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Original Research

A pre-experimental study to assess the effectiveness of autogenic training on stress among under graduate nursing students at selected colleges in Bangalore city

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ABSTRACT:

Aim: A pre-experimental study to assess the effectiveness of autogenic training on stress among under graduate nursing students at selected colleges in Bangalore city. **Materials and methods:** This study was done in the department of nursing after taking the permission from the institute. For determination the effect of autogenic training on stress among nursing students 70 students were included in this study. Pre experimental one group pre test-post test was conducted on nursing students. **Results:** Among the selected nursing students, before intervention it was found that 26% of nursing students had mild stress, 43% had moderate stress, 28% had severe stress and 03% had extreme stress. After autogenic training 47% of nursing students had mild stress, 35% had moderate stress and 18% had severe stress. This shows that there was reduction in stress levels after autogenic training. The mean score of the stress of nursing students before and after Autogenic training was 66.8 and 55.2 with the standard deviation of 19.64 and 17.79 respectively. The calculated't' value, 3.0558 was found to be significant at 0.05 level. Hence the hypothesis 'there is a significant difference in the level of stress among nursing students before and after autogenic training' is accepted. It is proved that the autogenic training implemented to nursing students for reducing the level of stress is significantly effective. **Conclusion:** The study was conducted to assess the effect of autogenic training on stress among nursing students. The mean percentage of level of stress has been decreased from 66.77% to 55.22%. This proves that the autogenic training is effective in reducing stress among nursing students. The researcher concludes that this intervention is an appropriate method to reduce stress among nursing students.

Keywords: Autogenic training, stress, nursing students

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INTRODUCTION

The dynamic interplay between a person and their surrounding environment is at the heart of the multifaceted phenomena that is stress. It is also a stressor, a person's emotional reaction to the stressor, and a two-way street between the person and their surroundings. It's important to remember that stress, in moderation, may really help boost productivity. There is evidence to suggest that most human achievements are made under pressure, but chronically high levels of stress can have detrimental effects such as a lowered resistance to illness, frequent infections, headaches, poor concentration, memory loss, and a decrease in the ability to solve problems. [1] Researchers found that many different types of stressors were experienced by medical students, nurses, and nursing students. [2] The theoretical training setting isn't the only source of stress for nurses and nursing students; the hospital environment also contributes. It's no surprise that hospitals are often cited as the most stressful places to work: life and death hang in the balance every day. [3] Environmental stress has been shown to alter an individual's personality and increase the prevalence of problematic behaviours. 3 There are three broad classes into which all of these stressors may be placed: those having to do with schooling, those having to do with health, and those having to do with interpersonal relationships. [4] Stress, in its many forms, may have deleterious consequences on a person's physical and mental health in the long run by weakening the person's defences against the challenges it presents. It was shown that stress may lower one's quality of life by causing mental and physical sickness, malfunction, and adjustment disorder.[5] In the course of her work, a nurse may experience anything from moderate

depersonalization to severe emotional weariness. Multiple elements, including structure, procedure, and environment, have been shown to influence stress in the workplace. Nursing administration, nursing leadership quality, professional disputes, rapid technological advancement, and organisational reorganisation are all examples of such issues. The field of nursing has a reputation for being high pressure and demanding. It's tough on your body and your mind. The stress may be managed or alleviated in a number of ways. [6-8] In order to effectively manage stress, one has to have access to a wide range of cognitive and behavioural strategies. The term "coping" often refers to an individual's actions taken to either conform to their surroundings or protect themselves from the unfavourable outcomes of a stressful circumstance. Stress relief may be achieved in two primary ways: (1) problem-focused approaches, which include taking action to alter or rectify a stressful external factor, such as an activity or object in one's surroundings; and (2) emotional regulation. -directed behaviours (thinking and/or doing) aimed at taming the unwelcome emotions brought on by those stressful settings. Methods like cognitive and behavioural problem solving are active components of issue-oriented therapies. [9]

Student tension may be reduced with the use of autogenic training. Training oneself to focus only on the here and now, rather than worrying about the past or the future, is one goal of autogenics. To self-regulate or self-generate is the goal of autogenic training, a kind of relaxation therapy. Our minds have the power to direct our bodies toward a state of homeostasis by regulating the ratio of sympathetic to parasympathetic nervous system activity. The six mental exercises that make up autogenic training are called "heaviness," "warmth," "breathing," "calm heart," "calm stomach," and "calm forehead." Mental focus and self-suggestions are used to guide the exercises' progression. During autogenic training, one's thoughts are first focused on relaxing the muscles by inducing a sense of heaviness and warmth in the body, then on decreasing the heart rate, then on focusing on the sensation of warmth in the belly and the sensation of coolness in the forehead.

Kern argues that autogenic practise may help with both mental and physical stress. In doing so, one is able to quiet the mind and tune in to one's own emotions. Many people find autogenic training to be a soothing way to unwind. To put it another way, it's cheap and easy. [10]

Kanji claims that via autogenic training, one may adopt a novel and fruitful way of thinking and behaving. Please, Linden, explain why autogenic training is one of the most powerful and all-encompassing approaches to managing stress. Consequently, learning to control one's emotions and stress is essential to building one's sense of self-worth. [11]

MATERIAL AND METHODS

This study was done in the department of nursing after taking the permission from the institute. For determination the effect of autogenic training on stress among nursing students 70 students were included in this study.

INCLUSION CRITERIA

Nursing students who were willing to participate in the study.

EXCLUSION CRITERIA

Nursing students who were not residing in the hostel.

METHODOLOGY

Among undergraduate students of selected colleges at Bangalore. 70 nursing students which was determined by Mahajan formula. By using stratified random sampling 18 nursing students from mild stress, 30 nursing students from moderate stress, 20 nursing students from severe stress and 2 nursing students from extreme stress were selected. We studied the age in years, year of study, medium of study at school, residence during school, religion, monthly income of the family (Rs), educational status of father and educational status of mother of the nursing. The Student Nurse Stress Index was a self administered questionnaire. It contains four main aspects which measures stress such as academic load with 9 items, clinical load with 7 items, personal problems with 6 items, interface worries with 3 items. Each items assess the level of stress as no stress, mild stress, moderate stress, severe stress and extreme stress. The scores are calculated as no stress-1, mild stress-2, moderate stress-3, severe stress-4 and extreme- 5. The total score was calculated by adding score of each answer. The score ranges from 25-125. Hence, a quantitative analysis was done. Pre experimental one group pre test-post test was conducted on nursing students.

Score of 25	-No stress
Score of 26-50	-Mild stress
Score of 51-75	-Moderate stress
Score of 76-100	-Severe stress
Score of 101-125	-Extreme stress

RESULTS

The effect of autogenic training on stress among nursing students were assessed and analysed by using the collected data. The study was conducted among 70 nursing students at selected nursing college Bangalore. The Stress was assessed and autogenic training was implemented to the nursing students.

Table 1 Distribution of nursing students by age

Age in years	No of participants	Percentage
18-20	47	68
21-23	23	32

Table 1 Denotes the distribution of nursing students by age, 68% (47) belongs to the age between 18-20 years and 32% (23) of students belongs to 21-23 years.

Table 2: distribution of students based of year of study

Year of study	No of Participants	Percentage
I year	22	32
II year	23	32
III year	03	04
IV year	22	32

Table 2 Denotes the distribution of nursing students based on year of study 32% of nursing students belongs to I- year, 32% of nursing students belongs to II- year, 4% of nursing students belongs to III-year and 32% of nursing students belongs to final year.

Table 3: distribution based on medium of study in school

Medium of study	No of participants	Percentage
English	20	28
Malayalam	42	61
Kannada	08	11

Table 3 denotes Medium of study at school indicates that 28% of nursing students studied in English medium, 61% of nursing students studied in Malayalam and 11% of nursing students studied in Kannada medium.

Table 4: distribution based on residence during school

Residence	No of participants	Percentage
Hostel	05	07
Home	65	93

Table 4 Denotes the residence during school indicates 7% (05) of nursing students resided in hostel and 93% (65) of nursing students resided in home.

Table 5 distribution based on religion

Religion	No of participants	Percentage
Hindu	20	28
Muslim	49	71
Christian	01	01

Table 5 denotes in regard to religion indicates 71% of nursing students belongs to Christian, 28% of nursing students belongs to Hindu and 1% of nursing students belongs to Muslim.

Table 6: distribution based on family income

Income	No of participants belongs	Percentage
1000-10000	60	86
10001-20000	05	07
20001-30000	03	04
30001-40000	02	03

Table 6 The distribution on monthly income of nursing students reflects that, 86% of their family earns between Rs. 1000-10,000, 7% earn between Rs. 10,001-20,000, 4% earn between Rs. 20,001-30,000 and 3% earn between Rs. 30,001-40,000.

The level of stress of the nursing students was assessed by student Nurse Stress Index Scale. The tool was administered to 70 nursing students and the level of stress was categorized as no stress, mild stress, moderate stress, severe stress and extreme stress. The nursing students with mild, moderate, severe and extreme level of stress were selected for intervention.

Table 7: Distribution on Level of Stress Before and After Autogenic Training among Nursing Students

	Before Intervention		After Intervention	
Level of stress	**No of students**	**Percentage (%)**	**No of students**	**Percentage (%)**
No stress	-	-	-	-
Mild stress	18	26	33	47

Moderate stress	30	43	24	35
Severe stress	20	28	13	18
Extreme stress	02	03	-	-

The above table shows the distribution of level of stress before and after autogenic training among nursing students. Among the selected nursing students, before intervention it was found that 26% of nursing students had mild stress, 43% had moderate stress, 28% had severe stress and 03% had extreme stress. After autogenic training 47% of nursing students had mild stress, 35% had moderate stress and 18% had severe stress. This shows that there was reduction in stress levels after autogenic training. The mean score of the stress of nursing students before and after Autogenic training was 66.8 and 55.2 with the standard deviation of 19.64 and 17.79 respectively. The calculated't' value, 3.0558 was found to be significant at 0.05 level. Hence the hypothesis **'there is a significant difference in the level of stress among nursing students before and after autogenic training'** is accepted. It is proved that the autogenic training implemented to nursing students for reducing the level of stress is significantly effective.

DISCUSSION

Stress cause physical, emotional, intellectual, social and spiritual consequences. Physically, stress can threaten a person's physiologic homeostasis. Emotionally, stress can produce negative feelings about self. Intellectually, stress can influence a person's perceptual and problem solving abilities. Socially stress can alter a person's relationship with others. Spiritually, stress can challenge one's beliefs and values.[11]

In the age distribution 68% of nursing students belongs to 18 -20 years of age group and 32% of nursing students belongs to 21-23 years of age group. Krutarth Ramallah, conducted a cross sectional study showed that 85 students experienced stress out of 200. Females students reported higher prevalence of stress than males.[12]

In the present study the level of stress of the nursing students was assessed by Student Nurse Stress Index Scale. It was administered to 70 undergraduate nursing students on the basis of stratified random sampling technique. Among them it was found that 26% of nursing students had mild stress, 43% had moderate stress, 28% had severe stress and 3% had extreme stress. The mean, standard deviation, mean percentage of stress scores of nursing students were 66.8, 19.64 and 66.77 respectively.

Damayanti Dutta, conducted a survey on secret life of Indian teens and released her report in India Today. The researcher concludes that 70% teens report stress, 70% shows depression, 66% faces problems by using mobiles, 50% drink alcohol, 48% reports suicidal tendency, 30% reports poor relationship with parents and 14% were tobacco users.[13]

American psychological Association and American Institute of Stress, estimated that 51% of students experienced headache, 34% of upset stomach, 30% of muscle tension, 23% of changes in appetite, 17% of teeth grinding and 13% felt dizzy. The study shows that 50% of students experienced anger and irritability, 45% felt nervous, 45% felt lack of energy, 35% felt of crying.[14]

A study conducted in India revealed that about 10% to 30% of university students are having high stress and nearly 30% of them leave college or university without completing the studies. A lead author and Director of Maharishi University of management brain research centre states that pressure of stress can be overwhelming. 19% of college students report clinical Depression, 13% of report high level of anxiety. Indications are there that 75% of human diseases are caused by stress experienced by people.[15]

In the present study autogenic training was implemented to reduce the stress level among nursing students, which was done for a duration of thirty minutes per session per day for one month. The results were the autogenic training is effective in reducing stress among nursing students. Among the selected nursing student before intervention it was found that 26% of nursing students had mild stress, 43% had moderate stress, 28% had severe stress and 3% had extreme stress. After autogenic training 47% of nursing students had mild stress, 35% had moderate stress and 18% had severe stress. This shows that there was reduction in the stress level after autogenic training.

CONCLUSION

The study was conducted to assess the effect of autogenic training on stress among nursing students. The mean percentage of level of stress has been decreased from 66.77% to 55.22%. This proves that the autogenic training is effective in reducing stress among nursing students. The researcher concludes that this intervention is an appropriate method to reduce stress among nursing students.

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