



E-ISSN: 2663-2268
P-ISSN: 2663-225X
www.surgicalnursingjournal.com
IJARMSN 2024; 6(1): 106-109
Received: 13-12-2023
Accepted: 19-01-2024

Dr. Mohammed Umar Khan
Professor, Upchar college of
Nursing, Jaipur, Rajasthan,
India

Dr. Yasmin Raza
Physiotherapist, MPT
Neuroscience, S.N. Health and
Wellness Centre, Jaipur,
Rajasthan, India

Dr. Ankit Kumar Garg
Professor, NIMS University,
Jaipur, Rajasthan, India

Dr. Vishnu Dev Mishra
Professor, NIMS University,
Jaipur, Rajasthan, India

Corresponding Author:
Dr. Mohammed Umar Khan
Professor, Upchar college of
Nursing, Jaipur, Rajasthan,
India

A study to assess the effectiveness of yoga exercise to control the stress among adults at selected rural areas of Jaipur city

Dr. Mohammed Umar Khan, Dr. Yasmin Raza, Dr. Ankit Kumar Garg and Dr. Vishnu Dev Mishra

DOI: <https://doi.org/10.33545/surgicalnursing.2024.v6.i1b.176>

Abstract

Introduction: Stress is a natural human response that prompts us to address challenges and threats in our lives. Everyone experiences stress to some degree. The way we respond to stress, however, makes a big difference to our overall well-being. Stress affects both the mind and the body. A little bit of stress is good and can help us perform daily activities. Too much stress can cause physical and mental health problems. Learning how to cope with stress can help us feel less overwhelmed and support our mental and physical well-being. Yoga continues to grow in popularity as people experience its physical and mental benefits. Developing a personal yoga practice can help prevent and reduce stress, which is a common goal among people who want to create positive growth and focus on self-improvement. Yoga encourages mental and physical relaxation, which helps reduce stress and anxiety. The physical postures promote flexibility, relieve tension, and alleviate pain.

Objective: The main aim of the study is to assess the effectiveness of yoga exercise to control the stress among adults at selected rural area of Jaipur.

Methodology: A true experimental research design was conducted at Meenawala and Panchyawal Sirsi Road, Jaipur. The 60 adults (30 for experimental and 30 for control group) were selected through simple random sampling technique.

Results: The results of the study was that pre-test and post-test mean score of stress was 38.67+11.30 and 26.13+6.74 respectively and the pre-test mean score of anxiety was 17.43+7.20 whereas the post-test mean score was 11.17+4.20. The mean difference for stress was 12.54 and that for anxiety was 6.26. The paired 't' value obtained for stress and anxiety were 8.06 and 7.24 respectively which were significantly higher than the table value 2.05. It shows that Yoga exercise was effective in reducing the level of stress in adults.

Conclusion: On the basis of the results it is concluded that Yoga exercise reduce the stress level and improve the quality of life of the adults. We can say that if any individual is continue the exercise, yoga, meditation and other physical activities can help in the reduction of stress and anxiety level among them. It is suggested to focus like that activities and make a part of life.

Keywords: Assess, effectiveness, yoga exercise, stress, adults

Introduction

Stress refers to the consequence of failure of an organism in responding appropriately to actual or imagined physical or emotional threats. Stress is unavoidable in every stage of human development. During adolescence, the individuals experience a variety of problems in their family, school and college.

Anxiety comprises of psychological and physiological state which is characterized by somatic, emotional, cognitive and behavioral components. Anxiety may be considered as a normal reaction in stressful situations and can actually be beneficial in some situations. During adolescence, the stressors like college work, unsatisfactory relationship with parents, problems with friends, romantic relationships and drugs cause the individual to have excessive anxiety. However, while the person suffering may realize it is excessive, they may also have difficulty in controlling it, which may negatively affect their day to day living.

Yoga is increasingly being used now a day to help people cope with stress. Yoga has been practiced for more than 1000 years. Many studies recommend yoga as a complimentary therapy in order to achieve a healthy state of mind. There are different types of yoga like Yoga exercise, Kundilini Yoga, Sudarshan Kriya yoga, Iyengar Yoga etc. which are being

widely practiced throughout the world.

Need of the study

There are 200 million adults in India aged between 15-24 years. One fifth of this statistics is contributed by adults aged 15-19 years. It is expected that this group of population will reach 234 million by 2030.

Adults are the future generation of any nation. Stress because a large number of adults to decrease their capacities which in turn decreases the work force of the nation and putting a large burden on the health sector, families and the society.

There are many techniques like progressive muscle relaxation, aerobic exercises and yoga which are being practiced by individuals to reduce stress. Yoga has been found to be beneficial for stress in many studies conducted around the world. Due to its feasibility, practicability and economical nature, the investigator felt the need to evaluate the effectiveness of Yoga exercise to reduce stress in adults.

Aim of the study

The main aim of the study is to assess the effectiveness of yoga exercise to control the stress among adults at selected rural area of Jaipur.

Objectives of the study

1. To assess the level of stress among adults in experimental and control group before and after implementation of yoga exercise.
2. To evaluate the effectiveness of Yoga exercise on level of stress among adults in experimental group.
3. To find out the association between the level of stress among adults of experimental and control group and their selected demographic variables.

Hypotheses

H₁: There will be significant difference in the level of stress in experimental group before and after implementation of Yoga exercise at $p \leq 0.05$ level.

H₂: There will be significant difference in the post-test scores of stress of experimental and control group at $p \leq 0.05$ level.

H₃: There will be significant association between the levels of stress among adults of experimental and control group and their selected demographic variables at $p \leq 0.05$ level.

Review of Literature

Review of literature is presented under the following heading.

1. Literature related to stress in adults.
2. Literature related to effectiveness of Yoga exercise on stress.

Research Methodology

The Quantitative evaluative research approach was used to conduct present study. The research design adopted for the present study was true experimental research design. The researcher assesses the effectiveness of yoga exercise to control the stress among adults at rural area of Jaipur. In present study yoga exercise was independent variables. In

this study level of stress among the adults was dependent variables. Demographic variables selected for this study are age, gender, religion, education, occupation, type of family, family income and previous knowledge of yoga. The present study was conducted at Meenawala and Panchyawal Sirsi Road, Jaipur. The investigator selected 60 adults (30 for experimental and 30 for control group) through the simple random sampling technique. The target population for the study was adults residing at Meenawala and Panchyawal Sirsi Road, Jaipur.

Inclusion criteria

- Adults between 18-30 years of age.
- Adults residing at Meenawala and Panchyawal Sirsi Road, Jaipur.
- Those were willing to participate in study.
- Those were present at the time of study.
- Those were able to read and write Hindi and English.

Exclusion criteria

- Those were younger and elder than including age limit.
- Those were not willing to participate in study.
- Those were not present at the time of study.
- Those were not fulfilling the inclusion criteria.

Data Collection Tools and Technique

The instrument select in a research should as far as possible be the vehicle that would best obtaining data for drawing conclusions pertinent to the study and add to the body of knowledge in discipline.

Tool

As the study aimed to assess the effectiveness of yoga exercise to control the stress among adults, the following data collection instruments were constructed in order to obtain data:

- **Section I:** Description of demographic variables.
- **Section II:** A modified stress scale to assess the level of stress.

Reliability

The reliability was calculated by using split half method. Inter rated score was 0.91 and found to be highly reliable

Data Collection Procedure

A written formal permission was obtained from ward councillor of Meenawal and Panchyawal, Jaipur to conduct the study from 15/09/2023 to 08/10/2023. The samples were informed by researcher about the nature and purpose of study. The investigator himself assess the effectiveness yoga exercise among the adults.

Results

There were 60 adults in which 30 for experimental group and 30 for control group selected for data collection. After that mean, mean difference, SD is calculated on the basis of effectiveness and result or hypothesis can be calculated by paired 't' test. Mean, mean difference and standard deviation were obtained as below.

Table 1: Comparison of Mean, SD, Mean difference and paired ‘t’ value on level of stress in experimental group before and after administration of Yoga exercise

Variables	Before intervention		After intervention		Mean difference	DF	Paired ‘t’ value	Table value
	Mean	SD	Mean	SD				
Stress	38.67	11.30	26.13	6.74	12.54	29	8.06*	2.05
Anxiety	17.43	7.20	11.17	4.20	6.26	29	7.24*	

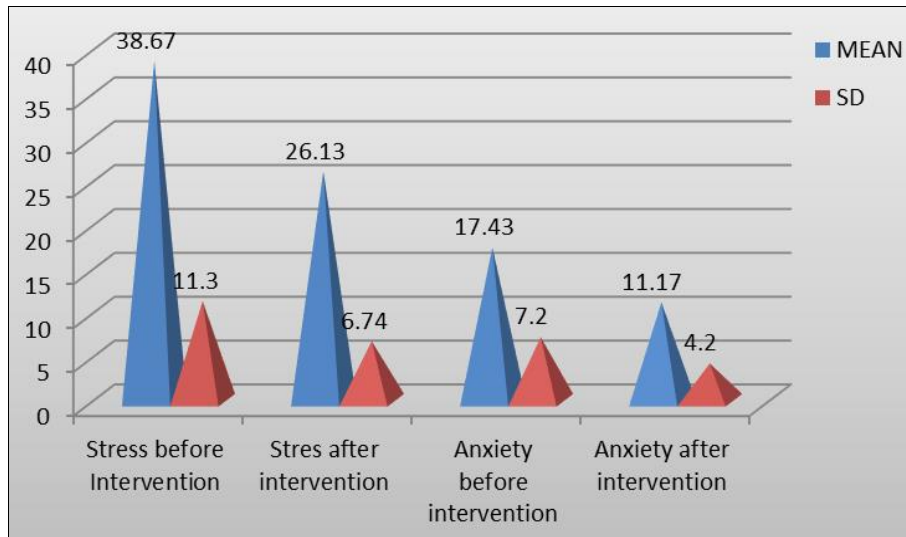


Fig. 1: Pyramid Diagram Show The Mean & S.D. Of level of stress

Table - 1 shows that in experimental group, the pre-test and post-test mean score of stress was 38.67+11.30 and 26.13+6.74 respectively and the pre-test mean score of anxiety was 17.43+7.20 whereas the post-test mean score was 11.17+4.20. The mean difference for stress was 12.54 and that for anxiety was 6.26. The paired ‘t’ value obtained

for stress and anxiety were 8.06 and 7.24 respectively which were significantly higher than the table value 2.05. It shows that Yoga exercise was effective in reducing the level of stress in adults. Hence the research hypothesis (H₁) is accepted.

Table 2: Comparison of the post-test Mean, SD and Independent ‘t’ value on level of stress among adults in experimental and Control group

Variables	Experimental Group		Control Group		DF	Independent ‘t’ value	Table value
	Mean	SD	Mean	SD			
Stress	26.13	6.74	36.37	11.01	59	4.341*	1.96
Anxiety	11.17	4.20	16.37	7.50	59	3.312*	1.96

*Significant at p≤0.05 level

Table - 2 shows that in experimental group the post-test mean score for stress and anxiety was 26.13+ 6.74 and 11.17+4.20 respectively whereas in control group the post-test mean score for stress and anxiety were 36.37+11.01 and 16.37+7.50 respectively. The independent ‘t’ value at p≤0.05 level for stress and anxiety were 4.34 and 3.31 respectively which shows that Yoga exercise was effective in reducing the level of stress in adults. Hence the research hypothesis (H₂) is accepted.

Conclusion

The study was done to determine the effectiveness of Yoga exercise on stress among adults at selected rural areas of Jaipur. The result of this study showed that most of the adults had reduction in the level of stress after practicing Yoga exercise.

Conflict of Interest

The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

Funding Source

There is no funding Source for this study.

References

1. Respiratory students train. The Reflector. Archived from the original on 5 August 2016. Retrieved 6 Nov 2016.
2. Harbrecht BG, Delgado E, Tuttle RP, Cohen-Melamed MH, Saul MI, Valenta CA. Improved outcomes with routine Respiratory Therapist evaluation of non-intensive-care-unit surgery patients. *Respir Care*. 2009;54(7):861-867. DOI:10.4187/002013209793800457. PMID 19558737. S2CID 32274631.
3. O'Malley RJ, Rhee KJ. Contribution of air medical personnel to the airway management of injured patients. *Air Med J*. 1993;12(11-12):425-428. DOI:10.1016/S1067-991X(05)80138-5. PMID 10130326.
4. Legislation. Gov Track.us. Archived from the original on November 17, 2019. Retrieved August 28, 2019. Medicare Respiratory Therapy Initiative Act of 2019.
5. Legislation. Gov. Track.us. Archived from the original

- on November 17, 2011. Retrieved August 28, 2011. Medicare Respiratory Therapy Initiative Act of 2017.
6. Shelledy DC, Wiezalis CP. Education and credentialing in respiratory care: where are we and where should we be headed? *Respir. Care Clin. N Am.* 2020;11(3):517-530. DOI:10.1016/j.rcc.2020.04.003. PMID 16168918.
 7. Rowley DD, Mayo DF, Durbin CG. Initial experience with a Respiratory Therapist arterial line placement service. *Respir. Care.* 2019;45(5):482-485. PMID 10813223.
 8. Kacmarek RM, Durbin CG, Barnes TA, Kageler WV, Walton JR, O'Neil EH. Creating a vision for respiratory care in 2019 and beyond. *Respir Care.* 2019;54(3):375-89. PMID 19245732.
 9. "Smother Small Dog to see it Revived. Successful Demonstration of an Artificial Respiration Machine Cheered in Brooklyn. Women in the Audience, But Most of Those Present Were Physicians. The Dog, Gathered in from the Street, Wagged Its Tail. *New York Times.* May 29, 1908. Retrieved 2007-12-25.
 10. Smith GA. *Respiratory care: evolution of a profession.* Lenexa, Kansas: AMP; c2018.
 11. Pierson DJ. The future of respiratory care. *Respir Care.* 2021;46(7):705-718. PMID 11403703.
 12. Weilacher RR. History of the respiratory care profession. In: Hess DR, MacIntyre NR, Mishoe SC, Galvin WF, Adams AB, Saposnick AB, editors. *Respiratory care: principles and practice.* Philadelphia: Saunders; c2021.

How to Cite This Article

Khan MU, Raza Y, Garg AK, Mishra VD. A study to assess the effectiveness of yoga exercise to control the stress among adults at selected rural areas of Jaipur city. *International Journal of Advance Research in Medical Surgical Nursing.* 2022;4(1):106-109.

Creative Commons (CC) License

This is an open-access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.