

## Short Communication

# Road traffic accident deaths as seen in a Tertiary Health Centre Jos University Teaching Hospital (JUTH), Jos, North central, Nigeria

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**World wide, road traffic accidents have contributed significantly to morbidity and mortality in all regions. With the increase in population, indulgence in alcohol and drug intoxication, increased civilization with consequent increase in the number of vehicles worldwide, road traffic accidents have increased enormously with developing nations worst hit. Several persons have lost their lives in an attempt to move from one place to the other. Most of these deaths are medicolegal in nature as they occur immediately at the scene of the accident or within 24 h of patients' admission in any health facility following the accident. This has resulted to increased litigation in our courts of law. This paper aims to analyze some demographic features- age, sex and the mode of road traffic accidents in our environment.**

**Key words:** Road traffic accident, deaths, Jos.

## INTRODUCTION

Road traffic accidents are one of the leading causes of deaths worldwide with the developing world most hit. It is estimated that deaths resulting from road traffic accidents is almost 1.2 million worldwide while injuries from such accidents is estimated at 50 million (Anonymous, 1978). The Americas bear 11% of the burden of road traffic accident mortality (Archanu et al., 2005). Currently, vehicular accidents rank 9th in order of disease burden and is projected to be ranked third by the year 2020 (Asogwa, 1992). Nearly three quarters of deaths resulting from motor vehicle crashes occur in developing countries (Asogwa and Obionu, 1985).

In India over 80,000 persons die in traffic crashes annually, over 1.2 million injured seriously and about 3,000,000 disabled permanently (Asogwa and Obionu, 1985). In Nigeria, the Commander, Federal Road Safety Corps (corps marshal) declared in April 2009 that 5,157 deaths occur through road traffic accidents in the last 3

years out of 18,308 accidents reported while 13,251 had different forms of injuries (Balogun and Abereoje, 1992; Bryan A Garner Blacks Dictionary (August 1990). Also in Nigeria, reports shows an average of 23 daily accidents and 3 deaths per day between January to March, 2009 (Crilly, 1998)

Statistics shows that while developing countries own only 32% of the world's vehicles, they account for 75% of annual accident fatalities (Falope, 1991; Mohan, 2004). Studies show the highest accident rates in the world to be from Ethiopia, Ghana, Nigeria and Nepal (Odelowo, 1993).

Factors responsible for the increase in road traffic accidents include human factor, vehicular and road. These deaths are mainly coroner cases in Nigeria Law and our courts are recording more Litigation cases resulting from road traffic accidents (Odero, 1998)

## MATERIALS AND METHODS

This is a descriptive study of all road traffic accident deaths as seen in Jos University Teaching Hospital, Jos Plateau State, North Central Nigeria over a period of 5 years (January 2005 to December, 2009). Demographic indices such as age, sex, mode of

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**Table 1.** Distribution of RTA by mode of death.

Year	Mode of death			Total (%)
	Vehicular	Bike	Pedestrian	
2005	8	10	6	98 (5.7)
2006	235	28	5	268 (15.7)
2007	266	35	29	330 (19.3)
2008	317	39	30	386 (22.6)
2009	467	115	48	630 (36.8)
Total	1367 (79.8)	227 (13.3)	118 (6.9)	1712

accident was obtained from the mortuary records of the hospital and the data analyzed using simple statistical methods.

Jos University Teaching Hospital is the only federal tertiary hospital in the state. It is a 520 bed hospital and is a referral center for most of the numerous private, State Government owned and missionary hospitals in the state. Jos has witnessed the influx of people thus her population has increased over the years. The sighting of regional head quarters of many companies and banks have also contributed to the increased population with consequent vehicular load in the state.

## RESULTS

From Table 1, a total of 1,712 deaths were recorded during the 5 years period of study out of which vehicular deaths accounted for 79.8%, bike deaths 13.3% and pedestrian death 6.9%.

The lowest number of deaths (98) occurred in 2005 (5.7%) while the year 2009 had the highest number of deaths 630 (36.8%). For each year, vehicular deaths accounted for highest number of deaths while pedestrian deaths had lowest values.

From Table 2, age range 40 to 49 years accounted for the highest percentage 25.1% of deaths from road traffic accidents while the lowest percentage 0.6% was for age range 70 to 79 years. For all the years under study (2005 to 2009), male deaths were higher than female deaths.

## DISCUSSION

In the period of study, deaths due to vehicular accidents accounted for the highest percentage (79.9%). This is similar to reports in other parts of the country and in the Western world (Mohan, 2004; Oluwasanmi, 1993). There is an obvious increase in deaths from 2005 (5.7%) to 2009 (36.8%). This could be due to increase in population in our region due to modernization and rural to urban drift as more people come to the town seeking for white collar jobs and a better life style. Proliferation of numerous industries, banks and other conglomerates has accounted for increased population with its attendant challenges. Alcoholism and drug intoxication is also a factor as most deaths were found associated with intoxication. Jos boasts of its own brewery and intoxication from local alcoholic brews has become an

issue of great concern in Jos. Wear and tear of the roads with poor maintenance culture is an important factor. Recklessness on the part of road users is also a contributing factor to this increase in road traffic accident deaths.

The highest frequency of deaths within the 3rd to 5th decades of life is consistent with other studies in Nigeria and the Western World (Mohan, 2004; Oluwasanmi, 1993; Penal code CAP89, 1963; WHO, 2002, 2004). This could be due to the fact that this consists of the agile, active and very mobile age group associated with increase transit from place to place and increase in risk taking and it is the age group associated with increased use of alcohol and drug intoxication.

The very low incidence of deaths amongst the elderly > 70 years could be due to the fact that they are the geriatric group associated with decreased mobility, most are retired or too sickly therefore are sedentary and seldom found traveling on the roads.

We therefore recommend that Government should equip law enforcement agents involved in regulating and monitoring road users to ensure and enforce safe driving. Road networks in the state and country entirely should be repaired, properly maintained, widened and fully equipped with road signs to assist motorists. Driver's license should be issued only to qualified people. Citizens should change their attitudes positively, stop reckless driving, obey traffic codes, stop alcohol or drug intoxication.

Our health facilities should be modernized and fully equipped with emergency gadgets and drugs with adequate manpower to man them. Vehicles that are not road worthy should be stopped from plying the roads which should be cleared of broken down vehicles. All road traffic accident deaths according to Nigerian Law are Coroner cases and should be reported to police for investigation (Odero, 1998; WHO, 2004).

## Conclusion

Deaths resulting from road traffic accidents in our region are on the increase and are in tandem with reports from other regions of the country and World wide. Measures to

**Table 2.** Age and sex distribution of RTA deaths.

Age (Year)	Year										Total (%)
	2005		2006		2007		2008		2009		
< 15	M	F	M	F	M	F	M	F	M	F	
15 – 19	4	2	8	4	9	13	16	9	25	34	124 (7.2)
20 – 29	5	2	18	12	20	18	32	24	44	18	193 (11.3)
30 – 39	16	6	29	16	34	25	40	32	52	48	298 (17.4)
40 – 49	20	12	40	25	28	21	33	22	49	54	304 (17.8)
50 – 59	13	8	38	39	54	48	46	42	68	74	430 (25.1)
60 – 69	5	2	14	10	16	18	34	28	44	39	210 (12.3)
70 – 79	-	1	8	4	15	7	16	5	30	44	130 (7.6)
> 80	1	-	-	1	3	-	2	-	3	1	11 (0.6)
	1	-	2	-	1	-	3	2	2	1	12 (0.7)
Total	65	33	157	111	189	150	222	164	317	313	1712

reduce this trend involve Governments effort and that of the citizens as causes of this deaths in most cases are modifiable. All road traffic accident deaths occurring immediately or within twenty four hours of admission in any health centre is a coroner's case in Nigeria and should be reported to the police immediately.

## REFERENCES

- Anonymous (1978). Road accidents in the unnecessary epidemic. *Br Med. J.*, 1: 547.
- Archanu Kual, Sinha us. Pathak YK. Singh A Kapoor AK Sharma S Singh S (2005). Fatal road traffic accidents study of distribution, nature and type of injury. *JIAFM.*, 27(2): 971 – 973.
- Asogwa SE (1992). Road traffic accidents in Nigeria a review and a reappraisal. *Accid. Anal. Prev.*, 24: 149 – 55
- Asogwa SE, Obionu CN (1985). Urban pedestrian accident and the efficacy of counter – Measure centre *Afri. J. Med.*, 31: 62 – 65.
- Balogun JA, Abereje OK (1992). Pattern of road traffic accidents cases in a Nigeria University Teaching Hospital between 1987 and 1990. *J. Trop. Med. Hyg.*, (95): 23 – 29.
- Bryan A Garner Blacks Dictionary (1990). Eight Edition by Thomson West Publishers USA.
- Crilly M (1998). Contributory factors to traffic accident deaths identified at coroner's inquest. *J. Public Health Med.*, 20: 139 – 143.
- Falope (1991). Motorcycle accidents in Nigeria. A new group at risk. *West Afr. Med. J.*, 10:187 – 189.
- Mohan D (2004). Road traffic deaths and injuries in India, Time for action. *Nat. Medis India.* 17: 63 – 66.
- Odelowo EO (1993). Factors affecting Mobidity and mortality from road traffic – accidents; a Nigeria periurban study. *Afri. J. med. Sci.*, 22: 69 – 74.
- Odero W (1998). Alcohol related road traffic injuries in Eldoret, Kenya. *East Afr. Med. J.*, 75: 708 – 711.
- Oluwasanmi AJ (1993). Road traffic accident trends in Nigeria *Acc Anal Prev.*, 25: 485 – 487.
- Penal code CAP89 (1963). Section 220(c).The Laws of Northern Nigeria.
- WHO (2002). The injury chart book.
- WHO (2004). World report on road traffic injury prevention Geneva. pp. 3 – 29.