

A Study to Assess the Stress and Anger Management by Deep Breathing Exercise and Meditation Among Adolescent Nursing Students at a Selected Nursing School in Delhi

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Abstract

Introduction: Stress is a response that can lead to physical, emotional, or psychological strain. It is a frequent occurrence in daily life. Stress acts as the body's natural mechanism for defense against potential threats and dangers. It initiates a release of hormones that ready the body's functions to either confront danger head-on or retreat, commonly known as the fight-or-flight reaction. Anger can be caused by both external and internal events such as stress, family issues, abuse, poor social, financial situations, overwhelming of time and energy, non-appreciation of effort and opinion, injustice, loss of energy, and weakness. Genetic factors and the inability of the human body to deal with certain chemicals and hormones, and feelings of hopelessness can contribute to anger. The main purpose of the study was to assess the effectiveness of deep breathing exercise and meditation on stress and anger management expression among adolescent nursing students. **Method:** The study employed a quantitative approach utilizing a pre-experimental design with a single-group pre-test post-test design. The selection of participants employed purposive sampling, a non-probability technique, while data gathering utilized a structured questionnaire. The research data were analyzed using both statistical and descriptive methods. Results reveal that computed value (60.232) was higher than table value (2.000) at the level of significance, which indicates that the intervention given for stress management was effective for adolescent nursing students. **Conclusion:** The findings of the study concluded that deep breathing exercise and meditation for stress and anger management was effective among adolescent nursing students.

Keywords: Assessment, stress, anger, deep breathing, meditation, adolescent

INTRODUCTION

Stress is a reaction that manifests physically, emotionally, or psychologically when faced with changes that require a response or adaptation. It is an inherent aspect of daily existence for all individuals. Stress serves as the body's built-in mechanism for protection against threats or aggressors. This response triggers a hormonal rush that readies an individual to either flee from danger or face it head-on, known as the fight-or-flight response. In situations where there is a perceived threat or challenge, the human body prepares itself with a response that is partially physical, mobilizing the individual to either confront the issue or escape to safety quickly.

Anger can be caused by both external and internal events such as stress, family issues, abuse, poor

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social, financial situations, overwhelming of time and energy, non-appreciation of effort and opinion, injustice, loss of energy, and weakness. Genetic factors and the inability of the human body to deal with certain chemicals and hormones, and feelings of hopelessness can contribute to anger. When someone experiences triggers of anger, it elevates their heart rate, blood pressure, and the levels of adrenaline and noradrenaline. Anger confers survival benefits as it constitutes a component of the brain's fight-or-flight reaction to a perceived danger [1–5].

Adolescence signifies a transitional phase in physical and emotional development, transitioning from childhood to adulthood. According to the World Health Organization (WHO), this stage spans from ages 10 to 19 years and is pivotal for acquiring emotional intelligence, coping with secondary sexual changes, and developing essential skills for adulthood. With around 1.2 billion adolescents globally, India holds the highest number, with 253 million, according to UNICEF's records [6, 7].

"Meditation encompasses a range of techniques aimed at self-regulation, directing attention and awareness to enhance mental processes and promote overall mental health and growth, as well as specific abilities like tranquility, lucidity, and focus". It involves employing methods such as mindfulness or concentrating the mind on a specific object, idea, or task to cultivate attention, awareness, and attain a state of mental clarity, emotional calmness, and stability [8–10].

The best way to control stress and anger in nursing environments and to prevent it from arising is the use of some simple steps like breathing exercise, yoga, meditation, relaxation, listening to music, etc. Anger management courses should be arranged for all adolescents to teach how to identify the causes of anger, and how to control stress and deescalate anger and stress that arise during the academic period [11–14].

MATERIALS AND METHODS

Study Design

A quantitative descriptive research study was carried out at the School of Nursing in Delhi, focusing on adolescent nursing students as the sample group.

Setting of the Study

The selection criteria for the study setting were based on the feasibility of conducting the research and the availability of adolescent nursing students as the sample group.

Study Participants

The study comprised 60 adolescent nursing students, aged between 16 and 19 years, who were enrolled in the general nursing and midwifery (GNM) program at a designated school of nursing in Delhi.

Inclusion Criteria

The inclusion criteria were adolescent nursing students aged 16 to 19 years who are willing to take part in the study at a chosen school of nursing in Delhi.

Exclusion Criteria

The study does not include adolescent nursing students who are unavailable during the data collection period.

Development and Description of the Tools

Following a thorough review of the literature and consultations with experts, the study employed a self-administered questionnaire covering demographic details and two standardized instruments [15–18]: The Perceived Stress Scale (PSS), which consists of 10 items with positive and negative statement which measures individual stress levels and the Standardized Behavioral Anger Response Questionnaire, which consists of six statements.

Table 1. Analysis and interpretation of the data (N = 60).

| Test | Mean | Mean Difference | Standard Deviation | t-Test | Table Value |
|-----------|--------|-----------------|--------------------|--------------------------|-------------|
| Pre-test | 141.55 | 36.56 | 10.31 | 60.232 (<i>df</i> = 59) | 2.000 |
| Post-test | 104.98 | | 12.04 | | |

Significant at $p \leq 0.05$.

RESULT

The findings of the study were derived from data collected from 60 participants. The analysis and interpretation of the data were conducted in two parts: first, the frequency and percentage distribution of demographic variables of adolescent nursing students, and second, the evaluation of stress and anger levels using mean and standard deviation (Table 1).

DISCUSSION

In the present study, the focus was on evaluating the level of knowledge among adolescent nursing students regarding anger and stress management. The results were examined through both subjective observations and analysis based on hypotheses. Descriptive statistics were employed to summarize the characteristics of the data, while inferential statistics were utilized to draw conclusions about potential relationships or differences between variables.

The data analysis process was organized according to a pre-defined plan, and the results were presented across various sections to provide a comprehensive understanding of the findings. Through this structured approach, the researchers were able to systematically explore and interpret the data, ensuring that all relevant aspects were addressed.

The research findings indicated a notable enhancement in the understanding of adolescent nursing students enrolled at the chosen School of Nursing in Delhi. This improvement was attributed to the implementation of specific interventions, such as deep breathing exercises and meditation, aimed at stress and anger management. The choice of these interventions was based on established evidence suggesting their efficacy in promoting emotional well-being and reducing negative affective states [19–24].

The research employed a quantitative descriptive study design, involving the selection of 60 participants through purposive non-probability sampling. Data collection was facilitated through the use of a structured questionnaire, which incorporated both self-prepared items and standardized tools for assessing knowledge levels. Statistical methods were applied to analyze and interpret the collected data, ensuring that the conclusions drawn were grounded in empirical evidence.

Overall, the study's findings underscored the importance of incorporating stress and anger management strategies into the education and training of adolescent nursing students. By equipping these individuals with effective coping mechanisms, such as deep breathing exercises and meditation, the study aimed to enhance their ability to navigate the challenges of their academic and professional lives. Additionally, the research contributed to the growing body of literature on interventions for promoting emotional well-being among healthcare professionals, particularly in the context of nursing education [25–27].

CONCLUSION

The research demonstrated an enhancement in the knowledge of adolescent nursing students at a designated school of nursing in Delhi. This quantitative descriptive study involved 60 participants, selected through purposive non-probability sampling at the specified institution. Data collection was conducted using a customized structured questionnaire and standardized instruments, with analysis and interpretation performed using appropriate statistical methods. The study concluded that deep breathing exercise and meditation for stress and anger management was effective among adolescent nursing students.

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