

INVESTIGATION INTO CAUSES OF MOTOR-BIKE ACCIDENT IN ILARO TOWN (YEWA SOUTH LOCAL GOVERNMENT)

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ABSTRACT

Motor-bike has been a means of transportation in most cities and towns in Nigeria. It is used to convey goods and services in environments that are sparsely populated and reduces the waiting time of passengers. However, there has been an alarming rate of motor bike crashes resulting from different causative factors, hence the need to mitigate the causes of these accidents amongst its users. This study was carried out in Ilaro, a town in Yewa South Local Government Area of Nigeria. In this study, a total of 200 purposely designed questionnaires that captured the causes of motor-bike accidents ranging from environmental factors, motor-bike condition, behavioural factors, etc. were administered. The preliminary results indicate that substantial motor bike accidents emanated from over speeding (75%), behavioural factors (59%), environmental causes (33%) as well as harsh weather conditions (55%). Probable solutions to reducing accidents amongst riders and users were suggested with a view to reducing accidents on the roads. Consequently, loss of lives and manpower amongst potential family benefactors would be greatly reduced if not completely eliminated.

Keyword: Investigation, Motor, Bike, Causes, Accident, Family, Manpower

1.0 INTRODUCTION

In 1922, Lord Lugard opined that the economic development of Africa is summed up in one word, **transport**. In other words, transport is the life blood of economic activity of any nation. This economic activity leads to creation of wealth and increasing the well-being of its citizens. It also increases its productive capacity by building its stock of capital resources in the form of human and non-human infrastructures [1]. The direct opposite of this capital growth - is the depletion of resources which is the consequence of emanating accidents as barriers to development. Mitigating against accidents, is the focus of this study.

2.0 BACKGROUND STUDY

In other climes, the inter-play between the various human activities leads to increase for transport demand which should be a catalyst for technological development in the transport sector, leading to transport innovation. But in case of developing nation like Nigeria, adaptation of second-hand technology is the practice, which after sometime begins to manifest its negative traits in the form of carnages and fatalities on our roads. What this means is that the evolution of this transport phenomenon called 'Okada' (a coinage in Nigeria parlance, actually borrowed from a Nigerian Airline called Okada Air) is

attributed to poverty alleviation rather than a genuine response to transport demand. Of course it is a paradox that Nigeria that has so many resources to create wealth for its teeming population can reduce its transport sector to 'Okada' to alleviate poverty.

According to [2] there is a very strong connection between the factors examined in this paper and motor-bike accident causation in Ilaro, which is one of the developing towns in Ogun State. Although, the study does not show this trend directly, it can be inferred from a critical examination of the socio-cultural background of these public transport operators - the motor-bike riders, popularly called 'Okada' operators in Ilaro.

Motorbike accident is a multifaceted issue with diverse causal factors, therefore, the effectiveness of any mitigating factor is not only hinged on the appreciation of the complex nature and multi-dimensional aspect of accident occurrence but also on how the various accident causal factors can be manipulated to reduce the carnages on our highways [3]. Same author, using the conceptual approaches of the study carried out by Mackay (1994), has helped further to classify the numerous accident causal factors into three major groupings namely human factors, machine factors and road/environmental factors. The focus of this paper therefore, is to find out accident causation factors which may be attributable to violation of or unsafe acts by riders or Pedestrians, roadways, vehicular, road defects, bad weather, or poor visibility, etc. In Nigeria today, motorbike accident has become endemic and constitutes one of the major threats to national development.

Able bodied young men are being sent to their early graves by the day.

3.0 METHODOLOGY

The necessity to justify the basis for this research has led to a search for an appropriate model to provide a theoretical framework as well as explanation for the important role transportation plays in the life of a people, and how transportation can positively and negatively impact the society. For an empirical study of this nature, data were collected through field survey using a total of 200 purposely designed questionnaires that captured the causes of motorbike accidents in Ilaro, were administered. These questionnaires were administered on the motorbike riders/users, which are considered pertinent in this case since it is about the only veritable instrument considered appropriate, efficient and effective in gathering information in addition to oral interviews within the study area. The data so collected were analysed using simple techniques such as percentages and graphs.

4.1 RESULTS AND DISCUSSION

The results of brake failure and tyre defect as causative factors are presented in figure 1 while the results of sudden loss of power and bush burning as causative factors are presented in figure 2. In addition to this, the results of bad riding habits as well as poor training of riders as causative factors are presented in figure 3. Furthermore, the results of poor road markings, bad road infrastructures as causative factors are presented in figure 4 and finally the results of

animals criss-crossing and poor visibility as causative factors are presented in figure 5.

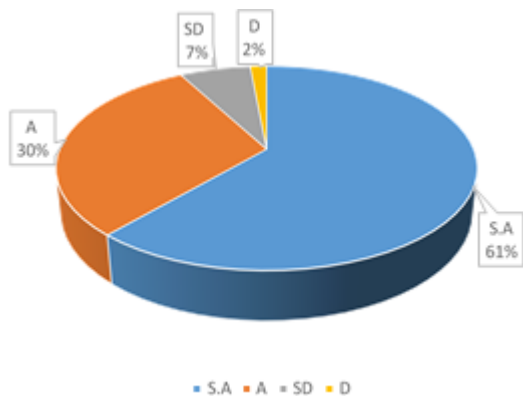


Figure 1: (a) Brake Failure and

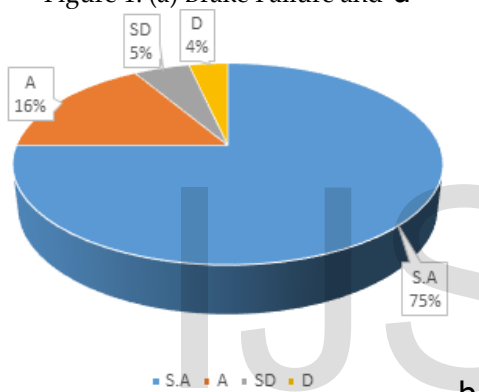


Figure 1(b) Tyre Defect as Causative Factors.

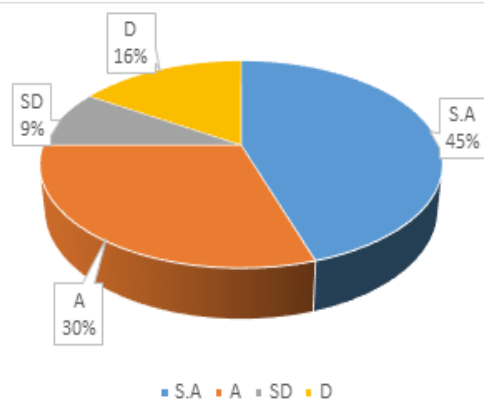
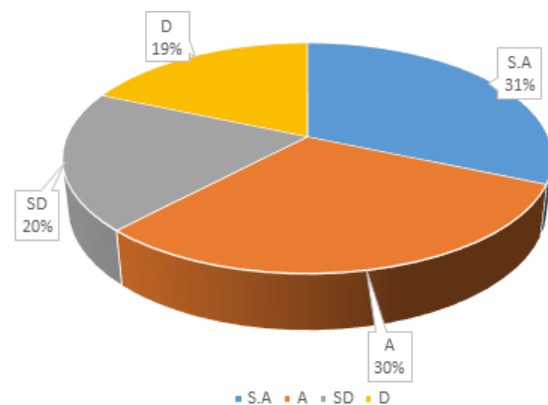
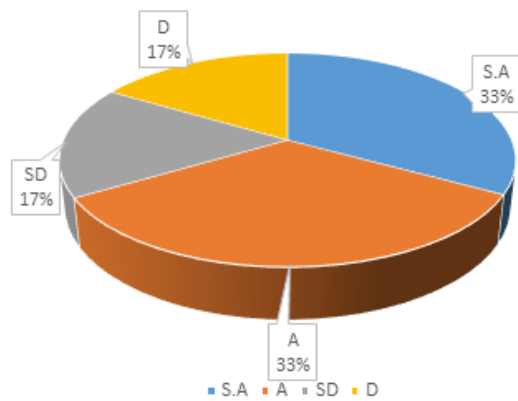
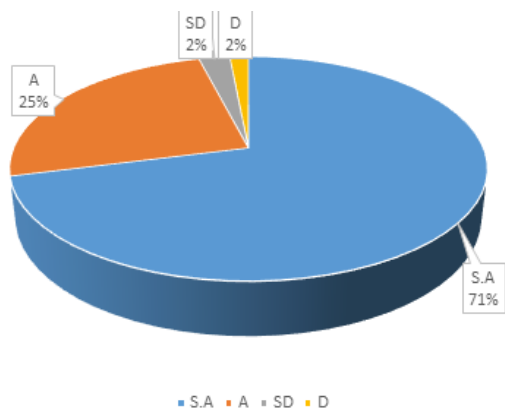
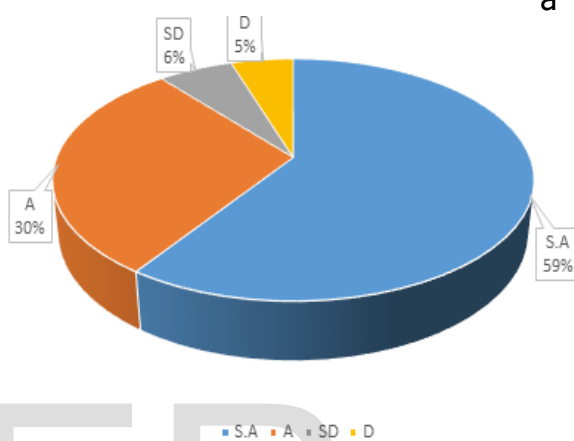
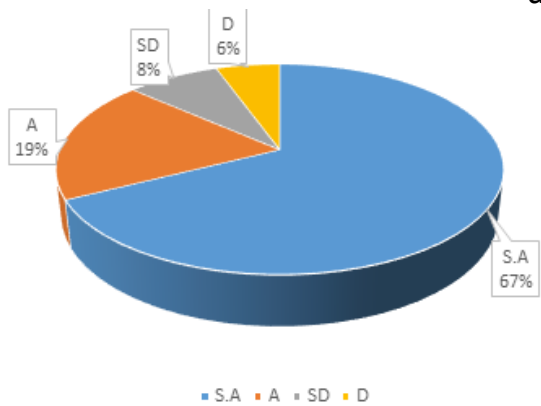


Figure 2: (a) Sudden Loss of Power (b) Bush Burning as Causative Factors



a

a



b

b

Figure 3: (a) Bad Riding Habit (b) Poor Training as Causative Factors

Figure 4: (a) Poor Road Markings and (b) Bad Road Infrastructures as Causative Factors

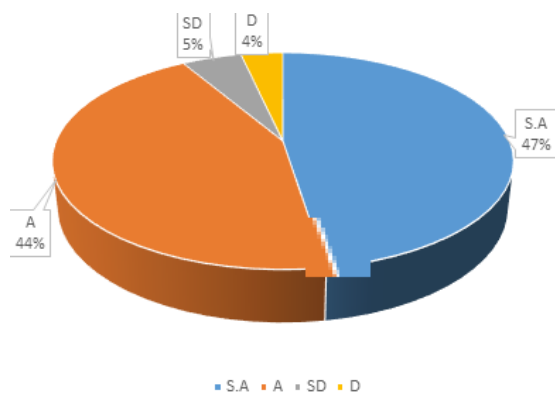


Figure 5: (a) Animals Criss-Crossing

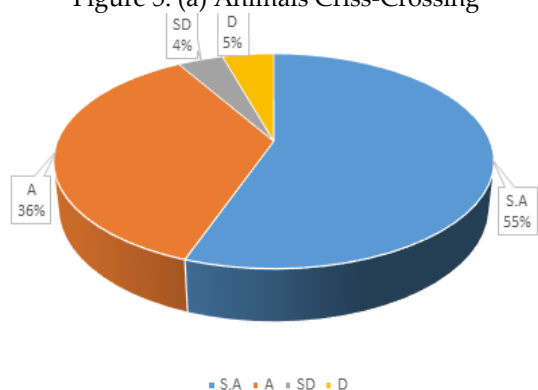


Figure 5 (b) Poor Visibility as Causative Factors

From the results, Fig.1 shows all the causal factors identified as contributing factors to the alarming occurrence of motorbike accidents, the human factors are the most significant. The following have been identified as major causal factors: bad riders, non-training of riders, teenage riders/irresponsible riding, speed and hasty driving as well as economic factor, such as punitive hire-purchase agreement, high repayment premium, loans and extortions from law enforcement agents. Others are, drunken driving, drugs and driving and lack of respect/consideration for the rights of other road users.

Of the above causal factors, bad/poor training (Fig.3a), bad driving attitudes/habits (Fig.3b), are most prevalent. A very critical look at the above

factors shows that these factors are highly influenced by age, marital status, and educational background and account for why a good number of the riders are very reckless in their riding, because they have nothing to live for. No commitment of any sort. The issue of illiteracy of these operators poses another serious source of danger on the roads because of lack of understanding of road signs and they do not even pay attention to them and other motorists. Majority of these riders are stack illiterates who have no formal classroom training or use of motorbike training, who do this business on part-time basis, purely for economic reasons, after returning from their farms already famished and fatigued.

4.2 Machine Factors

These are factors that are the consequence of poor and inadequate maintenance due to poor training of the repairers and the use of fake and sub-standard spare parts. The under listed are the elements constituting machine factors. These are namely malfunctioning machine, burst tyre, brake failure, faulty lights at night and non-use of directional indicators most of the time, as well as poor and irregular maintenance. Most importantly, a deficient, unserviced and poorly maintained machine is a danger on the road and will most likely cause accident on the roads. Generally, irregular and poor maintenance of the motorbikes by road side mechanics lead to malfunction, resulting in poor performance which eventually show up while vehicle is in motion. This poor performance could result in stoppage of machine in motion, a fault which could lead to

loss of control particularly when machine is on high speed. The results of these findings are presented in Fig.4, as condition of the machine, tyre defects, sudden loss of power of machine in motion, are very serious contributing factors.

The reason why the riders patronise road side mechanics as against approved motorbike dealers is not far-fetched. Road side mechanics are very popular and readily available in the locality where most of these motorbike operators operate. Their charges are also cheaper, even though they lack proper and adequate tools, which make them to fumble here and there causing more damage to the machines at the end of the day. The riders prefer fake or fairly used spare parts to genuine ones because they are three-times less expensive than the genuine and new ones. Another machine factor of dire consequence is brake failure. From the results of the study presented in Fig.1, it has been shown that brake failure leading to loss of control of the machine constitutes about 75% of major fatalities of motorbike accidents.

4.3 Road/Environmental Factors

These are factors associated with poor road designs and construction, badly paved road surfaces, poor channels leading to erosion and washing away of the surfaces. The norm that good roads are associated with speed and likely to cause more accidents than bad ones, is an aberration in Nigeria. This development in Nigeria has made people to come to the painful conclusions that the rate of accidents and increasing fatalities have shot up due to potholes, windy roads, rough dusty roads and blind corners.

Bad infrastructures due to bad road construction, badly paved surfaces, lead to failures and creation of potholes, gullies, etc (Fig.4), inflict heavy damages on the machines. Bad roads stress the riders/users alike leading to undue fatigue and cause accidents. Environmental factors such as rough, dusty and windy and badly marked roads (Fig.4), with consequent restricted and poor visibility (Fig.5). Dusty roads constitute health hazards to eyes, lungs and cause accidents. Poorly maintained brakes and rickety machines, coupled with the menace of fairly used tyres known as 'tokunbo' in Nigeria parlance, have led to loss of control on rough, dusty and windy and blinded roads [4]. Brake failures resulting from poor maintenance, worn-out tyres have often times led to loss of control of vehicle in motion at the sight of intruded animals criss-crossing the roads (Fig.5). This is one environmental challenge that government has continuously neglected.

5.1 Conclusion

Investigations have shown that there is a very serious connection between the identifiable causative factors and accident occurrences i.e. human, machine and road/environmental factors, leading to the kind of monumental losses in both human capital and material resources Nigeria has suffered through senseless and avoidable accidents over the years. Motorbike is used for transport because the public transport system is not working as it should be. Most roads are poorly maintained, wide spread and inaccessible to automobiles and buses, even though, it is the fastest means through which most people do their runs including even the well-to-do. Because also,

It is the fastest and easy way to navigate bad roads to beat congestion and hold ups. it is, a preferred choice for most people. Major causes of motorbike accidents are attributable to driving under the influence of alcohol or drugs, shared rides involving three or more passengers, extortions and graft by Road Safety Officials/other agencies, Police, etc., who are induced for them to circumvent traffic laws, driving on the wrong side of the road or overtaking through the wrong side, navigating dangerously though traffic in order to beat hold ups, etc.

5.2 Recommendation

In other to stem the tide, government should invest more in public transport system and make it work. Government through the appropriate organs should design sensitisation/training programmes for all motorbike riders, and should do this on a regular basis. Age limit should be set as a minimum qualification to discourage teenagers from owning and running motorbike for commercial purpose. Government must find a way to regulate and license riders. Government must ensure that the Road Safety, Police and other Agencies should be alive to their responsibility, and must find a way to discipline erring officials.

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