



**TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING ON KNOWLEDGE REGARDING DISASTER PREPAREDNESS AMONG NURSING STUDENTS.**

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**ABSTRACT**

Disaster can be defined as any occurrence that causes damage, ecological disruption, loss of human life or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside that affected community or area. This disaster brought the need for emergency preparedness to the attention of Indian public. Objectives: To assess the existing knowledge of the nursing students regarding disaster preparedness. To determine the effectiveness of planned teaching on knowledge regarding disaster preparedness among nursing students. To associate the knowledge of nursing students on disaster preparedness with the selected demographic variables. Method and Material: The study design was one group pretest and post test and quantitative evaluatory approach. Population was nursing students in selected nursing college of Wardha. Sample size 100 nursing students. Result: The findings shows significant difference between pretest and post test knowledge scores interpreting effective planned teaching on knowledge regarding disaster preparedness among nursing students. Mean value of pre test is 34.5 and post test is 94.84 and standard deviation values of pre test is 2.465 and post test is 1.298. The calculated t-value is 40.888 and p-value is 0.000.

**KEYWORDS :** Knowledge, Effectiveness, Plan Teaching, Disaster Preparedness

**1. INTRODUCTION**

The word 'Disaster' derives from middle French disaster<sup>1</sup>. A disaster can be defined as any occurrence that causes damage, ecological disruption, loss of human life or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside that affected community or area. This disaster brought the need for emergency preparedness to the attention of Indian public.<sup>2</sup> Natural disasters are very frequent these days and it bring immense loss to lives and properties. We should have pre-disasters management policy to tackle disaster situation before, so that precious lives of our planet can be saved in advance.<sup>3</sup>

Disaster preparedness has reached a new level of urgency. Thus nurses need to become involved in disaster management in order to function effectively in these types of situation. Exposing nurses to disaster nursing education may result in positive outcome of population involved in a disaster. Currently, there are few modules and frameworks to guide nurses through the process of understanding disaster nursing.<sup>4</sup>

According to WHO' s CRED is reporting that in 2010 a total of 385 natural disasters killed more than 297,000 people world wide, affected over 217.0 millions others and caused US\$ 123.9 billion of economic damages. According to disaster center ---November, 5 2011-10; 28 am EDT during the last decade earth quakes killed 780,000 people, making them the worst cause for death. According to a study published in the lancet "the reported ratios of death to injury vary, but across many studies seems to be about 1-to-3 which makes earth quakes the number one cause of injury by natural disaster."<sup>5</sup>

**2. Problem statement**

To assess the effectiveness of planned teaching on knowledge regarding disaster preparedness among nursing students.

**3. OBJECTIVES**

1. To assess the existing knowledge of the nursing students regarding disaster preparedness.
2. To determine the effectiveness of planned teaching on knowledge regarding disaster preparedness among nursing students.
3. To associate the knowledge of nursing students on disaster preparedness with the selected demographic variables.

**4. methodology**

**Research approach-** Quantitative Evaluative approach.

**Research design** - One group pretest-posttest design.

**Setting of study** -Selected Nursing college of Wardha.

**Sample-** Nursing students.

**Sample size-** 100

**Sampling techniques-** Non probability convenience sampling.

**Tool** - structured knowledge questionnaire including demographic variables will be used for the study.

**Independent variable** - planned teaching regarding disaster preparedness.

**Dependent variable** - knowledge of nursing students regarding disaster preparedness.

**SAMPLING CRITERIA**

**INCLUSION CRITERIA:** 1. Nursing students studying in selected nursing college. 2. Nursing students who are willing to participate in the study.

3. Students who are available during the study period

**EXCLUSION CRITERIA:** 1. Nursing students those are participated in the similar study on disaster preparedness.

**5. RESULT**

This section deals with the assessment of knowledge of regarding disaster preparedness. The level of knowledge is divided under following heading poor, average, good, very good & excellent.

**TABLE NO. 1 Knowledge on disaster preparedness among nursing students in Pretest**

Level of knowledge score	Score	Percentage score	Pretest Knowledge score	
			Frequency	Percentage
Poor	1-4	0-20%	18	18%
Average	5-8	21-40%	56	56%
Good	9-12	41-60%	23	23%
Very good	13-16	61-80%	3	3%
Excellent	17-20	81-100%	0	0%

Minimum score	2
Maximum score	13
Mean score	6.84 ± 2.465
Mean Percentage	34.2%

The above table shows that 18(18%) of nursing students were having poor level of knowledge score, 56(56%) of them had average and 23(23%) of them had good level of knowledge score, very good level of knowledge score is 3(3%). The minimum score was 2 and the maximum score was 13, the mean score was 6.84± 2.465 with a mean percentage score of 34.2%.

**TABLE NO. 2 Knowledge On Disaster Preparedness Among Nursing Students In Post Test**

Level of knowledge score	Score	Percentage score	Posttest Knowledge score	
			Frequency	Percentage
Poor	0-4	0-20%	0	0%
Average	5-8	21-40%	0	0%
Good	9-12	41-60%	0	0%
Very good	13-16	61-80%	5	5%
Excellent	17-20	81-100%	95	95%
Minimum score	13			
Maximum score	20			
Mean score	18.97 ± 1.298			
Mean Percentage	94.85%			

The above table shows that none of them had poor level of knowledge score, none of them had average and good level of knowledge, 5 (5%) have very good level of knowledge, 95(95%) had excellent level of knowledge score. The minimum score was 13 and the maximum score was 20, the mean score was 18.97 ± 1.298 with a mean percentage score of 94.85%.

## 6. DISCUSSION

The study conducted by KajiAHet. Al, findings of the study were based on the objectives of the study. Mean value of pre test is 34.5 and post test is 94.84 and standard deviation values of pre test is 2.465 and post test is 1.298. The calculated t-value is 40.888 and p-value is 0.000. The findings show that there is a significant difference between pretest and post test knowledge scores. Thus it is concluded that planned teaching was effective in increasing the knowledge of the nursing students regarding disaster preparedness.

The purpose of this project was to determine if a disaster preparedness educational intervention for nursing students' could engage students in personal preparedness and enhance their willingness to respond during a public health emergency. The United States (U.S.) is among the top five countries in the world that experience frequent natural disasters (Guha-Sapir et al., 2012). With over 3.1 million nurses in the U.S. (AACN, 2011) and their importance to healthcare, the nursing profession plays a crucial role in the ability of the nation to prepare for and respond to disasters.

Currently, however, nurses in the U.S. lack the knowledge, skills and attitudes needed to effectively respond to disasters, thereby placing the public at risk. A pilot program was developed that introduced the topic of disaster preparedness to senior level nursing students through a one-hour course. The pilot program utilized a pre- and post-survey method to evaluate the effect of the education on nursing students. A convenience sample of 18 students participated in the class, course evaluation and pre-survey, and 14 students responded to the post survey request. Data were collected and analyzed on the course evaluation, measuring how well the course objectives were met and the appropriateness of the teaching strategies. Pre- and post survey results were compared to determine the effectiveness of the pilot program. The results indicated that the course encouraged nursing students to engage in preparedness, and to be willing to respond. No increased in pre-registration with a professional emergency preparedness organization was noted.

Implications from this pilot program include the need for further studies regarding best methods for educating nursing students. Also, advance practice registered nurses need to lead the nursing profession in emergency preparedness to increase the resilience of the United States during disasters.<sup>6</sup>

## 7. CONCLUSION

The researcher as a part of her post graduate programmed, conducted an intervention research on the topic to assess the effectiveness of planned teaching on knowledge regarding the Disaster preparedness among the nursing students. The researcher aimed to improve the level of knowledge of nursing students. He predetermined certain objectives, to precede the study. Those objectives were adequate to reach into the findings. A particular time period has been allocated for each step. Investigator had presented her hypothetical views about the study in its beginning. The study had done by separating the topic into 5 chapters. And finally the researcher reached into her findings. The result of this study shows that 5 (5%) having very good level of knowledge and 95(95%) having an excellent level of knowledge. To find the effectiveness of planned teaching 't' test was applied and t value was calculated, post test score was significantly higher at 0.05 level than that of pre test score. Thus it was concluded that planned teaching on the regarding the disaster preparedness was found effective as a teaching strategy.

## 8. Recommendation

On the basis of findings of the study, it is recommended that the following studies can be conducted

1. A similar study can be replicated on large scale to generalize the findings.
2. A similar study can be conducted by using other learning teaching A.V. aids such as self-institutional module, video assisted teaching.
3. A similar study can be conducted to find out the difference in the knowledge level of the nursing students on the basis of various institutional setting such as government and private setting.
4. A similar study can be conducted in community area by changing sample.

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