

# “A Descriptive Study To Assess The Knowledge And Attitude Regarding Disaster Management Among Nursing Students From Selected Nursing College Mangaluru”

Mrs. Navya<sup>1\*</sup>, Mr. Ajmal K.P<sup>2</sup>, Ms. Albi Kurian<sup>3</sup>, Ms. Aleesa Shibu<sup>4</sup>, Ms. Alfy Angel Ajith<sup>5</sup>, Ms. Alphonsa Thomas<sup>6</sup>

<sup>1\*, 2, 3, 4, 5, 6</sup>Asst. Professor, Department of Community Health Nursing, Yenepoya Nursing College, Yenepoya (Deemed to be University) University, Mangaluru, Karnataka, India.

\*Corresponding Author:-Mrs. Navya

\*Asst. Professor, Department of Community Health Nursing, Yenepoya Nursing College, University road Derlakatte, Mangaluru 575018, Email Id:navyabh356@gmail.com, Contact address:9632870965  
DOI:10.47750/pnr.2022.13.S08.581

## Abstract

**Background:-** Disasters and major emergencies affect people's lives in many different aspects – their health, security, housing, access to food, water and other life commodities. Therefore, it is vital to strengthen the disaster/emergency preparedness as well as the response to different natural and man-made disasters. The disaster management plays a crucial role in the mitigation of disaster consequences. The aim of the disaster management is to support the countries in building their disaster response capacities.

**Materials and methods:-**A descriptive study was conducted among 83 Nursing Students. Subject was selected using non probability purposive sampling techniques. The information was collected using a demographic Performa and a self - administered questionnaire the overall knowledge and attitude on Disaster management was graded adequate good and inadequate.

**Results:-**Majority 29% of the students have average knowledge, 63% had good knowledge regarding disaster management. The mean knowledge score was 2.3133. Distribution of subjects as there attitude score revealed that more than half 52% of the nursing students had favorable attitude towards disaster management and 14% having negative attitude and 34% having neutral.

The present study reveals that there is a significant association ( $P < 0.05$ ) between knowledge scores of students regarding disaster management with age. There is no association found in other demographic variables

**Conclusion:** The present study concludes that the Nursing Students have Good knowledge regarding the Disaster management. The Nursing Students have (63%) had good knowledge regarding Disaster management. There is association between Age and no Association found in other selected demographic variables.

**Keywords:** Knowledge, Attitude, Disaster Management.

## 1. INTRODUCTION

India's development graph in recent years appears to be ever ascending. Ironically, at the same time, the frequency of disasters has also gone up. Recent decades have witnessed both natural as well as man-made disasters; blurring the distinction between them to a large extent. These disasters have caused widespread destruction and fatalities, leaving the institutions and the community wanting on the front of disaster related preparedness, relief, reconstruction and recovery. Does development lead to disasters or do disasters open up new avenues of development is the contemporary debate. However, these efforts remain confined and sporadic; their dissemination and replication are yet to be fully realized. The voices that are clearly audible on disaster policy initiatives and their participatory execution get attenuated when it comes to actualizing their sustenance<sup>1</sup>

Disasters come in many forms from natural to technological, and can occur without warning. A disaster causes loss of property, loss of life, and disrupts daily life. In the aftermath of a disaster, there are many organizations that step in to assist those affected. One such organization is the American Red Cross, which trains disaster responders to assist in relief efforts. Disaster services volunteers with Red Cross are trained in a variety of functions, some of which deal more directly with victims of disaster than others<sup>2</sup>.

Disasters and major emergencies affect people's lives in many different aspects – their health, security, housing, access to food, water and other life commodities. Therefore, it is vital to strengthen the disaster/emergency preparedness as well as the response to different natural and man-made disasters. The disaster management plays a crucial role in the

mitigation of disaster consequences. The aim of the disaster management is to support the countries in building their disaster response capacities.

India is vulnerable, in varying degrees, to a large number of disasters. More than 58.6 per cent of the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12%) of its land is prone to floods and river erosion; close to 5,700 kms, out of the 7,516 kms long coastline is prone to cyclones and tsunamis; 68% of its cultivable area is vulnerable to droughts; and, its hilly areas are at risk from landslides and avalanches. Moreover, India is also vulnerable to Chemical, Biological, Radiological and Nuclear (CBRN) emergencies and other man-made disasters.

Disaster risks in India are further compounded by increasing vulnerabilities related to changing demographics and socio-economic conditions, unplanned urbanization, and development within high-risk zones, environmental degradation, climate change, geological hazards, epidemics and pandemics. Clearly, all these contribute to a situation where disasters seriously threaten India's economy, its population and sustainable development.<sup>3</sup>

## MATERIALS AND METHOD:

The research design adopted for the present study was descriptive research design. The study was carried out in YNC, Mangaluru. Sample consists of 83 Nursing Students who were selected by non-purposive sample techniques, based on inclusion criteria. The Nursing Students from YNC were selected as study participants. The present study refers to the Disaster management require a high level of awareness regarding Disaster management.

## TOOLS AND TECHNIQUES

Research instruments are also called research tools they are the device used to collect data. Tool facilitates the measurement of variables. Data collection tool sare the procedure or instruments used by the researcher to observe or measure the key variables in the research problem. Based on the objectives of the study, a structured knowledge questionnaire on Disaster management was used to identify knowledge and Attitude among selected demographic variables.

Tool was prepared on the basis of objectives of the study; it was developed after review of literature of relevant topics and discussion.

Total number of questions was 26. In order to obtain validity of the data collection tool, the draft of the problem statement, objective, demographic Performa, and knowledge questionnaire are submitted to 7 experts along with letter seeking suggestion of expert to validate the tool, acceptance form or tool validation and criteria check list for 2 validations. The baseline Performa was used to assess the characteristics of students regarding Disaster Management. It had 5 item which include age, gender, Type of family, Have you attended any training programme regarding disaster management, Do you think there is a need to start a course on disaster management in the university. The knowledge questionnaire was consisting of 26 items.

Data collection was done after obtaining ethical clearance from the institutional ethics committee. Prior permission from the concerned authority was obtained to conduct the study. Subjects were asked to participate in the study after self introduction by the investigators. The subjects were informed about the purpose of the study and their consent was attained. The participants were assured about the confidentiality of their information. The data were analyzed in terms of the objectives of the study using both descriptive and inferential statistics.

## DATA ANALYSIS:-

The data entry and analysis was performed using statistical package for social science software package version 23. chi - square test was used to find out the association of socio demographic variables with knowledge and Attitude score regarding Disaster management and  $p < 0.05$  was taken as statistically significant association.

## RESULT:

The findings of the study demonstrated that, among 83 Nursing Students surveyed, maximum percentage of the subjects (90.36%) belonged to an age group of 15-20 years, Maximum numbers of subjects (87.95%) were Female. Majority of the subjects (81.93%) belongs to Nuclear family. Most of the subjects (75.90%) had not attended any training programme regarding Disaster management. Majority of the subjects (81.93%) need to start a course on disaster management in the university

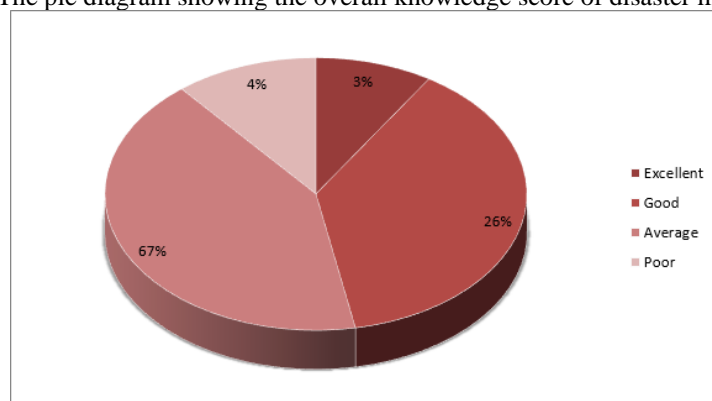
## DESCRIPTION OF KNOWLEDGE SCORE

**Table 1: Grading of overall knowledge**

Sl.No	Knowledge Score	Percentage
1	Good	67%
2	Average	26%
3	Excellent	4%
4	Poor	3%

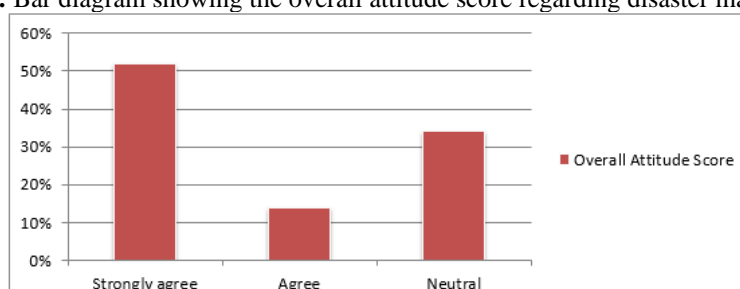
From the above table it can be interpreted that majority (67%) had good knowledge, (26%) had average knowledge, (4%) had excellent and (3%) having poor knowledge regarding disaster management.

**Figure1:** The pie diagram showing the overall knowledge score of disaster management.



### Description of Attitude score of nursing students regarding disaster management

**Figure 2:** Bar diagram showing the overall attitude score regarding disaster management.



Bar-diagram shows overall attitude scores of Nursing students regarding disaster management. Majority (52%) had strongly agree, (14%) had agree and (34%) had neutral.

### Description of correlation between knowledge and attitude score

**Table 2:** correlation between knowledge and attitude regarding disaster management.

Score	Title	Total knowledge score	Total attitude score
Total knowledge score	Pearson correlation	1	-0.24
	Sig(2 - tailed)		.830
	N	83	83
Total attitude score	Pearson correlation	-.024	1
	Sig(2- tailed)	.830	
	N	83	83

### Description of Association between knowledge score with selected demographic variables.

Data presented in Table 2 shows that there is significant association between knowledge score with selected demographic variables.

- Age (15-20) is associated with knowledge score ( $\chi^2=0.02$ )  $P<0.05$
- Gender ( Female) is associated with knowledge score ( $\chi^2=0.006$ )  $P<0.05$

**Table 3 :** Association between knowledge score and selected demographic variables

Sl.No	Demographic variables	Median (>18)	Median (<18)	X <sup>2</sup>	df	P value	Inference
1	Age in years						
	15-20	40	35	4.822	1	0.028	S
21-25	1	7					
2	Gender						
	Female	32	41	7.499	1	0.006	S
Male	9	1					
3	Type of family						
	Joint family	7	8	0.055	1	0.815	NS
Nuclear family	34	34					
4	Have you attended any training programme regarding disaster management						
	Yes	8	11	0.0524	1	0.469	NS
No	33	31					
5	Do you think there is need to start a course on disaster management in the university						
	Yes	34	34	0.055	1	0.815	NS
No	7	8					

## DISCUSSION:

The finding of the study which was conducted among 83 UG students of 2nd year BSC nursing showed that majority (90.4%) in the age between 15-20 years , most (88%) of subject were females. 67% had good knowledge on disaster management.

The findings of the study can be comparing with a study which is conducted by Abdulla Nofal revealed that two-third of the participants were below 30 years and more than 85% were female.<sup>4</sup> Majority 29% of the students have average knowledge , 63% had good knowledge regarding disaster management. The mean knowledge score was 2.3133.

Distribution of subjects as there attitude score revealed that more than half 52% of the nursing students had favorable attitude towards disaster management and 14% having negative attitude and 34% having neutral.

A related study which was conducted by Waheeb Nasr Naser reveal that out of 531 health professionals 32.0% had good knowledge, 53.5% had fair and 14.5% exhibited poor knowledge regarding disaster management. The P value of <0.05 was used as a statistical significant.<sup>5</sup>

The present study reveals that there is a significant association ( $P < 0.05$ ) between knowledge scores of students regarding disaster management with age. There is no association found in other demographic variables.

A supporting study conducted by J Arun Jothi reveal that there was no significant ( $P < 0.05$ ) association between the pretest knowledge of students with the demographic variables namely age , sex and educational qualification<sup>6</sup>.

The study was conducted by Pongen TB reveal that the study findings showed that 8% nursing students had adequate knowledge about disaster preparedness. Majority (62%) of the nursing students had positive attitude regarding disaster preparedness<sup>7</sup>

## CONCLUSION:

In the present study by assessing the level of knowledge and attitude of Nursing Students regarding Disaster Management, it was found that 4% of Nursing Student had excellent, 26% had average level of knowledge and majority of the subjects (67%) had good level of knowledge regarding Disaster Management. This chapter enlightens the need of the research study. The research reveals that there is association between level of knowledge with age and no association between other selected socio-demographic variables. There is no association between levels of attitude with other selected socio demographic variables. This is why it is important to have at least a basic awareness of Disaster management. The present study concludes that the Nursing Students have a Good knowledge regarding Disaster Management.

## Financial Support And sponsorship

Nil

## Conflic to finterest:

There is no conflict of interest

## REFERENCES:

1. Revi A climate change risk : an adaptation and mitigation agenda for Indian cities. Environment and urbanization. 2008 Apr; 20(1):207-29.2.Brands NM.A call to action examining the experiences of American red cross disaster services volunteers. master thesis- sociology and anthropology. 2014 available from <https://ir.library.illinoisstate.edu/mts/11>
2. Brands NM. A call to action examining the experiences of AmericanRed Cross disaster services volunteers. Master's Theses - Sociology and Anthropology.2014 available from <https://ir.library.illinoisstate.edu/mts/11>.
3. National disaster management authority government India.(online).2019.(cited 2019 Jun 8) .Available from: <https://ndma.gov.in/en/vulnerability-profile.html>
4. Nofal A, Alfayyad I, Khan A, Al Aseri Z, Abu-Shaheen A. Knowledge, attitudes, and practices of emergency department staff towards disaster and emergency preparedness at tertiary health care hospital in central Saudi Arabia. Saudi medical journal. 2018; 39(11):1123.
5. Naser WN, Saleem HB. Emergency and disaster management training; knowledge and attitude of Yemeni health professionals - a cross sectional study. BMC emergency medicine.2018 Dec;18(1):1-2
6. Arun Jothi J . A study to evaluate the effectiveness of structured teaching programme on knowledge regarding disaster management among students selected nursing schools in Kanyakumari district(doctorl dissertation, college of nursing, Dharmarathnakara Dr. Mahalingam institute of paramedical science and research, erode
7. Pongen TB , Kiho T, Pongen T, Venyo U, Singson V , Humtsoe LE. Effectiveness of structured teaching programme on knowledge and attitude regarding disaster preparedness among nursing students. Indian journal of continuing nursing education. 2018 Jul 1;19(2):75