Research Article

Meditation Lowers Stress and Supports Forgiveness among nursing Students: A Randomized Controlled study

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Abstract

Aim: To evaluate the effectiveness of meditation lowers stress and supports forgiveness among nursing Students.

Participants and setting: The study was conducted by adopting a Quasi-experimental, non-equivalent control group pre and post test design.50 nursing students who fulfilled the inclusion criteria were selected by using Non-probability purposive sampling technique. 50 women were assigned in experimental and control group. The study was conducted in Bhavana College of nursing, Nalgonda, Telugana, India.

Intervention: A brief introduction about self and study was given to the nursing students and consent was obtained (both oral and written) and the confidentiality of the response was assured. Pre assessment was done in both experimental and control groups. In the experimental group meditation technique was practiced by the women and pre and post test level of stress was obtained using John D. Catherine & T. Mac Arthur's perceived stress scale. In the control group without any intervention, the pre and post test level of stress was obtained for both the groups and the level of stress was assessed.

Measurement and findings: Analysis revealed that the women in the experimental group showed a highly significant decrease in the level of stress following meditation at $P<0.001$ level when compared with the control group.

Conclusion: Evidence suggests that meditation-based stress-management practices reduce stress and enhance forgiveness among college undergraduates. Such programs merit further study as potential health-promotion tools for college populations.

Keywords: Meditation, Nursing Students, Stress, Supports Forgiveness.

1. Introduction

Stress is a major issue for college students as they cope with a variety of academic, social, and personal challenges. Most first-year undergraduates are living apart from their parents for the first time. More advanced undergraduates face continuing pressure for academic performance as well as difficult career choices and job search issues. In annual surveys conducted between 1985 and 1995, increasing proportions of students reported feeling overwhelmed. In 2004, stress was the most commonly identified impediment to academic performance, cited by one-third (32%) of nearly 50,000 students surveyed at 74 US campuses.

Continuing stress may lead students into unproductive rumination that consumes energy and compounds the experience of stress. Intensified stress can undermine resilience factors, such as hope and the capacity to forgive the many perceived or real interpersonal transgressions that may beset college undergraduates. Although a certain level of stress may result in improved performance, too much stress can adversely affect physical and mental health. An important developmental task for college students is learning to manage excess or unnecessary distress while actively engaging with healthy, age-appropriate challenges that promote growth. In this study, we

evaluated the effectiveness of meditation-based intervention for reducing distress and enhancing well-being among college undergraduate populations.

There is a considerable body of evidence suggesting that nurses experience job-related stress In one international study, which included the United Kingdom (UK), 40% of hospital nurses were found to have levels of burnout that were higher than the norms for healthcare staff and in the US, job dissatisfaction in nurses was four times higher than that of the average worker. Stress within the trained nursing workforce can also lead to patient dissatisfaction and reduced quality of care.[1]

Meditation affects the body in exactly the opposite ways that stress does. While practicing meditation, the heart rate and breathing slow down, blood pressure normalizes, use of oxygen become more efficient and sweat normally. Also, adrenal glands produce less cortisol, the mind ages at a slower rate, and immune function improves. Meditation is wonderful in that it's free, always available and amazingly effective in short term stress reduction and long term health. Benefits can be felt in just one session and mediation has no side effect.[2]

Mindfulness meditation, often recommended as an antidote to the stress and pain of chronic diseases, a practice designed to focus one's attention intensely on the moment, noting thoughts and feelings as they occur but refining from judging or acting on those thoughts and feelings. The intent is to deepen awareness of the present, develop skills of focused attention, and cultivate positive emotions.[3]

Institutions of higher education have long been interested in stress-management interventions. Although college administrators are increasingly implementing programs that address student stress, relatively few researchers have rigorously evaluated the effectiveness of such programs. We found only 8 studies of college student stress-management interventions in which researchers used randomized controlled designs. Most of these investigators focused on specialized groups, such as nursing, education, or medical students; in one study of nursing baccalaureate undergraduates.[4]

Heaman observed reductions in state anxiety from five weeks training in relaxation and biofeedback. Researchers in studies evaluated interventions that combined training in relaxation with cognitive behavioral techniques. In the largest of these studies, which focused on a diverse student group that included graduates and undergraduates (N = 90). Observed reductions in psychological distress and anxiety from a 6-week training program. In a second study, focused on nursing baccalaureate undergraduates (N = 76) showed reductions in anxiety and depression from a 6-week training program. In a third study, focused on introductory psychology students (N = 36), reductions in heart rate and state anxiety from a peer-led intervention.[5]

2. Materials and Methods

A formal consent was obtained from the principal of nursing institution suryapet. The investigator selected 25 nursing students for experimental group and 25 for control group using non probability purposive sampling technique. On the selection of the study subjects a self introduction was given and the written consent was obtained. The confidentiality was assured. The investigator gave introduction about stress scale; its purposes importance of meditation was explained and instructed the nursing to mark in the questionnaire to in which category she belongs. In the experimental group, the investigator assessed the level of stress by using Modified John D. Catherine & T. Mac Arthur's perceived stress scale. The meditation technique was taught by the investigator and after that the women were doing meditation for 20 minutes in the morning and evening for seven consecutive days under the supervision of investigator and at the end of the seventh day, the post test level of stress was assessed by using the same scale. But in the control group, pre and post test was assessed without administering meditation by using the same stress scale, and the mediation technique was taught to the control group after post test. Descriptive and Inferential Statistics were used to analyze the data. Frequency and percentage distribution were used to analyze the demographic data of women with reproductive organ cancer in experimental and control group.

2.1 Description of the tool
Section I: It consists of demographic variables such as age, religion, type of family, father Occupation, and father Income.
Section II: John D. Catherine & T .Mac Arthur's perceived stress scale is a standardized tool which was modified by the investigator after extensive review of literature and consultation with medical and nursing experts. The scale has ten questions with 5 positive items and 5 negative items. Each item was self interviewed. The minimum score is 1 and the maximum score is 10. The total score is 50.

To evaluate the level of stress the score was interpreted as follows:

1- 20 - Normal
21- 30 - Mild
31- 40 - Moderate
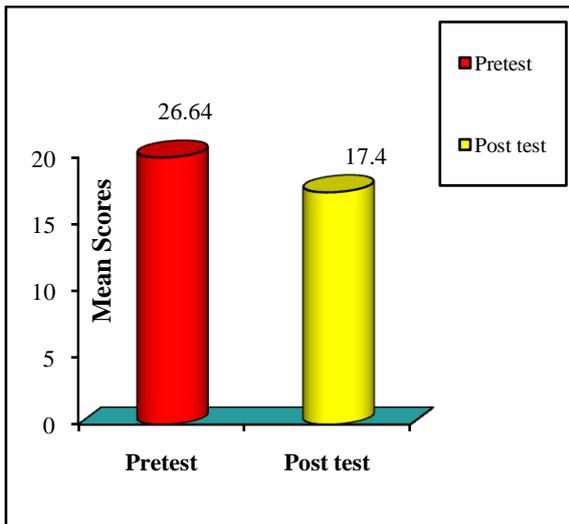41- 50 - Severe

3. Results

Table 1: Comparison of mean scores between pre and post test level of stress among nursing students in the experimental group.

Test	Mean	S.D	't' value
Pre test	26.64	2.22	10.81
Post test	17.40	3.65	

N=25; ***p<0.001 S – Significant

Table 1 represents mean value and standard deviation of pre test and post test level of stress. The pre test mean was 26.64 and standard deviation was 2.22, and the post test, mean was 17.40 and standard deviation was 3.65.The 't' value found to be 10.81 at p<0.001 level, which shows that there is a significant difference between pre and post test level of stress among nursing students in the experimental group.

Figure 1: pre and post test level of stress among nursing students in the experimental group
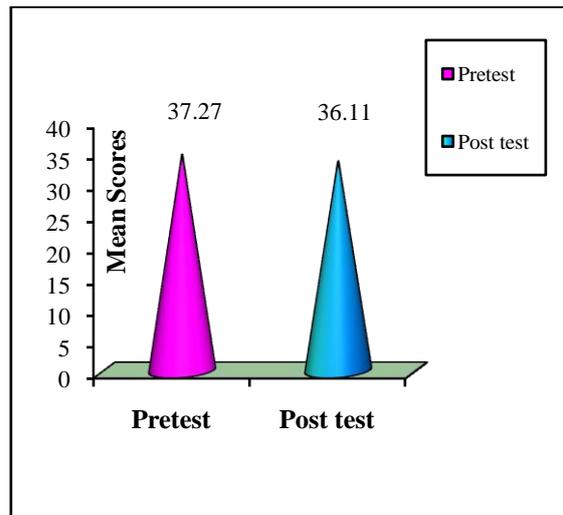

Table 2: Comparison of mean scores between pre and post test level of stress among nursing students in the control group

Control group	Mean	S.D	't' value
Pre Test	34.53	2.88	1.373
Post Test	33.50	2.40	

N=25; N.S – Not Significant

Table 2 represents mean value and standard deviation of pre test and post test level of stress. The pre test mean was 34.53 and standard deviation was 2.88, and the post assessment mean was 33.50 and standard deviation was 2.40. The 't' value found to be 1.373 at p>0.001 level which shows that there is no significant difference between pre and post test level of stress among nursing students in control group.

Fig 2: Pre and post test level of stress among nursing students in the control group


Table 3: Comparison of mean scores level of stress among nursing students between experimental and control group

S.No	Group	Mean	S.D	't' Value
1	Experimental group	17.40	3.65	18.428
2	Control group	33.50	2.40	

N=50; ***p<0.001, S – Significant

Table 3 points out the mean value and standard deviation of experimental group were found to be 17.40 and 3.65, and in control group the mean value was 33.50 and standard deviation was 2.40. The mean difference was 48 and the 't' value found to be 18.428 at p < 0.001 level which shows that there is a significant difference between the level of stress among nursing students in experimental group and control group. Hence the research hypothesis stated was accepted.

Fig 3: Mean score level of stress among nursing students between experimental and control group
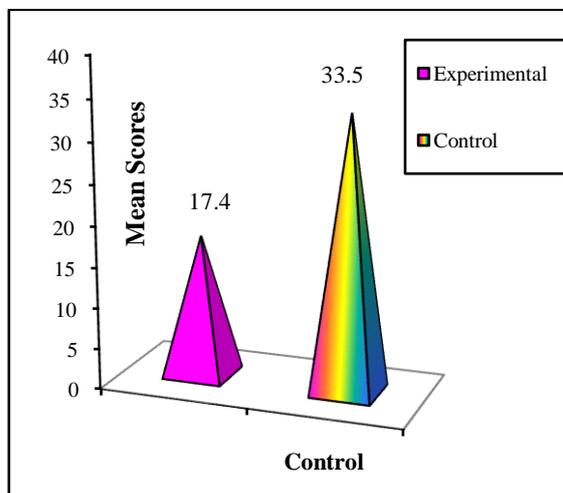
4. Discussion

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5. Conclusion

We evaluated the effects of meditation-based programs on undergraduates' stress and well being. These programs have demonstrated stress-reduction effects among adults, are nonsectarian, and generate wide cross-cultural interest. In a self-selected group of undergraduates we documented reductions in stress, increases in forgiveness, and trends toward reduced rumination. Researchers should explore the mechanisms, sustainability, and generalize ability of such effects, and how benefits from similar programs can most appropriately and effectively be made available to students.

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