

# RESEARCH ARTICLE

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# A Descriptive Study to Assess the Knowledge and Attitude Regarding Disaster Preparedness among Middle School Children at Selected Schools

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#### ABSTRACT

Disasters are cause of trouble to human society since ancient time. Human beings have to face and cope up with such disasters. Natural and manmade disaster creates extensive harm to human life. Although scientific invention, information revolution, latest technology skills etc. are successfully in reducing the dreadful effect of disaster and their intensity but still many old and new forms of natural calamities/ disaster takes place here and there and we have to suffer major threats of life and property. Therefore investigator conducted a descriptive study to assess the knowledge and attitude regarding disaster preparedness among middle school children at selected schools in a view to develop an informational pamphlet. Objectives of the study were

- 1. Assess the level of knowledge regarding disaster preparedness among middle school children.
- 2. Assess the level of attitude regarding disaster preparedness among middle school children.
- 3. Find out association between knowledge and attitude regarding disaster preparedness among middle school children with selected demographic variables.

A descriptive research design was used for the study. The purpose of the study was to assess the knowledge and attitude regarding disaster preparedness. The investigator administered the 50 middle school children at rural area. The data was collected by distributing knowledge questionnaire and attitude scale about disaster preparedness. The conceptual frame work is based on General system theory. The data generated was analyzed used both descriptive and inferential statistics is frequency, percentage and chi-square.

The majority of 48% children belong to the age group of 13years, 58% children are male, 56% children are studying in 7 standard and 56% children are belongs to Hindu religion. The study revealed that out of 50 samples majority of students, 88% have moderate knowledge, 10% students have inadequate knowledge and 2% students have adequate knowledge. The study revealed that 80% students have moderate attitude, 14% students have less attitude and 6% students have strong attitude. Thestudy revealed that 2 demographic variables that is age and standard are significant and 2 demographic variable that is gender and religion are not significant. The study concluded that the majority of middle school children under study were had moderate knowledge and attitude regarding disaster preparedness, which is suggestive for expanding their knowledge and awareness in community.

#### **KEYWORDS**

Disaster preparedness, Natural disaster, Informational pamphlet, Earthquakes

#### INTRODUCTION

Fossilized evidence bears witness to the fact that since the beginning of time humankind has had to deal with the aftermath of catastrophic events. Over our lifetime, we learned about the cataclysmic events that shaped the very world we now inhabit, including volcanic activity and huge meteorites that changed life upon the

earth. Whether it is natural as in the forms of earthquakes, landslides, tsunami and volcanic eruptions or manmade like in the case of fires, bomb blasts and wars, disasters have always been a part and parcel of human civilization. Heralding tragedy in every sphere of life, disasters are nevertheless unpredictable, and quite often, beyond control<sup>6</sup>. Disaster preparedness is



an ongoing multisectorial activity .It forms and integral part of the National system responsible for developing plan and programme for disaster management, prevention, mitigation, preparedness, response, rehabilitation and reconstruction<sup>7</sup>.

The recent earthquake in Gujarat, India on 26 January 2001, was the worst earthquake of the decade the impact of earthquake was felt in the neighboring Pakistan and Afghanistan too. Asia and Pacific are among the most disaster prone reason in the world. According to world disaster 41% of people kill,88% people affected,87% rendered homeless and 78% injured during 1993-1997 India also saw world's worst Man Made disaster in 1984, when methyl isocyanides Gas leak that union carbide pesticides plant in Bhopal killing about 3000 people. Peoples are still suffering from a variety of disease as an after effect of this tragedy<sup>8</sup>.

Community can and do cope with disasters by preparing in advance and working together as a team. Knowing what to do is the best protection. It is essential that the community should be prepared because the members of the community have the most to lose from being vulnerable to disasters and the most to gain from an effective and appropriate emergency preparedness program.

#### PROBLEM STATEMENT

A descriptive study to assess the knowledge and attitude regarding disaster preparedness among middle school children at selected schools in a view to develop an informational pamphlet.

#### **OBJECTIVES**

- Assess the level of knowledge regarding disaster preparedness among middle school children.
- Assess the level of attitude regarding disaster preparedness among middle school children.
- Find out association between knowledge and attitude regarding disaster preparedness among middle school children with selected demographic variables.
- Develop and distribute informational pamphlet on disaster preparedness among middle school children.

#### **ASSUMPTIONS**

- Students may have the knowledge and attitude regarding disaster preparedness.
- Knowledge and attitude on disaster preparedness closely associated with some demographic characteristics such as age, gender, standard and religion.
- Pamphlet enhances the knowledge



and attitude regarding disaster preparedness

### **REVIEW OF LITERATURE**

The literature gathered from extensive review is depicted here; it has been organized under the following headings.

- 1) Studies related to disasters and its impact.
- 2) Studies related to disaster preparedness. A cross-sectional survey was conducted to assess the at home preparedness and barriers to preparedness in a cohort of public health employees. Cross sectional employees 100 attending survey of emergency preparedness training was conducted. Results showed that 15 percent of participants were better prepared and only 8 percent of them were considered as most prepared. There was no relationship between the concern for disasters and principal preparedness. The barrier involved challenges in getting the task done versus lack of desire or knowledge<sup>10</sup>.

## **METHODOLOGY**

- Research approach Quantitative research approach
- Research Design Descriptive design
- Setting Selected schools at
  Obedullaganj

- ► Independent variable —
  Informational pamphlet on disaster
  preparedness
- Dependent Variable Knowledge and attitude regarding disaster preparedness.
- ▶ Population Middle school children's
- ► Sample- middle school children of selected schools at Obedullaganj.
- Sample size 50
- ► Sampling technique- Non Probability sampling in which convenient sampling is used
- Inclusive criteria
- Middle school children only
- Those who could understand Hindi
- Those who are willing to participate in study
- Those who are available at the time of the data collection
- Exclusive criteria-
- Those who are not willing to participate at study period.
- Those who are not present during the time of study.
- Those who are at 14 years and above

## DATA COLLECTION METHOD

The study was conducted in the month of March 2016 in the selected schools. The study sample was assured of

confidentiality of their response. Data was collected by give the knowledge questionnaire an attitude scale related to disaster preparedness selected by convenient sampling. Information was provided through informational pamphlet to the study sample

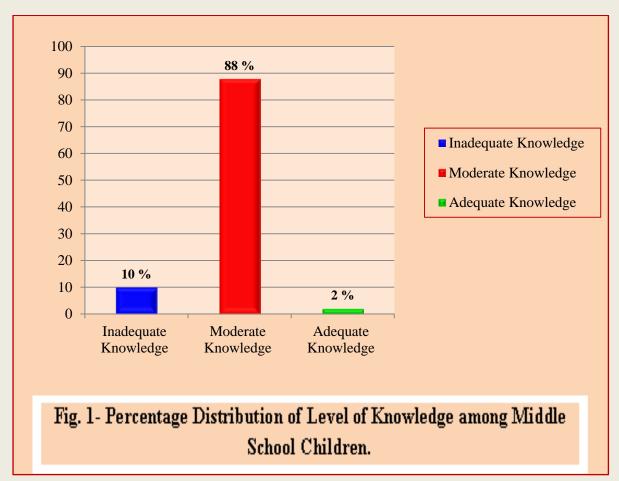
The respondents were co- operative and the data was thus collected and compiled for data analysis.

#### FINDINGS OF THE STUDY

### Part I: Demographic profile

- Majority of children 24 (48%) in the age group of 13 years, 13 (26%) in the age group of 12 years, 8 (16%) in the age group of 11 years and 5 (10%) in the age group of 10 years.
- 29 (58%) of children are male and21 (42%) are female
- 28 (56%) of children are studying in 7 standard, 15 (30%) are in 6 standard, and 7 (14%) are in 8 standard.
- 28 (56%) of children are belongs to Hindu religion, 22 (44%) are belongs to Muslim religion.

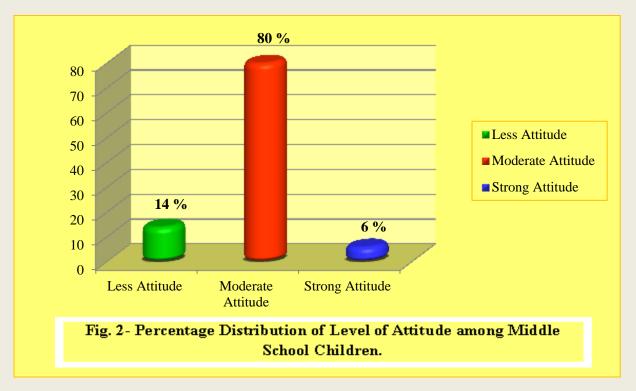
Part II. Assessment of level knowledge of respondents



The above Fig I shows that majority of children had moderate knowledge 44(88%), 5(10%) children have inadequate

knowledge and 1(2%) children have adequate knowledge regarding disaster preparedness.





The above Figure II shows that the majority of 40(80%) children have moderate attitude, 7(14%) children have

less attitude and 3(6%) children have strong knowledge regarding disaster preparedness.

Part IV. Association of knowledge score of middle school children's with demographic variables.

S. No.	Demographic Variable	Inadequate knowledge	Moderate knowledge	Adequate knowledge	df	Chi square
1	Age					
	• 10	1	4	0		
	• 11	0	7	1	6	9.19
	• 12	1	12	0		
	• 13	3	21	0		
2	Gender					
	<ul> <li>Male</li> </ul>	3	26	0	2	1.43
	• Female	2	18	1		
3	Standard	tandard				
	• 6	1	13	1		
	• 7	2	26	0	4	5.43
	• 8	2	5	0		
4	Religion					
	<ul> <li>Hindu</li> </ul>	3	24	1	2	0.84
	<ul> <li>Muslim</li> </ul>	2	20	0		

The above Table I shows that association of knowledge score of middle school children's with demographic variables.

Part V. Association of attitude score of middle school children's with demographic variables.

S.	df	Chi					
No.	Demographic Variable		Less attitude	Moderate attitude	Strong attitude	uı	square
1	Age					6	4.62
	•	10	0	4	1		
	•	11	2	6	0		
	•	12	2	11	0		
	•	13	3	19	2		
2	Gende	Gender					
	•	Male	7	20	2	2	6.88
	•	Female	0	20	1		
3	Standard						
	•	6	5	9	1		
	•	7	1	25	2	4	7.75
	•	8	1	6	0		
4	Religion						
	•	Hindu	6	22	0	2	6.34
	•	Muslim	1	18	3		

The above Table II shows that association of attitude score of middle school children's with demographic variables.

## **CONCLUSION**

The study intended to find out the knowledge and attitude regarding disaster preparedness. The overall experience was a satisfying one. The investigator found that the informational pamphlet will increase the knowledge and attitude of middle school children's about disaster preparedness.

#### **IMPLICATIONS**

## **Nursing practice**

- ➤ Nurses had important role in imparting knowledge on disaster preparedness.
- They work in various settings such as rural and urban community settings, hospital settings and many other areas, so that they can utilize the opportunity to spread awareness on disaster preparedness.

## **Nursing education**

- Nursing education plays an important role in preparing the nurses for the well-being of people in various age groups. Nurses should have through knowledge about magnitude of the problem and especially the prevention measures.
- The study also implies that the health personnel have to properly train to teach the public regarding promotion of health and prevention of injury. Nursing curriculum should stress more importance on education future nurses regarding disasters preparedness.

## **Nursing administration**

Nurse administrators should take initiative in formulating policies and plans in providing education to the coastal community and other vulnerable population on disasters preparedness. They should act as an efficient leader in



organizing drill for disaster preparedness in vulnerable areas, hospitals and schools.

## **Nursing research**

The present study would help nurses and other health care professional to understand the level of knowledge, attitude and practice of coastal inhabitants regarding disasters preparedness. Based on this knowledge nurse research can undertake similar studies.

#### RECOMMENDATIONS

- ▶ Similar kind of study can be conducted for a large group.
- ▶ Comparative study can be conducted regarding disaster preparedness.
- An evaluative study can be conducted to assess the knowledge and attitude regarding disaster preparedness.
- ▶ The study can be replicated on large sample in different setting to have wider applicability by generalization.



#### **BIBLIOGRAPHY**

- 1. K. Park "Park's text book of preventive and social medicine, 21<sup>st</sup> edition (2011), published by BanarasidasBhanot, Page no. 736-742.
- 2. Brunner and Suddharth's "Text book of medical surgical nursing", 10th edition (2004), published by Lippincott Williams and Wilkins, Page no. 2184-2187.
- 3. LakhwinderKaur, SukhminderKaur and Kanta Ajay Kaur "Text book of medical surgical nursing", 2nd edition (2013), Lotus publishers, Page no. 893-899.
- 4. Bjarnason D. Human response health promotion and healing before, during and after catastrophic event. Crit Care NursClin N Am. 2010;22:ix.
- 5. Sing SR. Disaster management. First edition. New Delhi. ARH Publishing Corporation. 2011.
- 6. Government of India. Draft study on corporate involvement in disaster management [Online]. 2005 [Cited 2011 Nov 10]; Available from: URl. http://earthmind.net/drr /docs/cases/dp002-corp-dr.pdf.
- 7. Rao DP. Disaster Management [Online] [Cited on 2011 Nov 10]; Available form:URLhttp://www.gisdevelopment.net/application/natural\_hazards/overview/nho0 004.htm.
- 8. Disaster preparedness. Times Foundation India Times [Online] [Cited on

- 2011 Nov 10]. Available from: URL: http://www.timesfoundationindiatimes.com
  9. Menon VC, Kava S. Infochanges disasters. Infochange India News and Features development News on Disasters in India [serial online] 2011 [Cited 2011 Nov 10]; [1-8]. Available from :URL: http://www.infochangeindia.ord/disastersibp.jsp
- 10. Sanders S, Bowie SL., Bowie YD. Lessons learned on forced relocation of older adults: the impact of Hurricane Andrew on health, mental health, and social support of public housing residents. Journal of Gerontological Social Work [Serial online] 2003 [Cited on 2011 Nov 10]; 40(4): [23-5]. Available from: URL: http://search.epnet.com
- 11. Jennings A. Teaching disaster nursing by utilizing the Jennings Disaster Nursing Management Model. Science Direct Nurses Education in Practice [serial online] 2004 Mar [Cited 2011 Aug 8]; 4(1): [69-76]. Available from: URL: http://sciencedirect.com
- 12. Pearsall J. ConsiseQxford EnglishDictionary. 10th edition. New Delhi.Oxford university press. 2002.
- 13. Agnes M. Websters new world college dictionary. 4th edition. New Delhi. 2006; P:435.
- 14. Stepski LA. Disaster management and response. NursClin N Am. 2005,40(3):426.