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Received: August 11, 2016; Published: September 09, 2016

# Abstract

Now a day, Disability is becoming as an important issue for the development agenda. No nation can develop without inclusion of Persons with Disabilities (PWDs) in main stream of society. It was descriptive cross sectional study conducted at Haimchor, Chandpur district among persons with Disabilities (PWDs) of Haimchor, Chandpur. We included PWDs above 20 years of age. For the quantitative study, 82 respondents (above 20 years of PWDs) were selected by purposive sampling technique. About 42.7% study subjects came from 20-29 years' age group. Two-third of the respondents were male. During protection of disaster two-third were not satisfied. About 73.2% of the respondents knew about pre disaster management. About 70.7% of the respondents knew about during disaster management. More than half (64.6%) of respondent's answer was not satisfactory in terms of infrastructural facility to cope with disaster.

Keywords: Coping strategy; Disability; Disaster prone area

# Introduction

Disasters and emergency situations have direct and indirect impacts on the people they affect, ranging from small inconveniences and disruptions to life threatening conditions [1,2]. Extensive scientific review of evidence and experience both internationally and locally, identifies that extreme climate events have a significant impact on population health, public health systems and the capacity of emergency service providers. Alarmingly, specialized disaster related services for this segment of the population are no-way near the demand [3]. Increased scrutiny on disasters and emergencies over the past decade has shown that persons with disabilities are disproportionately affected in almost all types of disaster and emergency situations [4]. Individuals with disabilities are disproportionately affected in disaster, emergency, and conflict situations due to the lack of accessibility in evacuation, response, and recovery efforts, and exclusion of disability issues in planning and preparedness. It is well known that people learn from their previous experience of disasters how it affects them and how they were able to cope with that disaster. Generally, people cope with local knowledge, indigenous coping mechanism, financial ability, external efforts etc. They always try to cope with it and restore their livelihood someway. These coping mechanisms are different for different people and region. This study aims to find out the coping strategy level of the PWDs disaster management. Most of the PWDs had poverty, less education, ignorance of the community people, less access to information, healthcare facilities and other facilities that a civilized people deserved. It is important to know their coping strategy level of disaster management to improve their capacity.

## Methodology

It was descriptive cross sectional study conducted at Haimchor, Chandpur district among persons with Disabilities (PWDs) of Haimchor, Chandpur. We included PWDs above 20 years of age. Total 82 respondents (above 20 years of PWDs) were selected by purposive sampling technique. With semi-structured questionnaire face to face interview followed for data collection. Respondent willingly answered all the questions to researcher. All the collected data properly organized and processed with SPSS. Then frequency analysis for all the variables had done properly. In this study, ethical considerations had been maintained through all the stage of the study. It considered all the right of the respondents involved with this study. The research topic is not so much sensitive and no political biasness that is why

the study had faced very little consideration about ethical issues. Every guidelines and rules & regulations of the research strictly followed. Respondents spontaneously answered about the questions of the interview. They have voluntarily participated in the study. They gave their information without any confidentiality. They had no inquiry about the study. The study maintained all ethical issues to ensure the validity and reliability of the study.

Disaster related Question	Satisfactory level
If any persons with disabilities can answer 5 or below 5 questions out of twenty-seven following question his or her Coping strategy	Not satisfactory
If any persons with disabilities can answer 6-10 questions out of twenty-seven question his or her Coping strategy	Mild satisfactory
If any persons with disabilities can answer 11-15 questions out of twenty-seven following question his or her Coping strategy	Moderate satisfactory
If any persons with disabilities can answer 16-20 questions out of twenty-seven following question his or her Coping strategy	Satisfactory
If any persons with disabilities can answer 21-27 questions out of twenty-seven following question his or her Coping strategy	Very satisfactory

#### **Results**

Table 1 shows about 42.7% study subjects came from 20-29 years' age group followed by 18.3% from 40-49 years and 13.4% from 30-39 years.

Age	Frequency	Percentage
20-29	35	42.7
30-39	11	13.4
40-49	15	18.3
50-59	11	13.4
60-69	4	4.9
70-79	3	3.7
80-89	3	3.7
Total	82	100

Table 1: Distribution of age.

Table 2 reveals that 68.3 percent of the respondents were male and 31.7 percent were female with disabilities.

Sex of respondents No. of respondents		Percentage	
Male	56	68.3	
Female	25	31.7	
Total	82	100	

#### Table 2: Distribution of gender.

Table 3 shows that most of the respondents were illiterate (34%) followed by primary (19%), lower secondary (15%), higher secondary (11%), secondary (11%) and others (6%).

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Education level	Frequency	Percentage
Illiterate	28	34.1
Primary	16	19.5
Lower Secondary	13	15.9
Secondary	9	11.0
Higher Secondary	9	11.0
Graduate	2	2.4
Others	5	6.1
Total	82	100

#### Table 3: Distribution of education.

Table 4 shows that 53.7% of the respondents had monthly family income1000-5000 BDT followed by 36.6% had 5,000-10,000 BDT, 6.1% had 10,000-20,000 BDT and 3.7% had >20,000 BDT.

Income range in taka	Frequency	Percentage
1000-5000	44	53.7
5,000-10,000	30	36.6
10,000-20,000	5	6.1
>20,000	3	3.7
Total	82	100

Table 4: Distribution of monthly family income.

Table 5 shows that 98.8% of PWDs know about disaster.

Respondent know	Frequency	Percentage	
Yes	81	98.8	
No	1	1.2	
Total	82	100	

Table 5: Distribution of respondent's knowledge about disaster.

Table 6 indicates 30.5% of PWDs answer was satisfactory and 69.5% of PWDs answer was not satisfactory. In questionnaire protection strategy was by own self, family members, neighbor's villagers, govt./NGOs help.

Satisfactory level	Frequency	Percentage	
Satisfactory	25	30.5	
Not satisfactory	57	69.5	
Total	82	100	

 Table 6: Distribution of satisfaction during protection of disaster.

Table 7 shows that 73.2% of the respondents knew about pre disaster management and rest of 26.8% did not know about pre disaster management. About 70.7% of the respondents knew about during disaster management and 29.3% of the respondent did not know.

Response about pre-disaster management	Frequency	Percentage		
Yes	60	73.2		
No	22	26.8		
Response about during disaster management				
Yes	58	70.7		
No	24	29.3		
Total	82	100		

Table 7: Distribution of respondents according to level of satisfaction about pre- disaster, during disaster management.

Table 8 shows that 39% of respondent's answer was satisfactory and rest of 61% answer was not satisfactory. About 35.4% of the respondent's answer was satisfactory and rest of 64.6% of respondent's answer was not satisfactory in terms of infrastructural facility to cope with disaster.

Obstacles in shelter center	Frequency	Percentage		
Satisfactory	32	39		
Not satisfactory	50	61		
Infrastructure facility				
Satisfactory	29	35.4		
Not satisfactory	53	64.6		
Total	82	100		

**Table 8:** Distribution of respondents according to level of satisfaction of face obstacles in shelter center and infrastructural facility to cope with disaster.

Table 9 shows significant association was found between education and level of coping strategy.

Education level of the Respondent	Strategy Lev	Strategy Level of the respondent about Disaster Management					p value	df
	Not satisfactory	Mild	Moderate	Satisfactory	Very Satisfactory			
Illiterate	1	15	9	3	0			
Primary	4	5	6	1	0			
Lower Secondary	0	2	8	3	0			
Secondary	0	1	4	1	3			
Higher Secondary	0	2	2	2	3	51.51	0.001	24
Graduate	1	1	0	0	0	] 51.51	0.001	24
Others	0	2	1	2	0	]		

Table 9: Association between education and level of coping strategy.

### Discussion

In this study among all the respondent's ratio between male and female was almost 2:1. Near about 43% respondent's chronological age was between 20 to 29 years of age. Almost 34% respondents have no educational qualification that means they were illiterate. Most of the respondent was unemployed which was about 50%. It also affected their family income most of the respondent family income was

below 3000/- taka. Illiterate and unemployed persons with disability have less knowledge about disaster than educated and employed persons with disability. That is why level of coping strategy increased with increase of the educational and occupational level according to this study. When an emergency situation arises, Persons with Disabilities (PWDs) may face extra challenges and barriers than other members of the community. Their managing capacities of disaster and chance of survival related to many aspects. Most of the times they become dependent on other family members, caregivers, neighbors, relatives or the community people. But these people are also sometime fall into crisis situation that time special care cannot be provided by them for the PWDs. Sometimes negative attitude of the people increases the vulnerability of the PWDs. For this, lack of knowledge of the community people about the assistance of the PWDs creates a resistive force to help them in disaster like situation. Also lack of knowledge on disaster management among Persons with disabilities (PWDs) also aggravates vulnerability of them and sometime their life falls into danger. In post disaster stage, sometimes a chaotic situation arises during distribution of relief materials. They may not have the ability to face this chaotic like situation. Disaster preparedness can disability measures through knowledge building and capacities of government organizations, communities, and every individual to minimize disability impact and inclusive respond to rescue and recover from disaster and emergency situation [5]. The preparedness plan need to involve training of the PWDs, distribution of necessary aids, providing financial support, planning for an effective accessible evacuation and information management will increase the knowledge of persons with disabilities (PWDs) for disaster management. persons with disabilities are excessively affected in disaster, and emergency like situations due to the lack of ease of access in evacuation, response, and recovery efforts, and exclusion of disability issues in planning and preparedness [6-7]. Food crisis and availability of pure drinking water will increase malnutrition rates and health related problems leading to a greater risk of acquiring a health-related disability [8]. These social and economic discrimination results a snowballing effect on their vulnerability to the adverse impacts of climate change. People with disabilities constitute a significant proportion of the poorest of the poor in the world.

#### Conclusion

Level of coping strategy depends on education, family member and social status. Those who have well education and higher social status they are more aware about coping strategy than others. We can prevent and minimize damage of disaster if necessary steps taken immediately. Therefore, it is very important for us to take proper and appropriate action about disaster management.

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# Volume 4 Issue 1 September 2016 © All rights reserved by Ruhul Amin., *et al.*

*Citation:* Ruhul Amin., et al. "Coping Strategy of Persons with Disabilities in Disaster Prone Area". EC Orthopaedics 4.1 (2016): 443-448.