

INCIDENCE OF HEAD INJURIES ASSOCIATED WITH MOTOR CYCLE ACCIDENTS IN PORT HARCOURT

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ABSTRACT

A retrospective study of 517 patients with head injuries associated with motorcycle accidents. This study was carried out at Accident and Emergency (A and E) Department of Port Harcourt Teaching Hospital between January 2001-December 2005. Admission and discharge registers of the Accident and Emergency Department, Intensive care unit and male female orthopedic wards were used for the study. The age group commonly involved in motorcycle accident was 20-29 years of age with 39.5% (males 29.8% and females 9.7%), followed by 30-39 and 10-19 years (males 14.3% and females 5.6%) during the period under review. A total of 331 out of 517 patients died which is 64%. The people more at risk were the pillion riders. They have the highest

number of deaths, which is because the motorcyclist holds the machine handle with both hands which gives him stability.

KEYWORDS: Pillion riders, Head injury, Age group.

INTRODUCTION

Head injury refers to any damage to the scalp, skull or brain. Head injuries can take many forms. In fractures of the cranial base, the internal carotid artery may tear within the cavernous sinus, producing an arteriovenous fistula. Arterial blood rushes into the cavernous sinus, enlarging it and forcing blood into the connecting veins, especially the ophthalmic

veins. As a result the eye protrudes (exophthalmos) and the conjunctiva becomes enlarged (chemosis).

Motor cycle accidents deaths accidents deaths associated with head injury pose a greater threat to the motor cyclist and their passengers than deaths and injury in other motor vehicle accidents. One of the major that increase this risk is the failure of other motorist to detect and recognize motorcyclist in traffic. Negligent vehicle drivers often fail to see and avoid motorcyclist on the road. Nearly three fourth of all motorcycle accidents involve collision with another passenger vehicle and because motorcycle offer less protection to their drivers than other vehicles. The risk is much greater than that of any other vehicle accident (www.Onlinelawyersource.com).

The severity of motorcycle accidents increases with increasing speed, size of the motorcycle and involvement of alcohol in the accidents. Nearly one half of all motorcycle accident deaths are caused in accidents where alcohol use was involved. The lack of helmets use also greatly increases the risk of motorcycle accident head injuries and deaths. Motorcyclists and pillion riders who do not wear helmets are 40% more likely to suffer a fatal head injury than those who wear safety helmets (www.Onlinelawyersource.com).

The extent of a head injury can be determined in a number of ways. The Glasgow coma scale is based on a patient's ability to open his or her eyes, gives answer to questions and responds to physical stimuli, such as a doctor's touch. A person can score anywhere from the three to fifteen points on this scale. A score less than eight points on the scale suggests the presence of serious brain damage (www.Fag.org/head-injurthtml).

MATERIALS AND METHODS

The objective of the study is to investigate the incidence of head injuries associated with motorcycle accidents. This study was carried out at Accident and Emergency (A and E) Department of Port Harcourt Teaching Hospital between January 2001-December 2005.

Admission and discharge registers of the Accident and Emergency Department, Intensive care unit and male female orthopedic wards were used for the study. Name, sex and age was collected from admission and discharge register of the A and E department, together with the type of head injury involved. Records from the registers of patients with head injuries associated with motorcycle accidents were obtained and studied.

RESULTS

The age group commonly involved in motorcycle accident was 20-29 years of age with 39.5% (males 29.8% and females 9.7%), followed by 30-39 and 10-19 years (males 14.3% and females 5.6%) during the period under review.

Pillion rides (motorcycle passengers) were at a greater risks and had the highest number of death, 237 that is 45.8% out of 64% of the total death resulting from head injuries.

Table 1: Age and sex ratio of Patients with head injuries caused by motorcycle accidents, University of Port Harcourt Teaching Hospital (January 2001-December 2005).

Ages	Males	% of Male involved in the motorcycle accident	Females	% of female involved in the motorcycle accident	Total	% of total
0-9	6	1.1	5	1.0	11	2.1
10-19	40	7.7	31	6.0	71	13.7
20-29	154	29.8	50	9.7	204	39.5
30-39	74	14.3	29	5.6	103	19.9
40-49	38	7.4	13	2.5	51	9.9
50-59	32	6.2	12	2.3	44	8.5
60-69	19	3.7	6	1.1	25	4.8
70 above	5	1.0	3	0.6	8	1.6
Total	368	71.2	149	28.8	517	100

Table 2: Role, Sex and Death of motorcycle accident Victims, University of Port Harcourt Teaching Hospital (January 2001-December 2005).

Roles	Males	Females	Total	% Total	Deaths	% (D)
Motorcyclists	141	-	141	27.3	62	12.0
Pillion rides	216	114	330	63.8	237	45.8
Pedestrians	20	26	46	8.9	32	6.2
Total	377	140	517	100	331	64

DISCUSSION

Fifty percentage of the road traffic deaths in Port Harcourt were from motorcycle accidents and about 5.72% died as a result of head injuries (Seleye-Fubura and Ekere, 2000).

In the present study it was observed that motorcycle accident was higher between 20-29 years. This was in agreement with the report from Falope, (1991). A total of 141 motorcyclist had head injuries from 2001-2005 and they were all males. This report points to the fact that all motorcyclists in Port Harcourt are males.

The people more at risk were the pillion riders. They have the highest number of deaths, which is because the motorcyclist holds the machine handle with both hands which gives him stability. The motorcyclist senses danger first and takes appropriate precautions albeit mostly be reflex. Pedestrians usually have fatal head injuries and a majority of them die, which may be because of the impact of hit on the ground.

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