



## “A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON COPING STRATEGIES FOR STRESS-RELATED DISORDERS AT WORKING ENVIRONMENT AMONG STAFF NURSES IN SELECTED HOSPITAL BAREILLY”

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### ABSTRACT

**Background:** Stress is the response of the body and mind towards various changes in the physical environment of a person. Stress in the workplace is commonly recognized as one of the main factors that cause mental health problems. The term "stress", as it is currently used was coined by Hans Selye in 1936, : who defined it as "the non-specific response of the body to any demand for change". Work stress in nursing was first assessed in 1960 when Menzies identified four sources of anxiety among nurses: patient care, decision-making, taking responsibility, and change. The nurse's role has long been regarded as stress-filled based on the physical labor, human suffering, work hours, staffing, and interpersonal relationships that are central to the work nurses do.

### Objective:

- To assess the knowledge regarding coping strategies for stress-related disorders at the working environment among staff nurses
- To determine the effectiveness structured teaching program among the staff nurses regarding coping strategies for stress-related disorders at the working environment
- To find the association between Pre-test knowledge scores with their selected demographic variables.

**Material and methods:** A Quantitative research study was done. A pre-experimental, one-group pretest, post-test design was adopted for the present study.

**Sample:** The accessible population for the study consists of staff nurses.

**Sample Setting:** The study was conducted in Rohilkhand Medical College and Hospital Bareilly, U.P.

**Sample size:** 60 samples were selected by Convenient Sampling Technique. Data was collected using the Self-Structured Knowledge Questionnaire. The collected data was organized in a Master Data Sheet and analyzed using Descriptive and inferential statistics as per the study's objective.

**Results:** The mean post-test knowledge score (**22.73**) was greater than the mean pre-test knowledge score (**11.71**) with the mean difference of **11.46**. The calculated t value was (**t=-23.84**) more than the tabled value (**t (59) = 3.46**). Hence there is significant difference in the mean post-test knowledge scores; it shows that the structured teaching program was effectiveness in improving the level of knowledge of staff nurses.

**Conclusion:** Structured Teaching Program, is an effective teaching method to teach the participants and also help to enhance the knowledge of the staff nurses regarding coping strategies for stress-related disorders in the working environment

**Keywords:** Structured Teaching Program, stress, coping strategies, stress-related disorders.

## INTRODUCTION

**The great weapon against stress is our ability to choose one thought over another“Adopting the right attitude can convert a negative stress into a positive one.**

**- Hans Selye.**

Hans Selye first used the term "stress" in 1936 and later described it as "the non-specific response of the body to any desire for change." Stress is the body and mind's reaction to numerous changes in a person's physical surroundings.<sup>1</sup>

There are many various ways that individuals have described stress. Medical experts, social scientists, anthropologists, psychologists, and even zoologists have all shown an interest in the subject. For our purposes, it seems most instructive to investigate it from a variety of angles in order to grasp the event completely and to get an understanding of its historical foundations.<sup>2</sup>

The state of stress is not an ailment in and of itself. It is, nonetheless, a strong factor in sickness. It is well-recognized that prolonged, severe stress can result in major health issues.<sup>3</sup>

Some of the most difficult problems that psychologists, psychiatric professionals, and behavioral scientists worldwide face include stress, anxiety, and depression. Depression is a frequent mental ailment in the globe, both among physical and mental illnesses.<sup>4</sup>

Working place stress is the alteration in one's physical or mental state as a result of situations at working that the employee perceives to be challenging or dangerous.

Menzies originally recognized four types of stress for nurses in 1960 and categorized them as patient care, decision-making, taking responsibility, and change. Based on the physical labor, human suffering, working hours, staffing, and interpersonal interactions that are essential to the working nurses do, the role of the nurse has long been seen as stressful. However, since the middle of the 1980s, the use of technology has grown more prevalent, healthcare prices have continued to climb, and working place volatility may be to blame for an increase in nurses' working stress.<sup>5</sup>

The cost of stress in the workplace today is significant. Working person who experience ongoing working place stress will experience psychological and physical dysfunctions as well as a decline in motivation to perform at the highest level. The staff's absence due to illness has also been connected to a number of working place environmental factors.<sup>6</sup>

It is widely acknowledged that one of the key elements contributing to mental health issues is working place stress. The Department of Health and the Confederation of British Industry both performed surveys, and the results show that stress, anxiety, and depression account for 30% of ill days in the UK.<sup>7</sup>

The hospital's nursing staffs operate under stressful conditions, which may show in how they perceive their psychosocial working place and the ward environment. Low levels of social support at working, high psychological job demands, occupational stress, and occupational stress combined with low social support were all found to predict staff nurses' poor well-being (feeling tense and emotionally exhausted).<sup>8</sup>

To avoid problems with their physical and mental well-being, staff nurses must effectively manage their stress. These are just a few of the frequent problems that might impair performance on both a personal and professional level.<sup>9</sup>

The ward atmosphere reflects the setting in which the care is provided and patient-staff connections are formed, whereas the working environment has to do with the staff's working conditions, including organizational and job features.<sup>10</sup>

Various coping strategies are used by staff nurses to deal with their unfavorable psychosocial environment. Understanding how to modify the pressure, including how to release and get rid of it whenever possible, is the key to managing stress.<sup>11</sup>

A better working environment could be created by enhancing activities that help patients solve their own personal and practical problems, clarifying the ward and treatment or caring structure and regimes, and developing the ward atmosphere.<sup>12</sup>

Management in nursing has become more difficult during the past ten years. As nurse managers assume more administrative management duties, their jobs have significantly expanded to include far more responsibility for direct patient care, staff nurse management, leadership, and organizational resource management.<sup>13</sup>

Muscle relaxation, meditation, biofeedback, cognitive-behavioral skills, and combinations of these techniques were all used in working site studies to manage stress.

Muscle relaxation, cognitive-behavioral skills, and combinations of two or more approaches were the most often used techniques. Somatic complaints, physiologic and psychological evaluations, and job-related variables were all used as outcome indicators to assess the effectiveness of stress therapies. In almost three-quarters of the trials, training was provided to all staff; high-stress individuals were not sought out particularly.<sup>14</sup>

According to a cross-sectional study conducted in 35 nations, including India, almost two-thirds of employees who had experienced depression faced discrimination at work or while seeking for new positions. This study also discovered that high-income countries experienced more anticipated and perceived prejudice than low-income nations. People who experience employment discrimination on a regular basis sometimes suffer in silence and don't seek the necessary care.<sup>15</sup>

### **NEED OF THE STUDY:-**

The World Health Organization states that stress is one of the most prevalent behavioral illnesses linked to low mood, lack of interest, guilt, and a sense of worthlessness, as well as sleep and eating issues, decreased energy, and difficulty concentrating.<sup>17</sup>

Occupational stress among healthcare professionals is currently a major issue in health policy. Numerous studies have identified nursing as a difficult profession. Stress has a cost for individuals in terms of their health, success, and job happiness, as well as for the organization in terms of absence and turnover, which may ultimately affect the caliber of patient treatment.<sup>18</sup>

Because it can take many different forms, stress is hard to identify and challenging to manage. Stress comes in so many forms that it is frequently difficult to know what to do.<sup>16</sup>

Working place stress is defined as unhealthy responses people have to excessive demands and pressures made of them at working. The health, welfare, education, and public administration sectors reported the highest rates of working-related stress over the previous three years, according to the most recent estimates from the Labour Force Survey (2018–2020). Health and working managers, lecturers, and welfare associate professionals had the highest rates of working-related stress reported over the past three years.<sup>19</sup>

Job stress, which is now more prevalent than ever, poses a threat to the health of employees and, by extension, the health of organizations, according to the National Institute for Occupational Safety and Health (NIOSH), a division of the U.S. Department of Health and Human Services. When the demands of the task don't match the employee's capabilities, resources, or desires, NIOSH defines job stress as the harmful physical and emotional reactions that follow. Stress can also occur when there are high expectations and little to no control on the part of the employee. Stress at working will harm your health.<sup>20</sup>

The present prevalence rate of neuro-psychiatric disorders, which approaches 1 in 4 people worldwide, has been dubbed a "unheralded public health crisis" by the UN, WHO, and World Bank. Rates are influenced by these illnesses' early start, significant disability, and significant chronicity. Most crucially, there are 500 million individuals who are underserved due to low detection and treatment rates, which are believed to be less than 10% globally.<sup>21</sup>

Due to less social support and on- and off-the-job affirmation than nurses with different specialties, staff nurses were more prone to burnout. Numerous factors were recognised as common trigger for mental health. The most prominent group of nurses working in hospitals with poor professional relationships is them. If unfavourable geographic point conditions persist, stress management therapies for medical nurses are predicted to be less likely to be successful. Triple-crown strategies for stress management should target both organizations and individual nurses. Working place interactions and consequently working conditions lead to job stress. Or, to put it another way, what one person finds unpleasant may not bother them. This sort of view guides bar policies that put employees first and help them deal with demanding working place situations.<sup>22</sup>

A representative sample of 21,307 educators from South African public schools participated in a cross-sectional study. The prevalence of diseases linked to stress was found to be 15.6% for hypertension, 9.1% for stomach ulcers, 4.5% for diabetes, 3.3% for moderate mental distress, 3.1% for serious mental distress, and 3.5% for asthma, according to the results. According to the study, instructors experience extremely high levels of stress. The majority of stress-related disorders were correlated with job stress and a lack of job satisfaction (hypertension, heart disease, stomach ulcer, asthma, mental distress, tobacco, and alcohol misuse).<sup>23</sup>

Using the keywords stress, occupational stress, and nursing, Moustakas E. and Konstantinidis TC. conducted a systematic review produced at "European Agency for Safety and Health at Working" and "National Institute for Occupational Safety and Health (NIOSH)". Results indicate that stress has been connected to a number of characteristics of working life. Working overload and role-based stressors including lack of power, role ambiguity, and role conflict are examples of working-related aspects that can be stressful. Stressful factors include threats to professional growth and performance, such as being undervalued and unclear advancement prospects<sup>24</sup>. Stress is linked to poor productivity, diminished performance capacity, and a lack of concern for the company and coworkers. The study found that over the past ten years, there has been an increase in awareness of the stress that hospital nursing staff suffer.<sup>25</sup> The physical, psychological, and social aspects of the workplace can cause nurses to experience more general stress than events that are specific to a certain type of hospital unit. High levels of stress have a negative impact on patient care by causing staff burnout and turnover. It appears that nurses need help from interventions that target the sources of occupational stress.<sup>26</sup>

The researcher finds that he saw all the perspectives and during clinical duties, he observed that the staff Nurses faces many problems regarding patient care, decision making, taking responsibility, and duty schedule, and they were stressed due to these factors and their job experiences

There the researcher selected this topic for the study of his interest and curiosity.

## **STATEMENT OF THE PROBLEM:**

**“A study to assess the effectiveness of Structured Teaching Program on coping strategies for stress-related disorders at working environment among Staff Nurses in Selected Hospital Bareilly”**

## **OBJECTIVES –**

1. To assess the knowledge regarding coping strategies for stress-related disorders at the working environment among staff nurses.
2. To determine the effectiveness of structured teaching program among the staff nurses regarding coping strategies for stress-related disorders at the working environment
3. To find the association between Pre-test knowledge score with their selected demographic variables.

## **OPERATIONAL DEFINITION:**

In this study, the following terms refers to: -

**EFFECTIVENESS:** refers to the extent to which the structured teaching program regarding the coping strategies for the stress-related disorder at working environment to achieves desired effect in improving the level of knowledge among staff nurses.

**STRUCTURED TEACHING PROGRAM:** refers to planned teaching activities given through lectures to increase the knowledge of stress and its coping strategies.

**COPING STRATEGIES:** The techniques adopted by the staff nurses to overcome and manage stress-related disorder.

**WORKING:** Environment where the staff nurses are engaged to care for the patients and carry out their regular professional activities.

**KNOWLEDGE:** refers to the written response of staff nurses regarding the coping strategies for stress-related disorders at the working environment as measured by a structured knowledge questionnaire

**STAFF NURSE:** refers to those who have completed a Diploma in nursing and midwifery or B.Sc. Nursing or M.Sc. Nursing, working in Hospitals and who are engaged in direct patient care.

**HOSPITAL:** Refers to a place where patients come and are admitted for the better care and treatment.

### **RESEARCH HYPOTHESIS:**

All hypotheses will be tested at a 0.05 level of significance.

**H<sub>1</sub>** There was a significant difference between the pretest and post-test scores on knowledge regarding coping strategies for stress-related disorders in the working environment among staff nurses

**H<sub>2</sub>** There was a significant association between the pretest knowledge score with their selected demographic variables.

### **ASSUMPTIONS:**

- Staff Nurses possess some knowledge regarding coping strategies for stress-related Disorders.
- A structured teaching program was help to improve the level of knowledge regarding coping strategies for stress-related disorders.

### **LIMITATIONS**

- The study was limited to staff Nurses in selected hospitals only.
- Staff Nurses, who were present during the data collection period.
- The sample size was limited to 60 only

### **REVIEW OF LITERATURE**

**“Stress is the Spice of Life; the absence of stress is death”-Hans Selye**

**A Literature Review is "a systematic, explicit, and reproducible method for identifying, evaluating, and synthesizing the existing body of completed and recorded work produced by researchers, scholars, and practitioners."**

The literature is reviewed to summarize knowledge for use in practice or to provide a basis for conducting a study.

**A literature review is a body of text that aims to review the critical points of knowledge on a particular topic of research.**

**ANA 2000**

Literature was reviewed and organized under the following headings: -

- ✓ Studies related to the prevalence of stress among staff nurses.
- ✓ Studies related to the level of stress in the workplace.
- ✓ Studies related to stress and coping strategies among the nurses in the workplace.

## **REVIEW OF LITERATURE-**

**A Literature Review is "a systematic, explicit, and reproducible method for identifying, evaluating, and synthesizing the existing body of completed and recorded work produced by researchers, scholars, and practitioners."**

### **Studies related to the prevalence of stress among staff nurses.**

**Alqarni T et. al.** conducted a cross-sectional study among mental healthcare professionals in Jeddah to assess the prevalence of stress, burnout & job satisfaction in the workplace. Data were collected from 107 mental healthcare professionals using a self-administered questionnaire related to stress. Data analysis was performed using (SPSS) version 23. The result reveals that a total of 107 participants—50.5% men and 49.5% women—were included, and the response rate was 79.2%. Stress was prevalent in 56.1% of people. 41 (38.3%) and 26 (24.3%) of the respondents reported high levels of depersonalization and emotional weariness, respectively, whereas 61 (57%) of the respondents reported high levels of low personal accomplishment. 25 people (23.4%) reported being content with their jobs, whereas 74 people (69.2%) were undecided. The emotional weariness score of male participants (27 12) was considerably greater than that of female participants (22 10) ( $t(105) = 1.99$ ,  $p\text{-value} = 0.049$ ). Additionally, participants' overall job satisfaction was considerably greater ( $p\text{-value} = 0.041$ ) when their monthly pay was over SR 20,000. Hence the study concluded that Less than one-quarter of the participants reported being content with their professions, which raises concerns about the stress and burnout rates among mental health professionals. Expanding the findings and examining the underlying aspects will require additional research.

### **Studies related to the level of stress in the workplace.**

**Javadi-Pashaki N et. al.** conducted an analytical cross-sectional study among staff nurses in governmental health centers of Guilan University of Medical Sciences, the North of Iran to assess the level of stress and sources of stress. Data was collected from 318 staff nurses by cluster sampling using self-reported questionnaires related to stress. Data analysis was performed using (SPSS) for Windows version 19. The result reveals that The task-oriented approach had the highest mean score (47.71 7.88) across all coping strategy aspects. Additionally, the findings showed that stress and coping mechanisms might account for around 2.5% of the variance in overall health ( $R^2 = 0.025$ ). However, coping methods were found to be a predictor of overall health based on the statistically significant level of the data ( $P = 0.002$ ,  $\beta = 0.094$ ). The study came to the conclusion that it is crucial to take coping mechanisms into account when estimating nurses' general health. Because some pressures in the nursing profession are inevitable and it's important to prevent their negative impacts, managers can consider workshops as an efficient training tool to lessen employee stress.

### **Studies related to stress and coping strategies among the nurses in the workplace.**

**Ofei AM et. al.,** conducted a cross-sectional study among nurse managers in 38 selected hospitals in Ghana to assess the stress and their coping strategies. Data was collected from 267 nurse managers using a self-constructed questionnaire related to stress. Data analysis was performed using descriptive and inferential statistics. The result reveals that Lack of employees (94.4%), unfavorable working circumstances (91.8%), insufficient management assistance (89.9%), and a heavy workload (89.15%) are the main sources of stress for NMs. NMs underwent several forms of stress (psychological, emotional, and physical). Time management (91.8%), efficient communication (91%), and task delegation (89.5%) are the most common ways to deal with stress, whereas binge eating (18.4%) is the least successful technique. Together, sociodemographic factors explained 6.4% of the stress experienced by NMs [ $R^2 = 0.064$ ,  $F(6,241) = 2.676$ ,  $p = 0.016$ ]. Accordingly, the study

came to the conclusion that senior hospital management should provide a supportive working environment for nurses and that the nomination of NMs should be based on competence and experience. Relevance to Nursing Practice Stress is highly frequent, especially among hospital managers and NMs.. The comprehensive evidence from the current study shows that NMs' overall health, patient safety, and the standard of care are all negatively impacted by stress.

## RESEARCH METHODOLOGY

The methodology section of the research informs the reader about the research design, sampling procedure, setting, data collection procedure, and tools used to measure outcome variables.

Researchers should describe information on various phases of data collection and ethical principles followed to protect human subjects.

It allows the researcher to verify the soundness of the methodology used. This section should include research design, study setting, population, sampling plan, method of data collection, data management, data analysis, ethical considerations, and work plan.

### (R. SREEVANI 2019)

#### Research approach

It involves the description of the plan to investigate the phenomenon under study in a structured (quantitative), unstructured (qualitative), or combination of the two methods. Therefore, the approach helps to decide about the presence or absence as well as manipulation and control over variables.

### (K. SURESH 2014)

A quantitative research approach was used in this research study.

#### Research Design

A research design is the framework or guide used for the planning, implementation, and analysis of a study. It is the plan for answering the research question or hypothesis. It is important to have a broad preparation and understanding of the different types of questions and hypotheses.

### (K.RAJESH 2016)

Research design should specify the type of research study the researcher intends to carry out. For example, Descriptive, Experimental, Comparative study etc. The selection of design is based on the research objectives.

### (R. SREEVANI 2019)

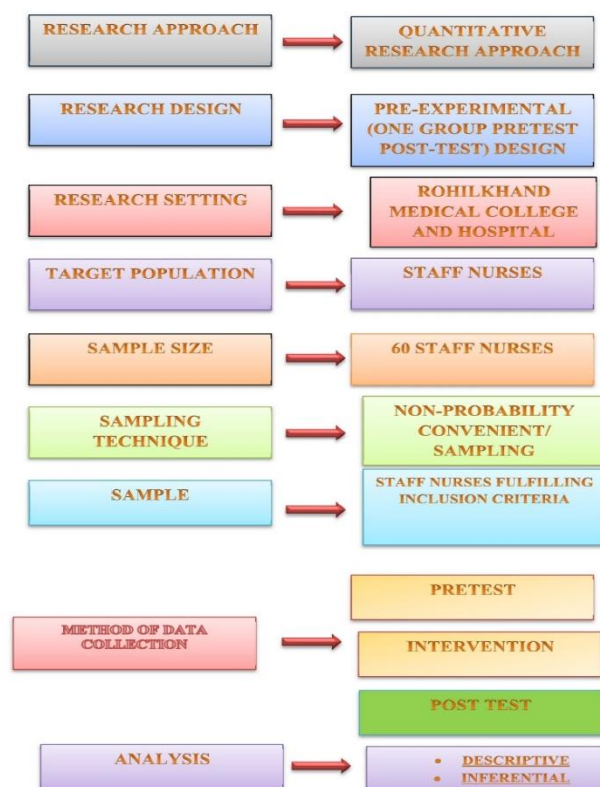
**Table 1: In this study pre-experimental one group pertest post-test design was adopted.**

Group	Pretest	Intervention	Post test
Staff nurses	O <sub>1</sub>	X	O <sub>2</sub>

**O1:** Assessment of pre-test knowledge regarding coping strategies in stress-related disorder.

**X:** Intervention through the structured teaching program

**O2:** Assessment of post-test knowledge regarding coping strategies in stress-related disorder.



**FIG:2 SCHEMATIC REPRESENTATION OF NURSING PROCESS**

### Population

This indicates the subjects who are to be included in the study.

The entire set of individuals or objects having some common characteristics selected for a research study, sometimes referred to as the universe of the research study.

• **Target population:** - The entire population in which the researchers are interested and to which they would like to generalize the research findings. In the present research study the target population consists of Staff Nurses.

• **Accessible population:** - The aggregate of cases that conform to designated inclusion or exclusion criteria and that are accessible as subjects of the study. In this study the accessible population was staff nurses from selected hospitals.

### Research setting

This specifies where the study is going to be conducted. The study setting is the location in which the research is conducted; it could be natural, partially controlled, or highly controlled.

The present study was conducted in: -

1. Rohilkhand Medical College and Hospital, Bareilly.

### Sample and sample size

Sample is a group of people, objects, or elements that are taken from a larger population for participation in a study.

The selected sample should be representative of the entire population.

A sample is a limited part of a population whose properties are studied to gain information about the whole



### **(Webster, 1985)**

In this study, sample consists of Staff Nurses who are fulfilling the inclusion and exclusion criteria at selected hospitals of Bareilly.

The sample size consists of 60 Staff Nurses based on the selection criteria.

### **Sampling technique**

It is systematic process of selecting a small portion or subsets of the population to represent the entire population. The sample method involves taking representative selection of the population and collecting the data as research information.

**(K. Rajesh 2016)**

Sampling is a procedure wherein a fraction of the data is taken from a large set of data, and the inference drawn from the sample is extended to whole group.

In this study the non- probability, Convenient sampling technique was used to select samples.

### **Sampling criteria**

Sampling criteria are also known as eligibility criteria. This includes exclusion and inclusion criteria.

#### **Inclusion criteria:**

Staff Nurses who are:

- willing to participate in the study.
- present during data collection.
- Staff nurses who were working in selected hospitals, Bareilly.

#### **Exclusion criteria:**

- Staff Nurses of other hospitals.
- Staff Nurse of another shift

### **Variables**

A variable is a characteristic, event, or response that represents the elements of the research question in a detectable way.

**(Waltz, Strickland, and Ling, 2004)**

A variable is something that varies. It refers to measuring characteristics of people, things, and situations that can change or vary.

**Independent variable:** Structured Teaching Program.

**Dependent variable:** Level of Knowledge regarding coping strategies in stress-related disorder.

### **Development of the data collection tool**

Tool for data collection are the specific measures to collect information on a particular construct i.e., questionnaire, rating scale etc.

**(K. RAJESH)**

A research instrument is a device used to measure the concept of interest in a research project that a researcher uses to collect data.

**(K. SURESH)**

Research instrument or a tool is a device used to measure the concept of interest in research study.

**(R. SREEVANI)**

Based on the objectives of the study the Researcher developed a structured interview schedule and a visual analogue scale.

**Table 2: Level of knowledge and distribution of score**

SCORE	LEVEL OF KNOWLEDGE
0-10	Inadequate knowledge
11-20	Moderate knowledge
21-30	Adequate knowledge

### **Description of data collection tool**

The tool was developed by the investigator on basis of research problems; the Researcher developed a structured interview schedule

It consists of two parts: -

#### **Part1: Socio-Demographic data:**

It included data about the age of staff nurses, Gender, Religion, Marital status, Professional Qualification, Years of Experience, and type of family.

**Part2:** Consists of a structured questionnaire on knowledge regarding Stress Coping Strategies.

- ✓ Part 1: Consists of 10 items on knowledge on stress at the workplace.
- ✓ Part2: Consists of 10 items on knowledge on general information Regarding stress.
- ✓ Part 3: Consist of 10 items on knowledge regarding coping strategies of stress.

### **Validation of the tool**

Validation is the extent to which an instrument measures the attributes of a concept accurately. The validity of an instrument concerns its ability to gather the data that it is intended to gather.

Validity refers to the degree to which an instrument measures what it is supposed to measure.'

Validity describes the extent to which a measure accurately represents the concept it claims to measure.

**(K.RAJESH)**

To make sure the content validity, the tool and structured teaching program content were evaluated by 5 experts, 3 experts are from the Psychiatric Nursing and 2 from the Medical Department of Psychiatric. The experts were requested to evaluate and authenticate the tool and structured teaching program for adequacy, clarity, appropriateness, and meaningfulness. Minor modifications were made on the basis of suggestions and comments given by the experts.

### **Reliability of the tool**

Reliability refers to the consistency with which an instrument or test measures what it is supposed to measure. Reliability is the extent to which a measurement or instrument or test yields the same results on repeated administration.

$$\frac{n \sum xy - \sum x \sum y}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}}$$

The tool was tested for reliability on 06 staff Nurses during pilot study by applying test-retest method by using Karl Pearson's co-efficient of correlation formula. The reliability coefficient of the Structured Knowledge Questionnaire was **r= 0.87**, revealing that the tool is reliable for the administration for the main study.

$$r = \underline{\hspace{10em}}$$

### **Pilot study**

A pilot study is referred to a small-scale preliminary tryout of the method to be used in an actually large study, which acquaints the researcher with problems that can be corrected in proportion to the large research study or is done to provide the researcher with an appropriate to try out the procedure, method, and tools of data collection.

A pilot study was conducted from 11-03-22 to 18-03-2022 at Gangasheel Hospital, Bareilly with written permission from the Chief Medical Superintendent. The researcher selected 06 post Staff Nurses by using a Non-Probability Convenient sampling technique who met the inclusion criteria and written consent was taken from the sample by describing the purpose of the study and convinced of the confidentiality of the information provided. The data was collected by Structured Knowledge Questionnaire, the post-test conducted on 18-03-22 for the same sample. Data analysis was done by using descriptive and inferential statistics. The findings of the study result show that the tools were feasible and practicable. Therefore, the structured tool and structured teaching program proceeded for the main study.

### **Procedure for data collection**

Formal permission was granted by the Chief Medical Superintendent of Rohilkhand Medical College and Hospital Bareilly (U.P). The duration of data collection was from 17-05-2022 to 24-05-2022 The purpose of the study was discussed with participants to get their cooperation.

- Written consent was taken from each participant.
- The intervention was given to only the selected staff Nurses
- After giving the intervention the post-test was conducted after 7 days on the same sample.
- Collected data was tabulated for analysis.

### **Plan for data analysis**

The analysis of data is based on the objectives of the study. The data obtained from the sample was analyzed by descriptive and inferential statistics.

#### **• Descriptive statistics**

Collected data was organized in a master sheet, and analyzed by using descriptive statistics such as frequency, percentage, mean, and standard deviation to compute demographic variables.

#### **• Inferential statistics**

- Paired ‘t-test’ was used to find the effectiveness of a structured teaching program.
- Chi-square test to find the association between the pre-test level of knowledge of staff nurses with their selected demographic variables.

### **DATA ANALYSIS AND INTERPRETATION**

This chapter helps the analysis and interpretation of data collected from Staff nurses work as nursing staff in selected hospital Bareilly

The present study was designed to assess the effectiveness of structured teaching program on coping strategies for stress-related disorders at the work environment.

The purpose of the analysis is to reduce the stress at the work environment form so that the research problem can be studied and tested, including the relationship between variables.

This chapter deals with the analysis and interpretation of data collected from 60 staff nurses

The collected data was organized in a master data sheet & analyzed descriptive and inferential statistics as per the objectives of the study, using descriptive and inferential statistics.

The analysis is a way of organizing, categorization, and scrutinizing data in such a way that research questions can be answered or meaningful implications can be drawn.

(K.S. Sharma)

Interpretation of data refers to the critical examination of the analyzed study results to draw inferences and conclusions. This is an activity of critical thinking, which is done carefully through brainstorming to infer the condensed and statistically computed data, so that research questions can be answered and hypotheses can be tested.

(K.S. Sharma).

## OBJECTIVE

4. To assess the knowledge regarding coping strategies for stress-related disorders at the work environment among staff nurses
5. To determine the effectiveness of a structured teaching program among the staff nurses regarding coping strategies for stress-related disorders at a work environment
6. To find the association between Pre-test knowledge scores with their selected demographic variables.

## HYPOTHESES

All hypotheses will be tested at a 0.05 level of significance.

**H<sub>1</sub>** There was a significant difference between the pretest and post-test scores on knowledge regarding coping strategies for stress-related disorders at the work environment among staff nurses

**H<sub>2</sub>** There was a significant association between the pretest knowledge score with their selected demographic variables.

## ORGANIZATION OF THE DATA ANALYSIS

The data was divided into sections as follows:

**Section A:** Description of demographic characteristics of Staff Nurses.

**Section B:** Effectiveness of structured teaching program regarding coping strategies for stress-related disorders at the work environment

**Section C:** Association of the level of knowledge (pre-test) & selected demographic variables of the sample

### Section A: Description of demographic characteristics of Staff Nurses.

S.NO	DEMOGRAPHIC VARIABLES		F	%
1.	Age in year	a. 21-30 Years	35	58
		b. 31-40 Years	22	36.7
		c. 41-50 Years	03	5.0
		d. 50- above	0	0
2.	Gender	a. Male	15	25
		b. Female	45	75
		c. Other	0	0
3.	Religion	a. Hindu	27	45
		b. Muslim	12	20
		c. Christian	18	30
		d. Other	3	5.0
4.	Marital status	a. Married	32	53
		b. Unmarried	25	41

		c. Other	3	5.0
5.	Professional Qualification	a. ANM	14	23.3
		b. GNM	25	41.7
		c. B.Sc. Nursing	19	31.7
		d. M.Sc. Nursing	2	3.3
		e. Other	0	0
6.	Years of Experience	a. 0-3 Years	37	61.7
		b. 4-6 Years	21	35.0
		c. 7-9 Years	02	3.3
		d. 10 Years	0	0
7.	Types of Family	a. Nuclear	33	55
		b. Joint	23	38.3
		c. Broken	04	6.7

## SECTION B: EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON COPING STRETEGIES ON STRESS RELATED DISORDERS.

Comparison of mean pre-test and mean post-test knowledge scores

**Table 3: Range Mean $\pm$  SD, Mean difference & t-value of pre-test & post test score (N=60)**

Test	Range	Mean $\pm$ SD	Mean difference	Paired 't' test
Pre-test	19-06= 13	11.71 $\pm$ 6.96	11.02	-23.86 (0.05*)
Post-test	28-19= 09	22.73 $\pm$ 4.41		

t (59) = **3.46** \*Significance

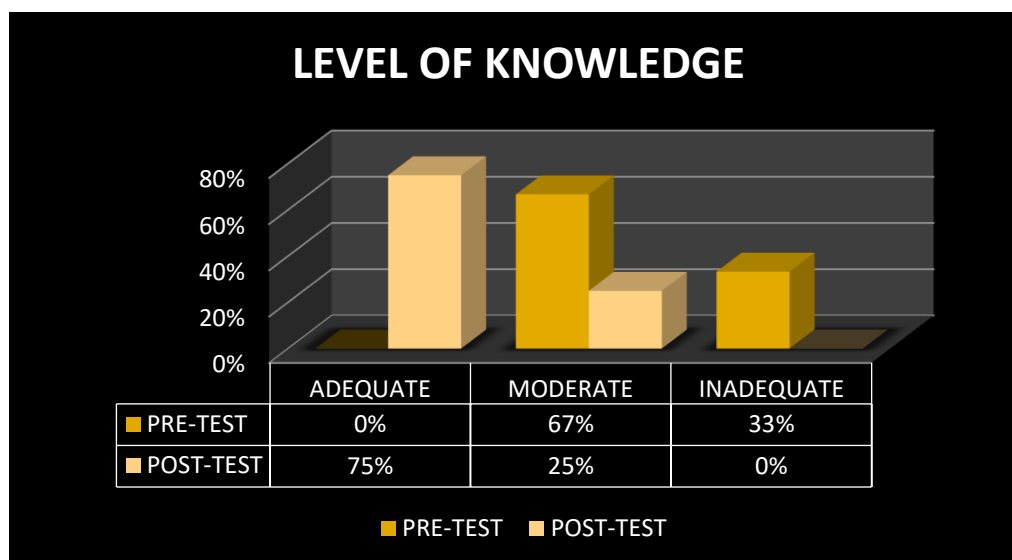
Table 3 depicts that the mean post-test knowledge score (**22.73 $\pm$ 4.41**) was greater than the mean pre-test knowledge score (**11.71 $\pm$ 6.96**) with the mean difference of **11.02**. The calculated t value was (**t= -23.84**) which was found to be highly significant at 0.05 level of significance with 95% confidence interval at the difference at df<sub>59</sub> = **3.46**. Therefore, it shows that a structured teaching program was effectiveness to improve the level of knowledge of staff nurses.

**Table 4: Comparison of level of knowledge score at pre-test & post-test.**

S.No	Observation	Inadequate knowledge		Moderate knowledge		Adequate knowledge	
		F	%	F	%	F	%
1.	Pre-test	20	33	40	67	-	-
2.	Post-test	-	-	15	25	45	75

Table 5 and figure 10 depicts that in pre-test score zero percent of staff nurses were having adequate knowledge, 67% (40) of staff nurses were having moderate knowledge. While, 33%(20) staff nurses were having inadequate knowledge regarding coping strategies of stress related disorder whereas in post-test 75% (45) percent of staff nurses were having adequate knowledge, 25%(15) of staff nurses were having moderate knowledge, while, zero percent of staff nurses were having inadequate knowledge regarding coping strategies of stress-related disorder.

Figure10: Column diagram showing the percentage distribution of participants according to their pre-test and post-test level of knowledge regarding coping strategies of stress related disorder



### SECTION C: ASSOCIATION OF LEVEL OF KNOWLEDGE SCORES (PRE-TEST) & SELECTED DEMOGRAPHIC VARIABLES OF THE SAMPLES.

This section deals with the association of demographic characteristics with pre-test knowledge scores. (Age, gender, religion, marital status, professional qualification, years of experience, and type of family concerning coping strategies of stress-related disorder

To determine the association of pre-test level of knowledge and demographic, variables, chi-square( $\chi^2$ ) test is used.

**Table 5: Association of level of knowledge score (pre-test) & selected demographic Variables.**  
(N= 60)

S. No.	Socio-Demographic variable	Total sample(N)	LEVEL OF KNOWLEDGE		Calculated value $\chi^2$	Df	Table value	Inference
			Inadequate	Moderate				
			F	F				
1.	<b>Age in years:</b>				0.18	2	5.99	NS
	21-30	35	12	23				
	31-40	22	7	15				
	41-50	03	1	02				
	50-above	00	00	00				
2.	<b>Gender</b>				1.59	1	3.84	NS
	Male	15	07	08				
	Female	45	13	32				
	Other	00	00	00				
3.	<b>Religion</b>				1.86	3	7.85	NS
	Hindu	27	09	18				
	Muslim	12	05	07				
	Christian	18	04	14				
	Other	03	02	01				
4.	<b>Marital Status</b>				0.121	2	5.99	NS
	Married	32	10	22				
	Unmarried	25	09	16				
	Other	03	01	02				
5.	<b>Professional Qualification</b>				17.74	3	7.85	S*
	ANM	14	04	10				
	GNM	25	09	16				

	BSc. Nursing	19	06	13				
	MSc. Nursing	02	01	01				
	Other	00	00	00				
6.	<b>Years of Experience</b>				0.758	2	5.99	NS
	0-3 Years	37	11	26				
	4-6 Years	21	08	13				
	7-9 Years	02	01	01				
	10 Years	00	00	00				
7.	<b>Types of Family</b>				0.561	2	5.99	NS
	Nuclear	33	11	22				
	Joint	23	07	16				
	Broken	04	02	02				

$t_{(59)} = 3.46, p < 0.05$  \*Significance

Table 7 revealed that the association of demographic variables of staff nurses regarding coping strategies for stress Related disorders in the work environment, the above table, shows that there is no significant association of age, gender, religion marital status, years of experience and the types of family with their demographic variables whereas professional qualification shows association with demographic variable.

## DISCUSSION

A report of findings is never sufficient to convey their significance. The meaning of that researcher gives to the result plays a rightful and important role in the reports. The discussion selection is devoted to thoughtful and insightful analysis of the finding leading to a discussion of a clinical and theoretical utility.

This chapter deals with the discussion in accordance with the objective of the study and hypothesis. The statement of the problem was “**a study to assess the effectiveness of structured teaching program on coping strategies for stress-related disorders at work environment among staff nurses in selected hospital Bareilly (U.P.).**”

## OBJECTIVE

1. To assess the knowledge regarding coping strategies for stress-related disorders at the work environment among staff nurses
2. To determine the effectiveness of a structured teaching program among the staff nurses regarding coping strategies for stress-related disorders at the work environment
3. To find the association between Pre-test knowledge scores with their selected demographic variables.

## RESEARCH HYPOTHESES

All hypotheses will be tested at a 0.05 level of significance.

- H<sub>1</sub>** There was significant difference between pretest and post-test scores on knowledge regarding coping strategies for stress-related disorders at the work environment among staff nurses
- H<sub>2</sub>** There was significant association between the pretest knowledge score with their selected demographic variables.

## MAJOR FINDING OF THE STUDY

The sample characters in the present study was found that out of 60 staff nurses. majority of the participants i.e., 58% belonged to 21-30 years of age, 36.7% of the participants belongs to 31-40 years of age, 05% belonged to 41-50 years of age and zero percent of the participants belongs to >46 years age group. 25% of participants were male and the majority of the participants i.e., 75% were female. 45% were Hindu, 20% Muslim, 30% were Christian, 0% were other religions. 53% were married,

41% were unmarried and 5% were other. 23.3% had professional qualification of ANM, 41.7% had the professional qualification of GNM, 31.7% had the professional qualification of B.Sc. Nursing, 3.3% had the professional qualification of M.Sc. Nursing and 0% had other professional qualifications of B.Sc. Nursing 61.7% had 0-3 years of experience, 35% had 4-6 years of experience, 3.3% had 7-9 years of experience and 0% had 10 years of experience. 55% were from nuclear family, 23% were from joint family and 6.7% were from broken family

#### **4. Objective 1: To assess the knowledge regarding coping strategies for stress-related disorders at work environment among staff nurses**

In the present study, the structured questionnaire was used to assess the level of existing knowledge score regarding stress-related disorders at work environment among staff nurses. **Figure 10** shows that percentage of nursing students according to the level of knowledge score related to coping Strategies on stress related disorders. In this Pre- test score 0% of staff nurses were having adequate knowledge, 67% (40) of staff nurses were having moderate knowledge. While, 33% (20) staff nurses were having inadequate knowledge regarding coping strategies of stress-related disorders whereas in the post-test 75% (45) percent of staff nurses were having adequate knowledge, 25% (15) of staff nurses were having moderate knowledge. 0% of staff nurses were having inadequate knowledge regarding coping strategies of stress-related disorders.

#### **5. OBJECTIVE 2:- To determine the effectiveness of structured teaching program among the staff nurses regarding coping strategies for stress-related disorders at the work environment.**

The knowledge level regarding stress-related disorders at work environment was assessed before and after the structured teaching programmed. **Table 3** showed that the mean post-test knowledge score (**22.73**) was greater than the mean pre-test knowledge score (**11.02**) with mean difference of **11.71**. The calculated t value was (**t=-23.86**) more than the tabled value (**t (59) =3.67**). Hence there is significance difference in the mean post-test knowledge scores; it shows that structured teaching program was effectiveness to improve the level of knowledge of staff nurses.

#### **6. OBJECTIVE 3:- To find the association between Pre-test knowledge score with their selected demographic variables.**

Analyses of the 3<sup>rd</sup> objective of the study showing in **Table 5** that is to find out the association between the level of knowledge on coping strategies of stress-related disorders with their demographic variable that is (Age, gender, religions, marital status, professional qualification, years of experience, and type of family) concerning coping strategies of stress-related disorders. Shows the association of pre-test level of knowledge and demographic, variables, chi square( $\chi^2$ ) test is used and the calculated chi-square value of (Age, gender, religions, marital status, years of experience, and type of family) the demographic variables were less than the corresponding table value, hence it shows that was no significant association between the pretest knowledge score with their selected demographical variables, except, only professional qualification is found significant\*

### **CONCLUSION**

Based on the findings of the study, the following conclusions were drawn.

1. Selected structured teaching programs were administered to the staff nurses.
2. Post-test results showed a significant improvement in the level of knowledge among staff nurses

Thus, it was concluded that the selected structured teaching program was effective in improving the level of knowledge among staff nurses.

### **IMPLICATIONS:**

The findings of the present study have implications for nursing practices, nursing education, nursing administration, and nursing research.



### **Nursing Practice**

The findings of the study show that the staff nurses have no information about coping strategies on stress-related disorders at the work environment to reduce the symptoms of stress as soon as possible. The present study will enable the staff nurses to become aware of coping strategies on stress-related disorders at the work environment.

- Nurses play an important role in promotive, curative, and preventive aspects of health care. The nurses should provide a structured teaching program on this particular topic and its management in the hospital and community.
- The nurses work in hospitals should themselves provide health education to their clients. They should do a structured teaching program rather than incidental teaching.
- The findings of the study can be disseminated to motivate nurses to plan for structured teaching programs regarding coping strategies on stress-related disorders at the work environment Nursing Education:
- The nursing curriculum provides clinical experience about coping strategies on stress-related disorders at the work environment
- Nurses must be abreast with new technologies, new approaches, and techniques used in coping strategies on stress-related disorders at the work environment
- In-service education regarding coping strategies on stress-related disorders at the work environment is conducted to improve the knowledge of staff nurses who are work in the hospital.

### **Nursing Administration:**

Nurses have to play a multidimensional role and their skills have to be combined with specialized knowledge to ensure prevention and coping strategies on stress-related disorders at the work environment.

- The nurse should participate in public awareness programs, through mass media and the administration should take initiatives to organize an educational program for health personnel regarding coping strategies on stress-related disorders at the work environment. Workshops, seminars, conferences, and puppet shows can be arranged for work people.

### **Nursing Research:**

The researcher who will be able to conduct and take part in a future research study has been allowed to gain first-hand experience.

The nurse researcher may use the findings of these studies to advance the health of staff nurses and find a way to avoid stress. She may also gain a thorough understanding of the condition.

The effectiveness of the study can be verified by its utilization by the nurses in work areas.

- This study can further support the need for coping strategies on stress-related disorders at work environment understanding and practice through evidence-based practice and findings.
- If someone else wants to research coping strategies on stress-related disorders at the work environment, they can utilize this work as a review of the literature.
- Research on the subject of coping strategies on stress-related disorders at work environment can produce important findings. The study's conclusions can be used for evaluation and findings quality assurance to raise overall standards of living. There are a lot of scopes for exploring more on this topic.

### **Limitations:**

The study is limited to -

- The study was limited to staff Nurses in selected hospitals only.
- Staff Nurses, who were present during the data collection period.
- The sample size was limited to 60 only

### **Recommendations:**

Based on the findings following recommendations are made: -

- The study can be conducted on a large sample by which the researcher will be able to generalize the findings.
- A study can be conducted to assess the knowledge and attitude regarding coping strategies for the stress-related disorder in the work environment
- A study can be conducted separately to assess the effectiveness of each intervention.
- A comparative study can be conducted between staff nurses of the ICU and general ward.
- To select the Psychiatric Hospital to assess the coping strategies for stress-related disorders among staff nurses working in a psychiatric unit.

### **SUMMARY**

This chapter elicited the entire summary of the whole study. The primary aim of the study is to evaluate the effectiveness of structured teaching programs on coping strategies for the stress-related disorder at the work environment among staff nurses and to improve the knowledge of staff nurses by giving structured teaching programs so that they will understand coping strategies on stress-related disorder at the work environment and able to use this knowledge in their future.

### **The present study was aimed to achieve the following objectives:**

1. To assess the knowledge regarding coping strategies on stress-related disorders at the work environment among staff nurses
2. To determine the effectiveness of a structured teaching program among the staff nurses regarding coping strategies for stress-related disorders at the work environment
3. To find the association between Pre-test knowledge scores with their selected demographic variables.

The conceptual framework was used for this study was based on the Conceptual Model Based On Modified Betty Neuman's System Model (1995)

The research design selected for the study is a pre-experimental one-group-only design.

A convenient sampling technique was used and the sample comprised a total of 60. The tool used for data collection was self-structured questionnaires.

To make sure the content validity, the tool, and the structured teaching program were evaluated by 3 experts are from the department of mental health nursing and 2 from the medical department of mental health nursing.

The pilot study was conducted from 11-03-2022 to 18-03-2022 at Gangasheel Hospital Bareilly with written permission from the Nursing Superintendent. The researcher selected 06 staff nurses by using the convenient sampling technique who met the inclusion criteria and written consent was taken from the sample by describing the purpose of the study. The tool was tested for reliability by applying the test-retest method using Karl Pearson's coefficient of correlation formula. The reliability coefficient of the Structured teaching program was  $r = 0.87$  revealing that the tool is reliable for the administration for the main study.

The final study was conducted at Rohilkhand Medical College and Hospital, Bareilly from 17-05-2022 to 24-05-2022. The intervention was given to staff nurses. After giving the intervention post-test was conducted. The collected data were analyzed by using descriptive and inferential statistics.

### **The major findings of the study were as follows:**

The sample characters in the present study were found out of 60 staff nurses. majority of the participants i.e., 58% belonged 21-30 years of age, 36.7% of the participants belonged to years of age, 05% belonged to 41-50 years of age and zero percent of the participants belonged to >46 years age group. 25% of participants were male and the majority of the participants i.e., 75% were female.

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**OBJECTIVE 2:- To determine the effectiveness of a structured teaching program among the staff nurses regarding coping strategies for the stress-related disorder at the work environment.**

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**LIST OF ABBREVIATIONS USED**

S.No.	SYMBOLS	ABBREVIATION
1.	df	Degree of Freedom
2.	F	Frequency
3.	H	Hypothesis
4.	N	Total number of samples
5.	NS	Non-Significant
6.	r	Correlation Coefficient

7.	SD	Standard Deviation
8.	$\chi^2$	Chi-Square
9.	HOD	Head of the Department
10.	#	Yates correction
11.	*	Significant
12.	WHO	World Health Organization

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