PEDESTRIAN ACCIDENT CHARACTERISTICS IN AN URBAN AREA OF DEVELOPING COUNTRIES - A CASE STUDY OF DHAKA METROPOLITAN CITY

Ruksana Rahman¹, Dr. Md. Mazharul Hoque², S.M. Sohel Mahmud³, Syed Noor-ud-Deen Ahmed⁴

¹Junior Design Engineer, Khalid & Partners Limited, E-mail: Ruksana.Rahman@yahoo.com
²Professor and Head, Department of Civil Engineering & Director, Accident Research Centre (ARC), Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, Bangladesh.
³Research Assistant, Accident Research Centre (ARC), Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, Bangladesh.
⁴Associate Professors, Department of Civil Engineering, Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, Bangladesh.

ABSTRACT

Pedestrians are the most vulnerable road users in Bangladesh. Upto 50% of urban road accident deaths are pedestrians alone. In Dhaka Metropolitan City roads are hostile to pedestrians, and the danger and inconvenience of walking in turn leads people to use rickshaws, CNG, baby taxis or other motor vehicles just make the traffic worse and the city more hostile to pedestrians – a vicious circle. Yet pedestrians have received far less attention than vehicular traffic. Seven years (1998 to 2004) of pedestrian accident data were extracted from the traffic accident database. The purpose of this study is to find out the pattern of accidents by using Microcomputer Accident Analysis Package Five (MAAP 5) report. Broadly, the investigation involves collection and analyses of accident data, summarizing the findings and proposing recommendations. The results of pedestrian accidents in different developed and developing countries and cities are used to evaluate pedestrian safety situation in Dhaka Metropolitan City with regard to that countries and cities in order to encourage governments and other private agencies to adopt necessary steps to reduce pedestrian accidents.

INTRODUCTION

The problem of deaths and injuries as a result of road crashes is now to be considered as a global phenomenon and virtually all countries of the world are concerned about the growth in the number of people killed and seriously injured in the road accidents.

Nearly 60 percent of urban trips involved walking alone in Dhaka city and it is particularly prevalent for short trips (DITS). In terms of road usage, at some locations, pedestrians accounted for the highest number, representing nearly 62 percent of the total user groups in Dhaka, the capital of Bangladesh. In regard to safety, the pedestrians are of considerable cause for concern as they represent up to 72 percent of road traffic fatalities in Dhaka Metropolitan City.