

*Full Length Research Paper*

# **Knowledge and practice of road safety regulation by commercial motorbike riders in Douala-Cameroon**

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Received 10 October, 2021; Accepted 2 February, 2022

**To assess the knowledge and practice of commercial motorbike riders on road safety regulation and capture their challenges towards its implementation. This was a qualitative study with a narrative design and focus group discussion (FGD) and in-depth interview (IDI) as data collection methods. Two focus group discussions (n=22) were held constituting of commercial motorbike riders who had been purposefully recruited and six in depth interviews carried out by four commercial motorbike riders and two traffic police officers were met in the Douala III and IV councils in the city of Douala in 2019. Both FGDs and IDIs were recorded, transcribed and themes were drawn out from the discussion and thematic analysis was carried out. Similar ideas were grouped together while dissecting views were separated. The commercial motorbike riders were aware that there were laid down rules addressing the functioning of the sector. They knew about use of helmets, attire to put on, respect of traffic lights and use of trafficator lights and license ownership. But most of them reported non-adherence with various reasons put forth. The commercial motorbike riders in Douala knew about the road safety regulation but were not motivated sufficiently to apply it.**

**Key words:** Knowledge, practice, road safety regulation, commercial motor bike riders, Cameroon.

## **INTRODUCTION**

Accident is an incident, occurring suddenly, unpredictably and unintentionally under unforeseen conditions (Dandona and Mishra, 2004). Accidents on the road caused by moving automobiles are known as road traffic

accidents (RTA). Road traffic accidents have become a huge global public health and development problem killing nearly 1.3 million people a year and injuring or disabling between 20-50 million people worldwide

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(WHO Factsheet, 2021). Most of the cause of these RTAs in low and middle income countries (LMIC) could be linked to an increase in motor vehicle numbers, high proportion of vulnerable road users (pedestrians, motorbike riders, cyclists), poor enforcement of traffic safety regulations, inadequacy of public health infrastructure, and poor access to health services (Nantulya and Reich 2002). A study carried out by Sobngwi et al in 2010 concluded that the burden of road road traffic injuries on heavy traffic roads (Douala inclusive) in Cameroon was a called for concern, given that estimated number of persons killed on such roads were 35 times higher than similar roads in Europe (Sogngwi-Tambekou et al, 2010).

The magnitude and persistence of this public health challenge has been recognized by public health researchers, policy makers and advocates at the global level, resulting in a resolution passed by the UN General Assembly to give priority to road safety by declaring the Decade of Action for Road Safety, 2011-2020 (WHO Fact sheet, 2020). This initiative was reinforced by the inclusion of two road safety goals among the 17 established in the post-2015 Global Sustainable Development Goals agenda: to decrease by half the number of deaths and injuries from road traffic accidents globally by 2020; and “to provide safe, affordable, accessible and sustainable transport systems for all by improving road safety.”(Global Plan for the Decade of Action for Road Safety 2011-2020). For this to be attained, there should be an enforcement of road safety regulations which according to WHO report pertaining to the different aspects of road safety regulation, stands between 1-4 on a scale of 10 (Global status report on road safety, 2009). In order for there to be an adherence to the road safety regulation, there should be an understanding of what it is all about. The Haddon’s matrix is a framework that offers analysis for basic safety under person, vehicle and environment. So for the people arm, education must be done. Education can be done with respect to the understanding of road safety regulation by the users (Christoffel and Gallagher, 2006). Hence, we sought to find out what the commercial motorbike riders in Douala understood by Road safety regulations and what their attitude towards it was. Therefore, giving us an idea of the level of awareness of essential road safety rules and options these commercial motorbike riders had. To assess the knowledge and practice of commercial motorbike riders on road safety regulation.

### Specific objectives

- (i) To identify the understanding of road safety regulations among commercial motorbike riders in Douala
- (ii) To assess the attitude towards road safety regulations among commercial motorbike riders in Douala
- (iii) To identify the practice of road safety regulations

among commercial motorbike riders in Douala.

## MATERIALS AND METHODS

### Study design

This was a qualitative study with a narrative design and FGD and IDI as data collection methods. The narrative design was used to understand how the participants constructed a story and narrative from their personal experience.

### Study area

The study took place in the Douala III and IV municipalities in the city of Douala in the Littoral Region of Cameroon in 2019. The population of Douala is about 1.5 million, organized into seven councils. It is made up of seven councils. The Bonassama municipal council known as Douala IV is separated from the other six councils by the River Wouri that empties into the Atlantic Ocean. The Douala III council is located in Nyalla and covers the Ndokoti neighbourhood.

### Conduction of focus group discussions and in-depth interviews

This was a qualitative study which adopted a narrative approach to qualitative enquiry. Two focus group discussions and six in-depth interviews were conducted, selecting participants who had at least five years of experience in their sector and were considered opinion leaders by their peers. A guide was used to gather information on major themes of the study. Twenty two persons who were all commercial motorbike riders participated in the FGD and six IDIs were carried out consisting of commercial motorbike riders and traffic police officers. The participants of the FGD were purposively chosen, in which a group was consisted in each of the neighborhood. There was a moderator and note takers and a recorder in both FGDs. The discussion had to be recorded in order to capture the stories as told by the participants in their own words. Before the recording, consent was obtained. For the traffic police officers they refused that the interview should not be recorded. Both FGDs and four IDIs were recorded. Transcriptions were made and themes were drawn out from the discussion and thematic analysis was carried out.

Narrative research allows participants in a study to share their experiences (Squire and Andrews, 2013). The FGD aimed at capturing the understanding of road safety regulations by the bike riders. It focused on the definition of road safety regulation, its contents and how to improve on adherence to it. With the aid of a discussion guide, the investigator introduced the topic to the group and allowed them to express themselves. There was further probing to have clarity of some of the concepts they highlighted.

### Selection methods for focus group discussions and in-dept interviews

The FGD were homogenous for sex, occupation and position occupied in their respective unions. The participants in the focus group discussions were purposively chosen, in which minigroups of 10-12 people were drawn from the target population (Squire and Andrews, 2013 ; Fern, 1982 ; Krueger, 1988 and Khan et al, 1991) and discussed topics on Road Safety Regulations (Table 1). In-depth interviews were conducted using an interview guide among opinion leaders in the police and commercial motorbike sectors

**Table 1.** Distribution of focus group discussion plan.

In depth interview	Group chosen from	Description of participants	Time allocation	Venue	Date and time
FGD 1	Motorbike riders who are opinion leaders in Bonaberi	10 Presidents of commercial bike associations	90	Centre Equestre	05/08/2019
FGD 2	Motorbike riders who are opinion leaders in Ndokoti	12 Presidents of commercial bike associations	90	Tradex PK10	09/09/2019

Source: Authors

**Table 2.** Distribution of InDepth Interview plan.

In depth interview	Group chosen from	Description of interviewee	Time allocation (min)	Venue	Date and Time
IDI 1	Entre Mort Paragon	7year riding experience	45	Bonaberi	05/08/2019
IDI 2	La Foret Bar	5year+ riding experience, union president	45	Bonaberi	12/08/2019
IDI 3	Feu Rouge Immeuble	10year+ riding experience, syndicate president	45	Bonaberi	19/08/2019
IDI 4	Tradex PK10	10year+ riding experience, union president	45	Ndokoti	14/09/2019
IDI 5	GMI Bonassama	12year experience in RTA prevention unit, Police Inspector	45	Bonaberi	26/08/19
IDI 6	Police Post Total Ndokoti	5year experience in RTA prevention unit, Police Superintendent, Chief of Post	45	Ndokoti	21/9/19

Source: Authors

(Table 2).

Selection of the participants was purposively done and was based on the profession, duration of practice, place of work and responsibility held in the association. During the discussion, there was a moderator, note taker and a recorder in all the focus group discussions. All the focus group discussions and four in-depth interviews were recorded on audiocassette tapes. The purpose of taping the interviews was explained to the participants and their consent was obtained before this was done. But the police officers refused to be recorded.

### Sample size and selection

The judgment and purposive sampling method was used in selecting the study participants. The selection of twenty two FGD participants and four IDI participants were purposively selected through the assistance of the Presidents of the Syndicates in Bonaberi and in Ndokoti. This was to ensure that operationalization of the study variables was consistent for all participants. This is a non-probability technique where the researcher selects units to be sampled based existing knowledge or professional judgment. This is appropriate for the selection of a few cases for intensive studies in life history research. For the police officers, the selection of two participants was done with the assistance of the commissioner who was in charge of the Regional RTA unit. Their contacts were taken and we agreed on a date, time and place. At the end of each focus group discussion/in-depth interview, the recording was put in a folder and labeled and stored on the desktop, and the booklets of

note takers were also labeled and put in the cupboard to avoid confusion during translation.

#### Inclusion criteria

The participants were commercial motorbike riders who

- (i) owned a driver's license
- (ii) was currently riding a functional motorcycle
- (iii) held a leader in their union

#### Exclusion criteria

- (i) Those who had recently been involved in a ghastly RTA and were in the hospital
- (ii) Those who had just started riding

### Conducting focus group discussions and in-depth interviews

The discussions and interviews were conducted in Pidgin, English, or French language since the moderator was bilingual. A range of aspects that were highlighted in the road safety regulation regulating the commercial motorcycle sector signed by the Prime Minister in 2008 was used (Extrait du décret n° 2008/3447/PM du 31 décembre 2008). The variables under discussion included meaning of road safety regulation, use of protective attires like helmets and jackets, ownership of license, color of commercial motorbikes, use of trafficators and proposals on how the commercial motorbike sector could be improved upon.

### Ethical clearance and administrative procedures

Ethical clearance of this study was obtained from the IRB of the Faculty of Health Science, University of Buea (Ref: 2019/1003-07/UB/SG/IRB/FHS). Then an authorisation was gotten from the Douala III (Ref: 79/CAD3/2019) and IV (Ref: 002/AR/CAD4/SG/SAC/2019) councils. The Commissioner in charge of the Regional Unit for Traffic and Circulation (00000607/NS/GRVPCL/S) also gave us an authorisation. The purpose of the study and its advantages to the commercial motorbike sector were explained, and questions raised by the bike riders were answered. Participants were asked to give their consent before the commencement of focus group discussions and in-depth interviews. Each participant was free to continue or abandon the process at his or her convenience. It was agreed that the identities of the participants would be concealed during the research process, analysis, and reporting.

### Typing and transcription of qualitative data

The manuscripts of the discussions and interviews were typed out and each manuscript was coded, and then saved as files in individual named folders. The audio recordings of the FGD/IDIs were given to the note takers who were present for the FGD/IDI to transcribe. After each transcription, the transcript was labeled and placed in an envelope. The recordings were labeled and stored in folders on the laptop and hard drive. The transcription was done word verbatim. Then the Pidgin and French interviews were translated into English. Then the translated transcripts were also typed out by the note takers.

### Data analysis

#### Development of code tree and analyses of data

A code tree was created for data analysis. All themes of the study were included. A branch of the tree generated, represented a major theme. In some case, a branch was sub-branched corresponding to subthemes. A branch or sub-branch addressed a code. Data that generated same theme were assembled under code representing a theme.

#### Coding the data

Sections of the data generated were read and copied into the branches of the code tree that represented themes. After all FGDs/IDIs had been thoroughly treated following this procedure, each theme with its corresponding data were retrieved, read and similar ideas were grouped separately. Common comments are presented in quotation marks.

#### Potential source of bias

Only persons who had been riding for long and were leaders were included in this study. This could have introduced bias in their knowledge and practice. When one does something over and over, he tends to learn from his errors and others. Hence, building a body of knowledge that will definitely inform practice.

## RESULTS

### Meaning of road safety regulation

Most motorcycle riders knew road safety regulations as

road signs and laws put in place by the government to govern the transport sector. The understanding of these riders pointed to the use of appropriate attire and respect for road traffic codes. One of the bike riders had this to say:

*“For the motorbike riders, it includes prudence while driving, respect of the road traffic codes like not exceeding 40 km per hour while riding in town. It also talks about the attire of the motorbike rider which includes long trousers, glasses, helmet, reflective and protective jackets”, P1 Bonaberi FGD*

### Use of helmets

Some of the riders knew that the government has prescribed the use of helmet among bike riders for their protection as said by this bike rider with 7years of riding experience.

*“The rider is to put on a reflexive jacket, long pair of trousers, and covered shoes. Above all, he should put on a helmet”, 7 years experienced bike rider in Bonaberi IDI*

It is worth noting that most of the riders were not using helmets. Cited reasons for non-possession of helmets included bike being sold without quality helmets, the hot climate of Douala, difficulties in breathing, difficulties in talking with potential passengers and high cost for quality helmets. This was confirmed by a participant who said: *“There is a lot of heat when you wear the helmet which is very uncomfortable”, P3 Ndokoti FGD.*

Another rider said: *“The issue is this, madam when you wear that thing it is very hot inside. You know na, Douala is already very hot”, P11 Bonaberi FGD.*

One of the motorcycle rider refuted the problem of hot climate and difficulties in communicating with passengers, citing that they were standard helmets in the market which are not usually sold alongside the bikes from the sellers. He had this to say: *“The issue is that to get a good helmet is very expensive. Because the truth is, you have good helmets that are not hot inside nor are they heavy and that will definitely protect you and keep your passenger safe. But these ones are very expensive. So when they sell, they just accompany it with that which is really of low quality”, P4 Bonaberi FGD.*

Even riders who used the helmet find it very difficult to maintain its routine usage probably because of the nature of the job. *“You don’t hear with it on and you need to hear people call out to you or the hooting of an oncoming car”, P1 Bonaberi FGD.*

This was also supported by another rider who said: *“The helmet has no problem but it is not our priority. If you are waiting for a passenger, you cannot be putting on the helmet. So, it is uncomfortable to put on and take off the helmet all the time”, P6 Ndokoti FGD.*

Pertaining to passengers putting the helmet on, they had this to say *“Some passengers say helmets are*

*personal so should not be shared and above all, the bike riders themselves cannot afford to buy and carry two helmets around*", 10 years experienced bike rider in Bonaberi IDI.

### **Ownership of driving license**

Consensus of opinions pointed to the unwillingness of the motorcycle riders to obtain the driver's license. Only few of the respondents were in possession of the license that permits them to use the bike on the road. It could be gathered from the discussions that the process of issuing the license to the riders was a major hindrance to its acquisition. This was confirmed by a participant who said:

*"We have had a bitter experience with the issue of license. We paid some money for our license, went and wrote the exams but till date the license have never been issued"*, P9 Ndokoti FGD.

The complex process of obtaining a license was highlighted by another participant who had this to say: *"For those who try to go to the driving school or seat in for the test, when they are through the license seem never to come. It takes a very long time and at times you never may ever have it. So this is a discouraging factor for others"*, P5 Bonaberi FGD.

The riders also pointed to the lack of clearly defined curriculum for motorbike riding in training centres and the lack of "moto-ecole" unlike the readily available and accessible "auto-ecole" dedicated for the teaching of vehicle driving.

### **Color of commercial motorbike**

Some of the riders knew that the government has prescribed the yellow color for bike being used for commercial purposes. This was confirmed by a participant who had this to say: *"Yes, according to one decree that was signed by the prime minister the colour ought to be yellow"*, P2 Bonaberi.

Most of the riders were not conversant with the prescribed color for commercial motorbikes but rather resort to the color of jackets used by the various pick-up junctions in Douala. These pick-up points were managed by the different councils in the city as reported by this rider: *"The council gives these reflective jackets (jackets with a reflective band) when you have all your documents. If you should go to any place, the colour of your jacket will just identify where you are coming from"*, P8 Ndokoti FGD.

### **Protective clothing**

A common practice among the riders is the wearing of

thick jackets. The health benefit and comfortable nature of the thick jackets promote their usage as highlighted by this rider: *"It is for health reasons we put them on. It helps us to prevent cold and respiratory problems in the long run, You see those thick jackets, we still put cartons beneath to prevent us from cold, it also protects us in the event that we get into a fight"*, P1 Ndokoti FGD.

### **Use of trafficator lights**

It is a common phenomenon to observe bike riders and their occupants sticking out their hand to indicate the direction of the motorcycle rather than the use of the trafficator light. Consensus of opinions among the riders indicated that these lights are either destroyed during road traffic collisions or removed by the owners to distract thieves from stealing their bikes. Some of the participants prefer to indicate their direction with the hand because the lights are not visible to other road users during the day periods. This was highlighted by this motorbike rider: *"Most often using the trafficator is useless. This is because no one seems to see it when used in the day especially from afar. So even if you were to use it, you still need to stick out your hand to indicate the direction you want to turn"*, P12 Bonaberi.

### **Improvements in the motorcycle transport sector**

The participants proposed several measures that could be implemented by the government to improve on the wellbeing of the transport sector in the country. Suggestions span from improvement of the road network, reduction in the price of fuel, sensitization on the use of the road and road signs, facilitation of the process and cost of getting a driver's license. The riders also proposed that the government ensure that good quality helmets be made available at the point of sales of the bike to maximize their safety when using them. This can be confirmed by the respond of this participant: *"The state should facilitate the acquisition of a license. I have paid for a license more than three times, yet I do not own one"*, P9 Ndokoti.

Most of the participants also insisted association of bike riders should be created and these riders should be encouraged to belong to it. This was highlighted by this participant: *"We encourage bike riders to belong to associations because there, they learn morals and also other aspects pertaining to the driving code"*, P2 Bonaberi.

### **Adherence to the prescribed code and conduct for motorcycle riders**

The motorcycle riders are faced with many challenges that imbed their adherence to the regulations in force ranging from the administrative to their routine activities

on the road. Concerning the appearance of the motorcycle, the riders complain of the cost incurred in painting their bike to yellow after struggling to raise money for it to be purchased. Also, some riders are reluctant to spray their bike into the yellow color because they use it for commercial and personal purposes. The riders perceived no benefit for having a yellow bike as highlighted by this informant: *“Besides, those who dared do it [spray bike into yellow] had no advantage over those who did not, for no one was ever sanctioned for not having a yellow bike used for commercial purposes”*, 10 years experienced bike rider in Ndokoti IDI.

The hot climate in the city of Douala was frequently cited by the key informants as one of the major reason responsible for the refusal to wear the helmet among the riders. Also, the helmet reduces flexibility as it reduces their capacity to hear from others during working hours. Besides, the passengers also refuse the use the shared helmets citing that it is personal and should not be shared with others as highlighted by this participant: *“Some passengers say helmets are personal so should not be shared and above all, the bike riders themselves cannot afford to buy and carry two helmets around”*, 10 years experienced bike rider in Bonaberi IDI.

The bright colored jackets are provided to the riders by the council or their syndicate to prove that they are registered members. However, the process of registering with the council takes too much time forcing many riders to abandon the procedure. This was confirmed by the respond from the law enforcement office: *“After registration with the council where they [bike riders] will be functioning, they give them one [bright jacket] with a registration number on it. But failure due to the number of personnel available at the councils to attend to them [bike riders], has just deterred some from going through that process. On the other hand, some of the motorcyclists are not just willing to do so”*, Police Officer in Bonaberi IDI.

They had other challenges like the fact that they thought they were always stigmatized like motorbike riders because the population at times thought of them as wayward individuals and the police were always quick to conclude that they were on the wrong.

## DISCUSSION

A recent study conducted by Al-Reesi et al. (2013) has confirmed that risky driving in general and aggressive violation of traffic regulations in particular are major risk factors (Al-Reesi et al, 2013). According to the system approach, the occurrence of RTAs can be ascribed to various contributing factors, namely the human, the vehicle and the road environment. The three factors (human, vehicle and road environment) as well as their interactions vary in the strengths of their contribution. The strongest factor is the human (95.4%) followed by the environment and the human- road environment interaction

(HRI) with 44.2 and 34.8%, respectively. Hence understanding motorbike riders' on-road behavior is critical in assessing the human factor which remains the most important factor for road traffic accidents. Thus, interventions can be proposed to address them.

## Knowledge on road safety regulation

Knowledge of traffic rules is essential for the manifestation of responsible behavior on the road. Knowledge, information and awareness are keys to building responsible behavior of road users. This study found that the participants knew what road safety regulation was and what it constituted. They had an understanding that road safety regulation were the set of rules that had been laid down to regulate the sector. They cited among others, the fact that there were rules stating that helmets should be worn both by riders and their passengers. The color of the bike should be yellow, the rider should wear reflexive jacket and own a category B driver's license and respect road signs and use of signal lights on the bike. This actually was similar to the rules laid down by Prime Ministerial decree n° 2008/3447/PM of 31 December 2008 (Extrait du décret n° 2008/3447/PM du 31 décembre 2008).

In as much as they had the knowledge, they reported not to respect most of them like the consistent wearing of helmets with reasons that ranged from heat, cost of purchase, unable to hear the passenger call out to them etc. The WHO fact sheet on RTA Of Feb 2020, states that the correct use of helmets can lead to a 42% reduction in the risk of fatal injuries and a 69% reduction in the risk of head injuries (WHO Factsheet, 2020). Yet the bike riders were ready to take the risk of not wearing the helmets due to some inconveniences. Also, they reported the fact that they did not adhere because of the system of law enforcement that operates haphazardly and failed to consistently penalize those who deviated from it. From the Triple E system approach, enforcement requires that authorities like traffic police ensure that road users comply with traffic regulations. This is so because, if the traffic laws are not enforced it is likely they will not be complied with and therefore will have little chance in influencing behavior, just as the participants indicated. A look at the report from the Ministry of Transport, enforcement for helmet use stood at 1 on a scale of 10 (Ministry of Transport for Cameroon, 2008).

## Practice of road safety regulation

Most of the participants reported that they were not using the helmets for reasons such as heat and the fact that it was not comfortable. This discomfort was also mentioned in a similar study carried out in Nigeria by Mwakapasa (2011). Another reason they mentioned was the low quality of the helmet. This was also mentioned by Peek-

Asa et al. (1999). In general the commercial motorcyclists were not adhering to the road safety regulations. This was similar to the study done by Saaed (2019). One prominent reason for their non-adherence was the non-enforcement of sanctions by the forces of law and order. This was similar to what Salve et al. (2014) concluded in his study.

### **Challenges of being motorbike riders**

Apart from the difficulties the bike riders had in acquiring some of the required PPEs and adhering to some of the road safety regulations, the fact that they were often stigmatized was of great concern to them. This was in line with the findings of Solaja MO, Kalejaiye PO and Itsuokor PA in Edo state in Nigeria (Solaja et al., 2015), where they found out that social stigmatization due to the use of motorcycles for criminal activities, lack of protection and inadequate clothing for riders, recklessness, impatience, over speeding and non-compliance to traffic rules, ban and arrest of innocent motorcyclists and payment of incessant levies are the major challenges of commercial motorcyclists in Etsako West, Edo State.

### **Improvements in the motorcycle transport sector**

Suggestions for the improvement of the sector spanned from improvement of the road network, reduction in the price of fuel, sensitization on the use of the road and road signs, facilitation of the process and cost of getting a driver's license. The riders also proposed that the government ensure that good quality helmets be made available at the point of sales of the bike to maximize their safety when using them. Most of these were in line with the SAFE SYSTEM APPROACH proposed by the Global Plan (OECD, 2008) produced by WHO and UN regional commissions in cooperation with the UN Road Safety Collaboration (UNRSC) (United Nations Road Safety Collaboration, 2011). The Safe System approach to road safety recognizes that transport is important to society, and that travel should be safe for all road users while they interact with roads and vehicles (OECD, 2008; United Nations Road Safety Collaboration, 2011). Hence, an improvement of the road network and enhancing the enforcement of laws laid down by the state will improve adherence to road safety regulation as concluded by Manasseh (2013). They also advocated for policies that would encourage acquisition of good helmets at point of sale and ease the process of getting required documents.

### **LIMITATIONS**

The major limitation was rallying participants in a commercial motorbike sector found in an urban setting for

FGDs/IDIs. This is because most commercial motorbike riders are always on the move in search of passengers and also because most of them have to work for long hours in order to meet up with the high cost of living. This required a lot of persuasion to obtain participants, with a concomitant increase in the cost of the study. There was also the issue that some participants understood only the French language.

This was taken care of, by carrying out the FGD largely in French and taking note takers who were bilingual. Furthermore, data collection relied on informant reports of normative behavior in response to questions posed. Hence, there could be an overstating of perceived norms or an underrepresenting the extent to which people deviate from the stated norms. There is a possibility also that the participants viewed the researcher as a potential spokesman to policy makers and hence could tend to skew responses towards expression of certain concerns they thought the researcher could channel to the hierarchy for action.

### **Conclusion**

In conclusion, the motor bike riders knew what road safety regulations was all about. They understood that it was a set of regulations put forth by a prime ministerial decree to regulate the activities of the commercial motorbike sector. They were also able to highlight some of the regulations in respect to the bike rider, the bike itself and the road safety codes which constituted the environment. Despite these, they were not motivated enough to apply it as it was stated. They had for the non-adherence such as the non- sanctions of defaulters by the security officers, poor state of roads among others, the heat inside the helmets prohibited its wearing, the high cost and long procedure of acquiring the category B license. They had as proposals to enhance adherence interventions such as the education of bike riders, enforcement of sanctions by traffic police and instituting of policies to ease acquisition of good helmets and license.

### **CONFLICT OF INTERESTS**

The authors have not declared any conflict of interests.

### **ACKNOWLEDGMENT**

This study was partly supported by the Faculty of Health Sciences of the University of Buea.

### **REFERENCES**

Al Reesi H, Al Maniri A, Plankermann K, Al Hinai M, Al Adawi S, Davey J, Freeman J (2013). Risky driving behavior among university

- students and staff in the Sultanate of Oman. *Accident Analysis & Prevention* 58:1-9. doi: <http://dx.doi.org/10.1016/j.aap.2013.04.021>
- Christoffel T, Gallagher SS (2006). Injury prevention and public health: practical knowledge, skills, and strategies. Jones & Bartlett Learning.
- Dandona R, Mishra A (2004). Death due to road traffic crashes in Hyderabad city in India: Need for strengthening surveillance. *National Medical Journal of India* 17:74-79.
- Extrait du décret n° 2008/3447/PM du 31 décembre 2008 fixant les conditions et les modalités d'exploitation des motocycles à titre onéreux Global Plan for the Decade of Action for Road Safety 2011-2020 Available at: [http://www.who.int/violence\\_injury\\_prevention/publications/road\\_traffic/UN\\_GA\\_resolution-54-255-en.pdf](http://www.who.int/violence_injury_prevention/publications/road_traffic/UN_GA_resolution-54-255-en.pdf)
- Fern EJ (1982). The use of focus groups for idea generation: the effects of group size, acquaintanceship and moderator on response quantity and quality. *Journal of Market Research* 19(1):1-13.
- Global status report on road safety: time for action (2009). Geneva: World Health Organization.
- Khan ME, Anker M, Patel BC, Berge S, Sadhwani H, Kohle R (1991). The use of focus groups in social and behavioural research: some methodological issues. *World Health Statistic Quarterly* 44(3):145-149
- Manasseh J (2013). Causes And Consequences Of Commercial Motorcycle Accidents In Makurdi Metropolis. *Global Journal of Social Sciences* 12(1):11-18
- Ministry of Transport for Cameroon (2008). National Strategy Report, p. 10
- Mwakapasa EG (2011). Attitude towards and practice of helmet use among commercial motorcyclists in Dar es salaam region, Tanzania (Doctoral dissertation, Muhimbili University of Health and Allied Sciences).
- Nantulya VM, Reich MR (2002). The neglected epidemic: road traffic injuries In developing countries. *British Medical Journal* 324(7346):1139-1141
- Peek-Asa C, McArthur D, Kraus F (1999). The Prevalence of non-standard helmet use and head injuries among motorcycle riders. *Accident Analysis & Prevention* 31(3):229-233
- Saeed J (2016). Knowledge, attitude and practice towards road traffic regulation among youth in Hulhumale'. [http://saruna.mnu.edu.mv/xmlui/bitstream/handle/123456789/1598/Jadhullah Saeed June 2016.pdf](http://saruna.mnu.edu.mv/xmlui/bitstream/handle/123456789/1598/Jadhullah%20Saeed%20June%202016.pdf). Accessed 15 May 2019
- Salve S, Dase R, Jadhav V, Mahajan S & Adchitre S (2014). A study on Awareness and Behaviour of Adolescents towards Road Traffic Accidents. *International Journal of Current Medical and Applied Sciences* 4(1):33-40.
- Sogngwi-Tambekou J, Bhatti J, Kounga G, Salmi L, Lagarde E (2010). Road Traffic crashes on the Yaounde-Douala road section, Cameroon 42(2):422-426. *Accident Analysis & Prevention*
- Solaja MO, Kalejaiye PO and Itsuokor PA (2015). The Challenges Facing Commercial Motorcycle Occupation In Etsako West Local Government Area, Edo State. *African Journal for the Psychological Study* 18(1):47-61
- Tamboukou M, Andrews M, Squire C (2013). Introduction: What is narrative research. Doing narrative research 2 p.
- OECD (2008). Towards zero: ambitious road safety targets and the safe system approach. Leipzig, Germany: OECD/ITF Joint Research Centre; <http://www.itf-oecd.org/sites/default/files/docs/08targetssummary.pdf>. Accessed 17 August 2016.
- United Nations Road Safety Collaboration (2011). Global Plan for the decade of action for road safety 2011–2020. Geneva: World Health Organization; [http://www.who.int/roadsafety/decade\\_of\\_action/plan/plan\\_english.pdf](http://www.who.int/roadsafety/decade_of_action/plan/plan_english.pdf), Accessed 17 August 2019
- WHO FactSheet (2020). <https://apps.who.int/iris/bitstream/handle/10665/330776/nCoVsitrep31Jan2020-eng.pdf>. Accessed at 28/03/21
- WHO FactSheet (2021). Road traffic injuries. <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>. Accessed on 20/09/2021