"A STUDY TO ASSESS THE KNOWLEDGE REGARDING DISASTER PREPAREDNESS AMONG NURSING INTERNS UNDERGOING CLINICAL TRAINING AT R.L. JALAPPA HOSPITAL AND RESEARCH CENTER. KOLAR, WITH A VIEW TO DEVELOP INFORMATION HANDOUT."

By

MISS.NASREEN TAJ

Research Project submitted to the
Sri Devaraj Urs College of Nursing, Tamaka, Kolar
In partial fulfillment of the requirement for the degree of

MASTER OF SCIENCE IN NURSING

In

MEDICAL SURGICAL NURSING SPECIALITY

Under the guidance of

Dr.ZEANATH CARIENA JOSEPH

Prof.& HOD Dept. of Medical Surgical Nursing.

Sri Devaraj Urs College of Nursing&

Chief Nursing Officer of RLJH &RC

Tamaka, Kolar-563101

2023

DECLARATION BY THE CANDIDATE

I hereby declare that this dissertation entitled "**A study to assess the Knowledge regarding Disaster Preparedness among Nursing Interns undergoing clinical training at R.L. Jalappa hospital and Research Center. Kolar, with a view to develop information handout.**"is a bonafide and genuine research work carried out by me under the guidance of Dr. Zeanath Cariena.J, Prof & HOD Dept. of Medical Surgical Nursing, Sri Devaraj Urs College of Nursing and Chief Nursing Officer at RLJH&RC Tamaka, Kolar.

Signature of the candidate

(Miss. Nasreen Taj)

Date:

Place: Tamaka, Kolar

ii

CERTIFICATE BY THE GUIDE

This is to certify that the dissertation entitled "**A study to assess the Knowledge regarding Disaster Preparedness among Nursing Interns undergoing clinical training at R.L.Jalappa hospital and Research Center. Kolar, with a view to develop information handout.**"is a bonafide research work done by

Miss. Nasreen Taj in partial fulfilment of the requirement for the degree of Master of Science in Medical and Surgical Nursing.

Signature of the Guide

Dr. Zeanath Cariena.J.
Prof & HOD of Medical Surgical Nursing,
Sri DevarajUrs College of Nursing,
Chief Nursing Officer of RLJH &RC,
Tamaka, Kolar-563103.

Date:
Place: Kolar

ENDORSEMENT BY THE HEAD OF THE DEPARTMENT/ PRINCIPAL /HEAD OF THE INSITITUTION

This is to certify that the dissertation entitled, "**A study to assess the Knowledge regarding Disaster Preparedness among Nursing Interns undergoing clinical training at R.L. Jalappa hospital and Research Center. Kolar, with a view to develop information handout.**"is a Bonafede research work done by Miss.Nasreen Taj is under the guidance of Dr. Zeanath Cariena.J, in partial fulfilment of the requirement for the degree of Master of Science in Medical Surgical Nursing**.**

Signature of the HOD	**Signature of the Principal**
Dr. Zeanath Cariena J	**Dr. G. Vijayalakshmi**
Prof. & HOD Medical Surgical Nursing	Professor and Principal
Sri Devaraj Ur's College of Nursing	Sri Devaraj Ur's College of Nursing
Chief Nursing Officer RLJH & RC	Tamaka, Kolar
Tamaka, Kolar	
Date:	**Date:**
Place: Kolar	**Place: Kolar**

ACKNOWLEDGEMENT

*My sincere thanks and gratitude to all my **friends and my MSc Batchmates, Roommates*** *who have helped me in the successful completion of this study.*

My deepest and sincere gratitude to my Parents and family members for their prayer, love, affection, constant support, and encouragement throughout my study and for being at my side in time of difficulties.

No words can express my appreciation and indebtedness to many of them whose names have not been mentioned here but have contributed unselfishly and most willingly in the successful completion of this Research project.

<div align="right">

Signature of the candidate

(Miss.Nasreen Taj)

</div>

Date:

Place: Kolar

ABSTRACT

BACKGROUND AND OBJECTIVES

INTRODUCTION

Hospitals are one of the essential institutions that must continue to function when an emergency event occurs. In spite of its importance, health facilities are themselves vulnerable to disasters and can get damaged, risking the lives of patients and health workers.

A study was undertaken to "assess the Knowledge regarding Disaster Preparedness among Nursing Interns undergoing clinical training at R.L. Jalappa Hospital and Research Center. Kolar, with a view to develop Information Handout."

The study aimed to assess the knowledge regarding disaster preparedness among nursing interns and to determine the association between the knowledge scores with socio demographic variables.

Methods and materials

A descriptive survey design was adopted by using Purposive Sampling techniques among 75 Nursing Interns and collected data using structured knowledge questionnaire was used to collect the data based on expert's validation and inclusion criteria of the study.

Major findings

The major findings of the study highlighted that majority 58.66% (44) of the samples belongs to moderate knowledge and 38.6% (29) samples belongs to inadequate knowledge, 2.66% (2) samples belong to adequate knowledge. there are many studies conducted which supporting to the study.

RECOMMENDATIONS:

more and study can conduct in different settings to improve the knowledge of Nursing Interns.

CONCLUSION

Finally, the researchers concluded the findings of the study clearly showed that there was Moderate Knowledge on disaster preparedness among nursing interns, thus study recommended to conduct seminar and simulation training Programme to the nursing interns on current practice to save the lives of the nation through disaster preparedness.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ANNEXURES

CHAPTER-I

INTRODUCTION

"Preparation through education is less costly than learning through tragedy."

Disaster as any occurrence that causes damage, ecological disruption, loss of human life, deterioration of health and health services, on a scale sufficient to warrant an extraordinary response from outside the affected community or area. The impact of the disasters not only imply on life but also on the functional status of the individual and the society.

Hospitals are one of the essential institutions that must continue to function when an emergency event occurs. In spite of its importance, health facilities are themselves vulnerable to disasters and can get damaged, risking the lives of patients and health workers.

India's development graph in recent year 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 man-made disaster; blurring the between them to a large extent. These disasters have caused widespread destruction and fatalities, leaving the institution and the community wanting on the front of disaster related preparedness, relief, reconstruction, and recovery. Does development lead to disasters or do disasters open new avenues of development is the contemporary debate. The voices that are clearly audible on disaster policy initiatives and their participatory execution get attenuated when it comes to actualizing their sustenance[2].

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.[3]

India is vulnerable, in varying degrees, to many disasters. More than 58.6 percent of the landmass is prone to earthquake of moderate to very high intensity; over 40 million hectares(12%) of its land of prone to floods and river erosion; close to 5,700kms, out of the 7.516kms 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[3]

Disaster risk in India is 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, clearly all these contribute to a situation where disasters seriously threaten India's economy, its population and sustainable development.[3]
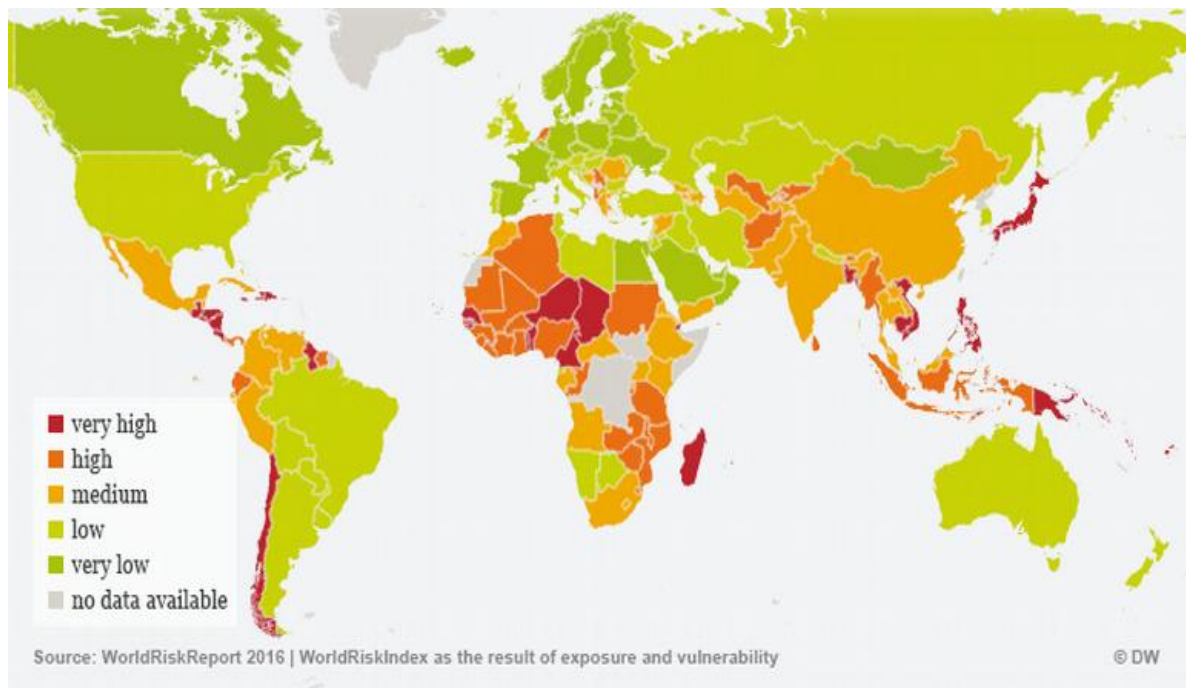
Fig.1. Disaster risk and prone areas in the world

Need for the study

Disasters are events that are unpredictable most of the time. It is important for any government, state, or community to manage disasters by being prepared for it in advance[4].

Disasters disrupt hundreds of thousands of lives every year. Each disaster has lasting effects, both to people and property[2].It prepares both teachers and students for potential disasters, thereby reducing the impact of said disaster. If the students can then transfer the knowledge to members of their families, it becomes general knowledge and the community can prepare as well[3].Preparing for disasters saves countless lives, speeds up people's recovery and saves money[4.]

A systematic review of scientific articles conducted from 2006 to 2016 on nurses' preparedness for disasters. Keywords used in this review were as follows: 'emergency', 'disaster', 'disaster preparedness', 'disaster competencies', 'disaster nursing', 'disaster role' and 'nurse'. Seventeen (17) articles were selected for this review. The findings of this review contribute to a growing body of knowledge regarding disaster preparedness in nurses and have implications for academia, hospital administration and nursing educators. The findings of this review provide evidence that could be used by nurse educators and nurse administrators to better prepare nurses for disaster response.[5]

A disaster preparedness education intervention was performed using a non-randomized controlled trial of a convenience sample with a pre- and post-intervention survey. Participants came from a health professions educational enrichment program for students from under-resourced high schools in the Kansas City area. The results

are the experimental group shows statistically significant improvement in knowledge of disaster topics post-intervention. Of 18 adapted EPIQ tool questions, 17 show statistically significant improvement in disaster knowledge post-intervention for the experimental group with significance set at $p < .05$ (range of significant p values .000-.017). This study revealed that the education intervention was effective and cost-efficient. In Disaster preparedness education should be included in the secondary school curriculum.[6]

Nurses are the largest group of healthcare providers who play vital roles in delivering disaster responses to an affected community. Therefore, it is essential for nurses to have a set of competencies that guide the development of their knowledge and skills in order to help people in the aftermath of a disaster.

The International Council of Nurses (ICN) and World Health Organization (WHO) have formulated the ICN Framework of Disaster Nursing Competencies in 2009, which was then revised in 2019. The second version of the ICN Framework of Disaster Nursing Competencies (ICN 2019) consists of eight domains: Preparation and Planning, Communication, Incident Management, Safety and Security, Assessment, Intervention, Recovery, and Law and Ethics[7].

According to global data the number of deaths from natural disasters can be highly variable from year-to-year; some years pass with very few deaths before a large disaster event claims many lives. Natural Disasters were responsible for 0.1% of deaths over the past decade. This was highly variable, ranging from 0.01% to 0.4% in the world visualization shown here the long-term global trend in natural disaster deaths. This shows the estimated annual number of deaths from disasters from 1900 onwards from the EMDAT International Disaster Database.[8]

During 2022, several countries in the region registered increases in the number of dengue, Zika, and chikungunya cases compared to those reported in 2021. During the first months of 2023, chikungunya and dengue fever outbreaks of high magnitude were recorded in South America. Before the start of the high season of dengue transmission in Central America and the Caribbean, the Pan American Health Organization / World Health Organization (PAHO/WHO) recommends that Member States review and adjust their preparedness and response plans to face possible outbreaks of dengue and other arboviral diseases in order to avoid deaths and complications from these diseases[9].

As reported Nationally India is among the world's most disaster-prone countries with 27 of its 29 states and seven union territories exposed to recurrent natural hazards such as cyclones, earthquakes, landslides, floods and droughts.[10]The incidence report of disaster in India-2023 is.[11]Ludhiana gas leak disaster-30 April, Rajasthan MiG-21 crash, Thathri land subsidence, Badakhshan earthquake, Cyclone Biparjoy, Indore step well collapse-30 March , Cyclone Mocha, Odisha train collision-2 June , Tanur boat disaster-7 May , Maharashtra heatstroke-16 April. Further, the Odisha train collision tragedy has highlighted by Government officials that **1,175** people had been admitted to hospitals as a result of the crash; **793** of those people had been released, and **382** were still undergoing treatment. Local hospitals were overwhelmed by the influx of injured people, but worked to provide patients with adequate care[11].
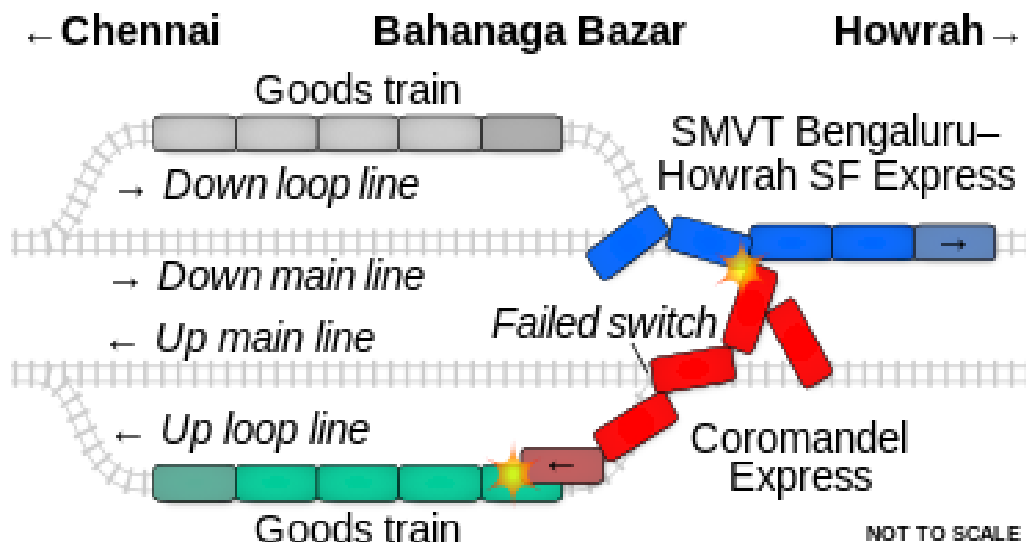
Fig.2.Simplified diagram of the 2023 Odisha train collision.

Preliminary survey

Based on the available literature with gaps identified and the personal experience of the investigator most of the Nursing Interns in preliminary survey conducted on 30 Nursing Interns were found to have inadequate knowledge about disaster preparedness and action plan in the process of trauma individuals. Thus, the researcher strongly felt the need to explore the level of knowledge among nursing interns to improve the knowledge and contribute to the health care sectors by empowering the Novice Nurses i.e., Nursing Interns for Emergency preparedness to save the Nation's health in times of disaster and crisis.

STATEMENT OF THE PROBLEM

"A study to assess the Knowledge regarding Disaster Preparedness among Nursing Interns undergoing Clinical Training at R.L. Jalappa Hospital and Research Center. Kolar, with a view to develop Information Handout."

OBJECTIVES OF THE STUDY

1. To assess the level of knowledge regarding Disaster Preparedness among Nursing Interns by using Structured Knowledge Questionnaire.

2. To determine the association between knowledge scores with selected socio demographic variables of Nursing Interns undergoing clinical training.

ASSUMPTIONS

1. Nursing interns had some Knowledge regarding Disaster Preparedness.

2. Increase in the Knowledge among Nursing Interns on disaster preparedness may influence the Nursing Emergency preparedness.

OPERATIONAL DEFINITION

1.   KNOWLEDGE:

It is the information and awareness that a person has in his mind regarding a person, fact, or a thing gained through his own experience[12].

In this study Knowledge refers to the level of understanding of Nursing Interns regarding disaster preparedness which is measured using Structured Knowledge Questionnaire.

2. NURSING INTERNS

In this study nursing interns refers to the students who are studying in fourth year Basic B.Sc. (N) and undergoing clinical training at R.L. Jalappa hospital and Research Center.

3. DISASTER PREPAREDNESS:

In this study disaster preparedness refers to a process of effectively preparing for triaging, sorting, initiating treatment as per the Doctor's order stabilizing patient and shifting to right clinical area for future management.

4. INFORMATION HANDOUT:

In this study the information handout refers to the systematically organized set of information gathered from the evidence literature with regard to disaster preparedness and based on the knowledge assessment made by the researcher by using Structured Knowledge Questionnaire which includes triaging, sorting, initiating treatment as per the Doctor's order stabilizing patient and shifting to right clinical area for future management.

CONCEPTUAL FRAME WORK

Concept is defined as a complex mental formulation of an object, property or an event that is derived from the individual's perception and experience[13] conceptual frame work is the overall underpinnings of a study which consists of a set of inter-related concepts or abstracts that are assembled in some rational scheme by virtue of their relevance to the common theme[14].

Conceptual frame work for the present study adopted by the investigator is based on Nola. J. Pender's Health Promotion Model (Revised-HPM2002) (Fig no: 3). Health Promotion is defined as activities directed towards the development of resources that maintain or enhance an individual wellbeing. On the other hand, illness prevention or

health protection is described as behavior motivated to actively avoid illness or detect the illness at the earliest stage[15].

The focus of this model is to explain the reasons that individual engages in health activities. It focuses on the three functions of a client;

1. Cognitive perceptual factors (individual perception)

2. Modifying factors (demographic and social)

3. Participation in health behavior. (Likelihood of action).

This model organizes cues into a pattern to explain the likelihood of individual developing health promotion behavior[16]. Further this model also enhances on moving towards understanding the multi faced nature of persons correlating with their interpersonal nature and interacting with their interpersonal and physical environments as they modify their behavior towards health.[17]

Pender's major concepts and definitions include the following:

1. Individual characteristics

2. Behavior specific cognitive-perceptual factors and affect.

3. Behavioral outcomes

INDIVIDUAL
CHARACTERISTICS

BEHAVIOUR SPECIFIC TO
COGNATIVE PERCEPTUAL
FACTORS AND AFFECT

BEHAVOIRAL
OUTCOME

Perceived benefit of action
Improved level of knowledge on disaster preparedness.

Perceived barriers to action
lack of knowledge, inadequate information on preparedness, lack of educational materials

Perceived self efficacy
Ability of the nursing interns to carry out the behaviors necessary to achieve a desired outcome and in managing the disaster

Activity related affect
nursing interns preparing for disaster preparedness that will be influence the implementation on care of the victims.

Interpersonal influences
include peer group and healthcare personals who plays major role in practice of health promotion activities by Nursing Interns in disaster preparedness.

Situational influences
access to health facilities, previous exposure on disaster preparedness and availability of information booklets and pamphlets regarding disaster preparedness.

Personal factors

Biological factors:
Age, gender, previous experiences/exposure in handling/witnessing disaster and residence.

Immediate competing demands

Commitment to plan of action
assessment of Knowledge level regarding Disaster Preparedness among Nursing Interns and distribution of Information handout on Disaster preparedness.

Health promotion behavior improved knowledge level.

Fig no 3 Health Promotion Model (revised) redrawn from Pederson's. N.J – Health Promotion

1.INDIVIDUAL CHARACTERISTICS

Individual characteristics that focus on:

a. **Prior related behavior:**

It refers to the frequency of the same behavior experienced in the past[17]

In this study, it refers to the previous knowledge of nursing interns regarding disaster preparedness.

b. **Personal factors:**

Personal factors include biological, psychological, and socio-cultural factors that directly and indirectly influence in the health promotion behavior.[18]

In this study biological factors includes age, gender, residence and previous experiences/exposure in handling/witnessing disaster.

Psychological factors are not included in this study.

2. **BEHAVIOR SPECIFIC COGNITIVE-PERCEPTUAL FACTORS AND AFFECT**

Behavior specific cognitive-perceptual factors and affect that focuses on:

a**. Perceived benefits of action**:

Perceived benefits of action refer to the anticipated positive outcome of the proposes health promotion behavior.[17]

In this study this includes Increased Knowledge on Disaster Preparedness.

b. Perceived barriers of action:

Perceived barriers of action are the real and imagined barriers to health behavior change.[18]

In this study it refers to lack of Knowledge regarding disaster.

c. Perceived self-efficacy:

Perceived self-efficacy refers to the personal judgments about individual capabilities to organize and consistently perform new behavior.[17]

In this study it refers to the ability of the Nursing Interns.

d. Activity related effect:

Activity related effect refers to the activities of individuals that are greatly influencing them to organize and consistently perform new behavior.[15]

In this study this includes the Nursing Interns preparing for disaster preparedness that will be influencing them in performing health promotion activities.

e. Inter personal influences:

Inter personal influences refer to the encouragement and support exerted by others on an individual in performing new behavior.[18]

In this study this include peer group and healthcare personals who plays major role in enhancing the health promotion activities of Nursing Interns in disaster preparedness.

f. Situational influences:

Situational influences refer to the external factors that affect the individual's perception of the proposed disaster preparedness behavior such as when, where, and how the activity will take place[18].

In this study the situational factors are access to health care facilities, previous exposure on disaster preparedness and availability of information booklets and pamphlets regarding disaster preparedness.

3. BEHAVIORAL OUTCOMES.

a) **Commitment to plan of action:**

Refers to the person's intention to change and the creation of plan of action to accomplish the implementation of health promotion behavior.[15]

The plan of action in the present study includes assessment of Knowledge level regarding disaster preparedness among nursing interns and distribution of information booklet on disaster preparedness.

b) **Health promotion behavior:**

It is defined as an action directed towards attaining positive health outcomes such as optimal wellbeing, personal fulfillment and productive living[17].

In this study, it refers to the adaption to health promoting behavior and preparation thus exhibiting an adequate / improved level of knowledge by the Nursing Interns.

PROJECTED OUTCOME

The study will help the Nursing Interns specifically in improving Knowledge on disaster preparedness particularly in mitigation, preparedness, response, recovery, and rehabilitation. Thus, improved knowledge level will ultimately improve their quality of life of people affected with disaster.

Summary

This chapter has outlined on the statement of research problem, objectives, operational definition, and the assumptions, conceptual framework, and projected outcome of the present study. The investigator found that the health promotion model was significant in the present study as the Knowledge of the Nursing Interns will influence and improve to save the lives of Nation.

CHAPTER-II

REVIEW OF LITERATURE

Review of Literature is a broad, comprehensive, in depth, systematic and Critical review of scholarly publications. It is essential to understand what known about the topic is already. A thorough review of literature provides a foundation upon which the new knowledge can be based and built on[18].

This chapter deals with a review of published and unpublished research studies and related materials for the present study. This review helped the investigator to develop an insight into the problem under the study and for building the foundation of the study.

The literatures for the present study are reviewed from the text books, journals, electronic resources, and are presented as below;

The studies related to disaster preparedness among nursing interns

A descriptive, analytical study was conducted in western Iran in 2020.Nursing Students' competency to attend Disaster Situations: A total of 70 nursing students in the fourth (final) year of their undergraduate nursing education entered the study by a census sampling method. Data collection was undertaken using a validated disaster competency assessment questionnaire. The mean age of participants was 21.4 ± 2.14 and 57.1% of them were women; 45 participants (64.3%) had received no disaster-related training, and 88.6% had no history of participating in disaster exercises. The total score for nursing students' competence was 125.58 ± 14.19. There was a

significant relationship between the mean score of nursing competence in response to disasters and student history of participating in an exercise and training course (P < 0.001). The study revealed that Students' competence in disaster situations is poor. Awareness of the competence condition of nurses is the first step to improve their preparedness as the most key members of the disaster health team. Conducting disaster-related training may be appropriate. This study can provide evidence for the development of educational policies in disaster nursing education.[21]

A cross-sectional study was conducted on knowledge and attitude regarding disaster management and emergency preparedness among nursing students of Delhi, NCR. The study aimed to assess the knowledge and attitude of nursing students regarding disaster management and emergency preparedness. Structured questionnaire was used to obtain the data from 130 nursing students. Median age of study participants was 22(18-31) years. Majority of the students (96.9%) were females. Out of total, 62(47.69%) were GNMs, followed by B.Sc. nursing 52(40.0%), post b.sc nursing 10(7.69%) and M.Sc. nursing 6(4.61%). Only 58(44.6%) students underwent for mock drill regarding disaster management. A very few 18 (13.8%) students experienced disaster earlier. Based on the limited sample size, study revealed that the knowledge and attitude regarding disaster management and emergency preparedness among nursing students were sub-optimal. So, researcher strongly felt that there is a continuous need for training workshops to be organized among nursing students to provide the current knowledge in the area with a behavioral change in the attitude leading to better management in case of emergency[22].

A non-experimental descriptive study was conduct in Dharapuram in bishop's college. The study title was to assess the knowledge and practice regarding disaster

management among 4th year B.SC (N) students of 45. The results of the studies revealed that the students has5 (11%) inadequate knowledge, 33(73%) had moderate adequate and33 (73%) had moderate knowledge, 1(2%) had inadequate practice about 35(78%) had moderate adequate, 9(20%) had adequate practice of disaster management.[24]

A Descriptive Study was conducted at Mangalore, Karnataka, India, with the aim to assess the Knowledge and Attitude Regarding Disaster Management among Nursing Students from Selected Nursing College Mangalore the 83 nursing students were selected by using non probability purposive sampling techniques. Structured Knowledge Questionnaire used to identify knowledge and Attitude among selected demographic variables the results of the study shows that majority 29% of the students have average knowledge, 63% had good knowledge regarding disaster management. The study concluded that the nursing students have good knowledge (63%) regarding the disaster management[25].

A cross-sectional survey conducted among nurses from 22 provinces of China in February 2020 to assess knowledge on Covid -19. The scores of self-report questionnaires were used to analyses their competencies for core emergency care, and linear regression analysis was used to explore influential factors. A total of 2570 nurses participated and had a good grasp of COVID-19 knowledge, but most of the nurses lacked experience in isolation ward work and emergency training. We found that age, professional title, work department, major work content, total work time, disaster rescue history, emergency training and infectious disease training were associated with core emergency competencies. The study revealed that Chinese nurses were qualified for handling COVID-19 but still need to strengthen the accumulation

of practical experience. Nurses should actively participate in emergencies to strengthen their operational capacity, whether in training or actual practice[19].

A Quantitative descriptive cross-sectional study conducted in two hospitals at Children Hospital & Institute of Child Health Lahore and General Hospital Lahore. With the aim to assess the Nurses Knowledge and Practices Regarding Disasters Management and Emergency Preparedness among 250 professional nurses working in Emergency departments and triage. Sample size was 156 which include head nurses and charge nurses in 2 hospitals. Data was collected through questionnaire which was distribution among the 156 participants. 14.1% was head nurses and 85.9 % were charge nurses who fill the questionnaire. Results of the study revealed that, chi-square the experience-knowledge p value .014, marital status-knowledge p value .014, qualification practice p value .013 and designation-knowledge p value .019 were found signification (p value less than normal value 0.05), rest of others variables found no significant hence among them any association were not found. The study revealed that the participants have a good knowledge on disaster, disaster drills, disaster plan, disaster management and emergency preparedness. The overall knowledge of the participants in the present study was 65.4%. [20]

A qualitative pre-experimental one group pre-test-post-test design study was conducted to assess the effectiveness of video assisted teaching programme on knowledge regarding Disaster management among people in Mehsana city,100 people were selected by using Self-structure knowledge questionnaire the sampling technique was used is simple random sampling technique the results revealed that "T" value (163.28) was greater than the table value (1.98) at 0.05 level of significance The pre-test and post-test mean % is 35.40% and 71.10% and different is 35.70%.the

knowledge is increase after the intervention so that the study concluded video assisted teaching programme was effective in this study .the recommendation of the study was to carried the evaluate efficiency of various teaching strategies like self-instructional module, pamphlets, leaflets, and computer assisted instruction on disaster management[23].

A cross-sectional and descriptive study was conducted in Turkey aimed to determine nursing students' knowledge levels on disaster nursing and their state of disaster preparedness included fourth-year nursing students in two universities located in the Ankara and Konya provinces of Turkey. The sample of 146 students who were studying in a nursing department of University A in the province of Konya, and 137 students who were studying in the nursing faculty of University B in Ankara province. Results revealed that 51.6% students were nursing students in university a located in Konya, with 48.4% studying at University B in Ankara. so that this study found significant differences between students in both universities in terms of their having received education about disasters, disaster nursing, and knowledge scores on disaster nursing. Recommended that It would be effective for teaching nurses, who have full knowledge of the field, are aware of their tasks and responsibilities before, after and during disaster, and who can properly display their professional proficiencies, to organize in-service training programs for healthcare staff[26].

A descriptive study was conducted in Mahalakshmipuram, Bangalore on 100 subjects with the aimed to assess the knowledge about disaster preparedness among inhabitants in a selected urban area, Bangalore, with a view to develop an information booklet. Survey approach with self-administered questionnaire used to collect the data. Results shows that among 100 respondents 32% of them had inadequate

knowledge, 53% had moderate adequate knowledge and 15% of them had adequate knowledge on disaster preparedness the study interpret that community inhabitants had adequate knowledge on disaster preparedness.[27]

A longitudinal pretest-posttest group study was conducted to find out the effectiveness of demonstration on knowledge attitude and practice on disaster preparedness among general public at Puducherry. With 90 samples were selected by using cluster sampling technique the results revealed that 533.33% of them had adequate knowledge, 72.22% of them had favorable attitude and 50% of them are practicing in post-test level respectively. Study revealed that the education plays a major role in changing knowledge. Recommended for further studies regular training and awareness programmes on various disaster preparedness to the general and public to improve the readiness and able to manage the situation during disaster [28].

A cross-sectional analytical descriptive study was conducted to evaluate the level of knowledge, attitude, and practice of hospital staff to prepare for disaster. Questionnaire was used to collect the data from 350 hospital staff were selected by using cluster sampling method. The mean scores for knowledge (74.5%), attitude (89.5%), and practice (29.2%) of participants had good knowledge, attitude, and practice. The Results revealed that good level of knowledge and attitude and a moderate level of practice in hospital staff in terms of disaster preparedness. It recommends that necessary to hold both theoretical and practical training programs as well operational maneuvers with an emphasis on repetition with appropriate[29].

A Cross-sectional research study was conducted, to evaluate the hospital disaster preparedness information of health personnel working in a foundation university hospital in Istanbul.1332 health personnel was selected by using easy sampling

technique with questionnaire. The study results shows that the mean score of disaster preparedness information score was minimum 8 maximum 84 most of the participants stated that there were not informed about their responsibilities and duties in case of disasters and current disaster, emergency plan was not told them. The study conclude that the hospital fulfils physical precautions such as emergency exit signs, fire extinguishing tubes and an alarm system, it thought that there are deficiencies in the participation of health personnel in the disaster management process[30].

A prospective descriptive cross-sectional study was conducted in a tertiary care teaching, research, and referral medical institute south India. With the purpose to assess the knowledge, attitude and practice regarding disaster preparedness and management among health care professionals.300 health care professionals were selected by using stratified random sampling by using self-administered questionnaire. The study results shows that 182 participants were had responded. 61% of that is satisfactory out of 182, 14 forms were discarded due to incomplete or incorrect. Rest of 168 questionnaires was analyzed. The health care workers had (22.6%), doctors (27%), were nurses had (28.6%), technicians and belongs to administrative staffs (21.4%). Among these groups nursing staff showed the highest level of knowledge followed by doctors, administrative staff and lastly technicians. study revealed that lack of sound knowledge among the health care workers regarding disaster preparedness and management. The attitude of the staff was found to be positive about the need of disaster plan, its timely update, conducting drills and training programmes, which was found the hospital did not have training or awareness programs for the staff[31].

A descriptive, cross-sectional research study was conducted with title assessment of emergency preparedness among university students.187 undergraduate participants

were selected by using self-report tool with convenience sample technique. Results show that lack of time was one of the most common barriers for students in regard to preparedness. Students were not being taught about emergency/disaster preparedness by instructors. There are many barriers to emergency preparedness among university students which is why continued research on the relationship between emergencies/disaster preparedness, behavior, and personal responsibility is critical in the future.[32]

A descriptive study was conducted with the aim to study on disaster awareness and preparedness among college students in district Ganderbal Kashmir valley on 400 students were selected randomly with self- administered questionnaire to collect the data. The study results shows that about 82.75% students know about disaster plan, a small percentage of 17.75% know where to find a disaster plan, 39.25% have knowledge about mock drills, 32.25% understand functions during a mock drill and about 69.75% students know disaster preparedness. the study concluded that there is a general lack of information among students regarding disaster awareness and preparedness.[33]

A structural equation analysis was conducted with the aim of disaster preparedness and awareness among university students of 111.the purpose of the study is to enable university stakeholders to identify the disaster preparedness indicators which is important to the students for upgrade their programs. Findings of this study revealed to help the faculty and academic staff updates existing programs and incorporate new ones. It also allows the policymakers to effectively assess the universities existing emergency preparedness policies and procedures[34].

A Multicenter descriptive cross-sectional study was conducted with the aimed of assessment of disaster preparedness and related impact factors among emergency nurses in tertiary hospitals. In Province of China with 265 emergency nurses from 48 tertiary hospital. Self-designed questionnaire was used to collect the data through WeChat software based on Smartphone. The results of the study revealed that moderate level of disaster preparedness with a mean item score of 4.24 out 6.0. the mean item score for pre-disaster awareness was highest, while that for disaster management was the lowest. Study concluded that it was a clear from the study that emergency nurses had a moderate level of disaster preparedness, there were seven factors affecting disaster preparedness. Optimizing and detailing these strategies will be interesting issue that is worth pursing in the future[35].

SUMMARY

This chapter has provided a review of literature relevant to the problem stated. The literature presented was extracted through hand search and electronic search. It includes primary and secondary sources. It has helped the investigator in understanding the impact of the problem.

CHAPTER- III

METHODOLOGY

This chapter deals with the methodology adopted for the proposed study and the different steps under taken. It includes research approach, research design, setting, sample and sampling techniques sampling criteria development and description of the tool, procedure of data collection and data analysis.

Methodology of the research indicates the general pattern of organizing the procedure for empirical study together with the method of obtaining valid and reliable data for problem under investigation.[17]

RESEARCH APPROACH

The term "research approach" refers to a group of policies and strategies that determine the entire course of research. The researcher has chosen the strategy and process for gathering, analyzing, and interpreting the data. It is mostly dependent on the nature of the study problem that was chosen and on providing the most precise and effective solution possible[36].

The research approach used for this study is Quantitative survey approach.

RESEARCH DESIGN

Research design is an investigator overall plan for obtaining answers for the research questions[17].A researcher's structural framework to combine several research methodologies and procedures. It is a method for answering the research question that

aids in choosing the study's goals and guarantees that the research methods are appropriate for the job and employ the right method of data analysis[36].

The research design, adopted for this study is descriptive design.

(Fig.4)SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY

Title	A study to assess the Knowledge regarding Disaster Preparedness among Nursing Interns undergoing clinical training at R.L. Jalappa Hospital and Research Center. Kolar, with a view to develop Information Handout.
Research Approach	Quantitative approach
Design	Descriptive design.
Sample & Sample Size	**75 Nursing Interns**
Setting	Nursing interns undergoing clinical training at R.L. Jalappa hospital and Research Center. Kolar.
Sampling Technique	**Purposive Sampling Technique**
Data Collection Tool	**Structured Knowledge Questionnaire**
Analysis & Interpretation	**Descriptive and Inferential Statistics**

Utilization of Information-by-Information handout.

SETTING OF THE STUDY

Setting refers to the area where the study is conducted.[17]

The study will be conducted among Nursing Interns undergoing clinical training at R.L. Jalappa hospital and Research Center. Kolar.

POPULATION

The population for the study refers to the group which represents the entire group or all the elements like individuals that meet inclusion criteria in the study.[17]

All the Nursing Interns undergoing clinical training at R.L.J.H&RC. Tamaka, Kolar.

SAMPLE

Sample refers to subset of the population that is selected to participate in a particular study[17].

The sample for the study consists of Nursing Interns undergoing training at R.L. Jalappa Hospital and Research Center.

SAMPLE SIZE

The sample size consists of 75 Nursing Interns.

Sample size determination

Power analysis is used to determine the sample size for this study, which considers results from earlier research and a thorough examination of the literature. This is derived by employing the technique to assess the difference between two means with a power of 95% and a predetermined significance level of 95% (CI) and 5% absolute error (d), the estimated sample size is around 85. If 10% of the sample's dropouts are taken into account, the sample size is around 75 nursing interns The following formula is used to determine the sample size for a difference in two means:

A total of 65 nursing interns hers were participated as study participants in the study referred to as the sample size. The sample size was determined by utilizing comparable study literature

$$n = 2\ \frac{\sigma^2(Z_\alpha + Z_{1-\beta})2}{(d)^2}$$

SAMPLING TECHNIQUE

Sampling technique defines the process of selecting a group of people or other elements with which to conduct a study.[15]

For the present study purposive sampling technique was adopted to collect the data.

Variables of the study

In research, a variable is any quality of a participant, location, event, or phenomenon that the researcher attempts to quantify in some way.

Study variable: Knowledge

Attribute Variable:

A variable is a measurable quality or trait of a study subject that the researcher cannot alter; instead, they can only measure or characterize the variable in accordance with the established system for measurement or categorization[17].

In this study, "Attribute Variables "describes the typical personal and professional traits of nursing interns, such as age, gender, previous experiences/exposure in handling/witnessing disaster and residence.

SAMPLING CRITERIA

INCLUSIVE CRITERIA:

Nursing Intern's undergoing clinical training who are

- Willing to participate in the study
- Available during the time of data collection.

EXCLUSIVE CRITERIA:

- Nursing interns who are not available at the time of data collection

SELECTION AND DEVELOPMENT OF TOOL

An instrument is a device or technique that a researcher used to collect data based on the research problem and the objectives of the study[17]

The following steps were undertaken for selection and development of the tool.

Structured Knowledge Questionnaire is developed to collect data which consists of the following sections.

Section –A: Socio demographic Performa

It consists of age, gender, previous experiences/exposure in handling/witnessing disaster and residence.

Section-B: It consists of Structured Knowledge Questionnaire includes

- Questions related to information specific on General knowledge on disaster.

- Questions related to information specific to Definition and types disaster. prevention mitigation, preparedness, Response, recovery, rehabilitation and triaging, sorting, initial treatment as ordered and stabilizing patient and shifting to right clinical area for further management.

Scoring

The total Structure Knowledge Questionnaire had 36

The Structure Knowledge Questionnaire **had 36 items.** Each **c**orrect response had a score of "1," wrong response was scored with zero. Each multiple-choice question has four possible answers. The interpretation of the level of knowledge was graded as:

Si. No	Knowledge scores	Score range
1	Inadequate knowledge	≤50% (≤18)
2	Moderately adequate knowledge	51-75%(19-27)
3	Adequate knowledge	>76%(28-36)

ESTABLISHING CONTENT VALIDITY AND RELIABILITY OF THE TOOL:

VALIDITY:

Drafted data collection tools/instruments with a Competency-based Training program were submitted to around five experts for validation, along with the

statement of the problem, objectives, operational definitions, blueprint, and criteria rating scale. Experts suggested modifications in a few of the items in the questionnaire. Based on the expert's suggestions tool and competency-based training program were modified and finalized.

Reliability

The reliability defined as the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure[17].

The tool was admitted to 10 nursing interns. In order to establish reliability of the tool, the split half technique using Spearman's Brown Prophecy (annexure-0) formula was used. The obtained values of reliability by using spearman's brown prophecy formula is r = 0.89. So, the Structure Knowledge Questionnaire found to be reliable.

Item Analysis

To determine the effectiveness of each test item by examining the subject's response to the item, item analysis was done for the structured knowledge questionnaires on disaster preparedness along with the reliability test. The difficulty value index (D.V.) was estimated for all the questions and interpreted appropriately. Only a small number of questions were determined to be challenging, and those questions were changed. For those items to have the necessary level of difficulty and discrimination index, the language has to be streamlined.

ETHICAL CONSIDERATION:

The formal ethical permission was obtained from the Institutional Ethics Committee. The permission for conducting the research was obtained from

principal nursing college. Written informed consent was obtained from the study subjects and reassurance of confidentiality of information was given to the study participants.

PILOT STUDY:

The pilot study, which had a sample size requirement of 10 nursing interns, was carried out in the month of April 2023. The concerned authorities gave the investigator official written consent. By guaranteeing the participants' privacy, informed consent was achieved. Participants' answers to structured questionnaires on knowledge were used to compile the data. The nursing interns receives the information booklet includes triaging, sorting, initiating treatment as per the Doctor's order stabilizing patient and shifting to right clinical area for future management. The tools were feasible to achieving the goals.

METHOD OF DATA COLLECTION

The data was collected in the month of May-2023 by using the following steps:

Preparation phase:

Step 1: Ethical clearance was obtained from the Research and Ethics Committee of the Sri Devaraj Urs College of Nursing, A formal written permission was obtained from principal of nursing college.

Step 2: The sample was selected by using a purposive sampling technique of 75 Nursing Interns who fulfilled the inclusion criteria.

Data collection phases:

The researcher first established good rapport with the Nursing Interns and then purpose of the interview was explained to the Nursing Interns. Written Informed Consent (Anneure-k_1&k_2), was taken from the study participants. Nursing interns were interviewed separately and the data was collected by Structure Interview Schedule using Structure Knowledge questionnaire on disaster preparedness.

4. **Closing phase**

After collecting the needed information, the information handout was given on disaster preparedness discussing on mitigation, preparedness, response, recovery, and rehabilitation.

```
Permission from concerned
authority
        │
        ▼
Selection of samples based
on inclusion criteria
        │
        ▼
Obtained
informed consent
        │
        ▼
Assessment of knowledge among Nursing
Interns by using Structure Knowledge
Questionnaire on disaster preparedness
        │
        ▼
Distribution of
Information handout on
disaster preparedness
```
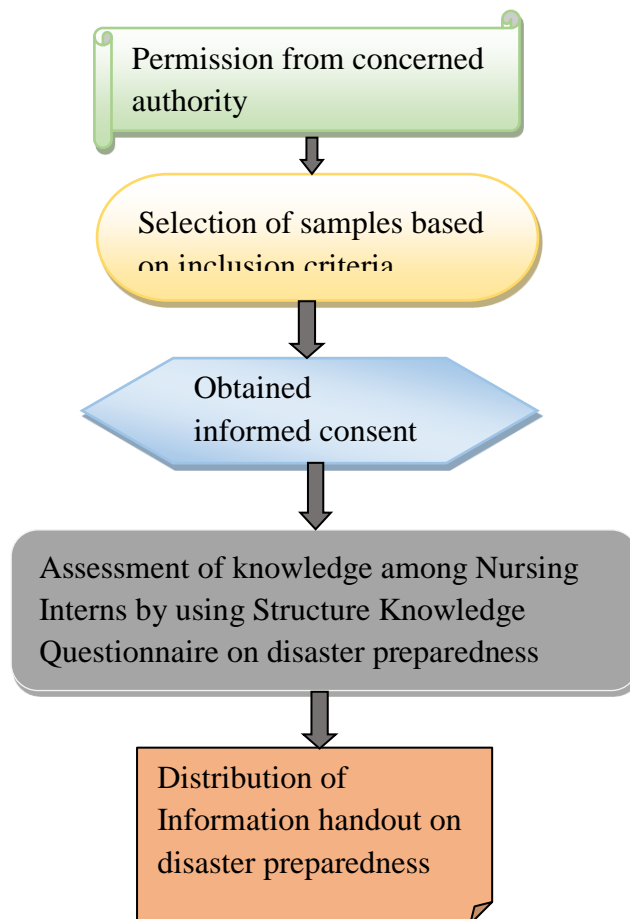
Fig. No 5: - Schematic representation of method of data collection

PLAN FOR DATA ANALYSIS

data analysis is the schematic organization of research data based on the objectives and assumptions of the data. [37]

The following steps are planned:

1. Data was organized on master sheet.

2. Socio-demographic data were analyzed in terms of frequency and percentage.

3. Calculation of mean, standard deviation and mean percentage of knowledge scores were done.

4. Association of selected demographic variables with knowledge scores was analyzed by Chi-square test χ^2 test.

SUMMARY

This chapter dealt with the methodology adopted for the present study. It included research approach, research design, variables under study, research setting, population, sample, sampling technique, development of the data collection tools, description of tools, determining validity and reliability, pilot study, procedure of data collection and the plan for data analysis. The coming chapter deals with analysis of data using above statistical methods.

CHAPTER IV

ANALYSIS AND INTERPRETATION

This chapter highlights on the analysis and interpretation of data collected from the 75 Nursing Interns undergoing training at R.L. Jalappa hospital and research center. Tamaka, Kolar in order to assess the knowledge regarding disaster preparedness. The data collected from the Nursing Interns before the information handout, was distubuted analyzed and interpreted by using descriptive and Inferential statistics.

The data collected was analyzed based on the following objectives of the study:

1. To assess the level of Knowledge regarding disaster preparedness among Nursing Interns by using Structured   Knowledge Questionnaire.

2. To determine the association between Knowledge scores with selected socio demographic variables of Nursing Interns undergoing clinical training.

ORGANIZATION OF FINDINGS

The analyzed data is organized and presented under the following sections based on objectives.

Section 1:

Description of frequency and percentage distribution of the Nursing Interns according to the demographic variables.

Section 2:

Deals with the pertaining to the first objective of the study, which is assess the level of knowledge regarding disaster preparedness among Nursing Interns by using Structured Knowledge Questionnaire.

- Overall level of knowledge.

- Area wise level of knowledge

Section 3:

This section delas with the finding related to the second objective association between the pre-test knowledge scores with selected demographic variables of Nursing Interns.

Section -I

SOCIO DEMOGRAPHIC CHARACTERISTICS OF NURSING INTERNS

This section delas with data pertaining to socio-demographic characteristics of Nursing Interns with disaster preparedness. nursing interns were assessed for socio-demographic variables before collecting the data regarding knowledge on disaster preparedness presented on table 1.

Table 1: Distribution of baseline characteristics in terms of frequency and percentage

n = 75

Sl.no	Sample characteristic	Frequency (f)	Percentage (%)
1.	**Age (in Years)**		
	20-22	68	**90.7%**
	23-25	7	9.3%
2.	**Gender**		
	Male	2	2.6%
	Female	73	**97.4%**
3.	Previous experiences/exposure in handling /Witnessing disaster		
	Yes	25	32.9%
	No	50	**67.1%**
4.	Residence		
	Karnataka	11	14.5%
	Andra Pradesh	0	0
	Tamil Nadu	1	1.3%
	Kerala	52	**69.7%**
	West Bengal	11	14.5%
	Others state _____	-	0

Table -1 reveals the socio-demographic variables of the sample

1.AGE

With regards to age majority 90.66% (68) of the study sample were between the age
group f 20-22years and 9.33% (7) of them belongs to the age group of 23-25 years.
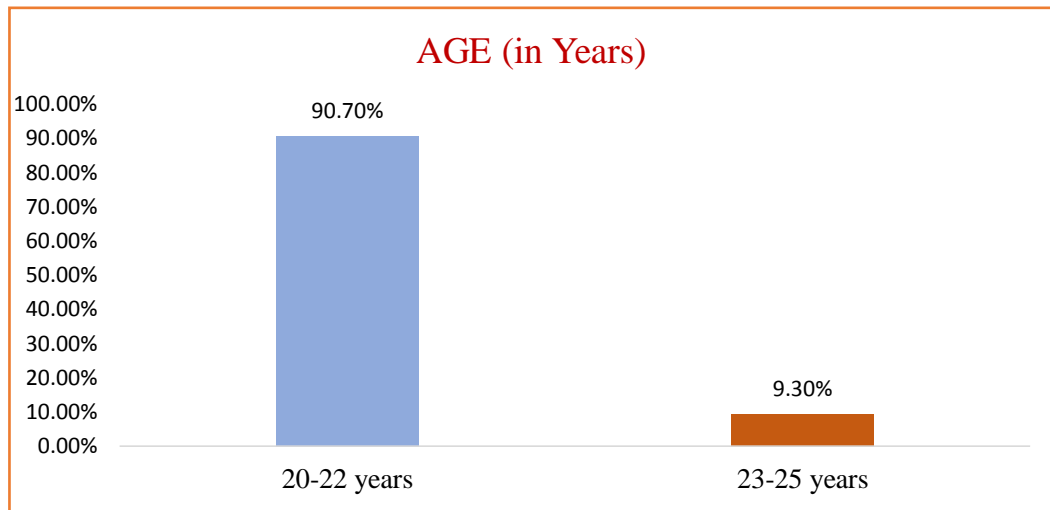
Fig.6 Distribution of Nursing Interns according to the Age in year.

2.Gender

With regards to the gender majority 97.4% (73) of the samples were females and
2.60% (2) of them were males.
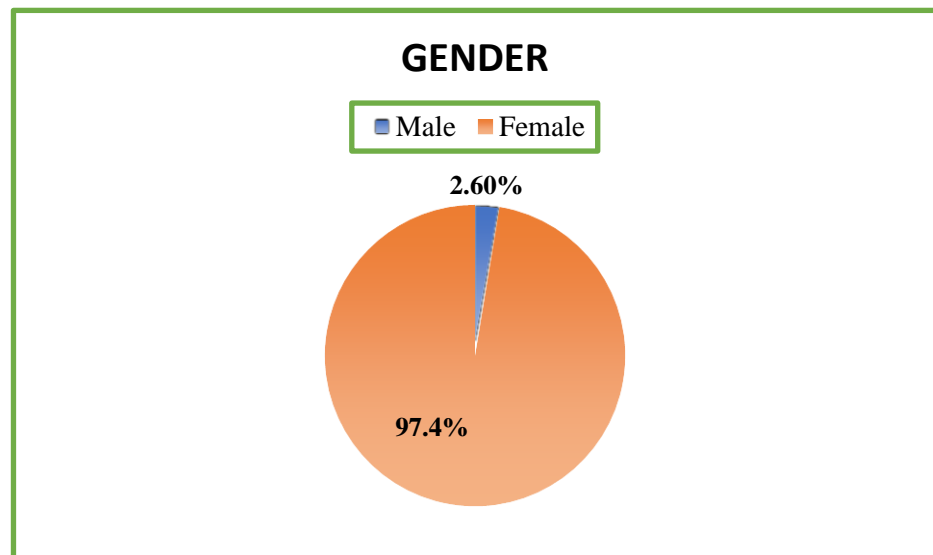
Fig.7 Distribution of Nursing Interns according to Gender

3. Previous experience/exposure in handling/Witnessing disaster.

With regards to previous experience/exposure majority 67.3% (50) of the sample were not having any source of previous experience/exposure.32.9% (25) of the samples having previous experience/exposure.
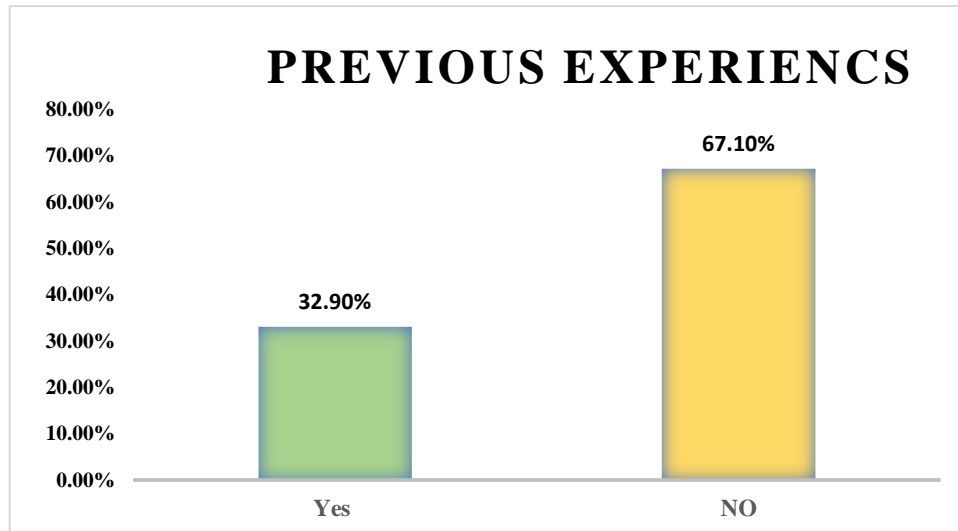
Fig.8Distribution of Nursing Interns according to previous experience

4.Residence

With regards to residence majority of sample belongs to Kerala 69.3% (52),14.5% (11) of samples belongs to Karnataka and west Bengal, only 1.3% (1) were from the Tamil Nadu**.**
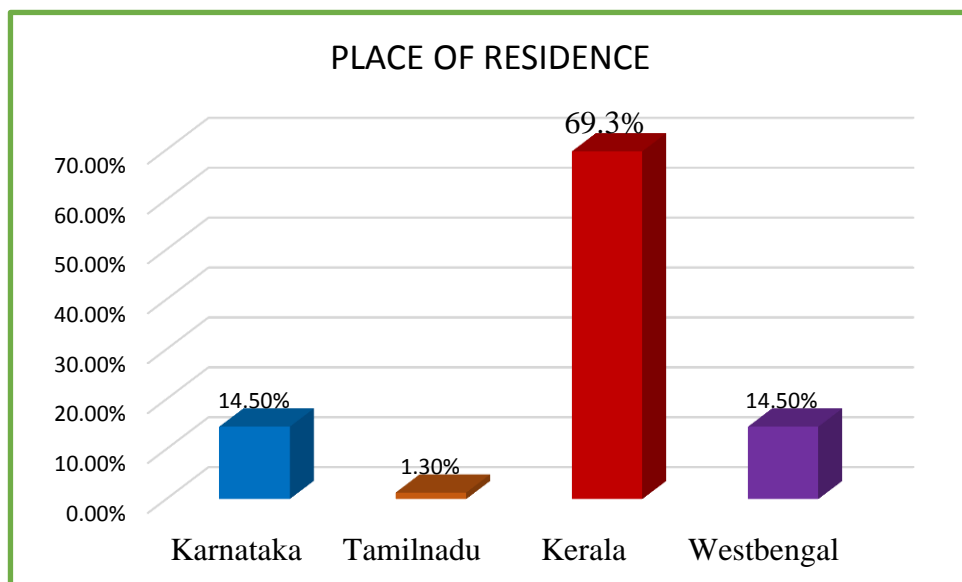
Fig.9.Distribution of Nursing Interns according to place of Residence

Section II This Section deals with the data pertaining to the first objective of the study.

Table2: - distribution of samples according to overall level of knowledge on disaster preparedness among Nursing Interns

n=75

Aspect	Knowledge scores	Score range	Frequency	**Percentage**
Knowledge Level	Inadequate knowledge	$\leq$50% ($\leq$18)	29	38.6%
	Moderately adequate knowledge	51-75% (19-27)	44	**58.66%**
	Adequate knowledge	>76% (28-36)	2	2.66%

Table 2. Shows distribution of sample overall knowledge on disaster preparedness.

The above table and diagram show that majority 58.66% (44) of the samples belongs to moderate knowledge and 38.6% (29) samples belongs to inadequate Knowledge, 2.66% (2) samples belong to adequate Knowledge.

Over all Knowledge score

2.66%

38.60%

58.66%

■ Inadequate ■ Moderately ■ Adequate
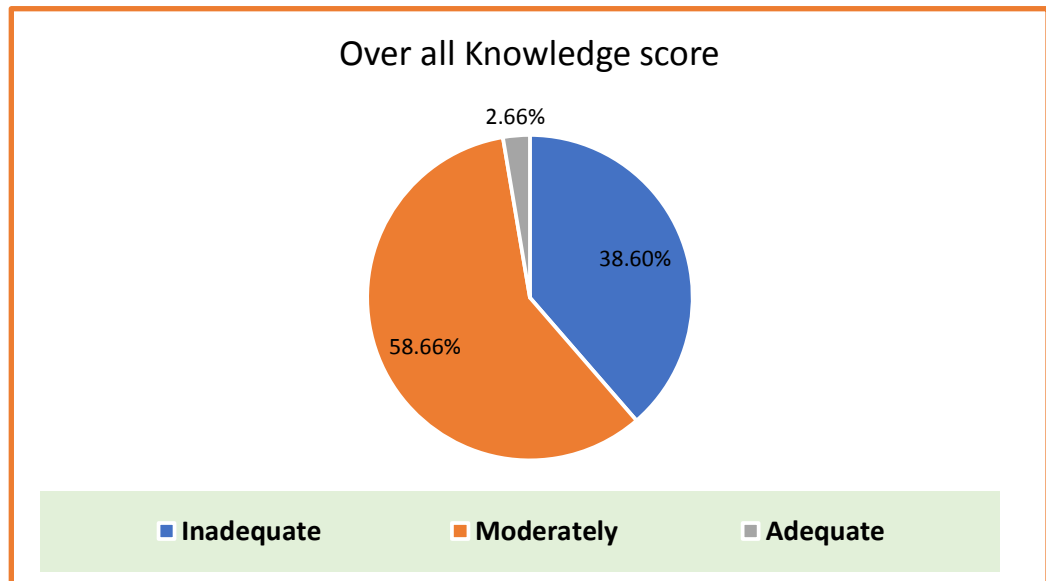
Fig.10 Distribution of Nursing Interns according to overall knowledge on disaster preparedness

Table 3 Area distribution of Knowledge score of disaster preparedness among

Nursing Interns

Si.no	Variables	No. of items	Max.score	Range	Mean	SD	Mean%
1	General Information	7	7	1-5	4.42	1.30	63.2%
2	Definition and types	9	9	1-8	5.70	1.69	63.40%
3	Mitigation	4	4	0-4	1.90	1.10	47.6%
4.	Preparedness	4	4	0-4	1.92	1.01	48%
5.	Response and recovery	4	4	0-3	1.24	.927	31%
6.	Triage	8	8	1-8	4.29	1.9	53.6%

Table 3

Represents that knowledge about the general information regarding disaster preparedness mean score was 4.42(SD±1.30), definition and types of disaster preparedness scores was 5.70(SD±1.69), mitigation mean score was 1.90(SD±1.10), preparedness mean score was 1.92(SD±1.01), response and recovery scores was 1.24(SD±0.927), Triage mean scores was 4.29(SD±1.9).
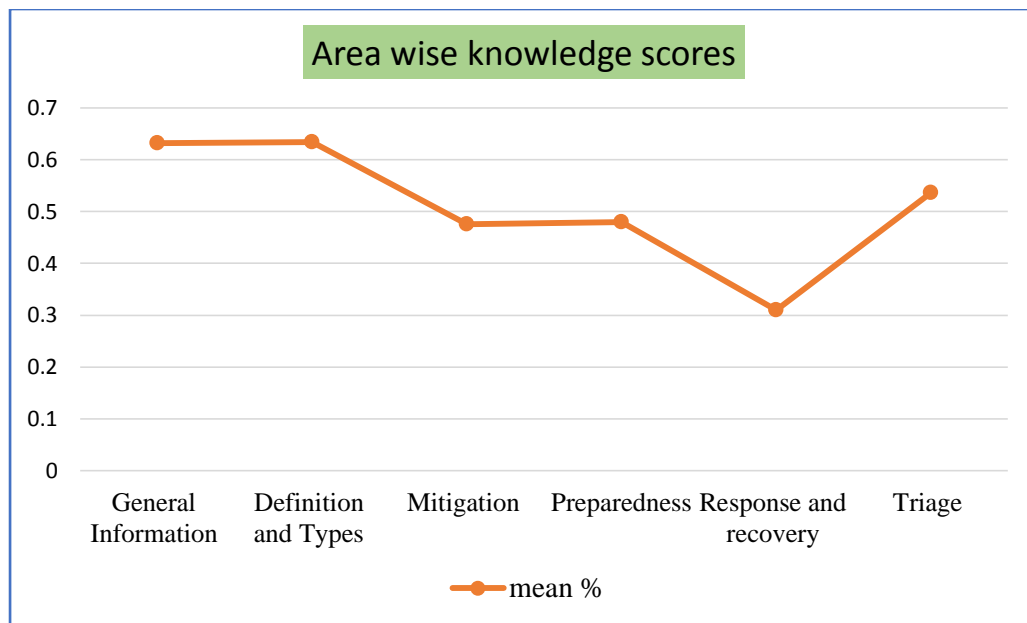
Fig11. distribution on area wise Knowledge scores

Table 4: ASSOCIATION OF KNOWLEDGE SCORES OF NURSING INETRNS WITH SELECTED DEMOGRAPHIC VARIABLES

n= 75

Sl. No.	Variables	Below Median ≤20	Median and above >20	Chi square	Df	P value (0.05)	Inference
1	**Age (in Years)**						
	a) 20-22	4	64	0.0001	1	----	<.05
	b) 23-25	5	2	(Fisher exact test)			**SS****
2	**Gender**						
	a) Male	1	1	0.1297	1	-	**NS**
	b) Female	4	69	(Fisher exact test)			At <.05
3	**Previous experiences/exposure in handling/Witnessing disaster**						
	a) Yes	4	21	0.2127	1	--	**NS**
	b) No	3	47	(Fisher exact test)			At <.05
4	**Residence**						
	a) Karnataka	2	10	0.6065	1	--	**NS**
	b) Other states	6	57	(Fisher exact test)			At <.05

46

Note: - P<0.05, NS-Not significant, SS-statistically significant, df-degree of freedom,1(3.38), df-2(5.99).

Table 4 Reveled that there was no significant association between the knowledge score and socio demographic variables except for Age (0.0001) fisher exact test

Regarding Gender with fisher exact value (0.1291), Previous experiences/exposure in handling/Witnessing disaster. (0.2127), at df-1 Residence (0.6065) at df-1.

Thus, the stated assumption was accepted which states that there will be significant association between the knowledge scores with selected demographic variables.

SUMMARY

This chapter was dealt with the data analysis and interpretation of the data collected from the Nursing Interns The results of the analysis showed that majority 58.66% (44) of the samples belongs to moderate knowledge and 38.6% (29) samples belongs to inadequate knowledge, 2.66% (2) samples belong to adequate knowledge. The association between knowledge scores with selected socio-demographic variable were assessed and its results revealed that variable like, Gender, Previous experiences/exposure in handling, residences are not statistically significant, were as age is statistically significant.

CHAPTER – 5

SUMMARY AND CONCLUSIONS

India is vulnerable, in varying degrees, to many disasters. More than 58.6 percent of the landmass is prone to earthquake of moderate to very high intensity; over 40 million hectares(12%) of its land of prone to floods and river erosion; close to 5,700kms, out of the 7.516kms 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[38].

This chapter deals with conclusion drawn, implication, limitations, and recommendations.

This study aimed to assess the knowledge regarding disaster preparedness among Nursing Interns with a view to develop information handout. A descriptive design was used for the study. The data was collected from 75 Nursing Interns by using Structure Knowledge Questionnaire approximately 30 minutes was taken for each Nursing Interns to fill questionnaire.

The study was based on the Nora.J. Pender's health promotion model (revised-HPM 2002).it provides a schematic representation of conceptual framework for health promotion of Nursing Interns by discussing three functions of client, that were Cognitive perceptual factors (individual perception), Modifying factors (demographic and social), Participation in health behavior. (Likelihood of action) and the major concepts like Individual characteristics, Behavior specific cognitive-perceptual factors and affect, Behavioral outcomes.

The collected data were planned and analyzed by using both descriptive and inferential statistics based on study objectives.

Major findings of the study

Description of socio-demographic variables

Results revealed that majority 90.66% (68) of the study sample were between the age group of 20-22years and 9.33% (7) of them belongs to the age group of 23-25 years. majority 97.4% (73) of the samples were females and 2.66% (2) of them were males majority 67.3% (50) of the sample were not having any source of previous experience/exposure.32.9% (25) of the samples having previous experience/exposure. majority of sample belongs to Kerala 69.7% (52),14.5% (11) of samples belongs to Karnataka and west Bengal, only 1.3% (1) were from the Tamil Nadu**.**

This section deals with the data pertaining to the first objective of the study assess knowledge on disaster preparedness among Nursing Interns.

Distribution of samples according to overall level of knowledge.

The overall knowledge score was assessed out of 75 Nursing Interns. majority 58.66% (44) of the samples belongs to moderate knowledge and 38.6% (29) samples belongs to inadequate knowledge, 2.66% (2) samples belong to adequate knowledge. there are many studies conducted which supporting to the study.

Area wise level of knowledge

Area wise knowledge score was assessed general information regarding disaster preparedness mean score was 4.42(SD±1.30), definition and types of disaster preparedness mean scores was 5.70(SD±1.69), mitigation mean score was 1.90(SD±1.10), preparedness mean score was 1.92(SD±1.01), response and recovery scores was 1.24(SD±0.927), Triage mean scores was 4.29(SD±1.9).

**This section deals with the data penetrating to the second objective of the study on association between pre-test knowledge scores with socio demographic variables of samples.**

Conclusion

This present study focused on assess the knowledge regarding disaster preparedness among Nursing Interns undergoing training at RLJH&RC. Tamaka, Kolar, based on the findings the conclusions are presented under the following.

Based on the objectives of the study conclusion are presented under the following points.

As per the first objective of the study, findings regarding assessment of knowledge regarding disaster preparedness among Nursing Interns. The knowledge scores of the Nursing Interns 58.66% (44) of the samples belongs to moderate knowledge and 38.6% (29) samples belongs to inadequate knowledge, 2.66% (2) samples belong to adequate knowledge.

Second objective reveals that,

With regard to association: It is found to be non-significant with all the socio demographic variables except for Age (Fisher exact test 0.0001), Regarding Gender with fisher exact value (0.1291), Previous experiences/exposure in handling/Witnessing disaster. (0.2127), at df-1 Residence (0.6065) at df-1.

IMPLICATIONS

Unpredictable occurrences called disasters kill and harm people, destroy property, and alter the environment. Nurses are essential in helping the sufferers during such incidents. Therefore, it is essential for nurses to be ready to face the catastrophes'

aftermath. Participating in disaster response and attending disaster-related education are key to having the necessary information and projecting a positive attitude.

Therefore, it is crucial for health administrators to provide front-line personnel, such as emergency and community health nurses, with disaster-related education and training to advance their understanding and application of disaster management. Disasters cause significant losses in developing nations. For most governments, minimizing catastrophic losses is a core objective. To deal with catastrophes in hospitals, nursing students need to be familiar with disasters and their effects.

The findings of the study can be used in the following areas of Nursing Profession.

Nursing practice

Nursing professionals including nursing interns during clinical practice and working in the hospital as well was in community setup should educate the peoples by using informative handout regarding disaster preparedness.

Nursing professionals plays a key role in enhancing the Nursing Interns knowledge on disaster preparedness which will improve the quality of profession by providing knowledge regarding disaster preparedness among Nursing Interns.

Nursing education

The study emphasizes on the curriculum and syllabus more and more information regarding the disaster preparedness

Nursing Interns can be trained on the necessity of disaster management.

Then kids will be able to comprehend many types of calamities. So that they may teach the general public, youngsters, and schoolchildren about disaster preparedness and its implications in order to deal with catastrophes in hospitals.

Nursing administration

The Nursing administrator can take a part in developing skill training programmes to enhance the Nursing Interns for future awareness regarding disaster and more certificate courses makes to train the Nursing Interns.

It is imperative that nursing administrators support initiatives to enhance disaster management. delivering in-service training to the Nursing staff. They ought to design and coordinate plans that are economical. The staff should support creating simulation training and practice the disaster preparedness out studies on disaster management.

The nursing administrators can conduct seminar and simulation training programme to the Nursing staffs and nursing interns on current practice to save the lives of the nation.

Nursing research

Nursing employees are crucial health care personnel for conducting research and playing a part in disaster management. Nurses who care for individuals in various settings train them about disaster management. Nurses may help design and test interventions for teaching the public about disaster preparedness. More study may be conducted by nurses to further identify the relationship between catastrophe kinds and

various illnesses. A comparable study might be undertaken as a comparative study between rural and urban communities, as well as a study with a big sample size and diverse age groups to gain an exploratory picture of this issue in our nation.

Nurses should come forward to carryout studies on disaster preparedness and publish for the benefit of the public, nursing fraternity, the public and private agencies should also encourage research in this field through materials and funds.

More and more research activity can carry out on the alternative methods and disaster preparedness.

LIMITATIONS OF THE STUDY

1. The study was limited to the Nursing Interns only in selected college of Nursing. Kolar.
2. The study did not use any control group.
3. The generalization of the study findings is not possible for small number,
4. The study does not have any intervention and assessment of its effectiveness.

RECOMMENDATIONS

- A similar study can be replicated on a large sample in different types of setting.
- A similar study can replicate with a control group.

- An intervention study can be done to assess the effectiveness of information handout in improving the knowledge of Nursing Interns regarding disaster preparedness.

- A similar study can be done to assess the effectiveness of simulation training Programme in improving the knowledge of Nursing Interns regarding disaster preparedness.

- A descriptive study could be done on the practice of disaster management and emergency preparedness among Nurses and Nursing Interns.

Summary

This chapter highlighted on overall study findings, implications, limitation, and recommendation of the present study. The present study clearly indicated its importance in the field of nursing practice, administration, education, and research. the researcher had strongly emphasized the necessity to meet with information needs of the Nursing Interns which will provide the better outcome of the Nursing Interns through gaining knowledge and performance.

REFERENCES

1. Max Mayfield. Preparation Through Education is less costly than learning through tragedy.septembet17, 2018.available from: https://orderyourlife.com/blogs/blog/plan-prepare-prevail-61-quotes-about-expecting-the-unexpected

2. All India Rail Safety Council. Available from: https://www.railsafety.co.in/activity.aspx?railsafety=8.

3. Natural disasters risk in India. atlas magazine:2022. https://www.atlas-mag.net/en/article/natural-disasters-risk-in-india.

4. Important of disaster. https://www.ifp.co.in/opinion/why-disaster-management-is-important

5. Labrague RN.L.J. et al. disaster preparedness among nurses: a systematic review of literature. International nursing review.vol.65, issue1; p.41-53.available form: https://doi.org/10.1111/inr.12369.

6. Sharon white-lewis.elaine beach.et al.improved knowledge of disaster preparedness in underrepresented secondary students: a quasi-experimental study.journal of school health.vol 91.issue6.p.490.498.available form: https://doi.org/10.1111/josh.13023.

7. international council of nurses core competencies in disaster nursing version 2.0.available from : https://www.icn.ch/sites/default/files/inline-files/ICN_Disaster-Comp-Report_WEB.pdf.

8. EM-DAT. The international disaster database centre for research on the epidemiology of disaster. Available from: https://www.emdat.be/

9. Pan American Health Organization. Available from: https://www.paho.org/en/documents/epidemiological-update-dengue-chikungunya-and-zinka-10-june-2023.

10. Unicef disaster in india.available from: https://www.unicef.org/india/what-we-do/disaster-risk-reduction.

11. Category: 2023 disaster in india-wikipedia. https://en.wikipedia.org/wiki/Category:2023_disasters_in_India.

12. Oxford university press. Illustrated oxford dictionary.I edition reprint. Landon: Dorling Kindersley.2007:1-1007

13. https://nursing-theory.org/theories-and-models/pender-health-promotion-model.php

14. Nancy burns, Susan k groove. The practice of nursing research and utilization, 5thedtion. Missouri: Elseviorsaunders 2009: 1-342.

15. Polit f and hungler p. nursing research: principles and methods.8th edition Philadelphia: JB lipponcott;2008:1-324.

16. Pender NJ, Murdaugh CL, parsons MA. Health promotion in nursing practice. 5thedition.upper saddle river, NJ: prentice hall, 2006:134-137.

17. Polit F d, Hungler J, Nursing Research: Principles and methods. 6th edition. Newyork. Lippincott. 1999:88.

18. Oxford advanced dictionary.

19. Hongdan Li RN.et al. Nurses 'core emergency competencies for COVID-19 in china: A cross-sectional study. International Nursing review. Vol 68, issue4.p.524-532. Available from: https://doi.org/10.1111/inr.12692.

20. Rehana shabbier.et al .nurses knowledge and practice regarding disasters management and emergency Preparedness. saudi journal of medical and

pharmaceutical sciences.ISSN 2413-4929.DOI: 10.21276/sjmps. available from: http://scholarsmepub.com/

21. Fatemeh kaviani.et al. nursing students' competency to attend disaster situations: A study in western Iran. Cambridge university press: available from: https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/article/nursing-student.

22. Karun. Ruchi thakur.et al. knowledge and attitude regarding disaster management and emergency preparedness among nursing students of Delhi, NCR. International journal of scientific research.volume-9.issue-6.doi: 10.36106/ijsr.

23. dayalal D. Patidar, Dipak Patidar. A study to assess the effectiveness of video assisted teaching Programme on knowledge regarding disaster management among people in Mehsana city Gujarat. International journal of advances in Nursing management. 2019;7(3): 217-220.doi:10.5958/2454-2652.2019.00050.7

24. S.Shalini Saranya. A study to assess the knowledge and practice regarding disaster management among IV year B.SC(N) students in Bishop's college of nursing Dharapuram. Asian journal of nursing education and research.2022; 12(2):211-4.doi: 10.52711/2349-2996.2022.00042.

25. Navya,Ajmal et al. A Descriptive Study To Assess The Knowledge AndAttitude Regarding Disaster Management AmongNursing Students From Selected Nursing CollegeMangaluru.Journal of Pharmaceutical Negative Results ; Volume 13; Special Issue 8 ; 2022. DOI:10.47750/pnr.2022.13.S08.581

26. Funda Ozpulat. Esma Kabasakal. Knowledge levels of nursing students on disaster nursing and their state of disaster preparedness. International journal of medical research& health sciences,2018,7(8):165-174.available from: www.ijmrhs.com

27. Ceeba Francis. a study to assess the knowledge about disaster preparedness among inhabitants in a selected urban area, Bangalore, with a view to develop an information booklet, international journal of advance research, ideas and innovations in technology; volume 4, issue 3.available online at www.ijarnd.com

28. Melvin David. M. et al .effectiveness of demonstration on Knowledge, attitude and practice on disaster preparedness among general public at puducherry. International journal of creative research thoughts (IJCRT) volume 9, issue 5 may 2021.ISSN:2320-2882.

29. Raziyeh.et al. disaster preparedness: knowledge, attitude, and practice of hospital staff. Health emergencies and disasters quarterly.2023;8(3):193-200. Doi: http://dx.doi.org/10.32598/hdq.8.3.482.1

30. Dincer, S. Kumru, S. evaluation of the hospital disaster preparedness information of health personnel. Journal of international health sciences and management, 6(11):30-45. Doi:https://orcid.org/0000-0001-7083-1377

31. Vamsi Krishna reddy.et al .knowledge, attitude and practice regarding disaster preparedness and management among health care professionals: a cross sectional study in a Tertiary care teaching, research and referral medical institute in south India. International Journal of scientific research.volume-9, Issue-1 January 2020.issue no.2277-8179.DOI: 10.36106/ijsr

32. COX, A. (2022). The assessment of emergency preparedness among university Students (master's thesis, Minnesota state university, Mankato).cornerstone: A collection of scholarly and creative works for Minnesota state university, Mankato. https://cornerstone.lib.mnsu.edu/etds/1236/

33. Bilal Ahmad. et al. a study on disaster awareness and preparedness among college students in district Ganderbal of Kashmir valley. IJSART.Volume 3 Issue12-2017.avaliable https://www.researchgate.net/publication/325895339.

34. Patel, R.K.et al disaster preparedness and awareness among university Students: a structural equation analysis, int.j.environ.res. public health 2023, 20,447. Available at https://doi.org/10.3390/ijerph20054447.

35. Keneuoe HycianthThinyane, TumeloMothebe, The Pan African Medical Journal , Myo Nye in Aung, Thaworn Lorga International Journal of General Medicine Published online 2012 Jun 27. doi: 10.2147/IJGM.S29406.

36. suresh k Sharma. Nursing research& statistics.3rd edition: ELSEVER publication no:162.

37. polit fd, hungler j, nursing research : principles and methods.6th edition. Newyork.lippincott.1999:88.

38. Natural disasters risk in India. atlas magazine:2022. https://www.atlas-mag.net/en/article/natural-disasters-risk-in-india.

ANNAXURE-A

ETHICAL CLEARANCE COMMITTEE CERTIFICATE

	SRI DEVARAJ URS COLLEGE OF NURSING TAMAKA, KOLAR – 563 103. INSTITUTIONAL ETHICS COMMITTEE.	Format No.	IEC 01
		Issue No.	02
		Rev No.	01
		Date	01-09-2018

Ref.:No.SDUCON/IEC/ 96 /2022   Date: 28/07/2022

To

Ms. Nasreen Taj
I year M.Sc Nursing (Med. Surg. Nsg.)
SDUCON,
Tamaka, Kolar-563103

This is to certify that the Institutional Ethics Committee of Sri Devaraj Urs College of Nursing, Tamaka, Kolar has examined and unanimously approved the Topic: **"A study to assess the Knowledge regarding Disaster Preparedness among Nursing Interns of Selected College of Nursing attached to Parent Medical Teaching Hospital, Kolar with a view to develop Information Handout."** of Ms. Nasreen Taj, under the guidance of Dr. Zeanath C.J, Sri Devaraj Urs College of Nursing.

Member Secretary

MEMBER SECRETARY
ETHICS COMMITTEE
SRI DEVARAJ URS COLLEGE OF NURSING
TAMAKA KOLAR - 563103.

Chairperson

CHAIR PERSON
ETHICS COMMITTEE
SRI DEVARAJ URS COLLEGE OF NURSING
TAMAKA KOLAR - 563103.

61

ANNEXURE-B

LETTER REQUESTING PERMISSION FOR CONDUCTING RESEARCH STUDY

From
Miss. Nasreen Taj
2nd Year M.Sc. Nursing
Sri DevarajUrs College of Nursing
Tamaka, Kolar-563103.

To,
The principal
Sri DevarajUrs College of Nursing
Tamaka, Kolar-563103.

Forwarded Through
Dr.Zeanath C.J &Research Guide

Respected Sir/Madam,

Sub: Requesting Permission for Conducting Research Study-reg.

I Miss.NasreenTaj, M.Sc. (N) 2nd Year (Medical Surgical Nursing Specialty) of Sri DevarajUrs College of Nursing, Tamaka, Kolar has selected the below mentioned topic for research project, as a partial fulfillment for M.Sc. Nursing Programme.

Title of the topic:

"A study to assess the Knowledge regarding Disaster Preparedness among Nursing Interns undergoing clinical training at R.L.Jalappa hospital and Research Center.Kolar, with a view to develop information booklet."

With regard to the above mentioned subject, I kindly request your goodself to grant permission to collect the data for research study from Nursing Interns undergoing training at RLJH&RC,Tamaka,Kolar, Kindly consider this letter and do the needful.

Thanking You,

Permitted
29/05/23

[Nasreen Taj]
Yours faithfully,

Requesting for kind permission to collect data & distribution of Information pamplet as per knowledge assessment/

62

ANNEXURE-C

LETTER REQUESTING OPINIONS AND SUGGESTIONS OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY OF RESEARCH TOOL AND INFORMATION BOOKLET.

From,
Miss. Nasreen Taj
II year M.Sc. (N) Student
Sri Devaraj Urs College of Nursing
Tamaka, Kolar – 563101

TO

(Through the proper channel)

Respected Sir/ Madam,

Sub: Request for opinion and suggestions of experts for establishing content validity of research
Tool and Information Booklet-reg.

I **Miss. Nasreen Taj** postgraduate student (Medical Surgical Nursing Specialty) of Sri Devaraj Urs College of Nursing, Tamaka, Kolar has selected the below mentioned topic for my project, for the fulfillment of Masters of Nursing Degree.

TITLE OF THE TOPIC:

"A study to assess the Knowledge regarding Disaster Preparedness among Nursing Interns undergoing clinical training at R.L.Jalappa Hospital and Research Center. Kolar, with a view to develop Information handout."

With regards to the above may I kindly request you to validate the tool (Structured Interview schedule) and Information Booklet for its appropriateness and relevancy. I am, here with enclosing the objectives of the study, criteria rating scale for your reference. I would be highly obliged and remain thankful for your great help.

Thanking you
Yours Sincerely,
(Miss. Nasreen Taj)
Enclosures:

1) Structured interview schedule and information booklet.
2) Criteria rating scale.
3) Content validity certificate.
4) Self addressed envelope.

STRUCTURED KNOWLEDGE QUESTIONNAIRE

The researcher introduces herself and explains the purpose of the study.

Kindly answer to all questions and select appropriate answer to all questions of your choice

1. Your answer will be kept confidential
2. Please be free and frank in answering the questions.
3. Each correct answer carries one score.

The Questionnaire consists of

Nursing Intern's profile

Section A: -SOCIO DEMOGRAPHIC DATA

1. AGE in year's _____

2. Gender   ()
   a) Male
   b) Female

3. Previous experiences/exposure in handling/witnessing disaster   ()
   a) Yes
   b) No
   IF yes please specify through _____   ()
      a) Mass media
      b) Curriculum
      c) Family
      d) Friends

4. Residence of   ()
   a) Karnataka
   b) Andrapradesh
   c) Tamil Nadu

d) Kerala

e) West Bengal

f) Others state _____

SECTION B: STRUCTURED KNOWLEDGE QUESTIONNAIRE

Questions related to information specific on General Knowledge Questions

5. The national disaster management authority (NDMA) is headed by   ()

    a) Prime minister of India

    b) President of India

    c) Governor of India

    d) Chief minister of India

6. The state disaster management authority is headed by   ()

    a) Governor

    b) Chief minister

    c) Chief secretary

    d) None of the above

7. The most common disaster in India is   ()

    a) Flood

    b) Draught

    c) Cyclone

    d) Earthquake

8. Who shall be the first responders in disaster management situation   ()

    a) Central government

    b) Local government

    c) Community

    d) State government

9. National institute of disaster management is located at ( )

   a) Bangalore

   b) Mumbai

   c) Hyderabad

   d) New Delhi

10. The role of which agency is important in disaster prevention. ( )

   a) Through Media

   b) Through Police

   c) Through Government officials

   d) Through Public

11. What are the main prescribed procedures for standard operating? ( )

   a) Search and rescue

   b) Medical assistant

   c) Casualty management

   d) All a and b and c

Questions related to information specific to Definition and types disaster.

12. Disaster refers to ( )

   a) A serious disruption of the functioning of a community

   b) A Serious problems

   c) Sudden harmful event

   d) More deaths

13. Disaster can be broadly termed as_____ types. ( )

   a) 2

   b) 3

   c) 4

   d) 5

14. The Disaster Management has _____No. of elements. ( )

    a) 4

    b) 6

    c) 8

    d) 9

15. The following events is not a natural disaster ( )

    a) Volcano eruption

    b) Flood

    c) Winter storm

    d) Tsunami

16. The first step in preparedness planning is ( )

    a) Analysis of data collected

    b) Determination of objectives

    c) Development of implementing of device

    d) Determination of strategy

17. Disaster Management includes: ( )

    a) Mitigation

    b) Reconstruction

    c) Rehabilitation

    d) All of the above

18. The typical examples of manmade disaster ( )

    a) chemical explosion

    b) leakage of toxic waste

    c) war and civil strike

    d) only a

    e) a b and c

19. The consequence of disaster on a society is? ( )
   a) Loss of life
   b) Damage to property
   c) Environmental Damages
   d) Only a & c
   e) a, b, and c

20. The step needs to be taken for risk reduction natural or man-made disaster is ( )
   a) Proper building construction
   b) well planning
   c) Awareness among the stakeholders
   d) Both a and b
   e) Only b

Questions related to information specific to prevention mitigation,

21. The most action preferred in disaster management is ( )
   a) Resettling people in the closest unaffected urban area
   b) Collection of valuable data for future management objectives
   c) Strengthening sewage and drinking water treatment facilities
   d) Restoring a community's services, facilities and residences to pre-disaster levels

22. Disaster Management mitigation measures involves ( )
   a) Governmental action and administration
   b) Community action and administration
   c) Military action and administration
   d) None of the above.

23. The role of NGOs in disaster management related preparedness includes ( )
   a) Public awareness and education
   b) Vulnerability and risk assessment
   c) Forming and training DNTs introducing alternative technology
   d) All a and b, c
   e) Only b

24. Disaster management covers ( )
    a) Maintaining control over disaster
    b) Reducing the effect of disaster
    c) Briefing of government officials about disaster
    d) All a, and b, c
    e) Only b

Questions related to information specific to Preparedness

25. The primary goal of a disaster preparedness plan is ( )
    a) To protect the population
    b) To protect valuable resources
    c) To keep communication lines open
    d) To protect environmental health personnel

26. which phases of emergency management includes exercise and drills ( )
    a) Mitigation
    b) Preparedness
    c) Recovery
    d) Response
    e) Rehabilitation

27. Disaster management team should include ( )
    a) Awareness of evacuation team
    b) First aid team
    c) Search and rescue team
    d) a, b, and c

28. During a disaster the person is responsible for leading the response effort is the ( )
    incident
    a) Chief
    b) Commando
    c) Director
    d) Officer

Questions related to information specific to Response and recovery

29. The responsibility of press briefing during a disaster event normally rests on   ( )
    a) Incident controller
    b) Public relation controller
    c) Transport controller.
    d) Security controller.

30. What are the three phases of disaster management planning   ( )
    a) Evacuating ,rebuilding and re branding
    b) Preparation, planning and perception
    c) Planning, evacuating and recovery
    d) Preparation, response, and recovery

31. The roles and responsibilities identified for disaster responses under disaster   ( )
    management plan is known as
    a) Incident Organogram.
    b) Disaster response structure
    c) Incident command system
    d) All of the above

32. In which phase of disaster damage "Assessment" is done   ( )
    a) Warning phase
    b) Impact phase
    c) Rescue phase
    d) Rehabilitation phase

Questions related to information specific to Triage

33. Triage is term used in disaster to   ( )
    a) Assess injured patients to prioritize care
    b) Follow the assigned leadership to the command centre
    c) Assess the disaster plan for what to do first
    d) Let the families into the emergency department

34. The system of triage is based upon which of the following principles ( )

    a) Treating patients in order of priority

    b) Treating first come first served

    c) Treating the quickest and easiest first

    d) Treating those that complaints the most first.

35. Triage system severity refers in _____color. ( )

    a) Green

    b) Yellow

    c) Black

    d) Red

36. The code denoted in our hospital for external disaster is ( )

    a) Brown

    b) Orange

    c) Red

    d) Yellow

37. As a triage nurse during disaster situation based on the triage color code tags placed on each of the wounded, which tag color represents the wounded who have the highest priority of being treated first ( )

    a) Green

    b) Yellow

    c) Black

    d) Red

38. In the disaster one of the wounded is able to walk around and has minor lacerations on the arms, hands, chest and legs as nurse would place what color tag on this survivor ( )

    a) Green

    b) Yellow

    c) Black

    d) Red

39. While triaging the wounded from a disaster nurse noted that one of the wounded is not breathing Carotid, Pulse is absent, capillary refill>2seconds, and does not respond to commands, what color tag is assigned. ( )
    a) Green
    b) Yellow
    c) Black
    d) Red

40. The wounded victim is Unresponsive, has respiratory rate of 20, capillary refill is 5 seconds. The nurse will assign what color tag ( )
    a) Green
    b) Yellow
    c) Black
    d) Red

CRITERIA

Scoring Key:

Criteria rating scale for validating the content of the Knowledge Questionnaire on Knowledge regarding disaster preparedness.

Respected Sir/Madam,

Kindly go through the content and rate the content in the appropriate columns given and your expert opinion in the remarks column.

SL. NO	Item	Very Relevant	Relevant	Needs Modification	Not Relevant
Section – A Demographic Data					
1	Age				
2	Gender				
3	Previous experiences/exposure in handling/witnessing disaster				
4	Residence of				
Section – B Structured Knowledge Questionnaire on disaster preparedness					
SL NO	Item	Very Relevant	Relevant	Need Modification	Not Relevant
1					
2					
3					
4					
5					
7					
8					
9					
10					

11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

INFORMED CONSENT FORM

Name of the investigator: **NASREEN TAJ**

SL_____No._____

Name of the Organization: R.L. Jalapa Hospital & Research Centre attached to Sri Deva raj Urs Medical Collage Tamaka, Kolar

Title of study: "A study to assess the Knowledge regarding Disaster Preparedness among Nursing Interns undergoing clinical training at R.L. Jalappa hospital and Research Center. Kolar, with a view to develop information handout."

If you agree to participate in the study, we will collect information as per Performa from you or a person responsible for you or both.

You are invited to take part in this research study. You are being asked to participate in this study because you satisfy our eligibly criteria. The information in the given document is meant to help you decide whether or not to take part Please feel free to ask any queries.

I have read or it has been read and explained to me in my own language. I have understood the purpose of this study, the nature of information that will be collected and disclosed during the study. I had the opportunity to ask questions and the same has been answered to my satisfaction. I understand that I remain free to withdraw from this study at any time and this will not change my future care. I the undersigned agree to participate in this study and authorize the collection and disclosure of my personal information for presentation and publication.

Nursing interns/ signature   Date:

Person obtaining consent and his/her signature: Date:

Principal investigator signature   Date:

For any clarification you are free to contact the investigator:

Principal Investigator NASREEN TAJ Contact No.

EXPERTS ADDRESS

Dr.G.Vijayalakshmi
Principal of SDUCON.
Tamaka, kolar-563103.

Dr.Lavanya Subhashini.
Vice principal of SDUCON
Tamaka,kolar-563103.

Dr.Malathi.K.V
Prof & HoD
Community Health Nursing.
Tamaka, kolar-563103.

Dr.Krishna Morthy.
Associate professor
Department of Emergency Medicine.
RLJH&RC
Tamaka, kolar.

Dr.Devandra Prasad.
Associate professor
Department of Emergency Medicine.
RLJH&RC
Tamaka, Kolar.

Mrs. Punitha
Prof& HoD
Department of OBG Nursing
Tamaka, kolar.

Mrs.Gayathri.K.V
Associate professor
Department of OBG nursing
Tamaka, Kolar.

ANNEXURE –H

CERTIFICATE FROM STATISTICS.

I hereby certify that I have provided statistical guidance in analysis to Miss. Nasreen Taj, II year M.Sc nursing student, for her research study titled as **"A study to assess the Knowledge regarding Disaster Preparedness among Nursing Interns undergoing clinical training at R.L.Jalappa Hospital and Research Center. Kolar, with a view to develop Information handout."** At Sri Devaraj Urs College of Nursing.

Date: 27|6|23

Place: Tamaka, Kolar

Signature of the Statistician

Name & Designation

S. RAVISHANKAR
Lect./Assit. Professor,
Dept. of Community Medicine,
Sri Devaraj Urs Medical College,
Tamaka, Kolar-563101

Photos

Sl. No.	1.Age	2. Gender	3.previous experiences /exposure in handling/witnessing disaster	4. Residence of	Q1	Q2	Q3	Q4	Q5	Q6	Q7	total	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	total	Q17	Q18	Q19	Q20	total	Q21	Q22	Q23	Q24	total	Q25	Q26	Q27	Q28	total	Q29	Q30	Q31	Q32	Q33	Q34	Q35	Q36	total	TOTAL
1	21	b	a) yes	Kerala	1	1	1	1	1	0	1	**6**	0	0	0	0	0	1	1	0	0	**2**	0	1	0	0	**1**	0	0	0	1	**1**	1	0	0	0	**1**	1	0	0	1	3	0	1	0	**5**	**27**
2	21	b	b) No	Kerala	1	0	0	1	1	0	0	**3**	1	0	0	1	1	1	1	1	0	**6**	0	0	0	1	**1**	1	0	1	1	**3**	0	0	1	0	**1**	0	0	1	0	0	1	0	0	**2**	**30**
3	21	b	No	Tamil Nadu	1	0	1	1	1	0	1	**5**	1	0	1	1	1	1	1	1	1	**8**	1	0	0	1	**2**	1	1	1	0	**3**	1	0	0	0	**1**	1	1	0	1	0	1	0	0	**4**	**42**
4	22	b	Yes	Kerala	1	0	1	0	0	1	0	**3**	1	1	0	0	0	0	0	0	0	**2**	0	1	0	0	**1**	0	0	0	1	**1**	0	0	1	0	**1**	1	1	0	0	0	0	1	0	**2**	**18**
5	22	b	No	Kerala	0	0	1	0	1	0	0	**2**	1	1	1	0	0	1	1	1	1	**7**	0	0	1	0	**1**	0	0	1	0	**1**	0	1	0	1	**2**	1	1	1	1	1	1	1	0	**7**	**33**
6	22	b	No	Kerala	0	0	1	0	1	0	1	**3**	1	0	1	0	1	1	1	1	1	**7**	1	0	1	1	**3**	1	0	1	0	**2**	1	1	1	0	**3**	1	1	1	0	0	1	1	1	**6**	**42**
7	22	b	Yes	Karnataka	1	0	1	1	0	0	0	**3**	0	0	1	1	0	1	0	0	0	**3**	0	1	0	0	**1**	0	0	0	0	**0**	1	0	0	0	**1**	0	0	1	0	0	0	0	0	**1**	**17**
8	22	b	No	Kerala	1	1	1	1	1	0	1	**6**	1	0	0	1	1	1	1	1	1	**7**	1	0	1	0	**2**	1	0	1	0	**2**	1	1	0	0	**2**	1	1	1	1	1	1	1	0	**7**	**45**
9	22	b	No	Kerala	0	0	1	1	1	1	1	**5**	1	1	0	1	0	0	1	1	1	**6**	1	0	0	0	**1**	0	1	1	1	**3**	0	0	1	0	**1**	0	0	0	1	1	1	1	0	**4**	**36**
10	22	b	No	Karnataka	0	0	1	0	1	1	0	**3**	1	1	0	0	1	1	1	1	1	**7**	1	0	1	1	**3**	1	1	1	0	**3**	1	1	1	0	**3**	1	0	0	1	1	0	0	1	**4**	**42**
11	22	b	Yes	Kerala	1	1	1	0	1	1	1	**6**	1	1	1	1	0	1	1	1	1	**8**	0	0	1	1	**2**	0	0	1	1	**2**	0	1	0	0	**1**	1	1	1	1	1	1	1	1	**8**	**46**
12	21	b	No	Kerala	0	1	1	1	1	0	1	**5**	1	0	1	0	0	1	1	1	1	**6**	0	0	1	0	**1**	1	0	1	0	**2**	1	1	0	0	**2**	1	1	1	0	1	1	0	0	**5**	**37**
13	22	b	Yes	Kerala	1	1	1	0	0	0	1	**5**	1	1	0	1	1	1	1	1	1	**8**	0	0	1	1	**2**	1	0	1	0	**2**	1	1	0	0	**2**	1	1	0	1	0	0	0	0	**3**	**43**
14	21	b	Yes	Kerala	0	1	1	1	1	0	1	**5**	1	1	0	0	1	1	0	1	1	**6**	1	0	1	1	**3**	0	0	1	0	**1**	0	1	0	0	**1**	1	1	1	1	0	1	1	1	**7**	**39**
15	21	b	No	Kerala	0	1	0	0	0	1	0	**2**	1	1	0	1	1	1	1	1	1	**8**	1	0	0	0	**1**	0	0	1	0	**1**	1	1	1	0	**3**	1	1	0	0	1	0	0	1	**4**	**34**
16	22	b	No	Kerala	1	1	0	1	1	0	1	**5**	1	1	0	0	1	0	1	1	1	**6**	0	0	1	1	**2**	0	0	1	0	**1**	0	0	0	0	**0**	0	0	1	0	1	0	0	1	**3**	**31**
17	22	b	Yes	Kerala	1	1	0	0	0	1	0	**3**	0	1	1	1	1	0	0	0	0	**4**	0	1	0	0	**1**	0	0	0	1	**1**	1	0	0	0	**1**	0	1	0	0	1	0	0	1	**3**	**23**
18	23	b	Yes	Kerala	1	1	0	0	1	0	1	**4**	1	1	1	1	0	1	0	1	0	**6**	0	0	1	0	**1**	0	1	1	0	**2**	0	1	0	1	**2**	0	0	1	0	1	0	0	0	**2**	**32**
19	21	a	Yes	Karnataka	0	1	0	0	1	0	1	**3**	0	1	1	1	1	1	1	1	1	**8**	0	0	1	1	**2**	1	1	1	0	**3**	0	0	0	0	**0**	1	0	1	0	1	0	1	1	**5**	**37**
20	21	b	No	Karnataka	1	1	1	1	1	0	1	**6**	1	1	0	1	1	1	1	1	1	**8**	0	0	1	1	**2**	0	0	1	0	**1**	1	1	0	1	**3**	1	1	1	1	1	0	0	1	**6**	**46**
21	22	b	No	Kerala	1	0	1	1	1	0	1	**5**	1	0	1	1	1	1	1	1	1	**8**	1	0	0	1	**2**	1	1	1	0	**3**	0	0	0	0	**0**	1	1	1	1	1	0	1	0	**6**	**42**
22	22	b	No	Kerala	1	0	1	0	1	0	1	**4**	0	0	0	1	1	1	1	1	0	**5**	1	0	1	0	**2**	0	0	0	0	**0**	0	0	0	0	**0**	0	1	1	0	0	0	0	0	**2**	**24**
23	21	b	No	Kerala	1	0	1	1	1	0	0	**4**	1	0	0	0	1	0	0	0	0	**2**	0	1	1	0	**2**	0	1	1	0	**2**	0	0	1	0	**1**	1	1	1	0	0	1	0	0	**4**	**26**
24	21	b	No	Karnataka	1	1	1	0	1	1	1	**6**	1	1	0	1	0	1	1	0	1	**6**	1	0	1	1	**3**	1	0	1	1	**3**	0	0	0	0	**0**	1	1	1	0	1	1	0	1	**6**	**42**

25	21	b	Yes	Kerala	1 1 1 0 0 0 0	**3**	1 1 1 1 1 0 0 0	**5**	0 1 0 0	**1**	0 0 0 0	**0**	1 0 1 1	**3**	0 0 1 0 1 0 0 0	**2**	**26**
26	21	b	No	Kerala	1 1 1 0 1 1 1	**6**	1 1 1 0 0 0 0 1	**4**	0 0 0 0	**0**	0 0 0 1	**1**	1 0 0 0	**1**	0 0 1 1 1 1 0 0	**4**	**28**
27	22	b	No	Kerala	0 1 1 0 1 0 0	**3**	0 0 1 0 0 0 0 1	**2**	0 0 1 0	**1**	0 1 0 1	**2**	0 1 0 0	**1**	0 1 1 0 0 0 0 0	**2**	**20**
28	22	b	Yes	Kerala	1 1 1 1 1 0 1	**6**	1 1 1 1 1 1 1 1	**8**	1 0 1 1	**3**	1 1 1 0	**3**	0 1 0 1	**2**	1 1 1 0 0 1 1 1	**6**	**50**
29	21	b	No	Kerala	1 1 1 0 1 1 0	**5**	0 1 0 0 1 1 1 1	**6**	1 0 0 1	**2**	0 0 1 0	**1**	1 1 0 0	**2**	0 0 1 0 1 0 0 1	**3**	**35**
30	21	b	No	Kerala	1 0 1 0 1 0 1	**4**	0 1 0 0 0 1 1 1	**5**	1 0 1 1	**3**	1 0 1 1	**3**	1 1 0 0	**2**	0 1 1 0 1 0 0 0	**3**	**37**
31	21	b	No	Kerala	1 1 1 0 1 0 1	**5**	1 1 0 1 1 1 1 1	**8**	1 0 1 1	**3**	0 0 1 0	**1**	0 1 0 0	**1**	1 1 0 1 1 0 0 1	**5**	**41**
32	21	b	No	Kerala	1 0 0 1 1 0 1	**4**	1 1 0 1 0 1 1 1	**7**	1 0 1 1	**3**	0 0 1 0	**1**	0 0 0 1	**1**	1 1 1 0 1 0 1 0	**5**	**37**
33	22	b	No	Kerala	0 1 1 0 1 0 1	**4**	0 1 0 1 1 1 1 1	**7**	1 0 1 1	**3**	1 0 1 0	**2**	1 0 0 0	**1**	1 1 1 1 1 1 0 0	**6**	**40**
34	22	b	Yes	Kerala	1 1 1 0 0 1 1	**5**	1 0 0 1 0 1 1 1	**6**	1 0 1 1	**3**	0 1 1 1	**3**	1 1 0 0	**2**	1 1 1 1 1 1 0 1	**7**	**45**
35	21	b	Yes	Kerala	1 0 1 1 0 0 1	**4**	1 0 0 1 1 1 1 1	**7**	0 0 0 0	**0**	1 0 1 0	**2**	1 1 0 1	**3**	1 1 1 1 1 1 0 1	**7**	**39**
36	22	b	No	Kerala	0 1 0 0 0 0 1	**2**	1 0 1 0 0 1 1 1	**6**	1 0 0 1	**2**	1 0 0 0	**1**	1 0 0 0	**1**	1 1 1 0 0 0 1 1	**5**	**29**
37	22	b	No	Kerala	1 1 1 0 1 0 1	**5**	1 0 0 1 0 1 0 1	**5**	1 0 1 1	**3**	0 0 1 1	**2**	0 1 0 0	**1**	0 1 1 1 0 0 0 1	**4**	**36**
38	22	b	Yes	Kerala	0 0 1 1 1 0 0	**3**	0 1 1 1 0 1 1 1	**6**	0 1 0 0	**1**	0 0 0 0	**0**	1 0 0 0	**1**	1 0 0 0 1 0 0 0	**1**	**23**
39	21	b	No	Karnataka	1 1 1 0 1 0 1	**5**	1 1 0 0 1 1 0 1	**6**	0 0 1 1	**2**	1 0 1 1	**3**	0 1 0 0	**1**	1 1 1 0 1 0 1 1	**6**	**40**
40	22	b	Yes	Kerala	1 1 1 0 1 0 1	**5**	1 1 1 1 1 1 1 1	**9**	1 0 1 1	**3**	1 0 1 0	**2**	1 0 0 0	**1**	1 1 1 0 1 1 1 1	**7**	**47**
41	23	b	Yes	Kerala	1 1 1 0 0 1 1	**5**	1 0 0 1 1 1 1 1	**7**	1 1 1 1	**4**	1 0 1 0	**2**	0 0 0 0	**0**	1 1 1 0 1 0 0 1	**5**	**41**
42	20	b	No	Karnataka	1 0 0 1 1 1 1	**5**	1 1 0 0 1 1 1 1	**6**	1 1 1 1	**4**	1 0 1 1	**3**	1 1 0 0	**2**	1 1 1 1 1 1 1 1	**8**	**48**
43	22	b	Yes	Kerala	1 1 1 0 0 0 0	**3**	1 1 0 0 1 1 0 1	**6**	0 1 0 0	**1**	1 1 1 0	**3**	0 0 1 1	**1**	0 1 1 0 1 1 0 1	**5**	**33**
44	21	a	No	Karnataka	1 0 0 0 1 0 1	**3**	0 0 1 0 0 1 1 1	**5**	0 0 0 0	**0**	1 1 0 0	**2**	0 0 0 0	**0**	0 0 1 0 0 0 0 0	**1**	**21**
45	22	b	No	Kerala	0 0 1 0 0 1 1	**3**	1 1 0 1 0 1 1 1	**7**	0 1 0 0	**1**	0 0 0 1	**1**	0 0 0 0	**0**	0 0 0 0 0 0 0 0	**0**	**24**
46	22	b	No	Kerala	1 1 1 1 1 1 1	**7**	1 0 0 1 1 1 0 0	**5**	1 1 0 1	**3**	0 1 0 0	**1**	1 1 1 0	**2**	0 0 1 1 1 0 1 1	**5**	**41**
47	22	b	Yes	Kerala	1 1 1 1 1 0 0	**5**	1 1 0 0 1 1 0 1	**5**	0 1 0 0	**1**	1 0 1 1	**3**	1 1 0 0	**2**	1 1 1 0 1 0 0 0	**4**	**36**
48	23	b	Yes	Kerala	0 0 1 0 1 1 0	**3**	0 0 0 1 0 1 1 1	**5**	0 0 1 1	**2**	1 0 1 1	**3**	1 1 0 0	**2**	1 1 1 0 1 0 0 1	**5**	**35**
49	22	b	No	Kerala	1 1 0 0 1 0 1	**4**	1 1 1 0 0 1 1 1	**7**	0 1 1 1	**3**	0 0 1 1	**2**	0 0 0 1	**1**	0 0 1 0 0 1 0 0	**2**	**36**
50	21	b	No	Karnataka	1 0 1 1 0 0 1	**4**	0 1 0 0 1 1 1 1	**6**	1 1 1 1	**4**	1 0 1 0	**2**	1 1 0 1	**3**	0 0 1 0 0 0 1 0	**2**	**40**
51	22	b	Yes	Kerala	0 1 1 1 1 0 0	**4**	1 0 0 1 0 1 1 0	**4**	0 0 0 0	**0**	0 0 1 0	**1**	1 0 0 1	**2**	0 1 0 1 0 0 0 1	**3**	**25**
52	22	b	Yes	Kerala	1 1 1 1 1 1 0	**6**	1 0 0 0 1 1 0 1	**4**	0 1 0 0	**1**	0 0 1 1	**2**	0 1 0 0	**1**	1 1 1 0 0 0 0 0	**3**	**31**
53	20	b	Yes	Kerala	1 1 1 1 1 1 1	**7**	1 1 0 1 0 1 1 1	**6**	0 0 0 1	**1**	1 1 1 1	**4**	1 1 0 0	**2**	1 1 1 1 0 1 1 1	**7**	**47**
54	21	b	No	Kerala	1 1 1 0 1 0 0	**4**	1 0 1 0 0 1 1 1	**6**	0 0 1 0	**1**	1 0 0 0	**1**	0 1 0 0	**1**	1 1 1 0 1 1 1 1	**7**	**33**
55	22	b	Yes	Kerala	1 1 1 1 1 1 0	**6**	1 0 0 1 0 1 1 0	**5**	1 0 0 0	**1**	0 0 1 0	**1**	0 1 0 1	**2**	0 1 1 0 0 1 0 0	**3**	**33**

#	Age		Answer	State	A	ΣA	B	ΣB	C	ΣC	D	ΣD	E	ΣE	F	ΣF	Total
56	21	b	Yes	Kerala	1 1 1 1 1 0 1	**6**	1 1 1 1 0 1 1 1 1	**8**	1 0 1 1	**3**	1 0 1 1	**3**	1 1 0 0	**2**	1 1 1 0 1 0 0 1	**5**	**49**
57	22	b	b) No	Kerala	1 0 0 1 0 1 0	**3**	1 1 1 0 0 0 0 0 0	**3**	0 0 0 0	**0**	1 1 0 0	**2**	0 0 0 0	**0**	0 0 1 0 0 0 0 0	**1**	**17**
58	21	b	b) No	Kerala	0 0 1 1 0 0 1	**3**	1 1 0 0 0 1 1 1 1	**6**	0 0 0 1	**1**	1 1 1 1	**4**	1 1 0 0	**2**	1 1 1 1 1 1 1 1	**8**	**40**
59	22	b	a) yes	Kerala	1 1 1 1 0 0 1	**5**	1 1 0 0 1 1 0 1 0	**5**	0 1 0 0	**1**	1 0 0 1	**2**	1 1 0 0	**2**	1 1 1 0 0 0 0 0	**3**	**33**
60	21	b	b) No	West Bengal	1 1 1 0 1 0 1	**5**	0 1 0 1 0 1 0 1 1	**5**	0 1 0 1	**2**	1 0 0 0	**1**	0 0 0 0	**0**	1 1 1 0 1 0 1 1	**6**	**32**
61	20	b	b) No	West Bengal	0 1 1 1 0 0 1	**4**	0 1 0 0 0 1 1 1 1	**5**	0 1 1 1	**3**	0 0 1 0	**1**	0 0 0 0	**0**	1 0 1 0 0 0 0 1	**3**	**29**
62	20	b	b) No	West Bengal	1 1 1 1 1 0 1	**6**	1 1 1 0 1 1 1 1 0	**6**	1 0 1 1	**3**	1 1 1 0	**3**	0 0 0 0	**0**	0 1 1 1 1 0 0 1	**5**	**41**
63	21	b	b) No	West Bengal	1 1 1 1 1 0 1	**6**	0 1 1 0 0 0 0 1 0	**3**	1 0 0 0	**1**	0 1 1 1	**3**	0 0 0 0	**0**	1 0 0 0 1 1 0 0	**3**	**29**
64	20	b	b) No	West Bengal	1 1 1 0 1 0 0	**4**	0 1 0 1 0 1 1 1 1	**6**	0 1 1 1	**3**	1 1 1 1	**4**	1 0 0 0	**1**	1 1 1 1 1 0 0 1	**6**	**42**
65	27	b	b) No	West Bengal	1 1 1 0 1 1 1	**6**	1 1 0 0 0 1 0 1 0	**4**	0 0 1 1	**2**	0 1 1 0	**2**	0 0 0 0	**0**	1 0 1 0 1 0 0 0	**3**	**31**
66	21	b	b) No	Kerala	1 1 1 1 1 0 1	**6**	1 0 0 0 0 1 1 1 1	**5**	1 0 1 1	**3**	1 0 1 0	**2**	0 0 0 1	**1**	0 1 0 0 1 1 0 1	**4**	**38**
67	24	b	b) No	West Bengal	1 1 1 1 1 0 0	**5**	0 1 0 1 1 0 1 1 1	**6**	1 0 1 1	**3**	0 0 1 1	**2**	0 0 1 0	**1**	1 0 1 1 1 0 0 0	**4**	**38**
68	21	b	b) No	West Bengal	1 1 1 0 1 0 0	**4**	1 1 1 0 1 0 1 1 1	**7**	0 1 0 1	**2**	0 0 1 0	**1**	0 0 0 0	**0**	0 1 0 0 0 1 0 1	**3**	**31**
69	20	b	b) No	West Bengal	0 1 0 0 1 1 1	**4**	1 1 0 0 0 1 1 1 0	**5**	0 0 0 0	**0**	0 0 1 0	**1**	0 1 0 0	**1**	1 1 0 0 1 0 1 1	**5**	**27**
70	22	b	b) No	Kerala	0 1 1 0 1 1 0	**4**	1 1 0 1 0 1 1 1 1	**7**	0 0 0 0	**0**	1 1 0 0	**2**	0 0 0 0	**0**	0 1 1 1 1 1 0 0	**5**	**31**
71	22	b	b) No	Kerala	0 0 1 1 1 1 1	**5**	1 1 0 1 0 1 1 1 1	**7**	1 1 1 1	**4**	0 0 1 0	**1**	0 1 0 0	**1**	1 1 1 1 1 0 0 0	**5**	**41**
72	21	b	b) No	West Bengal	1 1 1 1 1 0 0	**5**	0 1 0 1 0 0 1 1 0	**4**	1 1 1 1	**4**	1 0 1 1	**3**	1 1 0 0	**2**	1 1 1 1 0 0 0 1	**5**	**41**
73	21	b	b) No	Karnataka	1 0 0 1 0 0 0	**2**	1 1 0 0 1 1 1 1 0	**6**	0 1 1 0	**2**	1 1 0 1	**3**	0 0 0 0	**0**	0 1 1 0 0 0 0 0	**2**	**28**
74	21	b	a) yes	West Bengal	1 1 1 1 1 1 1	**7**	1 0 0 1 0 0 0 1 1	**4**	1 0 0 1	**2**	1 1 1 0	**3**	1 0 0 0	**1**	1 1 1 0 1 1 0 1	**6**	**40**
75	22	b	a) yes	Kerala	1 1 1 1 0 0 1	**5**	1 1 0 0 1 1 0 1 0	**5**	0 1 0 0	**1**	1 0 0 1	**2**	1 1 0 0	**2**	1 1 1 0 0 0 0 0	**3**	**33**
				total	54 50 60 38 56 24 48	**330**	55 49 24 40 35 60 53 61 50	**427**	33 24 41 43	**141**	37 23 56 28	**144**	34 35 9 14	**92**	44 49 63 27 47 30 22 39	**321**	**2589**