

Effectiveness of audio-assisted teaching module of progressive muscle relaxation technique on level of stress among visually impaired adolescents in selected school for visually impaired at Dehradun

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ABSTRACT

Background: This is really hard to survive for one who born with eyes but no sight. Adolescence (from Latin adolescere, meaning “to grow up”) this is their age to explore the world with full of desires, dreams when they want to touch every color of life with their eyes, but if they lost their sight, it is colorless and feeling lifeless. They do not live in darkness, darkness lives in them, and it can cause stress. **Objectives:** The major endeavor of the study was to find the positive result of audio-assisted teaching module of progressive muscle relaxation technique on the level of stress among visually impaired adolescents in selected visually impaired school at Dehradun, Uttarakhand, India. **Materials and Methods:** The main study was conducted in National Institute of visually impaired school at Rajpur road, Dehradun, using pre-experimental one group, pre-post-test design and level of stress were assessed through interview method using modified stress scale consist of 24 questions. 100 samples were haggard through non-probability convenient sampling method. The audio-assisted teaching module of progressive muscle relaxation technique was used as an intervention for visually impaired adolescents for 10 days followed by post-test-assessment level of stress. It showed the progress in the paired and unpaired t -test. The findings of the study showed that progressive muscle relaxation technique was more effective ($t = 26.26$) significance at 0.05 level). **Results:** Progressive muscle relaxation technique helps tensed muscles to relax in the skeleton-muscular system, and it improves the reduction of stress level. **Conclusion:** Progressive muscle relaxation technique is a useful method to improve the level of stress among visually impaired adolescents. It ensures the huge implication of reduction in the level of stress, thereby influencing the dependability in adolescent’s living.


KEY WORDS: Audio-assisted Teaching Module; Progressive Muscle Relaxation Technique; Stress; Visually Impaired Adolescents

INTRODUCTION

“Earth is extending through fantastic living things tremulous from our own insight into multiperception organisms. Person

beings that are the only creatures to smile and are socially reliable in one way or other so we are called as social being too. Now, presently, envisage a life one has to live without seeing the loveliness of rising sun, beauty of flowering flowers, and even unable to see the features of one’s own mother.” Eyes are the most valuable organ in the human body used to view the world, so one has to face countless difficulties in the absence of vision.^[1]

Adolescence is the age of^[12-18] in these physical changes, psychological development, and social adjustment is taking place. Growth and development occur in interaction with

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other people that are significant to the adolescents such as parents, siblings, relatives, friends, and school personnel. The age of adolescence can cause a huge compact of stress for the people with a physical handicap, individual who face not only the usual developmental challenges although the further harm of his or her bodily handicap. Visual impaired adolescents have difficulty in their bond in the company of friends such as community separation, being rejected by their peer, having less friends, and lower socioeconomic status. The visual impairment also interferes the adolescent's social relationship with contacts and public activities. They too waste more time alone in passive actions.^[2]

The core cause of visually handicapped in the visually impaired assembly was toxoplasmic macular retinochoroiditis, ocular malformation, congenital glaucoma, retinal dystrophies retinopathy of prematurity, optic atrophy, and congenital cataracts as well as degenerative disorders of the retina and macula. The retina was the most often affected anatomic site in the visually impaired crowd and the optic nerve in the various disability groups.^[3]

The figure of visually impaired in India, in 2000, was predictable to be 18.7 million and the expected visually impaired would increase to 24.1 million in 2010 and 31.6 million in 2020.^[4] Disabled children face discrimination and disregard. An incomparable mark of Indian society be near to take care of such children as handicapped and arrange separate facilities for them, in addition to ophthalmic neonatorum along with Vitamin A deficiency disorders.^[5]

Worldwide, there are more than 285 million people are predictable to be visually impaired. Approximately 39 million are blind, and many of 246 million have low vision and around 90% of the world's visually impaired live in low profits settings. Of 82% of citizens living with blindness are aged 50 and above are statically proven. Global uncorrected refractive errors are the foremost core of moderate and harsh visual impairment. Cataracts persist behind the huge amount imperative source of blindness in center- and low-income countries. The number of people visually impaired from contagious diseases has compact in the past 20 years according to global estimation work. 80% of all visual impairment can be expelled or cured.^[6]

In India, imploring is predictable and time flattered form of livelihood for the visually impaired children. Worldwide, incidence of visually impaired is 42,000,000 people. It is estimated that no <200,000 children in India are visually impaired, and approximately 15,000 are in schools for the visually impaired. The incidence of childhood visually impaired was 0.17%. The outline of blind persons in India, in 2000, was likely to be 18.7 million, and the estimated blind persons would increase to 24.1 million in 2010 and 31.6 million in 2020.^[7]

Consequently, these visually impaired adolescents are having extra stress because of the changes in body figure and depending for desires on their parents. People will try to overcome the stress moreover by through healthy coping strategies, for example, diversional therapy, progressive muscle relaxation techniques, seeking peer support, or by adverse coping strategies, for example, smoking, drinking alcohol, overeating or under eating, sleeping too much, etc. The psychological factor focuses on the dissimilarity between the feelings of the worry and entertainment. Because the eyes are closed, one is forced to think on the awareness of tension and relaxation, for the basis, the feelings of sympathy and weightiness felt in the after it is tensed, a brain relaxation is felt as a result. When put into practice, the patient learns how to effectively relax and put off stress in his life.^[8]

An experimental study was conducted in the USA in a severe inpatient concerned unit to check the competence of progressive muscle relaxation gathering on state anxiety, psychological stress, weakness, and subjective happiness in patients with schizophrenia. Before and after the particular interventions, the level of anxiety recorded and the one-sided exercise experience scale is finished. In end result, the involvement group showed a decreased level of anxiety, psychological stress along with tiredness, and increased subjective comfort compared with the control group. The study fulfilled that progressive muscle relaxation technique was extremely much useful in reducing acute way of thinking of stress and anxious in patients with schizophrenia. A decline in stress and circumstances anxiety is linked with a raise in individual well-being.^[9]

The study was conducted to assess the effectiveness of audio-assisted teaching module of progressive muscle relaxation technique on the level of stress among the visually impaired adolescents in selected school for visually impaired at Dehradun, Uttarakhand, India.

The objectives of the study were as follows:

1. To assess the pre- and post-test level of stress among visually impaired adolescents.
2. To assess the effectiveness of audio-assisted teaching module of progressive muscle relaxation technique on the level of stress among visually impaired adolescents.

Hypothesis

H₁: There is a significant difference between pre-test and post-test mean score in the level of stress among visually impaired adolescents before and after administering the progressive muscle relaxation method at 0.05 level of significance.

Conceptual Framework

Conceptualization is a process of forming ideas with the concepts assembled together by good feature of their relevance to research problems, which provides a definite framework of reference for clinical apply, research, and education.

This study was based on the Betty Neuman’s System Model. In a system model, the key focus is on interaction of parts of subsystems within the system. Neuman’s model concentrates on explaining a person’s reaction to stressors in the environment, and it describes the nursing intervention all the way through using the statement prevention. There are three types of prevention so as to primary, secondary, and tertiary. These three levels of prevention are used to achieve, uphold, and protect wellness by sustaining method constancy. At this juncture, researcher used Neuman’s model to assess the effectiveness of progressive muscle technique on level stress of among visually impaired adolescents [Figure 1].

MATERIALS AND METHODS

In this study, pre-experimental one group, pre-post-test design was used. The study subjects comprised 100 adolescents with visually impaired were selected by non-probability convenient sampling technique. The instrument used for this study composed of two parts: Part 1: Demographic variables and part 2: Stress rating scale was used to assess the level of stress among visually impaired adolescents with the help of interview method. Scales consist of 24 questions and score was given according to answer of the samples. If they say always (5) frequently (4) sometimes (3) rarely (2) never (1).

Interpretation of the stress score total score: 120 Mild: 1–40 Moderate: 41–80 Severe: 81–120.

RESULTS

The information in Table 1 shows the calculated “t” value of pre- and post-test level of stress score of 26.262 correspondingly, which was elevated than the table value at 0.05 level of significance. It exposed that there was difference in the pre- and post-test stress scores of visually impaired adolescents as well as the study result is significant.

DISCUSSION

There are many studies on visually impaired adolescents to assess the stress level. Kathleen Romito, MD - family medicine, Lisa S. Weinstocks, and MD psychiatry (May 2010) conducted a similar study in which they used progressive muscle technique to reduce the level of stress.

A parallel intervention be used in this study to reduce the level of stress in adolescents with visually impaired. The

Table 1: Stress levels of adolescents with visually impaired adolescents before and after intervention on n=100

Intervention	Mean±SD	Mean difference	Df	t
Before	70.49±14.33	22.91	99	26.262
After	47.58±9.51			

At 0.05 level of significant. SD: Standard deviation

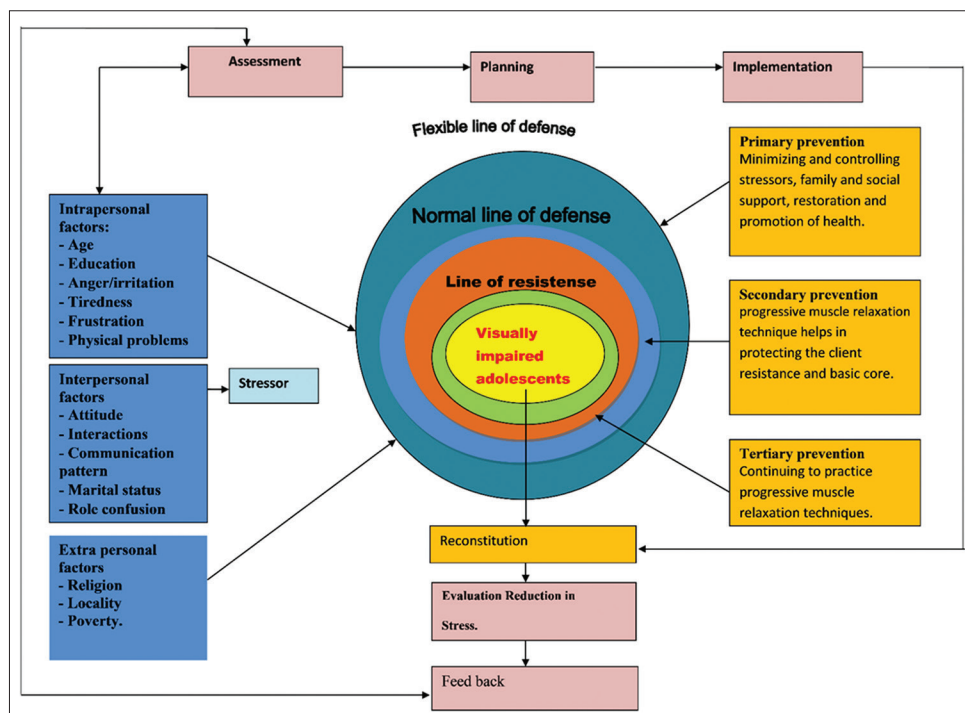


Figure 1: Conceptual framework based on Betty Neuman’s Systems Model

stress level means score of the visually impaired adolescents before the intervention was 70.49, and the stress level after the implementation of the intervention was 47.58. The mean percentage was decreased by 22.91%; it shows that there was an improvement in the level of stress. Hence, the study suggests that these interventions are doing well in improving the level of stress among visually impaired adolescents.

Implications

Nursing education

Psychiatric nurse can successfully focus on all the magnitude, particularly on amplification of the mental health status to get better adolescents self-esteem. Therefore, the value of special instructional programs such as progressive muscle relaxation technique must be durable in the management techniques as curative measures for all the mental health problems.

Nursing practice

The study conclusion would assist the psychiatric nurse to build up an insight into the enormity of stress level and effectiveness of progressive muscle relaxation techniques as the instructional program in civilizing the stress among adolescents with visually impaired. This method can be implemented along by way of the regular nursing care in the exact time related with the aim of any supplementary remedy administered in the ward.

Nursing administration

Once the exclusive instructional program advances, the superintendent has the accountability of given nurses with substantive qualifications program about the progressive muscle relaxation technique as a part of the continuing nursing education conference or in-service education program. Consequently, the superintendent can represent on paper policies concerning the education of this instructional program for the nurses in the hospice.

Nursing research

The study has clued-up the effectiveness of progressive muscle relaxation technique on the level of stress among visually impaired adolescents. Correlated studies can also use for the adolescents with visually impaired at different levels of stress such as mild, moderate, and severe and anxiety too.

1. Audio-video module for progressive muscle relaxation technique can be conducted for the teachers those who are working in the visually impaired schools.

CONCLUSION

Visually impairment is disability typically with a human inability to see and distinguish the world. The troubles include different degree that affects the healthy human life. Different instructional plans were available for the adolescents with visually impaired along with that progressive muscle relaxation technique was bring into being specially to improving the level of stress.

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