorcycle crashes in the study area has been mostly blamed on indiscipline, lack of respect for other road users and the rider's recklessness. Disturbingly, majority of the motorcyclists ignorantly rejected protective gear, therefore worsening the odds of suffering fatal head injuries (Naddumba, 2004). It was discovered during a visit to the University College Hospital (UCH) in Ibadan to assess the nature of injuries suffered by victims involving commercial motorcycle crashes that most of the patients were rescued by relatives, good Samaritans, and police officers. A medical doctor at the motorcycle accident ward noted:

Many of the patients in the ward suffered burn while others sustained deep wounds and fractures. The head and other extremities are the most affected parts of their body.... (Interview at UCH, 20 March, 2017).

The researcher found out that individuals who had helmets when accident occurred did not sustain any head injury, but complained of headache and confusion and in some cases were unconscious. Injuries related to motorcycle crash represent a larger chunk of injuries seen at the University College Hospital Ibadan (road accident unit). Unfortunately, larger percentages of the patients were young males. High incidence of motorcycle accidents were recorded among the males due to the fact that they are engaged in extensive activities, such as the following: they engage in reckless riding, over-speeding and overloading of their motorbikes; they ride when intoxicated; they ride without using protective gears; they are easily the most mobile population; they cover far distances to work without any form of rigour; and they are frequently involved in using a car for relaxation (Akinpeluet *et al.*, 2007). In the study area, riding of motorcycle is common among the men particularly for business-related purposes.

Information gathered from the road accident patients who were at the motorcycle accidents ward in UCH also revealed that students, civil servants and business men and women were mostly injured since they rush through heavy traffic to get to their businesses and to school. Solagberuet *et al.*, (2006) also observed same in the country.

An interviewee stated:

Indeed, motorcycles are often used for criminal acts like snatching of purses and other belongings like phones, bags, as well as kidnapping, including rape of innocent people. Those

who carry out such criminal acts are people of questionable character and criminal minded riders who are not genuine commercial motorcyclists because they use unregistered motorcycles to carry out the evil act (Interview at Oje, 23 March, 2017).

This issue seemed to be common in many areas of Ibadan as another respondent gave a similar account.

Criminals are among riders. They usually take innocent passengers who do not know the routes to isolated spots where they rob and rape them usually in the morning or late in the night (Interview at Mokola Roundabout, March 15, 2017).

The above finding supports the observation of a discussion organised by the Ministry of Transport in Lagos State which revealed that there have been cases of motorcycles (*Okada*) being used by armed robbers to deprive the citizens of their lifelong investments and valuable property. This is true of some cities in Nigeria where *Okada* has been banned from operation at certain period of the day (nigeriannewsworld.com, 30 April, 2011). On the other hand, there have been some cases in which the perpetrators of the crime are not the motorcycle operators. A motorcycle operator narrated his experience:

I witnessed one this year in the night around 8pm, I did not know where the lady was coming from but I guess she is new in town. She called the person so that the person will direct me while I parked my motorcycle at our unit. I went nearby to ease myself. Suddenly, she saw two men on a motorcycle that came towards her and wanted to grab her phone, and then she shouted *ole! ole!!* (Interview at Mokola Roundabout, 23, March, 2017).

Investigating the issue further, a respondent working with the NURTW at Mokola Roundabout stated:

This assertion is correct but I would want to let you know that most of those who perpetrate criminal activities are those who do not have attachment or registered with any affiliated unit. One of the major responsibilities of the association is to prevent criminals from joining the business (Interview with Okada chairman at Mokola roundabout, 25 March, 2017).

Corroborating the above findings, Ola (2012) stated that motorcycles are used to commit different forms of crimes in Ibadan metropolis. He reported one of such cases where five men were arrested in the city of Ibadan while another set of armed robbers were caught while robbing a Lebanese in Ibadan on a motorcycle. In a related event, three policemen were killed in Lagos by a gang operating on motorcycles (News up-date, 2013). In a similar vein, information from the Cross Rivers State Police Command showed that 1, 352 commercial motorcyclists were arrested for crime-related offences ranging from stealing of handsets, handbags as well as cases of rape and unlawful possession of arms between January and December 2008. Individuals are usually dispossessed of their belongings at gun point or suffer indelible cut with the use of cutlass (Silas, 2006). Similarly, Yusuf (2013) also reported that three men on a motorcycle killed a 42-year old woman with five children in Lagos State.

As noted by an interviewee:

Many *Okada* riders do not obey traffic rules. They are very stubborn people and commit all sort of crime such as armed

robbery. During the day they will monitor their passengers and in the night they will go and rob them (Interview with Civil Defence official in Molete, 19, March, 2017).

According to the above respondent, commercial motorcyclists breach traffic regulations and engage in robbery particularly at night after close monitoring of their victim during the day. The data collected through interviews showed that criminal activities such as ritual killings, kidnapping, armed robbery, bag snatching are common among commercial motorcycle operators. According to Silas (2006), in every city in the country, presence of commercial motorcycle is synonymous with crime and other illegal offences. Ugboma (2004) averred that the exoneration of commercial motorcyclists from crimes ranging from theft, armed robbery, murder and kidnapping will be difficult considering their in urban centres and their connection with commercial motorcycles.

VII. CONCLUSION AND RECOMMENDATIONS

The study investigated commercial motorcycling operations, public health and safety issues in Ibadan metropolis, Oyo State. This study has identified that commercial motorcycle riders fail to obey the Federal Road Safety Act. They contravene the Acts deliberately for the purposes of generating more income. They carry more than one passenger at a time and fail to use safety equipment like helmets. They do not wear protective clothing when driving, riding motorcycle without license, they take alcohol and drive. As a result, due to commercial motorcycling operations, commuters are exposed to differentiated levels of health issues; arms and legs injuries or fracture, serious brain and spinal cord challenges' including mental health and untimely deaths which become detrimental to the public safety. Also, findings revealed that emissions from motorcycles are very dangerous to the public health and it is concluded that commercial motorcycling affects public health and insecurity.

VIII. RECOMMENDATIONS

It is therefore recommended that non-compliance to traffic rules among commercial motorcyclists and the use of helmet including commuters should be considered punishable under the safety laws to control for these noticeable safety challenges and thereby promoting public safety while minimizing health hazards in Ibadan. Therefore, the government both at the federal and state level should increase the level of security in Ibadan. This can be achieved by posting more trained and experienced law enforcement agents in Ibadan metropolis. There should be strict penalties against anybody contravening the road traffic rules including over-speeding, alcoholic drink and driving, not using helmets, carrying more than one passenger and other offences. Therefore, further research could focus on government prevention and control measures aimed at reducing threats posed by commercial motorcycling to commuters' safety and public health through implementation of emission test policy.

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