# Earthquake preparedness of staff nurses research proposal



A STUDY TO ASSESS THE EFFECTIVENESS OF AN INFORMATION BOOKLET ON EARTHQUAKE PREPAREDNESS IN TERMS OF KNOWLEDGE AND PRACTICE OF STAFF NURSES WORKING IN SELECTED COMMUNITY HEALTH CENTERS OF GUJARAT STATE

# **INVESTIGATOR**

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### **ABSTRACT**

Disaster has been Mankind's constant though inconvenient companion since time immemorial. The fury of nature can be as disastrously beautiful as the gifts of nature received gratis. Natural disaster continues to strike unabated and without notice and is perceived to be on the increase in their magnitude complexity, frequency and economic impact. India has been traditionally vulnerable to natural disasters on account of its unique geo-climatic conditions. Floods, droughts, cyclones, earthquakes and landslides have been recurrent phenomena. About 60% of the landmass is prone to earthquakes of various intensities; over 40 million hectares is prone to floods; about 8% of the total area is prone to cyclones and 68% of the area is susceptible to drought. The main objective of the study was assessing the knowledge and practice of the Staff Nurses before and after the administration of an Information Booklet on Earthquake Preparedness in the selected Community health centre of Gujarat state. The conceptual frame work is based on System theory model. Materials Method used for the study was after a preliminary study on Earthquake Preparedness of Staff Nurses conducted at Adalaj CHC, a pre-post interventional study was performed on 8

CHCs of Gujarat State. Four districts of Gujarat state i. e. Ahmedabd, Gandhinagar, Panchamahal and Bharuch were selected randomly. Each CHCs of selected districts were randomly selected. While sample selection was done by Lottery Method. One group pre post design used for the study Data collection includes personal data, knowledge of Earthquake Preparedness of staff nurses with help of structured knowledge questionnaires, Practice of Earthquake Preparedness of staff nurses with help of structured observation check list. An Information Booklet was introduced in terms of knowledge and Practice performing by Staff Nurses on Earthquake Preparedness. Reliability of the tool was confirmed by Pearson test and validity was done from experts of different health department. Results of or Forty staff nurses were included from Eight CHCs of Gujarat state. For the knowledge it is reveals the comparison between pre-test and post-test knowledge score obtained by the Samples on Earthquake Preparedness. The mean pre test score is 15. 82 and the mean post test score is 29. 75. The Standard Deviation of pre test knowledge score is 2. 77 and that of the post test is 1.84. The calculated 't' is 13.92 and the tabulated' is 1. 68 at 0. 05 level of significance. For practice of the samples it is reveals the comparison between pre-test and post-test practice score obtained by the Samples on Earthquake Preparedness. The mean pre test score is 35, 47 and the mean post test score is 48, 025. The calculated 't' is 21. 37 and the tabulated' is 1. 68 at 0. 05 level of significance There was significant difference between pretest mean score and posttest mean score for knowledge and practice of samples regarding Earthquake Preparedness of Staff Nurses. After administration of an Information Booklet, there was improvement in samples' Knowledge and Practice. So it was concluded that https://assignbuster.com/earthquake-preparedness-of-staff-nurses-researchproposal/

An Information Booklet on Earthquake Preparedness increased the knowledge and practice of staff nurses working in selected CHCs of Gujarat State.

### Introduction

"Hospitals Safe from Disasters Reduce Risk, Protect Health Facilities, Save Lives," (World Health Day).

Disaster caused by nature's fury is not uncommon in this planet, earth. In fact, scientists believe that the birth of this planet, earth was the result of an explosion that occurred in the solar system, from time immemorial this planet has witnessed numerous natural disasters. In the past, man used to view this natural disaster as the "ACTS OF GOD" Gradually; science opened the doors of knowledge and enabled man to understand the mysteries of nature. On January 26, 2001 Gujarat was rocked by a violent earthquake. Thousands of people died and there was loss of about 400 crore rupees to the nation. It was one of the severest earthquakes to have hit the country. In served to highlight the gaping holes in the nation's disaster management ability. This devastating incident made the investigator take up the present study.

Nurses in any location will be on the front line as caregivers and managers in the event of a damaging, disaster. Having read the views of various authors the investigator is able to visualize that disaster situations are very different from routine nursing care situation. Nurses need to have adequate knowledge and training to work in such a unique, chaotic, stressful situation

and to identify and meet the complex, multi various health needs of victims of disaster.

India has been traditionally vulnerable to natural disasters on account of its unique geo-climatic conditions. Floods, droughts, cyclones, earthquakes and landslides have been recurrent phenomena. About 60% of the landmass is prone to earthquakes of various intensities; over 40 million hectares is prone to floods; about 8% of the total area is prone to cyclones and 68% of the area is susceptible to drought. In the decade 1990-2000, an average of about 4344 people lost their lives and about 30 million people were affected by disasters every year. The loss in terms of private, community and public assets has been astronomical. At the

global level, there has been considerable concern over natural disasters. Even as substantial scientific and material progress is made, the loss of lives and property due to disasters has not decreased. In fact, The human toll and economic losses have mounted. It was in this background that the United Nations General Assembly, in 1989, declared the decade 1990- 2000 as the International Decade for Natural Disaster Reduction with the objective to reduce loss of lives and property and restrict socio-economic damage through concerted international action, especially in developing countries.

# **OBJECTIVES OF THE STUDY:**

1. To assess the knowledge of the Staff Nurses before and after the administration of an Information Booklet on Earthquake Preparedness in the selected Community health centre of Gujarat state.

2. To assess the practice of the Staff Nurses before and after the administration of Information Booklet on Earthquake Preparedness in the selected Community health centre of Gujarat state.

### HYPOTHESES OF THE STUDY:

H1: The mean post test knowledge scores of the Staff Nurses after the administration of an Information Booklet on Earthquake Preparedness will be significantly higher than their mean pre test Knowledge scores as evident from the Structured Knowledge

Questionnaire at . 05 levels.

H2: The mean post test practice scores of the Staff Nurses after the Administration of an Information Booklet on Earthquake Preparedness will be significantly higher than their mean pre test practice scores as evident from the structured observational Checklist at . 05 levels.

# **OPERATIONAL DEFINITIONS**

- 1. Effectiveness: –it refers to the power of the information booklet to bring about changes in knowledge and practice of staff nurses regarding earthquake preparedness.
- 2. Informational Booklet: -A handy written material, which will enhance the knowledge of staff nurses regarding earthquake preparedness & improve practice of the staff nurse.
- 3. Earth Quake: -A sudden violent shaking of the ground as a result of movement within the earth's crust.

- 4. Preparedness:-is concerned with forecasting and working, education and training of population, organization for and management of disaster including preparation of operational plan, training of relief groups, ensuring adequate supplies of necessary funds.
- 5. Knowledge: -It is the ability of staff nurses to respond to a structured knowledge questionnaire regarding earthquake preparedness resulting as evident from knowledge score.
- 6. Practice: -It refers to the abilities of the staff nurse to guide and provide care to the earthquake preparedness with the use of informational booklet. At Evidence by Structured Observational Check List.
- 7. Staff nurse: staff nurse (male and female) who are working in community health center.
- 8. Community health center: -In this study CHC refers to community health center covering a population of 80, 000 to 1. 20 lake with 30 beds and specialist in surgery, medicine, obstetrics and gynecology, and pediatrics with X-ray and laboratory facilities.

# **DELIMITATIONS OF THE STUDY:-**

- 1. The study is delimited to Staff nurse of selected CHC of Gujarat state & accessible during the data collection will be selected for the sample.
- 2. The study is delimited to Staff nurse who are willing to participate in the study.
- The study is delimited to the CHC of selected district of Gujarat State only.
- 4. The study is delimited to the 40 staff nurses only.

### RESEARCH DESIGN

Research design selected for the present study was one group pre test post test design. The investigator had developed structured Knowledge

Questionnaire and Structured Observational Checklist for evaluation of pre test and post test.

# **RESEARCH SETTING:-**

The present study was conducted in the selected Community Health Center of Gujarat State. Investigator was divided Gujarat state in five regions (north, east, and west, south and central) and from that investigator will select any four districts by lottery method). From each district by lottery method investigator will select two Community Health Center.

# ANALYSIS AND INTERPRETATION

Materials Method used for the study was after a preliminary study on Earthquake Preparedness of Staff Nurses conducted at Adalaj CHC, a prepost interventional study was performed on 8 CHCs of Gujarat State.. Four districts of Gujarat state i. e. Ahmedabd, Gandhinagar, Panchamahal and Bharuch were selected randomly. Each CHCs of selected districts were randomly selected. While sample selection was done by Lottery Method. One group pre post design used for the study Data collection includes personal data, knowledge of Earthquake Preparedness of staff nurses with help of structured knowledge questionnaires, Practice of Earthquake Preparedness of staff nurses with help of structured observation check list. An Information Booklet was introduced in terms of knowledge and Practice performing by

Staff Nurses on Earthquake Preparedness. The main area of knowledge and Practice include - Introduction of Earthquake, Types and Phases of Disaster, Earthquake Preparedness and Care of Victim. Reliability of the tool was confirmed by Pearson test and validity was done from experts of different health department. Results for Forty staff nurses were included from Eight CHCs of Gujarat state. For the knowledge it is reveals the comparison between pre-test and post-test knowledge score obtained by the Samples on Earthquake Preparedness. The mean pre test score is 15. 82 and the mean post test score is 29. 75. The table also shows that the Standard Deviation of pre test knowledge score is 2. 77 and that of the post test is 1. 84. The calculated' t' is 13. 92 and the tabulated' is 1. 68 at 0. 05 level of significance. For practice of the samples it is reveals the comparison between pre-test and post-test practice score obtained by the Samples on Earthquake Preparedness. The mean pre test score is 35. 47 and the mean post test score is 48. 025. The table also shows that the Standard Deviation of pre test practice score is 3. 17 and that of the post test is 2. 03. The calculated' t' is 21. 37 and the tabulated' is 1. 68 at 0. 05 level of significance

There was significant difference between pretest mean score and posttest mean score for knowledge and practice of samples regarding Earthquake Preparedness of Staff Nurses. After administration of an Information Booklet, there was improvement in samples' Knowledge and Practice. So it was concluded that An Information Booklet on Earthquake Preparedness increased the knowledge and practice of staff nurses working in selected CHCs of Gujarat State.

# **CONCLUSIONS**

The following conclusions can be drawn from the study findings. For personal data investigator concluded the results and it is revealed that 18(45%) of the samples are in the age group of 31-40 years, 37(92.5%) are female, 40(100%) has not attend training regarding Disaster Management, 35(87. 5%) have the professional qualification of GNM and 17(42, 5%) have 6-10 years clinical experience and 39(97.5%) have not any experience related Earthquake Management. From knowledge questionnaire it is revealed that the mean difference in the area related to the Introduction of Earthquake is 3. 30, in area related to Earthquake Types and Phases is 1. 82, in area related to Earthquake Preparedness 5. 42 and while area related to Care of Victim is 3. 37. Samples have gained more knowledge in the area related to Earthquake Preparedness and Care of Victim. Obtained mean difference in all area of knowledge the calculated 't' is greater than tabulated 't' (1. 68) and so the investigator concluded that there is significant increase in the mean post test knowledge score as compared to the mean pre test knowledge score after the administration of an Information Booklet on Earthquake Preparedness which is statistically proved and so the null hypothesis Ho1 is rejected and research hypothesis H1 is accepted.. Mean post test knowledge score is higher than mean pre test knowledge score with the mean difference of 13. 92 which is statistically proved that the Information Booklet on Earthquake Preparedness is effective in terms of knowledge among the samples. The calculated 't' (13. 92) is significantly greater than the tabulated 't'(1.68) so there is significant increase in the knowledge of samples after the administration of the Information Booklet on Earthquake Preparedness.

For The Observational Checklist It is is revealed that the mean difference in the area related to the Arrangement of infrastructure and equipments is 6. 25, in area related to Preparation of Emergency kit articles is 2, 025, in area related to Communication Facility 3. 75 and while area related to Round the clock inspection of medicine and repair of equipment is 0, 53. Samples have gained more practice in the area related to Arrangement of infrastructure and equipments and Communication Facility. Obtained mean difference in all area of practice the calculated 't' is greater than tabulated 't'(1. 68) and so the investigator concluded that there is significant increase in the mean post test practice score as compared to the mean pre test practice score after the administration of an Information Booklet on Earthquake Preparedness which is statistically proved and so the null hypothesis Ho2 is rejected and research hypothesis H2 is accepted. Mean post test practice score is higher than mean pre test practice score with the mean difference of 12. 55 which is statistically proved that the Information Booklet on Earthquake Preparedness is effective in terms of practice among the samples. The calculated t' (21. 37) is significantly greater than the tabulated 't'(1.68) so there is significant increase in the practice of samples after the administration of the Information Booklet on Earthquake Preparedness. From all the above mentioned findings, it can be concluded that the administration of an Information Booklet was definite increase in both Knowledge and Practice of Staff Nurses. This clearly indicates that an Information Booklet on Earthquake Preparedness was effective in improving the Knowledge and Practice of the Samples.

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