

Health seeking behaviour of road traffic accident victims: A qualitative study among the slum dwelling disabled people of Dhaka city

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Abstract

Road traffic accident is a global problem which is severe in the developing countries like Bangladesh. In consequence, in developing countries road trauma has now been recognized as an increasing public health hazards and economic burning issue. And after road traffic accidents the lack of management and economic costs related with health seeking behaviour have a disproportionate impact on lower income groups, thus contributing to the persistence of poverty in conjunction with disability. This cross sectional study, carried out during July 2012 to June 2013, aimed to explore health seeking decision and culture of handling the road traffic accident related victims, as taken from experiences of the poor disabled people of slum dwellers of Dhaka city. The present study has been designed based on qualitative techniques such as in-depth interview and case studies. Additionally, a survey questionnaire was used to collect the demographic characteristics of the study population (n=150) and to select participants purposively for in-depth interview (n=50) and case study (n=30). Content analysis of qualitative data was done through theme coding and matrix analysis of case study was done to use relevant verbatim. Most of the time the health seeking decision totally depended on the surrounded people of the accidental place, their knowledge, awareness and remaining facility and capacity regarding proper management of the victims. However, most of the cases the victims did not get any early treatment and it took 2-12 hours to get even the first aid because of distance, shortage of money, lack of availability of getting the aid, lack of mass awareness etc. Under the reality of discriminated and unaffordable health service provision better treatment couldn't turn out due to economic inability of the poor victims. To avoid the severe trauma, treatment delay must be reduced by providing first aid within very short time and to do so mass awareness campaign is necessary for handling the victims. Moreover, necessary measures should be taken to ensure cost free health service provision to treat the chronic disabled condition of the road traffic accident related poor victims.

Keywords: Accident, Injury, Disabled, Qualitative, Slum.

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Introduction

Road traffic accident is a 'global tragedy' with ever-rising trend and represents a major cause of premature deaths and disabilities worldwide. Each year, 1.3 million people are killed and 50 millions are injured by road accidents all over the world. (iRAP, 2008a). Road trauma has now been recognized as one of the significant diseases of industrial societies and is an increasing public health hazards and economic burning issue in developing countries. Accidents are particularly prevalent in low and middle income countries- around 88 percent of the world's deaths occur in developing countries (Mackay, 2003). According to a study, the numbers of fatalities have been increasing from 1009 in 1982 to 2082 in 2011 in Bangladesh (ARI Database, 2012). It is estimated that by 2020 about two-thirds of the world's traffic fatalities might be in the Asian-Pacific region. The economic costs of road crashes, which range from 1 percent to 3 percent of GDP in Asia, have a disproportionate impact on lower income groups, thus contributing to the persistence of poverty. Also it has been observed from the studies that up to 62 percent of urban road accident deaths are pedestrians alone and in Dhaka city, they represented nearly 70 percent. Almost 80 percent of fatalities are vulnerable road users e.g. pedestrians, bicyclists and motorcyclists (Hoque, 2006). According to the World Health Organization report on road traffic injury prevention (WHO, 2004), for every death, there are far greater numbers of injuries- 04 persons with severe/permanent disabilities, 10 persons requiring hospital admission, and 30 persons were requiring emergency room treatment. These facts demanded that there is indeed an urgent need to develop an appropriate and co-operative health system response to this man-made epidemic by implementing strategic programs that will effectively address such a major growing issue of road traffic accidents and injuries.

In these circumstances this study aims to explore the healthcare seeking decision and culture of handling the road traffic accident related victims in the light of their existing experiences. The study also tried to assess socio-economic and demographic characteristics of the victims who are the slum dwellers of Dhaka city. Simultaneously, an attempt was made to explore the knowledge, beliefs, norms, attitudes, behavior and practices related to health seeking decision of the victims.

Methods

This is a cross sectional descriptive study among poor slum dwelling disable peoples of Dhaka city that had been conducted during July 2012 to June 2013. The present study was designed based on qualitative methods and to do so qualitative techniques such as in-depth interviews and case studies were used. Additionally, a survey questionnaire was used to collect the socio-economic background and demographic characteristics of the study population. The study area included three differently located slums of Dhaka city (Duaripara, Vasan tek and Korail slums). The study populations were the poor disabled persons and the victims of traffic related accidents and their household members living with him/her in the selected slum locations.

Participants were selected purposively to ensure both male and female and to ensure category of the research participants (road traffic accident victims). For interview we also sought to enroll 150 road traffic accident victims' those were generally disabled and aged between 21-60 years. It was a small survey of traffic accident related 150 disabled in slum community of Dhaka city and survey interview was used for collecting the socio-economic background and demographic characteristics of the study population as well as to identify more vulnerable participants for in depth interview. Based on survey interview more disabled were invited to attend one to one in depth interview and 50 qualitative interviews were conducted by skilled research assistant and sequentially identified 30 most disabled victims for case study. Selection was again purposive and was designed to reflect the views of traffic accident related disabled of both the sexes and their willingness to talk openly to the research team.

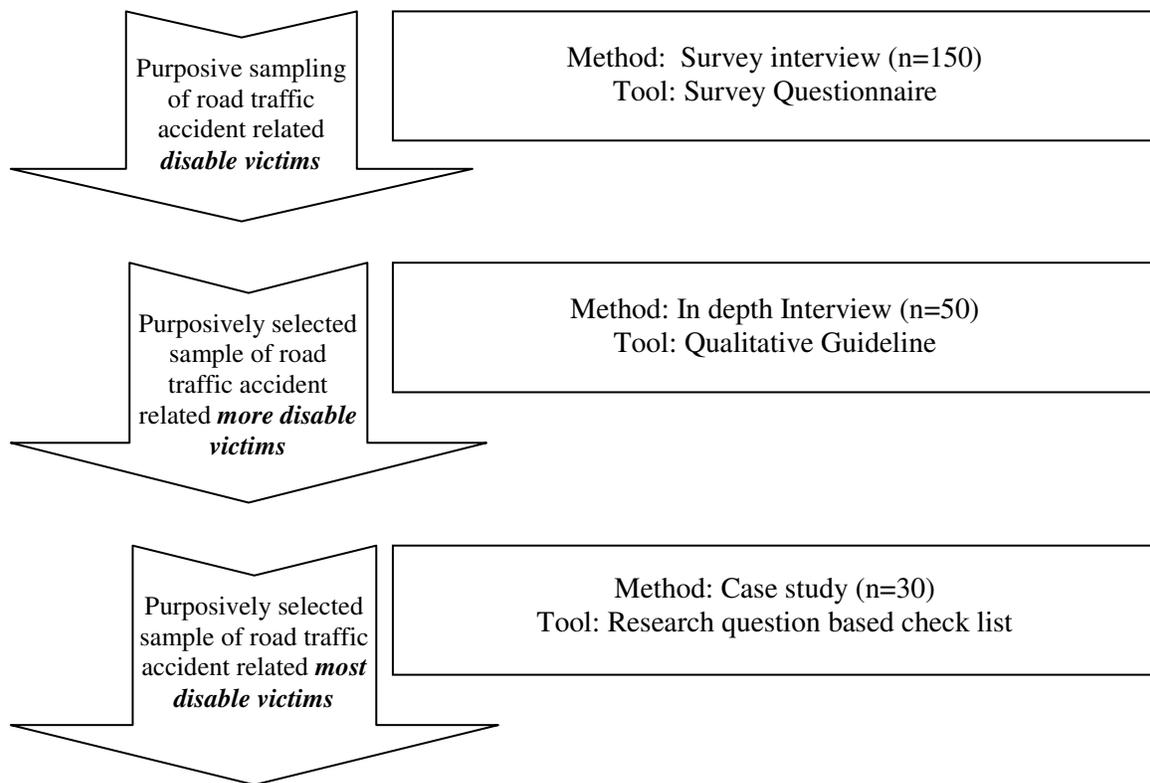


Diagram 1: Sampling, Sample size and Research tools

Before interviewing with the informants the researchers built rapport and described the objectives of the study. The investigator sought the verbal consent from the individuals to provide their personal information and their related practices in the relevant study field and ensured the confidential issues of their information that used only for this research purpose.

Analysis of data was begun with the first field activities and led to refinements as the study proceeded. The field notes were regularly reviewed with the field team (initially daily). The field team met the Principal Investigator (PI) every other day to discuss the results of their activity sessions/interviews and to determine the best practices for further activity sessions/interviews and note-taking. From the beginning, thematic analysis took place to understand the health seeking decision and culture of handling road traffic accident related victims. The process followed a sequence of interrelated steps recommended by Ulin et al. that include reading, coding, displaying, reducing, and interpreting. (Ulin 2002). Thus, data were organized according to a sequence. After that, qualitative findings were presented and discussed compared with existing relevant studies and literature on this topic. Moreover, the personal narratives presented in this report are literal translations of the same language that was delivered at the time of the interview. To present the complex view of most disable victims verbatim from case studies were used that were directly translated from the transcripts. The triangulation of methods and comparison of various accounts by different FROs were employed to improve the quality of research results, which is also recommended by Denzin (Denzin 1989). Cross tabs were made to present the demographic characteristics of the informants.

Results and Discussion:

The presentation of the findings is organized in three different sections. The first section report from the finding of survey interview and illustrates the major information of the disabled person's demographic characteristics. The second section reports from the findings of the case studies conducted among poor road traffic accident related victims of slum of Dhaka city. This section focuses on describing the (i) factors associated with health care seeking behaviour. The second section reports from the findings of in-depth interviews and focuses on explaining (ii) first aid and culture of handling road traffic accident. Verbatim quotations are used to illustrate findings in the both sections. Speech reported in the article was translated into English by the both first and second authors.

Demographic characteristics:

There was preponderance of male (97 %) and female (3%) children with an age range from 21-60 years and among them 50% were 31-40 years aged. Of the 150 participants of both categories who participated in survey interview, 38 (25%) never went to school and 56 (71%) only got primary education. 33% of the victims reported that in consequence of road accident they bound to take begging as their main occupation 31% of them were involved in small business to survive. All female victims who participated in the research were housewife. A significant number of families 80 (53%) had taka 2001-4000 per month income.

Table 1: Socio-demographic Characteristics of the informants

| Characteristics | Frequency (n) (N=150) | Percentage (%) |
|--------------------------------|----------------------------------|-----------------------|
| <u>Sex</u> | | |
| Male | 145 | 97 |
| Female | 05 | 03 |
| <u>Age (years)</u> | | |
| 21-30 | 09 | 06 |
| 31-40 | 75 | 50 |
| 41-50 | 46 | 31 |
| 51-60 | 20 | 13 |
| <u>Education</u> | | |
| Illiterate | 38 | 25 |
| primary | 76 | 51 |
| Secondary | 30 | 20 |
| SSC | 03 | 02 |
| HSC | 02 | 01 |
| BA | 01 | 0.67 |
| <u>Occupation</u> | | |
| Small Business | 47 | 31 |
| House wife | 03 | 02 |
| Beggar | 50 | 33 |
| Farmer | 05 | 03 |
| Government Service | 04 | 03 |
| Private Service | 20 | 13 |
| Unemployment | 21 | 14 |
| <u>Income (monthly)</u> | | |
| Up to 2000 | 24 | 16 |
| 2001-4000 | 80 | 53 |
| 4001-6000 | 25 | 17 |
| 6001-8000 | 15 | 10 |

Factors associated with health care seeking decision:

The result of the study shows that most of the time the health seeking decision totally depended on the surrounded people of the accidental place, their knowledge, awareness and remaining facility and capacity regarding proper management of the victims. By analyzing the in depth interview findings this study identified four causes that hinders the health seeking behavior of the victims for acute conditions and for injuries; these are lack of opportunity even to get first aid due to limitations of transport and weak communication systems, long distance of the health facilities, poor victim's shortage of money and eventually lack of mass awareness about rapid management of road traffic accident victims. Moreover, from the case studies the scenario of health seeking behavior of the victims has been explored to understand the accidental incidents and the way of being gone under any sort of treatment.

Limitations of transport and weak communication systems:

Lack of proper transportation and immediate communication systems leads treatment delay which in consequence forces the victims to accept the chronic disability in life time.

Case: 1

“One day I was going to bus stand by rickshaw to go to my village. All of a sudden a truck stroked my rickshaw and I fell down in road side and lost my sense. Few minutes later I found that few people were carrying me to hospital by *van* (one type of three wheelers). They admitted me in a private medical hospital. I told everything to doctor about the accident then they phoned my relatives and later my mother and brother came and broke down into tears. But it was too late. I tried to seat but could not, severe pain graved me, and one of my hands was bended with bed. Doctor confirmed to my elder brother that my right hand had been damaged. As it was deteriorating day by day lastly it had to cut. Till then I am fully crippled and have been bearing disable life (Male, age-50, married).”

Long distance of the injury service health facilities:

The long distance of the health facilities related with road traffic injury has been found in the study as hindering to get proper treatment in proper time to avoid long term disability.

Case: 2

“Near about one year ago, one morning I was going to my working station. As I was so busy at bus stand, so to ride the bus suddenly I fell down. Last wheel of the bus ran over on my two legs. I was groaning “mother, mother”. I lost my sense. When I got back my sense I was in a nearby private clinic at Savar. Taking consideration of my severity the hospital authority sent the message to my guardian. Later I was sent to the trauma Hospital in Dhaka. Lastly my legs were cut out. After 10 months treatment I came back at home. I am now physically challenged person (Male, age-23, unmarried).”

Case: 3

“Three years ago I was going to Comilla with my husband during Eid – Ul-Azha. Our bus stroke another truck and our bus turned out. I and my husband both were injured but I was severely injured. I felt a severe pain in my waist and legs. Passersby rushed me to a nearest hospital by tempo. As my condition was deteriorating day by day then I admitted into a clinic in Dhaka. Doctors decided to cut off my ankle by a surgery. After the surgery I was crippled (Female, age-35, married).”

Lack of affordability of poor victims:

The result of the study finds disability as consequence the poor victims’ shortage of money to get proper treatment from proper health facility. In addition, due to the decision often taken by the strangers with minimal knowledge, the victims often had been shifted to commercial private clinics rather than shifted to Government trauma hospitals.

Case: 4

“Five years ago, one day I was crossing the busy road of Shewrapara, Mirpur. Unexpectedly a rushed private car stroked me and I fell down following senseless. Pedestrians carried away me to Showrowardy Hospital and later I was shifted to a private clinic and not to the pongu *haspatal* (*Public Orthopedic hospital*). As I was not capable to bear the cost of treatment, so my operation was not successful. One of my legs had to cut. Later because of lethal infection I fully lost my one leg. In this way I lost my leg forever. It is my fate I have lost my leg now I am helpless (Male, age-40, married).”

Lack of mass awareness about rapid management of road traffic accident victims:

Most of the time the health seeking decision totally depended on the surrounded people of the accidental place, their knowledge, awareness and remaining facility and capacity regarding proper management of the victims. Often the lack of taking the right decision makes the poor disable.

Case: 5

“Just after accident local people shifted me to Dhaka Showrowardy Hospital that was 8 kilometer away from the accident spot. After almost 3 and half hours I got my first aid in that hospital by the doctor of the hospital who was on duty. (Male, age-40, married).”

Whereas, the study also finds some positive cases since the road traffic accident related victims were managed properly by the appropriate health seeking decision of mass people. And it could assist the victims to recover injury.

Case: 6

“One day morning I was going to my office by bus. After one kilometer ahead a truck stroke heavily to my bus, in consequence the bus lost its way and hit the island on the road. One of the heavy parts of the bus falls on my leg and my ankle was broken. One passer-by took me to a private hospital, later he took me disability hospital. I took treatment seven days there and came back home (Male, age-50, married).”

Case: 7

“One day I determined to go Farmgate from Shahbagh. When I was waiting for a bus, suddenly a microbus strokes me from my back. I fell down on the street. People rushed me into nearest pharmacy for first aid .They also collected some money for me. As I had no money I came back home by taking some medicine and I did not able to go to hospital further. At last I lost both of my legs. Now I can’t walk (Male, age-42, married).”

The study saw the sights of the depriving experiences of the road traffic accident related victims since the moment of accidental incident to health seeking behavior follows to disability. This study reveals the facts how the interviewees had to face these incidents. All the informants of the study were sufferer but their experiences of health seeking behavior and sufferings were not same. These unexpected incidents came as a nightmare to their life. The unbearable sorrows, thousands of adverse situations and dependency to others started from the health seeking moment to the lifelong passage of life.

First Aid and handling road traffic accident:

Distance, shortage of money, lack of opportunity of getting the aid, lack of mass awareness again has been identified as the main obstacles of getting the first aid assistance. Most of the cases it took 2 to even 12 hours to get the first aid. And findings of treatment seeking reveals the facts that most often the victims did not get any early treatment even the first aid. Moreover, in many cases it took more and more time to get first aid. As one of the victims said-

“Few people took me away by helping me hand to hand to hospital by CNG vehicle after my accident which is 12 km away from the accident spot. I took the first aid only after reach at that hospital. “

Whereas, some victims would be able to get the first aid facilities and their recovery rate was higher. As one said-

“First the people of surroundings shifted me to a nearest private clinic, 2 km away from the spot, by taxi. I got my first aid immediately in that hospital and then they shifted me to disability hospital.”

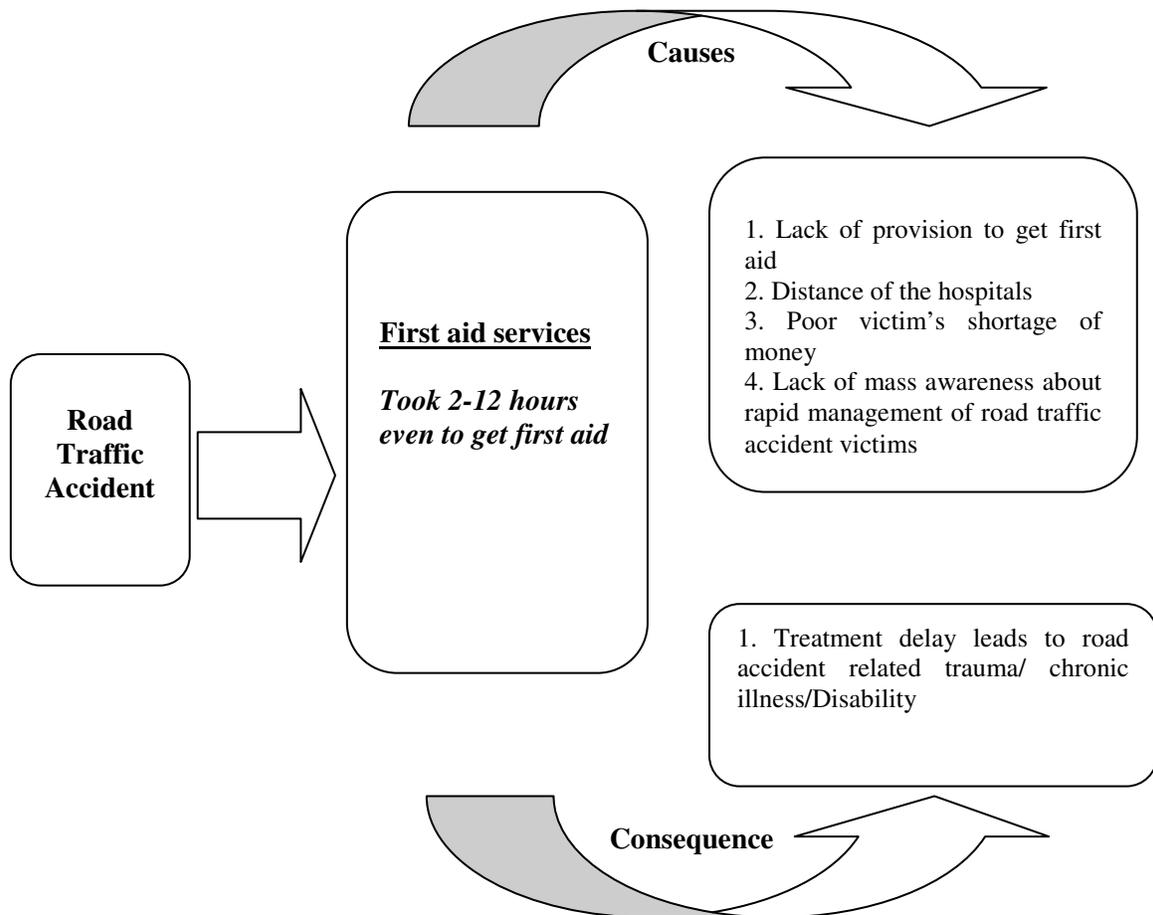


Diagram 2: First aid services in handling road traffic accident related victims

In case of any road traffic accident first aid is the most valuable issue after the accident. If the victim gets the immediate first aid then the possibility of curing is higher. However, the study explores the cause of treatment delay that led to severe chronic disable condition of the victims.

Conclusions and Recommendations

The results of the study explore the health seeking behavior after an incident of road traffic accident which helps us to understand the context of existing first aid facility and injury management. In Bangladesh, people are vulnerable to different types of disability but treatment facilities are not available to them. A large proportion of people do not get treated because they cannot afford it. Eventually, the lack of productivity caused by disability and high medical treatment costs drive them towards poverty, and poverty makes people ill. However, less attention is paid to factors influencing medical treatment seeking patterns or economic impoverishment of the household, which are also important factors. Broadly, by understanding the health seeking behavior and health system response to the victims of traffic related accident this research has created opportunity to develop more fruitful ways of new intervention designing to diminish the road accidents as well as to reduce the sufferings of the disabled people.

It can be concluded that treatment delay must be reduced by providing first aid within very short time and mass awareness raising campaign is necessary to avoid the severe trauma. Moreover, necessary measures should be taken to ensure cost free public health service provision to treat the long term disabled condition.

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