

The Rising Incidence Of Maxillofacial Injuries Due To Motorcycle ("Okada") Crashes In Nigeria: A Need For Strict Legislation

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Dear Editor,

In automobile crashes, the maxillofacial area is the most frequently injured body region¹. It has been reported that road traffic crashes are the major causes of maxillofacial injuries in Nigeria^{2,3}. This is in contrast to reports from Europe, America and some countries in Southern Africa where interpersonal violence is the major cause of maxillofacial injuries⁴⁻⁶. The increase in the incidence of maxillofacial fractures from road traffic injuries (RTIs) in the 1970s and 1980s in Nigeria was attributed to the sudden increase in motor vehicle ownership in addition to inadequate and poor maintenance of intercity highways and non-compliance with the use of seat-belts¹⁰.

Motorcycles popularly known in Nigeria as "Okada" have become a popular means of transportation in many communities in Nigeria. Although, it has been observed in developed countries that motorcycles are less implicated in maxillofacial fractures due to RTIs¹¹, reports from urban and semi-urban centres in Nigeria show a striking increase in the number of maxillofacial fractures that resulted from motorcycle crashes^{3,12,13}. Table 1 shows the analysis of RTIs due to motor vehicles and motorcycles in four study periods in Ibadan, South West, Nigeria^{2,12,14}. Between 1965 and 1995 in Ibadan the proportion of motorcycle-related maxillofacial injuries rose from 7.8% to 20.6%. The strikingly high incidence of maxillofacial injuries sustained by motorists in Ibadan (Table 1) seen between 1978 and 1982 could be attributed to the economic oil boom period.

Table 1: Analysis of Road Traffic Injuries due to motor vehicles and motorcycles between 1965 and 1999 (Four different study periods) in Ibadan, Nigeria (adapted from Abiose², Ajagbe et al¹⁴, and Fasola et al¹²)

Study period	1965-1975	1978-198	21982-1984	1995-1999
Types of automobile				
Motor vehicles	46.3%	84.9%	80%	63.4%
Motorcycles	7.8%	10.6 %	-	20.6 %

In Enugu, South East of Nigeria between 1985 and 1995, the number of motorists who sustained maxillofacial injuries rose by 140%, whereas the number of motorcyclists involved during the same period rose by over 1000% (Table 2)³.

In another report from a semi-urban population in Nigeria⁴,

almost a quarter of patients who sustained maxillofacial fractures were either motorcyclists or pedestrians hit by motorcycles. The incidence of maxillofacial fractures due to motorcycle crashes was also reported to be significant in Kaduna, Nigeria^{15,16}. Although, assault was reported as the most frequent aetiology of maxillofacial injuries in Maiduguri, North East Nigeria in a recent study by Olasoji et al¹⁷; more than 10% of their patients were involved in motorcycle-related maxillofacial injuries during the period of the study. In Benin, South of Nigeria 26.5% of cases with maxillofacial injuries were involved in motor-cycle related crashes, and motorcycle passengers sustained more injuries per patient than the other vehicle users¹⁸.

Table 2: Analysis of Road Traffic Injuries due to motor vehicles and motorcycles between 1985 and 1995 in Enugu, Nigeria (Oji³)

Year	Road Traffic Injuries	
	Motor vehicles	Motorcycles
1985	27	3
1986	32	7
1987	37	9
1988	41	13
1989	48	16
1990	50	16
1991	55	19
1992	56	21
1993	60	21
1994	60	30
1995	65	34

Frequent traffic jams as a result of poor road network in the country have made motorcycles attractive to commuters because motorcycles can pass through narrow ways¹². However, most of the motorcyclists are unlicensed and often do not follow traffic rules and regulations. Fasola et al¹³ reported that only one (3.8%) of the motorcyclists who sustained maxillofacial injuries within Ibadan city wore a crash helmet while Saheeb and Etetafia¹⁸ reported that none of the motorcyclists and their passengers involved in RTIs in Benin wore protective helmet. Okada riders apparently show great deficiency in public health education and application of safety measures thus predisposing them to having serious and often fatal injuries in many instances¹⁹. Their activities on the road have raised serious concern in the public view of the high risk of injuries to which they expose not only other road users, but also themselves.

In view of the attendant morbidity and mortality as well as the overall cost to the society, there is a need for awareness campaign to educate the public about the importance of wearing protective helmet while riding on motorcycles and also the need to obey traffic rules and regulations. These findings should also alert the authorities, especially

the government and Road Safety Commission to the need for the provision of good roads and the enforcement of laws concerning speed limit and alcohol drinking while driving. The law regarding the use of protective helmet should also be revisited by the government.

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