

# An Exploratory Study To Assess The Knowledge Regarding Disaster Preparedness Among People of Selected Community

Prof. Sheetal saxena, Prof Aradhna Michael, Dr Usha Ukande

**Abstract**— Among various kinds of disasters, flooding is unique in the sense that it has a very high degree of predictability, both in the short term, as well as long term. Floods can have devastating consequence and can have effects on the economy, environment and people. Though flood situations cannot be entirely prevented but steps can be taken to prevent or minimize injury, loss and speed the recovery process. Present study is an effort to assess the knowledge regarding disaster preparedness. During the study it has been found that majority of the sample had average knowledge regarding disaster preparedness but they were not prepared to deal with disaster i.e. flood situation.

**Index Terms**— Disaster, Flood, Knowledge.

## I. INTRODUCTION

Disasters strike at any time. They can be predicted, or without warning, large-scale or local, extreme or limited. Disasters occur daily throughout the world, posing severe public health threats and resulting in tremendous impact in terms of deaths, injuries, infrastructure and facility damage and destruction, suffering, and loss of livelihoods. Floods are the most common and widespread of all natural disasters. India is one of the highly flood prone countries in the world. Around 40 million hectares of land in India is prone to floods as per National Flood Commission report. While history repeats itself, we do not seem to be learning from the past experiences. One after the other, whether it was Guwahati, Mumbai, Srinagar or Chennai, each time is a repeat of the same misery, loss of life, destruction of property, millions in relief and business as usual after the crisis is over. Though it is not possible to control the flood disaster totally, by adopting suitable structural and non-structural measures the flood damages can be minimized. We need to analyze each of the urban flood water disasters carefully, isolate the problems and issues and make preparatory actions for prevention. Well prepared and trained individual can very well respond the disaster; minimize the loss in every aspect (human & economic). Though Madhya Pradesh is not flood prone state, the present study is an effort to assess the knowledge of people regarding disaster preparedness (keeping in view Chennai flood).

## Objectives-

1. To assess the knowledge regarding disaster preparedness among people.
2. To associate the knowledge score regarding disaster preparedness with selected demographic variables.
3. To prepare a leaflet on disaster preparedness.

## Hypothesis-

H1- People have some knowledge regarding disaster preparedness.

H2- There will be some association between the knowledge score regarding disaster preparedness and selected demographic variables.

## Operational Definitions

**Disaster-** in the study disaster means flood.

**Knowledge-** people may have some information which can be applied to protect lives and property in case of disaster (flood), which will be measured by self structured questionnaire.

**People-** all male and female age 18-35 years.

## Methodology-

**Research approach and design-** Descriptive approach with Non experimental research design

**Setting-** Choithram hospital campus and Urban community (Govind nagar colony) of Indore.

**Population-** All male and female above 18-35 years.

**Sample-** 100 samples were selected by non probability convenient sampling technique

**Tool-** self structured questionnaire was used to collect the data. Section A to prepare sample profile (demographic variables), section B- to assess the knowledge score, section C- to associate the knowledge score with demographic variables.

**Technique-** data were collected through interview technique.

**Data collection process-** the data was collected from December 1<sup>st</sup> 2015 to 20th January 2016. The researcher obtained written consent from the sample & the questionnaire was administered to the respondents. The total time taken for respondents to respond was 15-20 minutes. The data was analyzed by using descriptive & inferential statistics.

Prof Sheetal Saxena, community Health Nursing, Choithram College of Nursing, Indore, (MP) India

Prof Aradhna Michael, HOD Community Health Nursing, Choithram College of Nursing, Indore (MP) India,

Dr USha Ukande, Principal/HOD maternity Nursing, Choithram College of Nursing, Indore, (MP) India

**Findings**

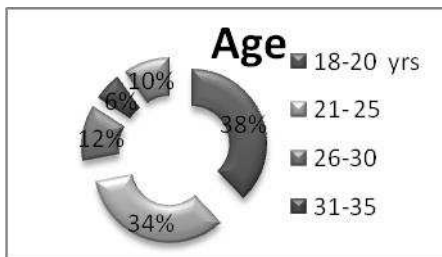
**Section A- Demographic profile of samples**

**Table 1- Demographic profile**

**N=100**

SN	Variables	f	%
1	<b>Age</b>		
	18-20 yrs	38	38
	21-25	34	34
	26-30	12	12
	31-35	06	06
	>35	10	10
2	<b>Gender</b>		
	Female	66	66
	Male	34	34
3	<b>Education</b>		
	Middle school	28	28
	Hr Secondary	32	32
	Graduate	32	32
	Post graduate	08	08
4	<b>Occupation</b>		
	Student	34	34
	Job	44	44
	Housewife	22	22

Data in the table 1 shows that Majority of the sample (38 %) of the samples were from the age group of 18-20 years, 34% samples were from age group of 21-25 years, 12% were from 26-30 years and 10% were above 35 years of age. More than half (66%) were female and 34% were male, 32% of the respondent completed their higher secondary education and same number of the sample (32%) were graduate. Only eight samples (8) were post graduate. Nearly half (44%) samples were on job and 34% were students and 22% were house wife.



**Section B- Level of knowledge regarding disaster preparedness**

**Table 2 Level of knowledge regarding disaster preparedness among people**

**N-100**

Knowledge Score	f	%
Good (15-21)	34	34
Average (8-14)	60	60
Poor (1-7)	6	6

Table 2 shows that 60% sample had average knowledge regarding disaster preparedness, 34% had good knowledge

whereas 6% had poor knowledge regarding the same. Hence hypothesis (H<sub>1</sub>) is accepted.

**Knowledge score**

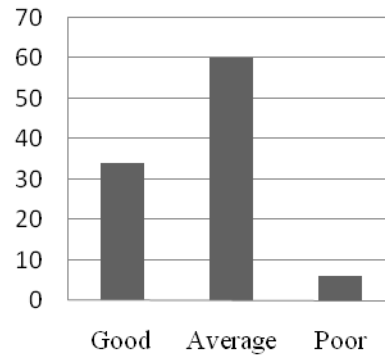


Figure-1 Bar diagram showing knowledge score regarding disaster preparedness among people

**Scoring as per individual statements of questionnaire**

It has been found that more than 50% samples were mentally prepared against disaster, but without any physical preparation.

Only 2% samples had heard about the disaster management plan which was prepared by Panchayat, community or District, rest 98% even had not heard about the disaster plan. Only 4% could write all emergency number like (Police, Fire fighting, Ambulance), 96% could enlist one or two numbers. Very few i.e. 4% were trained in giving first aid, very few were able to give CPR (though not trained in giving CPR).

Less than half (44%) of the samples were know the location of main switch of electricity supply; same samples were know how to switch off the main supply of electricity. In case of floods they could switch off the main supply of electricity. More than half (56%) of the sample were not knowing the place/location of main supply of water and how to switch off the same.

More than half (56%) of the samples had kept the important documents at safe place. More than half (58%) samples had not made the list of important things like jewellery, cash, imp documents, all certificates, license, and voter id.

Disaster kit which contains emergency/essential drugs, small first aid kit, water, candle, match box, sugar-salt and some dry eatables etc which can save their life in flood. 98% samples were unaware of disaster kit, and not knowing what it should contain.

Only 2% had disaster kit to be used in emergency or at disaster among these one was member of disaster plan committee.

Overall findings and experience of investigator suggest that people were not prepared to face any disaster i.e. flood.

**Section C- Association between knowledge score regarding disaster preparedness and selected demographic variables**

Table 3- Association between selected demographic variables and level of preparedness N-100

S N	Variabl es	Knowledge score			d f	$\chi^2$
		Go od	Ave rage	Po or		
1	<b>Age</b>				8	7.3 9
	18-20 yrs	12 13	24 20	02 01		
	21-25	06	05	01		
	26-30	02	03	01		
	31-35 >35	06 03	03 01	01 01		
2	<b>Gende r</b>				2	5.4 26
	Female Male	18 16	45 15	03 03		
3	<b>Qualifi cation</b>				6	5.3 7
	Middle school	08	17	03		
	Higher Second ary	09	21	02		
	Gradua te	12	19	01		
4	<b>Occup ation</b>				4	6.0 3
	Student Job	14 10	17 32	03 02		
	House wife	10	11	01		

Table-3 showing association of knowledge score with demographic variables. Table 3 shows that there is no significant association between knowledge score regarding disaster preparedness with selected demographic variables. Hence hypothesis ( $H_2$ ) is rejected.

#### Implications

**Nursing Education-** A good content for disaster management has been covered in nursing curriculum. The findings of the study could serve as guideline to nurse educators & other health personnel to prepare Education program for students & general people regarding disaster preparedness.

**Nursing practice-** Nurses must be professionally and personally prepared against disaster. They should know in advance that they may be called upon, and will need to make arrangements with the families for communication, and even for care of children or dependents. Future disasters all are but guaranteed to occur. We cannot stop them, but we can be better prepared for them.

**Nursing administration-** Nursing administrator can plan quality care to the people in community. They can carry out necessary interventions in the community to bring about positive feedback from the people of the community. Admin can conduct staff meetings discuss major problems & take different measures to improve community health services.

Various workshops and training programme can be organized to increase the knowledge about disaster preparedness.

**Nursing Research-** On the basis of findings of the study researchers should encouraged and motivates health professionals, and general public to take protective measures at community level.

#### Conclusion

Disasters pose serious public health threats to any nation. Death, trauma, injuries, worsening of chronic diseases, infections, spread of disease and mental health problems are potential public health consequences of a disaster. If people are well prepared intensity of loss can be minimized.

Investigator found that people are not actually prepared against any disaster, though majority had average knowledge score. During data collection it has been found that people were not prepared to face any disaster or emergency. People need to inform about the simple things which can save their lives in any emergency.

It is assumed that knowledge regarding disaster preparedness can be improved through education. The study has explored in to the knowledge of people regarding disaster preparedness. The study brought about the need for further teaching of the people regarding disaster preparedness

#### REFERENCES

- [1] G• Disaster management in India (pdf), Ministry of Home Affairs, Govt of India
- [2] <http://www.ifrc.org/en/publications-and-reports/world-disasters-report/world-disasters-report-2014>
- [3] [http://agritech.tnau.ac.in/agriculture/agri\\_majorareas\\_disastermgt\\_flood.html](http://agritech.tnau.ac.in/agriculture/agri_majorareas_disastermgt_flood.html)
- [4] <http://www.ndma.gov.in/en/do-s-dont-s>
- [5] <http://www.ndma.gov.in/images/guidelines/flood.pdf>
- [6] <http://www.ndma.gov.in/en/media-public-awareness/disaster/natural-disaster/floods.html>
- [7] <http://www.ndma.gov.in/en/madhy-pradesh-sdma-office>
- [8] <http://indianexpress.com/article/india/india-news-india/flood-disasters-chennai-a-snooze-alarm/>
- [9] [http://agritech.tnau.ac.in/agriculture/agri\\_majorareas\\_disastermgt\\_flood.html](http://agritech.tnau.ac.in/agriculture/agri_majorareas_disastermgt_flood.html)

**Ms Sheetal Saxena**, Professor, M. Sc. Nursing in Community Health Nursing, Choithram College of Nursing, CH&RC, Manikbagh, Indore (India), Member of SOCHNI, SOMI, NRSI, TNAI, Have been guide for research work for graduates and post graduate students

**Mrs Aradhna Michael (Prof/HOD) community health nursing**, Ph D Scholar, Choithram College of Nursing, CH&RC, Manikbagh, Indore (India), Member of SOCHNI, SOMI, NRSI, TNAI, Have been guide for research work for graduates and post graduate students.

**Dr Usha Ukande**, Ph D, M. Sc. N (MCH nursing) Principal Choithram College of Nursing, CH & RC, President SOMI, NRSI, Ph D Guide. Published and presented many research papers at National & International level.