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## A study to assess the effectiveness of structured teaching programme on knowledge regarding emergency preparedness on disaster among undergraduate students at selected colleges, Mehsana district

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### **Abstract**

This study evaluates a structured teaching program's impact on emergency preparedness knowledge among undergraduate students in Mehsana district. Using Imogene King's theory as a framework, the study aimed to assess current knowledge levels, measure program effectiveness, and explore demographic associations. Employing a pre-experimental design with pre-test and post-test assessments, findings indicated a significant increase in knowledge scores post-program. The study recommends larger-scale replication, different settings, and alternative teaching strategies like simulations or pamphlets for further research and improvement in disaster preparedness education.

**Keywords:** Preparedness, education, students, theory, assessment

### **Introduction**

For operational purposes, the World Health Organization defines a disaster as a sudden ecological phenomenon of sufficient magnitude to require external assistance. Another operational definition says that a disaster is any event that causes destruction and distress resulting in demands that exceed the response capacity of the affected community. Disasters usually have an unforeseen, serious, and immediate effect on health. Often the number of victims is considerable and response to the demand for immediate assistance requires efficient planning and organization of health services.

A disaster is an overwhelming ecological disruption occurring on a scale sufficient to require outside assistance. A disaster is an event located in time and space which produces conditions whereby the continuity of structure and process of social units becomes problematic. It is an event or series of events which seriously disrupts normal activities. The magnitude of the effects of the event will be viewed differently. Any occurrence, that causes damage, ecological disruption, loss of human life, deterioration of health and health services, on a scale sufficient to warrant.

A disaster is a serious disruption of the functioning of a society, causing widespread human, material, or environmental losses which exceed the ability of affected society to cope using only its own resources. Disasters are often classified according to their speed of onset (sudden or slow), or according to their cause (natural or man-made).

Another term closely related to disaster and used throughout this module is emergency. A disaster might be regarded as a particular type (or sub-set) of an emergency. "Disaster" suggests an intense time period and level of urgency. Where as disaster is bound by a specific period in which lives and essential property are immediately at risk, an emergency can encompass a more general period in which there is a clear and marked deterioration in the coping abilities of a group or community, or coping abilities are only sustained by unusual initiatives by the group or community or by external intervention.

Disaster management is the body of policy and administrative decisions and operational activities which pertain to the various stages of a disaster at all levels.

A disaster is an occurrence such as hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, earthquake, drought, blizzard, pestilence, famine, fire, explosion, volcanic eruption, building collapse, transportation wreck, or other situation that causes human suffering or creates human needs that the victims cannot alleviate without assistance.

The goal of emergency preparedness programs is to achieve a satisfactory level of readiness to respond to any emergency situation through programs that strengthen the technical and managerial capacity of governments, organizations, and communities. These measures can be described as logistical readiness to deal with disasters and can be enhanced by having response mechanisms and procedures, rehearsals, developing long-term and short-term strategies, public education and building early warning systems. Preparedness can also take the form of ensuring the strategic reserves of food, equipment, water, medicines and other essentials maintained in cases of national or local catastrophes.

Disaster is a sudden, calamitous event bringing great damage, loss, destruction and devastation to life and property. The damage caused by disasters is immeasurable and varies with the geographical location, climate and the type of the earth surface/degree of vulnerability. This influences the mental, socio-economic, political and cultural state of the affected area. It completely disrupts the normal day today life, like food, shelter, health, etc.

Almost 85% of the country is vulnerable to single or multiple disasters. Of the 36 states and union territories in the country, 27 are disaster prone. The multi hazard map of India depicts that 229 districts of India are prone to multiple hazards, West Bengal for example is prone to four types of hazards. Floods, droughts, earthquakes, cyclones, landslides and avalanches have taken a heavy toll of lives and have caused enormous damage to property. Tsunami is the latest addition to India's woes of natural disasters.

Government of India, ministry of home affairs and United Nations development programme has signed an agreement on august 2002 for implementation of "disaster risk management" programme to reduce the vulnerability of the communities to natural disasters, in identified multi hazard disaster prone areas. The programme has been divided in to two phases over a period of six years. Phase-1 [2002- 2004] would provide support to carry out the activities in 28 selected districts in the states of Bihar, Gujarat and Orissa. In Phase-2 [2003-2007], the programme would cover.

### Statement of the problem

"A study to assess the effectiveness of structured teaching programme on knowledge regarding emergency preparedness on disaster among undergraduate students at selected colleges, Mehsana district".

### Objectives of the study

#### The objectives of the study are to

- To assess the level of knowledge regarding Emergency preparedness on disaster among under graduate students.
- To determine the effectiveness of structured teaching programme on knowledge regarding Emergency preparedness on disaster among under graduate students
- To find the association between post-test level of knowledge on Emergency preparedness on disaster

with the selected demographic variables.

### Discussion

This chapter deals with the problem statement, objectives of the study, main findings of study, discussion, implication, recommendations, conclusion of study and summary of study.

The main aim of the study was to assess the effectiveness of structured teaching programme on knowledge regarding emergency preparedness on disaster among undergraduate students at selected colleges, Mehsana district.

Hypothesis was formulated, there will be significant difference in knowledge after the structured teaching programme given through the lesson plan. The conceptual framework of the present study was developed by the investigation based on King's theory of goal attainment (Imogene M King).

The setting was at Ratnaprabha college of nursing and samples were selected by convenient sampling technique; structured questionnaire method was used to collect data. Pre-test was given and structure teaching programme was provided through lesson plan and then post test was conducted. The data analysis shows that educating the undergraduate nursing students will help them to improve their knowledge regarding occupational health hazards. The t test value showed that there was a highly significant difference between pre-test and post-test knowledge score.

### Major findings and discussion

- **Discussion:** The study was focused to assess the effectiveness of planned health teaching programme on knowledge score of undergraduate students
- Findings are discussed under following headings:

#### 1. Findings related to sample characteristics

The sample characteristics under study were age in years, gender, religion, place of residence, family monthly income, previous knowledge about disaster preparedness, source of information. Sample size was 50. The findings showed that are 44 (88%) students are between age group of 17 to 19 years, 06 (12%) are Above 19 years. 10 (20%) students are male and 40 (80%) students are female. 46 (92%) students are Hindu and 4 (8%) students are Muslim. 17 (34%) students are from urban area and 33 (66%) students are from rural area. 4 (8%) students having family income of 5001-10000 rupees per month, 18 (36%) students family income of 5001-10000 rupees per month and 28 (56%) students having family income of Above 15000 rupees per month. 32(64%) Undergraduate students did not had previous knowledge about disaster preparedness and 18(36%) Undergraduate students had previous knowledge about disaster preparedness. 10% Undergraduate students got information from friends & Family, 40% Undergraduate students got information from Mass media, 42% Undergraduate students got information from Self- Reading, 8% Undergraduate students got information from Health personnel

#### 2. Pretest knowledge score of the undergraduate students regarding disaster preparedness

The findings showed that. It was observed that 15 (30%) undergraduate students had inadequate knowledge and 35 (70%) undergraduate students had moderately adequate knowledge before administering STP.

### 3. Effectiveness of planned health teaching programme on disaster preparedness among undergraduate students

36 (72%) undergraduate students had moderately adequate knowledge and 14 (28%) undergraduate students had adequate knowledge regarding disaster preparedness after administering STP. This shows that there is gain in knowledge. Further to know the statistical significance between pretest and posttest knowledge score t test value was computed. The t test value ( $t=50=15.18 > 2.01$ ) showed that there was a highly significant difference between pretest and post-test knowledge. On the whole, study showed that planned health teaching programme was effective. These findings suggest that increase in the knowledge is the effect of planned health teaching programme. Hypothesis of study is that the posttest knowledge scores of students will be highly significant than the mean pretest knowledge score, after planned health teaching programme. The findings of present study show that mean posttest (18.34) knowledge score is higher than mean pretest knowledge score (11.62). Hence research hypothesis is accepted.

### 4. Findings regarding effectiveness of planned health teaching programme

The findings showed that post-test data score with adequate (28%) and moderately adequate (72%) Students have regarding disaster preparedness. This shows that planned health teaching programme that have given to the subjects was more effective. This study is supported by another study conducted on undergraduate nursing students suggested that Continued evaluation of the simulation and making identified changes to the interdisciplinary disaster drills will improve student learning and help to prepare future nurses for disasters. This study is supported by another study conducted on undergraduate nursing students at Taiwan suggested that Students who were more willing to participate in disaster management had a higher level of anticipatory disaster stress and motivation for disaster engagement. It is suggested that healthcare institutions and schools should work together to design disaster education plans using innovative teaching/learning strategies to increase students' willingness and motivation for disaster engagement. This study is supported by another study conducted on undergraduate nursing students at Turkey suggested that there is a need for conducting undergraduate and graduate disaster nursing education on the national and international scale and delivering in-service training programs for working nurses.

### Summary

The aim was to study the effectiveness of planned health teaching on disaster preparedness among undergraduate students at selected colleges, Visnagar.

### The objectives were

- To assess the level of knowledge regarding Emergency preparedness on disaster among under graduate students.
- To determine the effectiveness of structured teaching programme on knowledge regarding Emergency preparedness on disaster among under graduate students
- To find the association between post-test level of knowledge on Emergency preparedness on disaster with the selected demographic variables.

### Conclusion

Based on the analysis of findings of the study, the following inferences were drawn:

Post test results observed an increase in knowledge score of students with 36 (72%) undergraduate students had moderately adequate knowledge and 14 (28%) undergraduate students had adequate knowledge.

Therefore, it could be concluded that the planned health teaching regarding disaster preparedness among undergraduate students was effective.

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