



## ORIGINAL ARTICLE

# A Study to Assess the Effectiveness of Structured Teaching Programme in Reduction of the Level of Academic Stress among First Year Basic BSc Nursing Students at a Selected Nursing College in Bengaluru

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### Abstract

**Background:** Academic stress from many sources has been reported for some time by student nurses. The sources of stress includes academics, parental expectations, competition for grades, relationships and career choices. Academic sources of stress like examinations, long hours of study, assignments and grades, lack of free time, lack of timely feedback after their performance, special elements of the academic programme like arrangement and conduction of workshops, also produce stress among student nurses.

**Methodology:** The approach employed in the present study was quantitative evaluative research approach with quasi experimental - one group pre-test post-test design. Subjects (N=50) were selected from SDS TRC & RGICD College of Nursing, Bangalore. Data was collected by using a structured knowledge questionnaire with 40 items. Reliability of structured knowledge questionnaire was found to be 0.9. Structured teaching programme was administered after conducting pre-test and post-test was conducted after seven days following pre-test. Data was analysed by using descriptive (mean, median, SD) and inferential statistical (chi-square test, paired 't' test) technique.

**Results:** The collected data was analysed by using descriptive and inferential statistics. The study findings revealed that on assessing pre-test levels of knowledge, majority of the subjects (70%) had moderate knowledge level and the assessment of post-test levels of knowledge showed that majority (86%) of the subjects had moderate knowledge, 12% had adequate knowledge while 2% had inadequate knowledge.

**Conclusion:** Based on the findings of the study, recommendations were drawn for nursing service, administration, education and research. The study concluded that the knowledge from structured teaching programme in reduction of level of academic stress among first year B.Sc. nursing students was moderately adequate and favourable.

**Keywords:** Effectiveness, Structured teaching programme, Knowledge, Academic stress

### Introduction

Modern man is the victim of stress and stress related disorders which threaten to disrupt his life. Stress is

a common condition that everyone experiences and is the subjective feeling produced by events that are uncontrollable or threatening. Some of the major reasons

for stress in nursing students include academic work load, heavy examination schedules, feeling of doubt about nursing as a career of choice, feeling of inadequacy and insecurity in clinical setting, personal inadequacy and fear of making mistakes. Prolonged periods of stress can cause memory problems and inability to concentrate on studies. Excessive stress in clinical area makes them feel moody with a sense of loneliness and isolation.<sup>1</sup>

Top five major sources of stress detected among nursing college students were: Change in sleeping habits, vacations, breaks, and change in eating habits, increased workload, and new responsibilities. Furthermore, stress may result from being separated from home for the first time, the transition from a personal to an impersonal academic environment, and the structure of the academic experience at the college level.<sup>2</sup>

Nursing school is now recognized as a stressful environment that often exerts a negative effect on the academic performance and psychological well-being of the students.<sup>3</sup>

In general, everyone experiences stress, but students are a group of people who are at higher risk of stressors due to the transitional nature of the student life as they need to adjust themselves with the life environment which requires compliance with new social norms and new friendships. Accordingly, their perception from an event is affected as a stressor based on their living environment and selecting coping strategies which they use them in the particular situations. These groups should cope with the increasing global demands i.e. decision making about issues such as occupation, lifestyle, friends, family, religion and politics. They should also meet the needs of family, teachers, friends and other groups. Therefore, they establish important emotional ties with the environment or non-family members and also establish their own value systems which, in most of the cases, is influenced by the family and the culture they belonged to.<sup>4</sup>

Considering that all the living organisms experience stress, nursing cannot aim at removing the stress completely, because stress is a part of life. Response to stress can be in an unhealthy way, and the role of nurse at this time is helping to promote the health. Health promotion includes strategies for reduction and management of stress. The nurse also can use nursing process to manage the stress.<sup>5</sup>

## Material and Methods

The research design selected for the present study was

Pre experimental - One group pre-test post-test design. In this design, pre-test was conducted followed by structured teaching programme on the same day and the post test was conducted for the same group after seven days following pre-test.

### Research Variables

**Dependent variable** - In this study, dependent variable was the knowledge regarding academic stress among first year BSc nursing students.

**Independent variable** - In this study, independent variable was the structured teaching programme (STP) regarding reduction of level of academic stress.

**Demographic variable** - It includes age, sex, religion, education of father, education of mother, occupation of father, occupation of mother, stay during study, the percentage of pre-university course (10+2) marks, medium of language during schooling, hobbies or activities, if they attended any programme on reduction of academic stress.

### Setting of the Study

The criteria for selection of an appropriate setting included the availability of subjects, feasibility of conducting the study, getting permission from the concerned authority etc. This study was conducted at SDS TRC and RGICD College of Nursing in Bengaluru.

### Population

Population is the entire set of individuals or objects having some common characteristics. In this study, population comprised of first year Basic B.Sc. Nursing students of SDS TRC & RGICD College of Nursing, Bengaluru.

### Sample and Sampling Technique

Sample is the subset of a population selected to participate in the study. Sampling refers to the process of selecting a portion of population to represent the entire population. The sample for the present study comprised of fifty first year Basic B.Sc. Nursing students of selected SDS TRC & RGICD College of Nursing, Bangalore. Non-probability convenience sampling technique was used to draw the sample.

### Data Collection Instruments

A structured knowledge questionnaire was selected as a tool for the present study.

### Method of Data Analysis

Numerical data obtained from sample will be organized and analysed with the use of both descriptive and inferential statistics.

## Results

### Socio-demographic variables

With regard to socio-demographic variables of the selected first year Basic B.Sc. Nursing students, 82.0% of the respondents belonged to the age group of less than 19 years, 16.0% of the respondents belonged to the age group of 20 years and the remaining 2% were in the age group of 21 years.

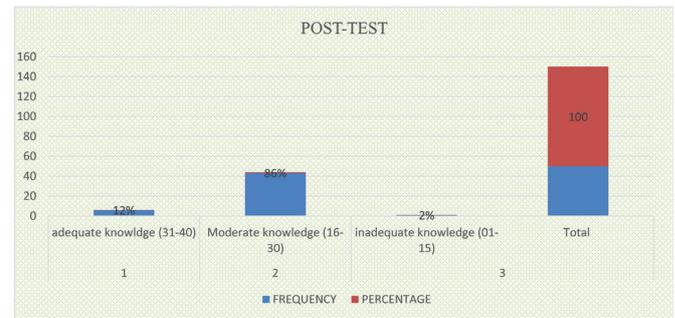
In relation to gender, 16 (32%) were males and 34 (68%) were females. 39 (78%) respondents were Hindus, 05 (10%) respondents were Muslims while 06 (12%) were Christians. In relation to the education of mother, 22 (44%) completed primary school, 17 (34%) completed secondary school, 6 (12%) received higher secondary education and only 5 (10%) completed graduation. In relation to the education of father, 6 (12%) completed primary school, 05 (10%) completed secondary school, 19 (38%) received higher secondary education and 20 (40%) were graduates. In relation to the occupation of father of the respondents, 04 (08%) were Government employees, 09 (08%) were doing private jobs, 28 (56%) were self-employed and 09 (18%) were daily wagers. In relation to the occupation of mother of the respondents, 29 (58%) were doing homemakers, 14 (28%) were self-employed, 02 (04%) were doing private jobs and 05 (10%) were Government employees.

Regarding the stay, among 50 respondents, 6% were staying at home, 24% were staying as paying guests and 70% of the respondents were staying in hostel. As

per the marks obtained in pre-university course (10+2), 46% cleared with first class, 26% with second class, 18% passed with distinction while 10% cleared with passing marks. Regarding the medium of language while schooling, 82% studied in Kannada medium, while 18% did schooling in English medium. 14% of the respondents mentioned playing sports as a hobby, 20% as watching television. 22% reported a hobby of yoga or meditation and while 34% mentioned reading books as their favourite activity. Among the 50 respondents, 48% not attended and 52% of the participants has attended the stress reduction programme.

### Figure No 1: Classification of respondents based on post-test level of knowledge

The post-test levels of knowledge of the respondents, it was found that majority 43 (86%) demonstrated moderate knowledge, 6 (12%) showed adequate knowledge while 1 (2%) showed inadequate knowledge.



**Figure 1:** Classification of respondents based on post-test level of knowledge

**Table 1:** Comparison of respondents based on pre-test & post-test levels of knowledge

Sl No	Level of Knowledge	Pre-test		Post-test	
		Frequency	Percentage	Frequency	Percentage
1	Adequate knowledge (31-40)	0	0%	6	12%
2	Moderate knowledge (16-30)	35	70%	43	86%
3	Inadequate Knowledge (01-15)	15	30%	01	02%
		50	100%	50	100%

**Table 2:** Findings related to effectiveness of structured teaching program in reducing academic stress among first year Basic BSc Nursing students

	Max. Score	Respondents Knowledge Scores			Paired 't' Test	p value	Inference
		Mean	SE of mean	Mean %			
<b>Pre-test</b>	40	19.28	0.47	48.2			<b>HS</b>
<b>Post-test</b>	40	26.62	0.54	66.5	12.72	<b>&lt;0.001</b>	
<b>Enhancement</b>		7.34	0.57	18.5			

In pre-test, the mean percentage knowledge score was 66.5% with mean and SD of 3.84.

The median was 27 and the range was 18. In post-test, the mean percentage knowledge score was 66.5% with mean and SD of 3.8. The median was 27 and range was 18. The mean percentage enhancement of knowledge was 7.34 with mean difference of 18.5 and SD 4.0. The paired t test was used to assess the effectiveness of structured teaching program. The calculated test value was 12.72,  $df=49$ , at  $p \leq 0.05$ .

#### **Findings related to association between the pre-test knowledge scores with selected demographic variables**

There was a significant association between pre-test knowledge scores and demographic variables such as sex, education of mother, education of father, occupation of mother, stay during study, percentage of pre-university course (10+2) marks, hobbies or activities and participation in any stress reduction programmes.

There was no significant association between pre-test knowledge scores and age, religion, occupation of father, place of residency, medium of language in schooling.

#### **Discussion**

The present study was conducted among fifty subjects in selected colleges of Bengaluru who were selected using stratified random techniques. The study was adopted by evaluative pre experimental approach and on this basis one group pre-test post-test design was used. The conceptual frame work adopted for this study was the concept based on Dorothy Johnson's Open System Theory. A review of related literature helped the investigator to highlight the study and also to strengthen the study.

It motivates the investigator to determine the effectiveness of teaching programme and also to place the data analysis. The experts had been given the suggestions for the tool. Reliability and feasibility were observed. Reliability was found as  $r = 0.96$  ( $p < 0.05$ ).

Planned teaching programme were prepared by STP in order to impart knowledge to first year B.Sc. Nursing students. The pilot study was conducted from 18/06/2020 to 26/06/2020. The pilot study was carried out including 10 subjects (First year B.Sc. Nursing students) from selected Nursing college of Sanjay Gandhi Institute of College of Nursing, Bangalore. On this basis, final study was conducted during 20.07.2020 to 16.08.2020.

#### **Conclusion**

Based on the findings of the study, recommendations were drawn for nursing service, administration, education and research. The study concluded that the knowledge from structured teaching programme in reduction of level of academic stress among first year B.Sc. nursing students was moderately adequate and favourable.

#### **Conflict of interest**

None

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