



Original Research Article

Knowledge, Attitude and Practice of Over Speeding Among Long Distance Commercial Drivers in Zaria, Kaduna State, Nigeria

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ABSTRACT

Over- speeding is an important risk factor for road traffic accidents, and every year many people die as a result of road traffic crashes. In Nigeria, it has rendered many children orphans. This study assessed the knowledge, attitude and practice of over speeding among long distance commercial drivers in Zaria, Kaduna State, Nigeria. A cross sectional descriptive study was carried out in January 2015, among 102 long distance commercial drivers in Zaria who have been driving for at least one year from the four major motor parks. The data was collected using pretested, structured interviewer administered questionnaire, and analysed using SPSS 20.0. The results were presented in tables and figures. Majority of the respondents (61.8%) were within the age group of 25-34 years, with mean age of 36.8 ± 8.7 years and 10.8% had tertiary education. Majority (99%) of the respondents had heard of over speeding while about half (47.1%) had driven above 100 km/hr. There was a statistically significant association between age and educational level of respondents and over speeding ($p < 0.05$) Majority of the long-distance commercial drivers had good knowledge, positive attitude and poor practice of over speeding. There is need for a comprehensive, multi-faceted strategy to educate the drivers on ways to ensure more road safety, formal training on driving and enforcement of speed limits by all relevant stakeholders.

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1. INTRODUCTION

Transportation is the process that involves movement of people, goods and services from a given point of origin to specific destination (Akinyemi *et al.*, 2019). There are various methods of transportation which

include road, sea, air and use of animals among others. However, the most popular means is road transportation with lots of benefits, but with road traffic accident (RTA) as the most disturbing consequences of its use (Akinyemi *et al.*, 2019).

In developing countries (Nigeria inclusive), the number of motor vehicles is generally much lower than in the developed countries, yet fatalities from road injuries are higher (Gbadamosi, 2002). Nigeria with a total land area of 910,177 square kilometres and human population of about 180 million is the most populous nation in Africa and the 7th most populous in the world (Akinyemi *et al.*, 2019).

Road traffic accident is a global issue and its trauma remains a significant concern and a leading cause of morbidity and mortality; with road traffic injuries projected to be the 5th leading cause of deaths globally by 2030 (WHO, 2013). While Africa has less than 2% of the world's registered vehicles, the region experiences 17% of road traffic deaths worldwide (Elechi and Etawo, 1990). Sub-Saharan Africa had the highest rates of road traffic deaths among all regions, with 24.1 per 100,000 populations in 2010 (Murray *et al.*, 2012).

Nigeria's 149 ranking in 2009 out of 178 member states indicates the hazards associated with road transportation in the country (Sumaila, 2013). RTA posed a threat to the safety of human life and properties with an estimated 1.2 million deaths and more than 50 million injuries yearly worldwide (WHO, 2015). Road traffic injuries cause considerable economic losses to victims, their families, and to nations as a whole (WHO, 2015).

The causes of RTA could be divided into human, vehicular and environmental factors. However, about 57% of the causes are due to human factors, among which are overcrowding, uses of drugs, medical conditions, lack of training before driving among others (Agbonkhese *et al.*, 2013). Over speeding is the speed beyond the acceptable limit or the speed limit on a particular road (Tonavicblog, 2012). The speed limit in a high way is not the same as that on a one-way route, therefore every road has its own speed limit pegged on safe range.

Road traffic accidents are important yet preventable cause of death and disability in Nigeria. Long distance drivers are usually under more stress than their counterparts plying intra-city roads (Usman and Ipinmoye, 2015). In Nigeria, majority of them are self-employed and owners of the vehicles they drive, while some drivers make daily or weekly monetary delivery to the owners of the vehicle they drive (WHO 2015). They face the highway on top speeds on a daily basis; sometimes making more than one trip on their usual route (Abdulgafoor *et al.*, 2013).

This study assessed the knowledge attitude and practice of over- speeding among long distance commercial drivers in Zaria, Kaduna State, Nigeria.

2. MATERIALS AND METHODS

The study was conducted in Zaria metropolis which comprises of two Local Government Areas, Sabon Gari and Zaria LGAs with an estimated population of 349,022. The study was cross sectional descriptive in nature carried out in January 2015 among 102 long distance drivers who have been driving for at least 1 year. Distance driving was taken as ≥ 100 km.

The 102 respondents were drawn from the 4 major motor parks in the metropolis out of the 300 drivers in the parks. All those that met the inclusion criteria and consented to participate in the study were recruited for the study.

The data was collected with pretested, structured, interviewer-administered questionnaire with 4 sections, namely A- socio-demographic characteristics of the respondents; B-knowledge of over speeding and factors influencing it; C- attitudes of the respondents towards over speeding; D-practice of over speeding by the respondents. The collected data were analyzed using SPSS software (SPSS 20.0, Chicago IL, USA). Data were summarized using frequencies, percentages, measures of central tendency (means) and dispersion (standard deviation) and presented as tables and figures.

Scoring system: Questions on knowledge: A score of 1 point for correct answer, incorrect or 'don't know' responses were scored zero and maximum score was 12 points. Scores above ≥ 6 points ($\geq 50\%$) were regarded as good, while those below 6 ($< 50\%$) were regarded as poor. For the attitude, a 3-point Likert scale was used for rating the drivers' attitudes, each question on attitude had a score ranging from 0 to 2, strongly agree (SA) was awarded 2 points, Agree (A) point and strongly disagree 0. Maximum possible score for attitude was 8 points. Scores of ≥ 4 points were regarded as positive attitude, while below 4 as negative attitude. For the practice question, unfavourable response (Yes) was scored zero point, while favourable response (No) was scored 1 point. Maximum score was 5, scores of ≥ 3 was good practice and ≤ 2 poor practice (Ekos Research Associates, 2007).

Permission was sought from the office of National Union of Road Transport Workers (NURTW) in the 4 major motor parks and written consent was obtained from the respondents.

3. RESULTS AND DISCUSSION

All (100%) the respondents were male and majority (71.5%) were within the age group of 25- 44 years, 61.8% were Hausas, 73.5% Muslims and more than half (59.8%) were married and 35.3% had secondary education (Table 1). About 2/3 (68.6%) had other occupations aside driving, while 52.0% had duration of driving of between 1 and 5 years. About half (54.9%) were owners of the vehicles and 59.8% were full time drivers while 33.3% had formal training on driving (Table 2).

Table 1: Socio-demographic characteristics of the respondents (n=102)

Variable	Frequency	Percent
Age (years)		
15-24	5	4.9
25-34	39	38.2
35-44	34	33.3
45-54	21	20.6
55-64	3	2.9
Ethnicity		
Hausa	63	61.8
Ibo	9	8.8
Yoruba	20	19.6
Others	10	9.8
Religion		
Christianity	75	73.5
Islam	27	26.5
Marital status		
Single	41	40.2
Married	61	59.8
Level of education		
No formal	25	24.5
Primary	30	29.4
Secondary	36	35.3
Tertiary	11	10.8

Table 2: Occupational history of the respondents (n=102)

Variable	Frequency	Percent
Has other occupation		
Yes	32	31.4
No	70	68.6
Duration of driving (years)		
<1	18	17.6
1-5	53	52.0
6-10	26	25.5
11-15	4	3.9
16-20	1	1.0
Ownership of vehicle		
Yes	56	54.9
No	46	45.1
Class of driving		
Part time	61	59.8
Full time	41	40.2
Type of vehicle		
Taxi	37	36.3
Mini Bus	58	56.9
Luxury Bus	7	6.9
Training on driving		
Yes	34	33.3
No	68	66.7

Majority (99%) of the respondents were aware of over speeding. The commonest source of information was radio (26.5%) (Figure 1); 55.9% respondents attributed unsafe driving to over speeding, 31.4% to driving under drugs, 47.1% to driving above 100 km/hr, 70.6% to driving dangerously no matter the speed and 72.5% to driving too fast in bad road condition (Figure 2).

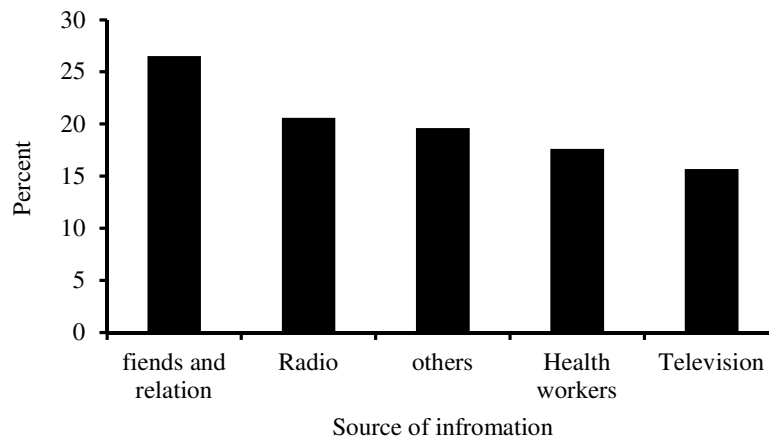


Figure 1: Sources of information about over speeding (n=101)

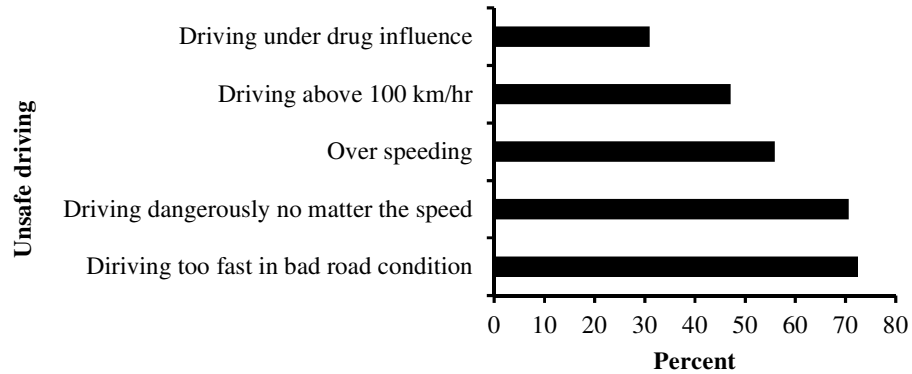


Figure 2: Knowledge of forms of unsafe driving (n=101)

Table 3: Attitude of the respondents towards over speeding (n=102)

Variable	Frequency	Percent
Over speeding is bad		
SA	53	52.0
A	39	38.2
SD	10	9.8
Over speeding should be discouraged		
SA	24	23.5
A	72	70.6
SD	6	5.9
Over speeding leads to accident		
SA	37	36.3
A	57	55.9
SD	8	7.8
Over speeding should be penalized		
SA	18	17.6
A	50	49.0
SD	34	33.4

Table 4: Practice of unsafe driving (n=102)

Variable	Frequency	Percent
Driving above 100 km/hr		
Yes	48	47.1
No	54	52.9
Smoking before driving		
Yes	37	36.3
No	65	63.7
Drinking before driving		
Yes	10	9.8
No	92	90.2
Regular check of brake system		
Yes	78	76.5
No	24	23.5
Regular use of seat belt		
Yes	82	80.4
No	20	19.6

About half (52.0%) strongly agreed that over speeding is bad, 70.6% agreed that over speeding should be discouraged, 55.9% agreed that over speeding leads to accidents, and 49.0% agreed that over speeding should be penalized (Table 3). The practice of driving at ≥ 100 km/hr, smoking and drinking before embarking on long distance driving were 47.1%, 36.3% and 9.8% respectively. About seventy seven percent and 80.4% regularly check their brake system and use seat belts respectively (Table 4). The computed average practice score was 4. One hundred and one respondents (99%) are aware of over speeding. The prevalence of practice of over speeding among the long-distance drivers was 47.1% (48/102). Computed average score for attitude was 5.0.

Male preponderance and the age range as found in this study is consistent with the findings of other authors in similar, and this is not surprising as the occupation is male dominated who are traditionally breadwinners and are more involved in outdoor activities such as this; it also attests to the high-risk nature of the job (Rosen and Sander, 2009). Most of the respondents were Muslims, Hausas and married. This is also expected for the peak age of 36 years considering socio-cultural practice of the study area. Only about 1/4 had no formal education and the remaining (75.5%) had attained some level of education which enhanced their knowledge of over speeding even though this level of education may adversely affect and enhance practice of over speeding, this finding contradicts that of a study on knowledge of commercial bus drivers about road safety measures in Lagos Nigeria where 89.9% had formal education (Rosen and Sander, 2009).

About 1/3 of the respondents had additional employment, only (40.2%) are part time operators which is similar to a study in Thailand where 54.5% were part time operators. About half (52.0%) have been in this business for 1-5 years while only 1.0% had 16-20 years' experience as commercial drivers. Thus, it is expected that they are more informed about the hazards of over speeding than colleagues who have spent shorter duration in the occupation. They are also likely to be aware of safety measures. This is similar to a study in Lagos, Nigeria where 49% were found to have been driving for 1-5 years and 5% for 16-20 years (Odero *et al.*, 1997). A significant proportion of the respondents were the owner of their vehicles, this also has an impact on the speeding attitude of these drivers as those who own the cars will want to drive safe and avoid over speeding in order not to shorten the life span of the vehicles. Only 33.3% of the respondents received training before starting as commercial drivers and which is in contrast to a study in Ilorin, Nigeria where 52.6 % of the respondents received formal training before starting off as drivers.

The awareness on over speeding was very high with friends as the main source of information. The knowledge of unsafe driving could have positive effect on their attitude and practice of road safety measures. This is similar to the findings of a study in two districts in Kenya: Thika and Naivasha where 84.6% and 81.7% of the respondents had good knowledge of speeding (Peden *et al.*, 2004). However, the result of this study is different from a study carried out in Lagos where 59.0% of all the drivers had poor knowledge of road signs and maximum speed limits (Myers *et al.*, 2002). About half (47.1%) of respondents see over speeding as driving above 100 km/hr as part of their knowledge of over speeding and this is in agreement with the absolute definition of over speeding (Road Safety Monitor, 2002). Majority of the respondents had good attitudes towards over speeding. This is however, different from a study in two districts in Kenya: Thika and Naivasha where only 52.5% exhibited good attitude towards over -speeding.

4. CONCLUSION

Majority of the commercial drivers had good knowledge, positive attitude and poor practice of over speeding (i.e. good practice safe driving) and there was statistically significance relationship between educational status of commercial drivers, their age and knowledge of safe driving. A significant number of the drivers had no formal training on driving. Thus, there is need for a comprehensive, multi-faceted strategy to educate the drivers on ways to ensure more road safety, formal training on driving and enforcement of speed limits by all relevant stakeholders.

5. ACKNOWLEDGMENT

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6. CONFLICT OF INTEREST

There is no conflict of interest associated with this work.

REFERENCES

- Abdulgafoor, M.B., Yuen, W.H., Stephen, M., Daniel, A., Jackim, N., Kent, A.S. and Adnan A.H. (2013). Prevalence, knowledge, attitude and practice of speeding in two districts in Kenya: Thika and Naivasha. *Injury*, 44, supplement 4, pp. 524-530.
- Agbonkhese, O., Yisa, G.L., Agbonkhese, E.G., Akanbi, D.O., Aka, E.O. and Mondigha, E.B. (2013). Road Traffic Accidents in Nigeria: Causes and Preventive Measures, 3 (13), pp. 90-100.
- Akinyemi, O.O., Adeyemi, O.O., Raheem, W.A., Adeaga, O.A. and Ade-ikuesan, O.O. (2019). Assessment of Road Traffic Accidents on South west Nigeria Intercity Highways. *Nigerian Research Journal of Engineering and Environmental Sciences*, 4 (1), pp. 408-421.
- Ekos Research Associates Inc. (2007). Driver Attitude to Speeding and Speed Management: A Quantitative and Qualitative Study, Transport Canada.
- Elechi, E.N. and Etawo, S.U. (1990). Pilot study of injured patients seen in the University of Port Harcourt Teaching Hospital, Nigeria. *Injury*, 21(4), pp. 234-238.
- Gbadamosi, K.T. (2002). Traffic Regulations and Road Traffic Accidents in Nigeria: A Spatial Analysis. Unpublished Ph.D. Thesis in the Department of Geography, University of Ibadan, Ibadan, Nigeria.
- Murray, C.J., Vos, T., Lozano, R., Naghavi, M., Flaxman, A.D., Michaud, C. (2012). Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*, 380, pp. 2197-2223.
- Myers, R.A., Taljaard, J.J. and Penman, K.M. (2002). Alcohol and road traffic injury. *South Africa Medical Journal*, 52 (8), pp. 328-330.
- Odero, W., Garner, P. and Zwi, A. (1997). Road traffic injuries in developing countries: A comprehensive review of epidemiological studies. *Tropical Medicine and International Health*, 2 (5), pp. 445-460.
- Peden, M., Scurfield, R., Sleet, D., Mohan, D., Hyder, A.A. and Jarawan, E. and Mathers, C (2004). World report on road traffic injury prevention. World Health Organization Geneva.
- Rosén, E. and Sander, U. (2009). Pedestrian fatality risk as a function of car impact speed. *Accident Analysis and Prevention*, 41 (3), pp. 536-542.
- Sumaila, A.F. (2013). Road crashes trend and safety management in Nigeria. *Journal of Geography and Regional Planning*, 6(3), pp. 53-62.
- Tonavicblog (2012). Causes of road accidents and safety tips, (cited 2014 August 10) available from; www.causesofroadaccidentsandsafetytips_tonavicblog.html
- The Road Safety Monitor (2002). Traffic Injury Research Foundation.
- Usman, S.O. and Ipinmoye, T.O. (2015). Driving under influence among long distance commercial drivers in Akure, South West region, Nigeria. *Journal of Environmental and Occupational Sciences*, 4 (3), pp. 128-131.
- World Health Organisation (WHO) (2013). Global status report on road safety: Supporting a decade of action.
- World Health Organisation (WHO) (2015). Global Status on Road Safety. Geneva, World Health Organisation.