

Effectiveness of Deep Breathing Exercise on Stress among High School Teachers

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Abstract

Stress is the non specific response of the boy to any kind of demand made up on it² The present study was to assess the effectiveness of deep breathing exercise on stress among high school teachers in selected schools, at Kollam. The objectives of the study were to assess the level of stress among high school teachers, evaluate the effectiveness of deep breathing exercise on stress among high school teachers and find out the association between stress an selected demographic variables. Quantitative research approach with one group pretest post design was used for the study. Purposive sampling technique was used to select 40 samples from the high school teachers group. Main study was conducted in AEMPHS, Irumpanangad, Kollam, from 22.2.2021 to 29.2.2021. Pretest was conducted among the high school teachers by using perceived stress scale and deep breathing exercise given on the same day Post test was conducted on 8th day. The data was analyzed by using descriptive and inferential statistics. The result revealed that the mean post test level was significantly lower than mean pre test and calculated “t” value (15.278) was greater than the table value (2.04) at 0.05 level of significance. There for it is interpreted that deep breathing exercise was effective for stress among high school teachers.

Keywords: effectiveness, deep breathing exercise, stress, high school teachers

Introduction

Stress is the nonspecific response of the body to any kind of demand made up on it. (Selye 1956)². Stress may be viewed as an individual reaction to any change that requires an adjustment or response, which can be physical mental or emotional. Responses directed at stabilizing internal biological process and preserving self-esteem could be viewed as health adaptation to stress³. According to the American institute of stress about 33% of people report feeling of extreme stress, 77% of people experience stress that affects their physical health and 73% of people have stress that impacts their mental health.⁵ According to study conducted by life style desk 57% of Indians suffering mild stress, 11% were feeling moderately stress, 4% reported moderately severe symptoms of stress and 2% reported severe stress.⁶ According to the state mental health survey 5.43% facing neurotic and stress related disorders.⁷ Teaching is becoming more challenging as a profession and it is one of the most significant and visible profession in the world. Studies revealed that teaching is one of the stressful occupation worldwide. Teachers stress not only affects his /her own health but also negatively affect the students and even the organization. According to the national foundation for educational research NFER report, teachers are imposed to a greater stress in comparison to other professionals. one in five teachers 20% feel stress about their job. The teachers are considered to be the most powerful environment for child development.¹⁰ Relaxation techniques are a great way to help with stress management. Relaxation is a process that decreases the effect of stress on mind and body.

Relaxation technique can help cope with every day stress and with stress related to various health problems. . Deep breathing exercise help to decrease stress. Deep breathing is one of the best ways to lower stress in the body. When we breathe deeply it send message to the brain to calm down and relax. Deep breathing exercises are one of the most simple way to reduce stress.

A descriptive study was conducted among school teachers in selected schools at vellore. To assess the level of stress among school teachers .Non probability convenient sampling were used to select 80 school teachers from two schools of vellore district. The study result shown that a majority of teachers 34(42.5) had moderate level of stress followed by 23(28.75) of teachers had mild stress and severe level of stress respectively. The study finding reveals the importance of being self-aware about stress and taking steps to keep it under control by using various stress management techniques¹¹

A quasi experimental study was conducted to assess the effectiveness of deep breathing exercise in reducing stress among 60 working women in selected area at Rajkot. perceived stress scale was used for data collection which range from 0 to >40 range. F test was used to evaluate the effectiveness of deep breathing exercise on level of stress among working women. The obtained F value was 9.49760. The finding of the study revealed that deep breathing exercise helps in decreasing the level of stress among the working women¹²

from the above facts , it is very necessary to reduce the stress among high school teachers in order to reduce the adverse effect of stress.

Statement of the problem

A study to assess the effectiveness of deep breathing exercise on stress among high school teachers working in selected schools at Kollam.

Objectives

- To assess the level of stress among high school teachers.
- To evaluate the effectiveness of deep breathing exercise on stress among high school teachers.
- To find out the association between stress and selected demographic variables among high school teachers.

Hypotheses

H1: There is a significant difference between mean pretest and post test stress score among high school teachers.

H2: There is a significant association between the stress and selected demographic variables among high school teachers

Methodology

A Quantitative research study was aimed to assess the effectiveness of deep breathing exercise to reduce stress among high school teachers at selected high schools at kollam district. The research design adopted for the present study was pre experimental one group pre test post test design. In this study the sample consists of 40 high school teachers having moderate to severe stress from AEPMHSS , Irumpanangad, kollam. The sampling technique used was purposive sampling technique and conceptual frame work was based on modified callista Roy's adaptation model theory. Main study was conducted in AEPMSS kollam from 21/04/2021 to 29/04/2021. Formal permission and ethical clearance was obtained

from the concerned authority. pre test was conducted among the high school teachers by using demographic proforma and perceived stress scale .Deep breathing exercise was administred 30 minutes for 7 days. post test was conducted on the 8th day The data was analyzed by using descriptive and inferential statistics.

Inclusion criteria

High school teachers

- Who are willing to participate in the study
- Who are having moderate and severe stress

Exclusion criteria

High school teachers

- Who are having respiratory illness
- Who are not available during data collection

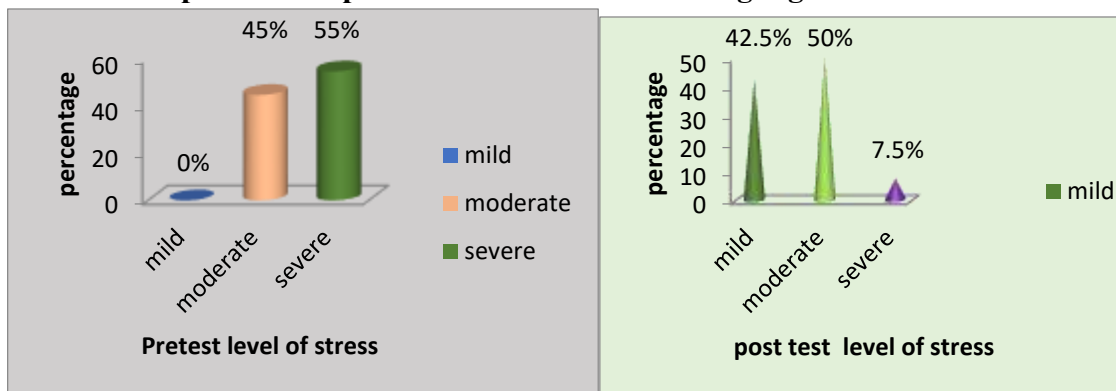
Statistics

Data was analysed using descriptive and inferential statistics .The distribution of subjects according to demographic variables ,and pretest and post test level of stress stress were shown using frequency,percentage ,graphs and tables.chisquare test was done to find the association between stress and selected demographic variables.

\Results

Section1: Distribution of sample according to demographic variable:Based on age, 35% of samples belongs to the age groups of 36-40 and 35% belongs the age group of 41-45 respectively. Based on year of experience, 50% of samples had 11-13 ,and 50% of samples had >13year of experience Based on marital status, 100% of samples were married. Based on number of children ,75% sample had one of children Based on type of family, 85% of sample belongs to nuclear family Based on history of respiratory illness 100% of samples had no history of respiratory illness Based on previous knowledge regarding deep breathing exercise 25%sample had previous knowledge.

Section 2: Assess the pretest and post test level of stress among high school teachers



Section 3: Evaluate the effectiveness of deep breathing exercise on stress among high school teachers.

Test	Mean	Mean difference	SD of difference	't' value
Pre-test	22.4	2.8	6.76	15.27
Post-test	19.6		6.3	

*Significant at 0.05 level

The data presented in the above table shows that mean and standard deviation of stress among high school teachers was 22.4 and 6.76 after the deep breathing exercise it was changed to 19.6 and 6.3. The paired 't' test computed between pretest and post test level of stress was statistically significant at 0.05 level. The calculated 't' value (15.27) was greater than the table value (2.04 at 0.05 level of significance). Hence null hypothesis (H_{01}) was rejected and research hypothesis (H_1) was accepted. So it is interpreted that deep breathing exercise was effective for reducing stress among high school teachers.

Section 1V: Association between stress and selected demographic variables.

Chi square test was done to find out the association between stress and selected demographic variables. The result shows that there was association between stress and selected demographic variable age. The calculated Chi-square (χ^2) value was greater than table value at 0.05 level of significance and there is no association between stress and selected demographic variables such as year of experience, marital status, number of children, type of family history of respiratory illness and previous knowledge.

The findings showed that there was a significant difference between the mean pretest and the post test values. This indicates that deep breathing exercise was effective on stress among high school teachers hence the research hypothesis (H_1) was accepted.

Discussion

The present study was focused on the effectiveness of deep breathing exercise on stress among high school teachers at selected high schools at Kollam district.

The findings of the study have implications for nursing practice, nursing education, nursing administration and nursing research.

Nursing Implication

Nursing Practice

- Nurse should be skilled enough to identify problems associated with stress among teachers
- Nurse should enhance awareness regarding various stressors among teachers, its identification and management

Nursing education

- Nursing education should ensure that sessions are conducted on stress management during training period, thus preparing student nurses in dealing with stress
- Educational programmes can be conducted giving importance to the psycho social concerns of the teachers

Nursing administration

- Nurse administrators should motivate the staff and health care team to participate in various stress management programmes of teachers

- School health nurse can organize free medical check ups for teachers more frequently in order to detect various health problems
- Continuing nursing education program can be conducted to enhance nurses knowledge and skills in providing competent care for those teachers who experience stress

Nursing Research

- More research studies need to be conducted to assess the applicability of highly feasible and less expensive stress management therapies in various settings
- The result of the study encourage health care professionals to motivate patients with stress to practice breathing exercise

Limitations

- One important limitation of this study was we used a small sample of teachers
- The study did not use any control group there for there are possibilities of threats to validity
- A pre experimental design was used for the study. A true experimental study could have been given more reliable results..
- Deep breathing exercise was practiced over a period of one week which was not sufficient
- No follow up was done after the post test of the study.

Recommendations

1. The same study can be replicated by using a true experimental research design which might yield more reliable results, to validate the findings and to make generalization
2. Replication of the study could be done with a large sample to validate and generalize the findings
3. A similar study can be conducted for collage faculties.
4. A similar study can be conducted among the primary school teachers

Conclusion

Based on the statistical analysis of the study it is concluded that deep breathing exercise is highly effective in reducing stress levels among high school teachers. The post intervention stress scores showed a significant reduction compared to the pre intervention scores. There for deep breathing practice can be recommended as a simple cost effective and non pharmacological intervention to enhance psychological wellbeing of school teachers

REFERENCES

1. Sreevani R. A Guide to mental health and psychiatric nursing: 3rd Edition. New Delhi: Jaypee brothers; 2010;.259.
2. Townsend C M. Psychiatric Mental health nursing: concept of care in evidence based practice. 5th edition. New Delhi: Jaypee brothers; 2007;.3.
3. Dlamini C S, Okeke C I, Mammen K J. An investigation of work related stress among high school teachers in swiziland. MJSS.2014;5.(15):575-576.
4. Eric Patterson. Stress facts and statistics [document on the internet]. The recovery village; 2020 June 11. Available from <https://www.therecoveryvillage.com/mental-health/stress-related/stress-statistics>.
5. Life style desk. 74% Indian suffering from stress. [document on the internet]; cited 2020 December

- 12, Available from <http://indianexpress.com/article/life-style/health/Indian-stress>.
6. Available from <http://indianmhs.nimhans.ac.in>.
7. Adam Felman. Why stress happens and how to manage it [document on the internet] Medline News Today; [cited 2020 March 12]. Available from <https://www.medicalnewstoday.com/articles/145855>.
8. Jennifer C. The effects of stress on your body. [document on internet]. webmed; [cited 2019 december 14]. Available from <https://www.webmed.com/balance/stress-management/effect-of-stress-on-your-body>.
9. Shahavarani A M, Abadi E A M, Kalkhoran M H. Stress facts and theories through literature review. IJMR. 2015;2(2):230-240.
10. National foundation for Educational Research. Teachers go through more stress than Another professional [internet]. 2019 [cited 2019 sep 27] Available from: <https://www.indiatoday.in>.
11. Solomon A, PDR, RCT. Assess the level of stress among school teachers at vellor. IJDR. 2017;7(11):16456-16558)
12. H MR, Hari V, K JJD. A Study to Assess the Effectiveness of Deep Breathing Exercise to reduce the Level of Stress among Working Women in a selected area at Rajkot. International Journal of Nursing Education and Research. 2019 May 7;7(2):178–80