

Injury Pattern Of The Patients Attending The Emergency Department In Manikgonj General Hospital

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Abstract

A retrospective study on injury pattern of cases attending the emergency department of Manikgonj General Hospital was conducted from March to May 1990. The study population comprising of 994 injured patients attending the emergency department of the hospital during the period of October to December 1989. It was found that highest (52.52%) number of injured cases was victim of road traffic accidents and male (89.46%) out numbered female (10.54%). The most affected age group was 25-34 years. The most common site of injury was lower limb and next was upper limb.

Introduction

A great number of unfortunate and innocent people of our country are becoming disabled due to accidents by cyclone and flood. Death rate from accidental injuries are also high for want of prompt and efficient emergency health service and facilities. Adequate trained personnel in emergency department might reduce death rate and number of disabled.

The incident of trauma cases is on the rise all over the world. Now this has assumed epidemic proportions among all types of accidents in home, in place of work at play and elsewhere those caused by motor vehicles claims largest toll of life tend to be the most serious. A terrible penalty of mortality is being paid due to integration of motor vehicles into the luxury of modern life. A WHO survey made between 1960 and 1972 in Hong Kong, Jamaica, Jordan and Malaysia recorded decrease in death from infectious diseases and a steady increase in road accident fatalities.

Accidents today are among the leading causes of

death. The number of minor as well as major injuries and the human sufferings the economic loss due to disabilities caused by accident is unestimate able. Thus while medical science has conquered the ravages of many diseases accidents have become a new Epidemic of public health importance calling for equal efforts for control and prevention. The natures of accident vary from country to country. In Bangladesh road traffic accident is identified as a great killer and disablers of mankind. To prevent mortality among the injured, a high standard of emergency department is virtually important.

Observations and Results

Causes of injury	Male	Percentage	Female	Percentage	Total	Percentage
Road traffic accident	467	59.80 %	55	25.82 %	522	52.52 %
Machinery accident	140	17.93 %	59	27.70 %	199	20.02 %
Assault	100	12.80 %	24	11.27 %	124	12.47 %
Fall	34	4.35 %	23	10.80 %	57	5.73 %
Burn	10	1.28 %	35	16.43 %	45	4.53 %
Others	30	3.84 %	17	7.98 %	47	4.73 %
Total	781	100 %	213	100 %	994	100 %

Table I: Distribution of injury pattern by cause and sex.

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Table-I shows that out of total male patient road traffic accident (59.80%) was the highest and burn (1.28%) was the lowest. Among total female patient machinery accident (27.70 %) was the highest and fall (10.80 %) was the lowest. It is revealed that road traffic accident (52.52%) was the most common causes of injury. Machinery accident was the 2nd common cause.

Type of Injury	Number of cases	Percentage
Laceration	245	24.65 %
Abrasion	234	23.54 %
Simple Fracture	155	15.60 %
Incised	110	11.07 %
Compound Fracture	84	8.45 %
Punctured	55	5.53 %
Head Injury	07	0.70 %
Others	104	10.46 %
Total	994	100%

Table II: Distribution of injury by Type

The table II shows the percentage of laceration (24.65%) was highest. Abrasion was the next (23.55%) followed by simple fracture (15.60%).

Methodology

This was a retrospective study carried out at the General Hospital, Manikganj during the period of March 1990 to May 1990. The general hospital was selected as a place of study because it is situated by the side of highway and surrounded by factories. The study subjects were the patients attending the emergency department from October 1989 to December 1989 and the total numbers of cases were 994. All information was collected from emergency and admission registers of the hospital.

Discussion

The incidence rate of road traffic accident is very high in Bangladesh. This study was carried out to find out the injury patterns of road traffic accidents of reported patients in nearby road-

side hospital like Manikgonj General Hospital. Bari SA conducted a retrospective study on 440 accident cases in emergency department of Rajshahi medical college hospital of which 83% were male and 16.7% were female and road traffic accident (47.9%) was on the top of the list. Parker SE in his topic accident pointed out that in India in 1978 death reported from accident numbered 118594 of which road accident were 17600. It was revealed that most common cause of injury was road accident. They numbered 522 representing 52.52%. They were in either knocked down by cars, buses, trucks and motorbikes. Judith A et al conducted a study on pedestrian injury in Canada and observed that pedestrian injury events are subject to motor vehicle accident. In 5 years duration 2972 pedestrians were killed.

If we look at pattern of injury cases we see that lacerated injury was the highest (24.65%) and abrasion was the second common type of injury (23.55%). Next type of injury was fracture. Simple fracture was 15.60% and compound fracture was 8.45%. Susan P Barker MPH conducted study on injuries and found that injuries are the most serious and preventable of all major health problems. The second common cause of injury was machinery accident They numbered 199 out of 994 . Most of the injury cases were lacerated injury. BB Summer et al conducted a study on injury in USA and found that injury is the foremost public health problem. The causes of accident must be determined by survey so that appropriate measure can be taken for prevention and treatment of injury cases.

Conclusion

Laceration was highest among the casualties. Majority of the cases were rickshaw-pullers. From this study, it can be concluded that most of the injured cases attended Manikgonj General Hospital were road traffic accidents as it is located nearer to highway.

Emergency department of all the hospitals should be provided with well-trained Medical

Officer and fortified with all necessary instruments and facilities. Improvement of road condition, imposition speed limits, marking of danger points, proper illumination and presence of police on the road should be ensured.

References

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