

Road Traffic Accidents In Uyo Urban, Akwa Ibom State: The Scourge Of Motor Cycle Trauma

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ABSTRACT

A retrospective study of one thousand, two hundred accident victims managed in the State's apex hospital, the University of Uyo Teaching Hospital in the year 2002 is presented. The aim was to determine the scope of Road Traffic accidents in Uyo Urban, the hub of Akwa Ibom State commercial life, the role of motor cycles in the mishaps, the nature of trauma sustained; the bones commonly involved and the possible causes of the accidents: The data obtained, showed that motor cycles are involved in over 50% of the Road Traffic Accidents and account for about 73% of the total mortality 69 out of 1200 victims died (5.75%). Fractures of the Tibia and Fibula were the most common fractures sustained. Of a total of 782 fractures recorded, tibia accounted for 325 (41.5%) fibula 153 (19.6%) femur 99 (12.6%) skull 80 (10.2%) while radius and ulna bones accounted for 20 each (2.5%). Significantly relevant to these accidents were the alarming number of motor cycles on the roads, the personality and comportment of the individual riders, the time or period of occurrence of the accidents.

Key Words: Road Traffic Accidents, Motor cycles, Trauma.

The incidence of Road Traffic Accidents in Uyo, the capital of Akwa Ibom State, in recent years, has reached an alarming proportion. Congregations of people, crowds of sympathizers and volunteer corps are now common sights on the major roads within the town on account of road traffic accidents. The population of Uyo has increased tremendously over the past ten years. This is partly so, because the revenue accruing to the state from the Federation Account has improved considerably causing an influx of people into Uyo. It is yet too early to expect a dramatic change in the socio-economic life of the indigenes and Uyo dwellers in general. Indices of poverty are still apparent. There is absence or near absence of 2 taxi-cabs in Uyo. Motorcycles ostensibly because they are cheaper pervade everywhere; their riders cut across the unemployed, school dropouts, drug addicts and criminals within the society. It is estimated that over 10,000 motorcycles are bought every year in Uyo; very few ever get registered. These multifarious factors have made motor cycles a real threat to life. Our findings have corroborated similar studies in Ilorin and Lagos.

MATERIALS AND METHODS

Data on road traffic accidents were collected retrospectively over a period of one year (January to December 2002) from records in the University of Uyo Teaching Hospital using a simple format:

Sex, Age, Location of Accident: Date: Time: Type of Vehicle involved, Nature of Trauma, cause of

Accident and Deaths.

A total number of 925 accidents resulting in 1200 casualties were studied and these were classified under Age, Sex ratios

It is noted that few accidents occurred between 6.00 p.m. and 6.00 a.m., while most of them occurred between 12 noon and 6.00 p.m.

RESULTS

Out of 925 road traffic accidents, motorcycles were involved in 467 (50.5%). See Table II. Of 1200 accident victims, the age group most commonly affected was 21-30 years of age, 446 (37%) with males accounting for 32% and females 5%. (Table I). This was closely followed by 31-40 age group 240 (20%), with also a significant male to female preponderance (male 15.4%, female 4.6%). Children aged between 0-10 years accounted for 7% of the total casualties with male to female ratio being about the same, 4% and 3% respectively.

A break-down of the types of injury showed that fractures involving the limbs, chest bones, cheek bones and the spine dominated other types of injuries, 65%. Head injuries, followed with 21% out of which fractured skull accounted for 6.67%. Out of a total of 69 deaths accounting for 5.75%, Head injuries provided 5%. (Table III). The most commonly affected bones in the descending order of dominance are shown in Table IV with the tibia leading with 41.6%, fibula 19.6%, femur 12.6%, skull 10.2%, clavicle 5.9%, radius and ulna 2.5% each.

Random sampling of motorcyclists showed that almost all of them are commercial cyclists. Many take to the trade for lack of adequate employment;

many are school dropouts, drug addicts and people of questionable character.

TABLE I Age and Sex Ratios of Casualties

AGES	TOTAL	%	MALES	%	FEMALES	%
0-10	88	7	48	4	40	3
11-20	162	14	131	11.3	31	2.7
21-30	446	37	380	32	66	5
31-40	240	20	183	15.4	57	4.6
41-50	192	16	157	14	35	2
51-60	52	4	52	4	0	0
61-70	10	1	10	1	0	0
71+	10	1	10	1	0	0

Age: Male: Female Ratio Of 1200^{Ria} Casualties

There were 925 accidents and the vehicles involved were categorized as:

Table 2: Vehicle Casualties

Type Of Vehicle	Total Number	%
Motor Cycle	467	50.5
Cars/Taxi Cabs	252	27.2
Buses	136	14.7
Lorries	44	4.8
Bicycles	26	2.8

Of the 1200 victims of the road traffic accidents the nature of injuries were classified as:

Table 3: Nature Of Injuries (1200 Accident Victims)

INJURIES	TOTAL	%	DEATHS	%
Head, Injuries (Fractured Skull)	254 (80)	21	60	5
Ruptured spleen	5	0.4	2	0.16
Ruptured Liver	3	0.25	1	0.08
Fractures	782	65	6	0.5
Minor Injuries	156	13	0	0
			69	5.74

Motor Cycles Accounted For 50 Deaths (73%)

Table 4: Nature Of Fractures (782#S)

Bones Involved	Total	%
Tibia	325	41.6
Fibula	153	19.6
Femur	99	12.6
Skull	80	10.2
Clavicle	46	5.9
Radius	20	2.5
Ulna	20	2.5
Ribs	13	1.7
Spine	13	1.7
Maxilla/Mandible	13	1.7

Records of the time of occurrence of accidents were inadequate. Of the 925 recorded accidents, only 444 had records of the time accidents occurred (48.9% only).

Table 5: Time Of Occurrence Of Accidents

Period Of Time	Number Of Accidents	%
12 Mid Night – 5.59 Am	33	7.4
6.00 Am – 11.59 Am	150	33.8
12 Noon – 5.59 Pm	241	54.3
6.00 Pm – 11.59 Pm	20	4.5

DISCUSSION

Road Traffic Accidents, worldwide constitute a major cause of mortality and morbidity. The incidence in developing countries is phenomenal; bad roads, vehicles in poor and unworthy conditions, and the mentality of drivers and some of the crash victims have been incriminated as causative factors^{1,2}. The poor economic situations in developing countries translate into poor conditions of roads, inadequate education, corruption and a myriad of factors that contribute to road carnage. Roads if built at all are not maintained; funds made available, in most cases disappear into private pockets. The general decadence of these nations manifest in the unwholesome attitudes of their nationalities unseriousness, unruly behaviour, alcoholism, drug addiction and general indiscipline - The basic ingredients of accidents.

In Nigeria, various measures from time to time, have been instituted to stem this behaviour from the War Against Indiscipline (WAI) of the Buhari/Idiagbon regime to the War Against Indiscipline and Corruption (WAIC) of the Abacha rule; these wars have been lost. Unemployment and hunger usually defy discipline. Today, the youths, which are the most affected group, have become restive and youth restiveness is now a phenomenon in Nigeria. This digression is to point out that most factors involved in Road Traffic accidents are created or controlled by man and man has to be stable to avoid them.

If in Akwa Ibom State with a population of 2-3 million people, scattered throughout her 31 Local Government Council Areas, each with at least one hospital, a hospital records 925 Road Traffic Accidents in a year, the problem is phenomenal. The age group most commonly affected is 21-30 years the group to which youths and adolescents belong, having a male: female ratio of 6:4:1. This has been corroborated by a similar study by Odelowo E. O in Ilorin in which his peak age was 18 to 30 years with male: female ratio of 5:7:1 (Falope 1991).

In Uyo Urban the problem of RTA goes beyond bad roads to this group of youths the unemployed political thugs, drug addicts, criminals etc. Most of them are commercial motorcyclists because motor cycles are handy and affordable and they could even get them on lease. With the teeming population in Uyo, these cyclists are found everywhere defying traffic rules and codes, rushing from one part of the town to the other, to make good hauls. At rush hours the town literally goes crazy with them and these are the periods, which record high incidence of RTAs 54.3% (between 12 noon and 6.00 p.m). Schools start closing by 12 noon while the Uyo main market gate is shut at 6.00 p.m. With the background of the cyclists, and their tendency to flout known and existing traffic laws, it is

inevitable that these accidents have to occur.

There is a consistency in the nature of injuries sustained in motorcycle accidents. Odelowo E. O. in his series stated that 75% of motor cycle accident victims sustained lower extremity, chest and cranio-cephalic injuries (Falope 1991). In our series, the percentage is 71.8%. Viewed on the basis of total fractures sustained, which constituted 73.8% (Tibia 41.6%, Fibula 19.6%, Femur 12.6%).

The predominance of lower extremity injuries may be due to any or some of the following the impact of the moving motor cycle on its subject, the attempt by passengers to jump off an endangered motor cycle and the latter falling on the passenger. Head injuries resulted mainly in collisions between motorcycles and saloons, buses and lorries. Out of the 5.75% total mortality, head injuries accounted for 5%. In most countries of the world, laws compelling all riders to wear helmets are enforced (Hijar et al, 1998) A similar law in Nigeria collapsed about a decade ago. With motorcycle becoming an important part of public transportation, all age groups are now at risk and there is need to revisit the law.

It is our contention that a high proportion of accidents is directly blamable on man. The role of intoxication with drugs and alcohol is important in the aetiology of RTA worldwide (Mao et al, 1997, Odelowo 1994). It is now commonplace to see these intoxicants sold in motor-parks and road-sides where they are easily available to motorists and cyclists. If the carnage on our roads and Uyo Urban in particular, where motor cyclists hold sway is to be minimized law enforcement agencies must be alive to their duties. Public enlightenment campaigns by relevant Government agencies should form part of plans to curb the deaths and morbidity on our roads.

REFERENCES

- Asogwa, S. E., Obionu C. N. (1985) Urban pedestrian accidents and the efficacy of a counter-measure. *Central African J. Med.* 31: 62-65.
- Eke N: (2001) Road Traffic Accidents in the Developing World: who are liable? Anil Aggrawal's Internet journal of Forensic Medicine and Toxicology 2001 Vol.2, No 1 (January June 2001).
- Falope I. A. (1991) Motorcycle accidents in Nigeria. A new group of risk. *West African Med J.* 10:187-189.
- Hijar M, Flores M, Lopez M.V, Rosovsky H (1998) Alcohol intake and severity of Injuries on highways in Mexico: a comparative analysis; 93:1543-1551.
- Mao Y, Zhang J, Robbins G, Clarke K, Lam M, Picket W. (1997) Factors affecting the severity of motor vehicle traffic crashes involving young drivers in Ontario. *Inj. Prev.* 3:183-189.
- Odelowo S. E. (1994) Pattern of Trauma resulting from motorcycle accidents in Nigeria: a two year prospective study. *African J. Med Sci*; 23:109-112.