

Assessment of Public Enlightenment Programme on Crash Helmet Usage among Motorcyclists in Akure Metropolis, Nigeria

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Abstract

Motorcyclists constitute an important group of road users globally but are among the most vulnerable road users. Almost the only protection offered to a motorcyclist is the crash helmet. The thrust of this study was to assess the public enlightenment programme among motorcycle riders on the use of crash helmet in Akure Metropolis of Ondo State, Nigeria. This study was conducted in May 2013 using a structured questionnaire and adopted a sample survey in 5 selected populous locations in Akure to select 140 motorcycle riders. It was found that the majority (80%) of the respondents have been enlightened before the study was conducted. Out of about forty-three percent of the enlightened respondents that had crash after the campaign, twenty-seven percent of them were helmeted. Though the coverage of the public enlightenment programme among motorcycle riders was impressive, the message content needs to be worked up as it did not translate to high level of compliance on crash helmet usage. It is therefore recommended that advocacy as a tool to changing perception and behaviour should be implemented by vigorously educating communities of religious leaders, household heads.

Keywords: Motorcyclists, enlightenment and helmet

Introduction

Motorcycle forms a crucial aspect of road transportation and the term used for the motorcycle system of transport varies from one section of the country to another. It is known as 'Okada' in the southern parts of Nigeria, while it is referred to as 'Ashaba' in northern parts of Nigeria. Wikipedia (2010) reported that "Okada" is now one of the primary modes of transportation in Nigeria, and comprises a cheap and adaptable transportation system in the country. Commercial "Okada" riding is an index of commercial transport failure in the country. "Okadas", like all motorcycles elsewhere, have far higher rate of causing crippling and fatal crashes per unit of distance than any other vehicle. The National Road Traffic Regulation 2004 as well as the FRSC Establishment ACT 2007, along with other road traffic regulations in all the States of the Federation, including the FCT, makes it mandatory for motorcycle riders to ensure that their motorcycles are registered, and the riders while on motion must wear crash helmet and if carrying passengers as commercial passengers or non-paying passenger, the passenger as well must wear crash helmet.

Motorcyclists are among the most vulnerable road users. They have the highest risk of getting killed in a traffic accident. In Nigeria, more than two thirds of all road traffic crashes involve commercial motorcyclists. They are responsible for a substantial proportion of the fatalities (Johnson, 2012). Almost the only protection offered to a motorcyclist is the crash helmet. In motorcycle crashes, the human head is exposed to loads exceeding several times the loading capacities of its natural protection. Wearing a helmet reduces the risk of fatality with about 50% (EEVC, 1993).

FRSC announced to Nigerians that effective from 10th September, 2012 it would embark on a weeklong nationwide awareness campaign as part of strategies to adjust the road crash trend. This road safety campaign focused mainly on reinforcing the message of safety through road shows, motor park rallies, in addition to extensive domesticating campaign strategies that involved visit to schools, corporate organisations among others (Chidoka, 2012). The question then is; has it achieved its mandate of educating road users most especially motorcyclists after the intervention campaign which lasted for one week? Therefore, this study assessed the public enlightenment programme on the use of crash helmet among the motorcycle riders in Akure metropolis of Ondo State.

Review

World Health Organization estimates that 1.2 million people are killed by Road Traffic Crash (RTC) and 50 million injured on the world's roads annually. Over 80% of this figure occurs in developing countries, with Africa having the highest death rate. It also predicts that, if nothing is done by countries to stem this tide, death by RTC would increase by 65% by 2015-2020 overtaking malaria and tuberculosis (FRSC, 2013).

Motorcycle injuries constitute a major but neglected emerging public health problem in developing countries (Rafindadi, 2000; Peden et al., 2002). Injuries related to motorcycle especially of the head contribute significantly to the number of road traffic injuries seen and lack of helmet wearing among motorcyclists is a major contributing factor to head injuries that warrant road safety campaign.

Apart from approaches that appear punitive, FRSC has been carrying out several road safety intervention programme using road shows, printing and distribution of posters, among others. At the federal, state and local government levels, there is increased effort to inform, train, educate and enlighten the 'Okada' riders about how to engage in their businesses without impinging on the safety of both the riders and passengers. And every month the FRSC juggles its campaign strategy for increased effectiveness.

Objectives of the Study

The broad objective of the study is to assess the public enlightenment programme among motorcycle riders on the use of crash helmet in the Akure metropolis. The specific objectives are to:

- Determine the proportion of motorcycle riders who were reached by the public enlightenment programme conducted on the crash helmet usage in the metropolis of Akure
- Identify the preferred mode of communicating the information on the crash helmet usage among motorcycle riders in Akure metropolis
- Determine the extent to which public enlightenment programme has influenced the factors associated with crash helmet usage
- Determine the level of compliance with the use of crash helmet among motorcycle riders in the Akure metropolis.

Method

The study adopted a structured questionnaire to answer the research questions raised. The target populations for the study are motorcycle operators in five selected populous locations in Akure, Nigeria. A purposive sampling technique was used in selecting the sample of 140 motorcycle riders for the study. A staff of the Road Safety Corps who is familiar with the topic of the questionnaire helped in assessing the face and content validity of the questions.

Limitation

The study covered five major locations in the Akure metropolis where the target groups are easily accessible. The locations are Adesida Road, specifically Ijomu junction, Ilesha Garage, Onyearugbulum, Alagbaka and Ado-Akure road in Akure metropolis. The issue of self-reporting was considered a limitation since one had to rely on the information given by the motorcyclists concerning the public enlightenment programme on the use of crash helmet in Akure metropolis of Ondo State.

Research Questions

- Does the public enlightenment programme conducted on crash helmet usage in the Akure metropolis cover a wide area?
- How accessible are the information sources of the programme among motorcycle riders in the metropolis of Akure?
- What is the extent to which the public enlightenment programme has influenced the factors associated with crash helmet usage?
- Does the public enlightenment programme bring about behavioural change on crash helmet usage in the Akure metropolis?

Result

The results of the study are presented below and grouped according to the research questions.

Table 1: Question One

Does the public enlightenment programme conducted on crash helmet usage in the Akure metropolis cover a wide area?

	Items	Measurement	Frequency	Percent
a.	Have you ever been enlightened before now?	Yes	112	80.0
		No	28	20.0
b.	How often is the public enlightenment conducted?	Daily	10	8.9
		Monthly	10	8.9
		Occasionally	76	67.9
		Unsure	16	14.3
c.	Does it mention that “motorcyclists are among most vulnerable road users”?	Yes	72	64.3
		No	13	11.6
		Unsure	27	24.1
d.	Does the campaign focus deeply on crash helmet usage?	Yes	69	61.6
		No	27	24.1
		Unsure	16	14.3
e.	Have you had a crash after the enlightenment programme?	Yes	48	42.9
		No	48	42.9
		No response	16	14.2
f.	Were you helmeted?	Yes	13	27.1
		No	30	62.5
		Unsure	5	10.4

The table 1 shows that the majority (80%) of the respondents have been enlightened before the study was conducted while one-fifth claimed not to have received any form of enlightenment.

About sixty-eight percent of the enlightened respondents believed that public enlightenment programmes are conducted occasionally while about nine percent apiece of the enlightened motorcycle riders consented to daily and monthly campaigns. Fourteen percent of the enlightened respondents could not ascertain the regularity of the public enlightenment programme. Of all the enlightened respondents, sixty-four percent commented that the campaign mentioned that “motorcycle riders are among the most vulnerable road users”. But about 12 percent of the enlightened riders affirmed that the campaign did not mention it. While twenty-four percent claimed that they could not ascertain whether or not the campaign mentioned it. About sixty-two percent of the enlightened respondents were convinced that the programmes focused deeply on crash helmet usage and twenty-four percent of them said no outrightly. Fourteen percent of the enlightened respondents were uncertain whether or not the programmes focused keenly on crash helmet usage. The percentage of those respondents (42.9%) that had crash after being enlightened is proportional to those that do not have crash after the enlightenment programmes. However, fourteen percent of the enlightened respondents failed to give response whether or not they have had crash after being enlightened. Out of about forty-three percent of the enlightened respondents that had crash after the campaign, twenty-seven percent of them were helmeted while about sixty-three percent of them were un-helmeted with only ten percent uncertain whether they were helmeted or not.

Table 2: Question 2

How accessible are the information sources of the programme among motorcycle riders in the metropolis of Akure?

	Items	Measurement	Frequency	Percent
a.	Do you seek for safety related information regularly?	Yes	85	60.7
		No	35	25.0
		No response	20	14.3
b.	Which one of the following sources of information on crash helmet usage campaign do you prefer?	TV	10	7.1
		Radio	14	10.0
		Newspaper	14	10.0
		Seminar	10	7.1
		Association	14	10.0
		FRSC Rally	23	16.4
		Internet	5	3.6
		Fliers	30	21.4
		Others	20	14.3
c.	What makes you prefer the information source?	Easy accessibility	65	46.4
		Cheapness	10	7.1
		Clarity of information	10	7.1
		Unsure	55	39.3
d.	Hindrance to information source	Not being computer literate	4	3.0
		Lack of time	74	52.5
		Lack of awareness on info source	15	10.5
		Financial constraint	12	9.0
		Distance from source	21	15.0
		Messages passed in unclear language	14	10.0

Table 2 shows that nearly sixty-one percent of the respondents seek regularly for safety related information but one-fourth of the respondents do not. However, fourteen percent of the respondents did not respond whether or not they seek regularly for safety related information. Seven percent apiece of the respondents prefer TV and seminar as source of information on crash helmet usage campaign. Ten percent apiece of the respondents prefer radio, newspaper and association as source of information on the campaign. The least (3.6%) of the respondents prefer to use the internet services. The Table 2 also shows that sixteen percent of the respondents preferred FRSC rally as their source of information while twenty one percent of them prefer fliers as a source of information. Fourteen percent of the respondents prefer other sources of information. Forty-six percent of the respondents prefer the information source since it is easily accessed. Seven percent apiece of the respondents prefer the source because of cheapness and clarity. However, thirty-nine percent are not sure for their preference. More than half (52.5%) of the interviewed motorcycle riders are unable to access the preferred information source due to time constraint. Three percent of them are impeded from accessing the preferred source owing to their inability to use the computer. About eleven percent of the respondents are hindered to information source since they lack awareness on the source. Exactly nine percent are held back owing to financial constraint and exactly fifteen percent are hindered to the information source due to distance from source. While ten percent of the respondents claimed that messages are communicated in an unclear language which is a barrier to information source.

Table 3: Question 3

What is the extent to which the public enlightenment programme has influenced the factors associated with crash helmet usage?

	Items	Measurement	Frequency	Percent
a.	Has the programme laid emphasis on government interest on reducing mortality rather than fine generation?	Yes	44	39.3
		No	52	46.4
		Unsure	16	14.3
b.	Does the programme point out that “crash is no respecter of rider’s experience”?	Yes	85	75.9
		No	11	9.8
		Unsure	16	14.3
c.	Does the programme reach out to motorcyclists of your own level of education?	Yes	71	63.4
		No	25	22.3
		Unsure	16	14.3
d.	Does the campaign mention that “crash can occur even at the shortest distance”?	Yes	48	42.9
		No	35	31.2
		Unsure	29	25.9
e.	Does the campaign mention that “crash helmet guarantees rider’s safety at all day”?	Yes	48	42.9
		No	48	42.9
		Unsure	16	14.2
f.	Does the programme clearly state that “the protection crash helmets offer motorcyclists outweigh the discomfort they created”?	Yes	34	30.4
		No	62	55.4
		Unsure	16	14.2
g.	Does the programme reassure that “no case of motorcyclist contacting disease through the crash helmet has been reported”?	Yes	34	30.4
		No	48	42.9
		Unsure	30	26.7

The Table 3 presents the enlightened respondents’ views on the extent to which the campaign has influenced the factors associated with the use of crash helmet in the Akure metropolis.

Thirty-nine percent of the enlightened respondents supported that the programme laid emphasis on the government interest on reducing mortality rather than fine generation while forty-six percent of them agreed that government is interested in fine generation rather than reducing mortality. Sixty-three percent of the enlightened respondents agreed that the campaign reached out to motorcyclists of their own level of education and more than one-fifth of the respondents that were enlightened disagreed while the remaining could not ascertain whether or not the campaign reached out to motorcyclists of their own level of education. Most enlightened respondents (75.9%) asserted that the programme pointed out that “crash is no respecter of rider’s experience” and the minority (9.8%) of the enlightened respondents believed that the programme did not point it out. However, fourteen percent of the enlightened respondents are not sure whether or not the campaign pointed out that “crash is no respecter of rider’s experience”. About forty-three percent of the enlightened respondents underscored that the campaign mentioned that “crash could occur even at the shortest distance” and thirty one percent of them said that the campaign did not. However, about twenty-six percent of the enlightened respondents were uncertain. The percentage of the enlightened respondents that consented that the campaign mentioned that “crash helmet guarantees rider’s safety at all day” is proportional to those that do not agree. However fourteen percent of the enlightened respondents could not ascertain whether or not the campaign mentioned it. Thirty percent of the enlightened respondents agreed that the programme clearly stated that “the protection crash helmets offer motorcyclists outweigh the discomfort they created” while more than half (55.4%) of them did not support it. Thirty

percent of the enlightened respondents accepted that the campaign reassured that “no case of motorcyclist contacting disease through the crash helmet has been reported” while about forty-three percent of them denied it.

Table 4: Question 4

Does the public enlightenment programme bring about behavioural change on crash helmet usage in the Akure metropolis?

	Items	Measurement	Frequency	Percent
a.	Are you now more informed or more knowledgeable about the importance of crash helmet?	Yes	85	75.9
		No	11	9.8
		Unsure	16	14.3
b.	What is the significant of being on helmet?	Head Injury	40	35.7
		Crash	32	28.6
		Fine	40	35.7
c.	Do you use crash helmet regularly now?	Yes	48	42.9
		No	64	57.1
d.	Do you think the enlightenment has helped to increase the use of crash helmet?	Yes	61	54.5
		No	14	12.5
		Unsure	37	33.0
e.	Do you now embrace the programme?	Yes	72	64.3
		No	24	21.4
		No response	16	14.3

Table 4 shows that a large group (75.9%) of the enlightened respondents claimed to be more knowledgeable about the importance of crash helmet now while small percentage (9.8%) of the enlightened respondents said they were not too informed on the importance of crash helmet. The enlightened respondents identified three answers for the significance of being on helmet which were: to prevent or reduce the severity of head injuries, to prevent crash from occurring and to avoid being fine. Nearly thirty-six percent of them said helmet is either to prevent or reduce the severity of head injuries and about twenty-nine percent of them said it is to prevent crash from occurring, while about thirty-six said it is to avoid being fined. Nearly forty-three percent of the enlightened respondents used it regularly while fifty-seven percent of them do not use it regularly. About fifty-five percent opined that enlightenment has helped to increase the use of crash helmet but nearly thirteen percent do not believe that enlightenment has helped increase the use of crash helmet while exactly thirty-three percent were uncertain on. Sixty-four percent of the enlightened respondents now embrace the programme but twenty-one percent did not embrace it while fourteen percent did not respond.

Discussion

As documented by Siviroj et al (2012), the majority (83.9%) of the motorcyclists had heard about a safety campaign which is in consonant with the percentage of motorcycle riders (80%) that have been enlightened in the study. Despite the robustness of the public enlightenment programme, this study among a sample of motorcycle riders in Akure metropolis found that about 43% of the enlightened respondents wear helmet on a regular basis after the campaign. This implies that the public enlightenment programme has brought about unacceptably change in behaviour of motorcycle riders. Similarly, a study by Jayadeyan et al (2010) showed that only 49.5 % of the riders identified themselves as regular safety helmet wearers in Kerala India. On the contrary, an in-depth study of motorcycle crashes carried out in London showed that 80% of the motorcyclists wore helmets (Department for Transport, 2004). These differences in the rate of helmet use reflect differences in awareness

of the role of helmet in preventing or reducing the severity of head injury during motorcycle crashes between these countries. Findings from the study showed that respondents were cautious of the information sources and some preferred FRSC rally. Meanwhile FRSC disseminates safety information through other media such as television, radio or internet. Based on the findings in the study, information source that require certain degree of expertise experienced low patronage as this is conspicuous in the internet application on the use of crash helmet among motorcycle riders and more than 50% of the respondents are hindered from information sources due to time constraint. In addition, it was discovered that some public enlightenment programmes were not adequately planned and as such the set of expected deliverables were not achieved. The study also revealed that 70% of the respondents have one or more children and are therefore are highly committed to meeting up with their daily needs. Prior to public enlightenment campaign of September 10, 2012, the FRSC officials conducted an observation survey in the strategic locations of Akure metropolis. From the outcome of the survey, it was discovered that the non-use of crash helmet almost characterized the motorcycle riders in the metropolis and this called for robust campaign. The majority (75.9%) of the enlightened respondents claimed to be knowledgeable on the use of crash helmet after the campaign. But about thirty six percent actually know the importance of safety helmet since crash helmet is primarily to prevent or reduce the severity of head injuries. The study shows that nearly two-third (60.7%) of interviewed motorcycle riders often seek for safety related information which is almost in agreement with a study conducted in Ibadan where significant proportion (77.1%) searched for other safety-related information (Nwagwu & Olatunji, 2012).

Conclusion

Though the public enlightenment programme covered the metropolis widely but it has not significantly affected the motorcycle riders' behaviours in terms of the level of the compliance with the crash helmet usage.

Recommendations

- Advocacy as a tool to changing perception and behaviour should be implemented by vigorously educating communities of religious leaders, household heads etc. When this set of groups are more informed and have permanent stake in the programme then it becomes easier to transform their followers or members through them.
- FRSC needs to work vigorously with partners i.e. governmental or non-governmental all over to raise the profile of the preventability of road traffic injuries and promote good practices related to helmet wearing.
- In order to continually sustain human development, it is recommended that government agencies or non-governmental organizations should assist in equipping motorcyclists with crash helmet knowing full well that youth dominated this vulnerable group.

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