Research Article

# Effectiveness of Structured Teaching Programme on Knowledge regarding Anxiety among GNM Students of Selected Institute of Pulwama

Perkash Kour[1], Aadila Rashid[2], Aamina Bashir[3], Asif Manzoor[4], Kumail Yousouf[5], Nadeem Ahmad Dar[6], Rabiya Shafi[7], Towseef Mohiud Din[8]

[1]Assistant Professor, Department of Nursing, MMINSR, SKIMS Soura, Srinagar, Kashmir, India.
[2,3,4,5,6,7,8]BSc Nursing Student, MMINSR, SKIMS Soura, Srinagar, Kashmir, India.

## I N F O

**Corresponding Author:**
Perkash Kour, Department of Nursing, MMINSR, SKIMS Soura, Srinagar, Kashmir, India.
**E-mail Id:**
perkashkour@gmail.com
**Orcid Id:**
https://orcid.org/0000-0003-1762-455X
**How to cite this article:**
Kour P, Rashid A, Bashir A, Manzoor A, Yousouf K, Dar NA, Shafi R, Din TM. Effectiveness of Structured Teaching Programme on Knowledge regarding Anxiety among GNM Students of Selected Institute of Pulwama. Ind J Holist Nurs. 2021;12(3):9-15.

## A B S T R A C T

*Background:* The mental health of an individual is affected by a number of factors, including anxiety. Anxiety is a normal human emotion that is experienced in varying degrees as a state of emotional or physical uneasiness. Excessive anxiety occurs as a response to an actual or anticipated situation or as a pathological state.

*Aim:* The study aimed to find the efficacy of teaching programme on knowledge regarding anxiety among GNM students by assessing their knowledge before and after intervention through pre and post-test.

*Materials and Methods:* Pre-experimental approach was adopted for the study with one group pre-test post-test design. 30 GNM students studying in Dolphin Institute of Medical Sciences and Technology, District Pulwama were selected by using non-probability purposive sampling technique. Data were collected by using a self-structured questionnaire. The collected data were organised and analysed according to the objectives of the study using descriptive and inferential statistics.

*Results:* The mean post-test knowledge score was higher than the mean pre-test knowledge score. This indicates the effectiveness of the planned teaching programme in increasing the level of knowledge of GNM students regarding anxiety. There was no statistically significant association between pre-test knowledge score of the subjects with the selected demographic variables such as age, gender, residence, type of family, occupation of parents at 0.05 level of significance.

*Conclusion:* The findings of the study conclude that GNM students were not possessing adequate knowledge regarding anxiety. The planned teaching programme was found to be effective in increasing their knowledge level of study subjects.

**Keywords:** Anxiety, Structured Teaching Programme, Knowledge, Effectiveness

*Kour P et al.*
*Ind. J. Holist. Nurs. 2021; 12(3)*

**10**

## Introduction

Mental health is defined as a state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. The positive dimension of mental health is stressed upon in WHO's definition of health as contained in its constitution "Health is a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity".[1] Mental health is affected by a number of factors and anxiety is one of them. The source of the word anxiety is the Latin word "anxietas" (which means to trouble, upset, and choke). It refers to the responses (affective, behavioural, and cognitive) of an individual towards danger.[2] Anxiety, a normal human emotion, is experienced in varying degrees as a state of emotional or physical uneasiness. Excessive anxiety occurs in response to an actual or anticipated situation or as a pathological state.[3] Anxiety, unless it becomes excessive, can be helpful as it shapes an adaptive and anticipatory response to a stressful and challenging stimulus. However, when in excess, it may result in an unstable and dysfunctional mental state. Pathological anxiety can be described as arising in the absence of stress or disproportionate to the challenging stimulus in terms of severity or duration. It can lead to biological, psychological, social or occupational impairment.

Anxiety disorders, however, are different. They can cause such distress that interferes with a person's ability to lead a normal life. Anxiety is a normal emotion that everyone experiences at times. Many people feel anxious or nervous when faced with a problem at work, before taking a test or making an important decision. Behavioural characteristics of anxiety include expressions of helplessness, feeling of inadequacy, crying, and difficulty in concentrating, rumination, enabling to solve the problem and pre-occupation.[4] The WHO has estimated that by the year 2030, anxiety-related disorders will be one of the leading causes of disability.[5] Nursing students during their educational course experience a high level of anxiety especially test anxiety throughout their education. There are many factors that contribute to anxiety in nursing students. Students in nursing programmes often have competing priorities and decreased financial aid which can lead to high levels of anxiety.[6] Anxiety is associated with substantial negative effects on student's social, emotional, and academic success. Specific effects include poor social and coping skills, often leading to avoidance of social interaction, loneliness, low self-esteem, perception of social rejection, and difficulty forming friendships.[7] Hala Mohamed Sanad (2019)[8] conducted a descriptive study to assess the anxiety levels among nursing students in College of Health Sciences (CHS), University of Bahrain. A self-administered questionnaire was employed to gather data on perceived anxiety and demographic characteristics from 93 nursing students. The study revealed that majority (90.3%) of students had normal levels of anxiety.

## Research Methodology

The objectives of the study were:

- To assess the level of knowledge on anxiety among GNM students of Dolphin Institute of Medical Sciences and Technology, Pulwama
- To administer a structured teaching programme on anxiety among GNM students of Dolphin Institute of Medical Sciences and Technology, Pulwama
- To evaluate the effectiveness of the structured teaching programme on knowledge regarding anxiety among GNM students of Dolphin Institute of Medical Sciences and Technology, Pulwama
- To find out the association between the pre-test knowledge score and selected demographic variables (age, gender, residence, parental occupation, type of family)

## Hypothesis

$H_1$: There is a significant increase in the mean post-test knowledge score as compared to the mean pre-test knowledge score regarding anxiety among the GNM students after implementing the structured teaching programme at 0.05 level of significance.

$H_2$: There is a significant association between the pre-test knowledge score of GNM students regarding anxiety with their selected demographic variables (age, gender, parental occupation, type of family, residence) at 0.05 level of significance.

## Assumptions

The study assumes that:

- The GNM students may possess some knowledge regarding anxiety
- The teaching programme may increase the knowledge and clear the doubts regarding anxiety among GNM students
- Knowledge of the students can be measured with the help of a structured questionnaire

## Research Approach

A quantitative research approach was used for this study. The study design is schematically represented as follows:

- Pre-test: Assessment of knowledge score regarding anxiety among GNM students on day 1
- Intervention; Implementation of STP on knowledge regarding anxiety on day 1
- Post-test: Assessment of knowledge score regarding anxiety among GNM students on day 6

**11**

*Kour P et al.*
*Ind. J. Holist. Nurs. 2021; 12(3)*

## Research Design

Pre-experimental one group pre-test and post-test design was used.

A structured knowledge questionnaire was used to assess the knowledge of GNM students by using non-probability purposive sampling technique.

**Setting:** Dolphin Institute of Medical Science and Technology Pulwama.

**Sample Size:** 30 study subjects.

## Sampling Criteria

### Inclusion Criteria

- GNM students who were studying in Dolphin Institute of Science and Technology, Pulwama at the time of the study
- Students who were willing to participate in the study
- Students who were present at the time of data collection

### Exclusion Criteria

- Students who were not willing to participate in the study
- Students who were not available at the time of data collection

## Data Collection Tool and Technique

As the study was aimed to assess the knowledge score regarding anxiety among GNM students therefore structured knowledge questionnaire was used to collect data. A Structured knowledge questionnaire was prepared to assess the knowledge of students regarding anxiety. It was prepared on the basis of objectives of the study, conceptual framework, and extensive review of literature used for the development of the tool. The following steps were involved in the development of the tool: Preparation of blueprint, content validation of the tool, reliability testing of the tool, and modification of the tool based on suggestions.

## Description of the Tool

The tool used for the study was a self-structured knowledge questionnaire. The tool consisted of two sections:

**Section 1:** Demographic data consisting of five items seeking information about age, gender, parental occupation, type of family, and residence.

**Section 2:** Self-structured knowledge questionnaire comprising 30 items on knowledge regarding anxiety. It was further divided into 5 parts:

**Part 2.1:** Knowledge regarding general information about anxiety.

**Part 2.2:** Knowledge regarding aetiology and risk factors of anxiety.

**Part 2.3:** Knowledge regarding signs and symptoms of anxiety.

**Part 2.4:** Knowledge regarding complications of anxiety.

**Part 2.5:** Knowledge regarding treatment and management of anxiety.

## Scoring Criteria

**Section 1:** Scoring key was prepared by coding demographic variables.

**Section 2:** For knowledge regarding anxiety among GNM students, a score of 1 was assigned to each correct response and a score of 0 was given to each incorrect response. For each area of knowledge, the scores of the items were summed up and the total score was divided by the total number of the items (30), giving a mean score for each area. The mean score was converted into a per cent score by multiplying it by 100. According to the scores obtained, the following criterion was developed for interpreting the scores:

Total number of Items = 30, Maximum score = 30, and Minimum score = 0

The pilot study was conducted from 1st October 2020 to 7th October 2020 to assess the feasibility of the study. 4 (10% of sample) GNM Students were selected by non-probability purposive sampling technique from Dolphin Institute of Medical Sciences and Technology, of District Pulwama. The purpose of the study was explained to each subject and written consent was obtained from them. A self-structured questionnaire was used to assess their knowledge regarding anxiety.

## Ethical Considerations

Ethical clearance was obtained from the principal of Dolphin Institute of Medical Sciences and Technology, Pulwama. Written informed consent was obtained from the participants before their participation. The participants were assured that their participation was totally voluntary and it would be used for research purposes only. Information obtained was treated with utmost confidentiality.

## Data Collection Procedure

Formal administrative permission was obtained from the principal of Dolphin Institute of Medical Sciences and Technology, Distt. Pulwama to conduct the study. The data was collected with the help of a self-structured questionnaire from 09 October 2020 to 15 October 2020. Before administering the tool, the subjects were explained the purpose of the study and were assured confidentiality. The tool was handed over to each student during a relatively less busy time so that they will be more responsive. It took about 30 min to complete the questionnaire which was followed by 15 min break after which a structured teaching

*Kour P et al.*
*Ind. J. Holist. Nurs. 2021; 12(3)*

**12**

programme was administered for 45 minutes. After six days of this programme, a post-test was conducted to assess the knowledge gained on anxiety among GNM students who participated in the study.

## Result

The data were tabulated, analysed, organised, and presented under the following headings:

**Section A:** Findings on socio-demographic characteristics (age, gender, occupation of father, type of family and residence) of study subjects.

**Section B:** Findings to assess the pre-test and post-test knowledge scores of study subjects regarding anxiety.

**Section C:** Findings related to the association of pre-test knowledge scores about anxiety among GNM students with their selected demographic variables.

## Section A: Description of Demographic Characteristics of the Study Subjects

The data present in Table 1 reveal that 10 (33.3%) study subjects were less than or equal to 20 years of age, 15 (50%) study subjects belonged to 21-23 years of age, and 5 (16.7%) were more than or equal to 24 years of age. Maximum (24, 80%) study subjects were female and 6 (20%) were male 22 (73.33%) study subjects belonged to rural areas and only 8 (26.67%) belonged to urban areas. The parents of 12 (40%) subjects were labourers, that of 6 (20%) study subjects were government employees, and that of 12 (40%) were businessmen. Maximum (23, 76.67%) subjects belonged to nuclear families and only 7 (23.3%) subjects had joint families.

## Section B: Description and Comparison of Pre-test and Post-test Knowledge Scores of Study Subjects regarding Anxiety

This section deals with the analysis and interpretation of data obtained from scores of study subjects. The knowledge scores were assessed by using a structured knowledge questionnaire. The knowledge scores obtained were divided into three categories, that is, average (1%-50%), good (51%-75%), and excellent (76%-100%).

The findings have been summarised and analysed in the following Tables.

The data presented in Table 2 show that in pre-test, majority of the study subjects (26, 86.70%) had average level of knowledge, 4 (13.30%) had good level of knowledge, and 0 (0.0%) had excellent level of knowledge regarding anxiety. On the contrary, in post-test, all the study subjects (30, 100%) had excellent knowledge and none had average or good knowledge regarding anxiety.

## Descriptive Statistics of Pre-test and Post-test Knowledge Scores of Study Subjects regarding Anxiety

Paired 't' test was used to find out the significance of difference between the mean pre-test and post-test knowledge scores. In order to test the statistical difference between the mean pre and post-test scores, the following null hypothesis was formulated:

$H_{01}$**:** There is no significant increase in post-test knowledge score regarding anxiety after implementation of structured teaching programme (STP) among GNM students of Dolphin Institute of Medical Sciences and Technology, Pulwama at 0.05 level of significance.

Data in Table 3 show that the pre-test knowledge scores range from 9 to 20 and the post-test knowledge scores range from 23 to 30. It is also shown that the mean pre-test knowledge score is 16.233 ± 2.990 and the mean post-test score is 27.067 ± 1.68 with a mean difference of 10.83 at 0.05 level of significance which indicates that there is a high significant difference between pre-test and post-test mean knowledge scores. Thus, there is enough evidence that the increase in knowledge scores of participants in the post-test occurred due to intervention and not by chance. Therefore, the investigator rejected the null hypothesis ($H_{01}$) and failed to reject the research hypothesis ($H_1$) which states that there is a significant increase in post-test knowledge score regarding anxiety after implementation of STP among GNM students at Dolphin Institute of Medical Sciences and Technology, Pulwama at 0.05 level of significance.

**Table 1.Frequency and Percentage Distribution of Demographic Variables of GNM Students**

n = 30

| Variables | Frequency | Percentage |
|---|---|---|
| **Age (in years)** | | |
| ≤ 20 | 10 | 33.3 |
| 21-23 | 15 | 50.0 |
| ≥ 24 | 05 | 16.7 |
| **Gender** | | |
| Male | 06 | 20 |

**13**

*Kour P et al.*
*Ind. J. Holist. Nurs. 2021; 12(3)*

| Female | 24 | 80 |
|---|---|---|
| Residence | | |
| Urban | 08 | 26.6 |
| Rural | 22 | 73.3 |
| **Occupation of parent** | | |
| Labourer | 12 | 40 |
| Businessman | 12 | 40 |
| Government employee | 06 | 20 |
| **Type of family** | | |
| Joint | 07 | 23.33 |
| Nuclear | 23 | 76.67 |

**Table 2.Frequency and Percentage Distribution of Study Subjects according to their Knowledge Scores in Pre-test and Post-test**

n = 30

| Knowledge Score | Pre-test | | Post-test | |
|---|---|---|---|---|
| | **Frequency** | **Percentage** | **Frequency** | **Percentage** |
| Average (1-10) | 26 | 86.7 | 0 | 0 |
| Good (11-20) | 4 | 13.3 | 0 | 0 |
| Excellent (21-30) | 0 | 0 | 30 | 100 |

**Table 3.Comparison of Descriptive Statistics of Pre-test and Post-test Knowledge Scores of the Subjects**

n = 30

| Test | Mean | SD | Median | Minimum | Maximum | Mean difference | t-value | p-value |
|---|---|---|---|---|---|---|---|---|
| Pre-test statistics | 16.233 | 2.990 | 17 | 09 | 20 | 10.83 | 30.724 | 0.000 |
| Post-test statistics | 27.067 | 1.68 | 27 | 23 | 30 | | | |

## Section C: Association of Pre-test Knowledge Score with Selected Demographic Variables of Subjects

This section deals with analysis and interpretation of data to find out the association of pre-test knowledge scores regarding knowledge of anxiety of study subjects with their selected demographic variables. Chi-square test was used to find this association. The following null hypothesis was formulated for this purpose:

$H_{02}$: There is no significant association between pre-test knowledge scores of study subjects with their selected demographic variables (gender, residence, type of family, parental occupation, and age) at 0.05 level of significance.

The data presented in Table 4 reveal that there is no significant association between pre-test knowledge scores of study subjects with their selected demographic variables. Thus, the investigator rejected the research hypothesis $H_2$ and failed to reject the null hypothesis ($H_{02}$) which states that there is no significant association between pre-test knowledge scores with the selected demographic variables.

**Table 4.Association of Pre-test Knowledge Score with selected Demographic Variables of Subjects**

n = 30

| Variables | Category | Level of Knowledge | | | Chi-square Value/ Fisher's Value | P-Value | Remarks |
|---|---|---|---|---|---|---|---|
| | | **Average (1-10)** | **Good (11-20)** | **Excellent (21-30)** | | | |
| **Gender** | Male | 5 | 1 | 0 | 4.616 | 0.099 | Not significant |
| | Female | 21 | 3 | 0 | | | |

*Kour P et al.*
*Ind. J. Holist. Nurs. 2021; 12(3)*

**14**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Residence** | Rural | 19 | 3 | 0 | 0.072 | 0.716 | Not significant |
| | Urban | 7 | 1 | 0 | | | |
| **Type of family** | Joint | 7 | 0 | 0 | 1.732 | 0.548 | Not significant |
| | Nuclear | 19 | 4 | 0 | | | |
| **Parental occupation** | Labourer | 11 | 1 | 0 | 1.405 | 0.273 | Not significant |
| | Government employee | 6 | 0 | 0 | | | |
| | Businessman | 9 | 3 | 0 | | | |
| **Age (in years)** | ≤ 20 | 10 | 0 | 0 | 2.596 | 0.273 | Not significant |
| | 20-23 | 11 | 4 | 0 | | | |
| | ≥ 24 | 5 | 0 | 0 | | | |

## Discussion

The findings of this study are supported by a quasi-experimental study conducted by E Barathipriya, G Ramya and Muvina (2019)[9] at VMCOM, Karaikal among 50 nursing students to assess the effectiveness of structured programme on anxiety. The result revealed that 29 (58%) respondents had inadequate knowledge in pre-test and 21 (42%) had moderately adequate knowledge. None of the respondents had adequate knowledge in pre-test whereas, 7 (14%) respondents had inadequate knowledge, 26 (52%) respondents had moderately adequate knowledge, and 17 (34%) respondents had adequate knowledge in post-test. While comparing the knowledge scores of study subjects regarding anxiety, the mean post-test score obtained by the subjects (27.07 ± 1.018) was found to be greater than the mean pre-test knowledge score of subjects (16.233 ± 2.960). It also indicated that it was statistically significant ($p < 0.05$).

The findings of the present study are similar to that of a study conducted by M Roja Rani, S HemaLatha, M Bhagya Lakshmi (2015)[10] at SVIMS College of Nursing, Tirupati, Andhra Pradesh among 89 nursing students to assess the effectiveness of structured programme on anxiety. The findings of the study revealed that the mean post-test score (24.18 ± 2.591) was greater than the mean pre-test score (8.35 ± 2.321) with a mean difference of 15.83 which indicated that STP was effective in enhancing the knowledge of study subjects.

The finding of the present study revealed that there was no significant association between pre-test knowledge scores of study subjects with the selected demographical variables like gender, age, residence, occupation of parents, and type of family ($p > 0.05$).

These findings are supported by an experimental study conducted by Amar C Yadav (2018)[11] on 60 nursing students in Lajpat Nagar, Delhi. The findings revealed that there was no significant association of knowledge with selected demographic variables like gender, age, residence, occupation of parent ($p > 0.05$).

## Limitations

- The study was limited to a small sample size (30) which imposes a restriction on generalisation
- The study was confined to GNM students of Dolphin Institute of Medical Sciences and Technology, Pulwama, hence generalisation can only be made for the sample studied
- The tool used for data collection was developed as per the study sample, hence the tool is not standardised
- The effectiveness of self-structured teaching programme was assessed only once in terms of knowledge gain. The skill domain was not included

## Recommendations

- The studies can be replicated on a larger sample to validate the findings and for generalisation
- Similar studies can be conducted in different settings
- Other teaching strategies i.e. planned teaching programme, guidelines etc can be used to assess the knowledge of nursing students on anxiety
- A comparative study can be done to evaluate the effectiveness of self-instructional module on prevention and management of anxiety in terms of knowledge of the students

## Conclusion

The mental health of a person is very important for good physical health. It should be given due importance and proper care should be taken to ensure good mental health. Anxiety has a huge impact on it and its excess can lead to deterioration of health in the long run. The study has shown that people have average knowledge regarding anxiety, and a structured teaching programme can help in increasing the awareness of people about the concept of anxiety, and its signs, symptoms, management and treatment, which, in turn, will lead to better mental health of people.

**15**

*Kour P et al.*
*Ind. J. Holist. Nurs. 2021; 12(3)*

## References

1. World Health Organization [Internet]. Mental health: a state of well being; [cited 2018 Feb 4]. Available from: http://www.who.int/features/factfiles/mental_health/en/

2. Wiktionary [Internet]. Anxiety; [cited 2018 Feb]. Available from: https://en.wiktionary.org/wiki/anxiety

3. Carleton RN, Mulvogue MK, Thibodeau MA, McCabe RE, Antony MM, Asmundson GJ. Increasingly certain about uncertainty: intolerance of uncertainty across anxiety and depression. J Anxiety Discord. 2012;26(3):468-79. [PubMed] [Google Scholar]

4. North American Nursing Diagnosis Association (NANDA) [Internet]. Definition of anxiety; [cited 2018 Mar]. Available from: http://nursingintervention.com/anxiety/nanda_nic_noc.

5. Al-Lamki L. Stress in the medical profession and its roots in medical school. Sultan Qaboos Univ Med J. 2010;10;156-9. [PubMed] [Google Scholar]

6. Turner K, McCarthy VL. Stress and anxiety among nursing students: a review of intervention strategies in literature between 2009 and 2015. Nurse Educ Pract. 2017 Jan;22:21-29. [PubMed] [Google Scholar]

7. Miers AC, Blöte AW, Bokhorst CL, Westenberg PM. Negative self-evaluations and the relation to performance level in socially anxious children and adolescents. Behav Res Ther. 2009 Dec;47(12):1043-9. [PubMed] [Google Scholar]

8. Sanad HM. Stress and anxiety among junior nursing students during the initial clinical training: a descriptive study at College of Health Sciences, University of Bahrain. Am J Nurs Res. 2019;7(6):995-9. [Google Scholar]

9. Barathipriya E, Ramya G, Muvina. Effectiveness of structured teaching programme on examination anxiety among I-year BSc nursing students at Vmcon Karaikal. Int J Sci Res Rev. 2019;8(1):66-70.

10. Roja RM, HemaLetha S, Bhagya LM. A study to assess the effectiveness of structured teaching programme on study skills among B.Sc. Nursing first year students in College of Nursing, SVIMS, Tirupati, A.P. Int J Nurs Edu Res. 2015;8(3):299-302. [Google Scholar]

11. Yadav AC. A study to evaluate the effectiveness of structured teaching programme on knowledge regarding coping strategies of examination anxiety among tenth standard students in selected schools, at Delhi. Int J Adv Nurs Mgmt. 2020;8(1):35-39. [Google Scholar]