

## IMPACT OF SIMPLIFIED KUNDALINI YOGA ON SINUS PROBLEM AMONG COLLEGE WOMEN STUDENTS

**Dr. S. Prasath, (Guide)**, Assistant Professor, Dept. of Yoga for Human Excellence, WCSC-VISION SKY Research Centre, Aliyar. Director of Physical Education, Government Arts College, Paramakudi – 623 707 Mail ID: [prasath\\_phy@yahoo.com](mailto:prasath_phy@yahoo.com)

**S. Shanmuga Vadivu** (Ph.D Scholar) WCSC-VISION SKY Research Centre, Aliyar. Assistant Professor, Department of Human Excellence, Nallamuthu Gounder Mahalingam College, Pollachi – 642001 Mail ID: [svadivu0810@gmail.com](mailto:svadivu0810@gmail.com).

### ABSTRACT

**Introduction:** A multitude of modalities are available for the treatment of chronic rhino sinusitis; however, each has its side effects and compliance issues. Simplified Kundalini Yoga is one of the yogic methods which include Physical exercise and meditation. In this practice of yoga, offers an inexpensive and free from side effect modality in this regard.

**Objective:** The objective of this study was to evaluate the impact of simplified kundalini yoga in relieving the symptoms of sinusitis.

**Methodology:** A total number of twenty four students with sinusitis were randomly divided into two groups; group-I taught to practice simplified kundalini yoga and group-II as a control group without participating in any particular training outside of their regular daily activities. A pre and post-test was taken by the students to assess the effect of simplified kundalini yoga on sinus problem. The concerned students were specifically advised to practice SKY yoga for up to 6 weeks. In this study, the Sino-Nasal Outcome Test (SNOT-22) questionnaire was the measuring tool used to evaluate the state of sinusitis.

**Results:** The results are presented in this study the 't' test value yoga practice group and control group are 2.77 and 0.23 for sinusitis. The experimental 't' values are significantly higher than the required table value of 2.04 with degrees of freedom 11 at 0.05 level of confidence. **Conclusion:** The present study was concluded that SKY yoga practices (Group I) reduced sinusitis than the Control group among college women students. Thus Simplified Kundalini Yoga can be used as adjuvant therapy in management of sinusitis.

### Keywords:

Sinusitis, Simplified Kundalini Yoga, Sino-Nasal Outcome Test

### INTRODUCTION

The World Health Organization announced the COVID-19 is as pandemic one, because it increase the risk respiratory and affect the physical and mental health of public and also may cause to death. Lungs are the most important organ in the human body. This is because the oxygen obtained from the external environment due to lung activity is a basic requirement for the functioning of all organs. COVID-19 directly impacts the lungs and damages the alveoli (tiny air sacs). Sinusitis is one of the upper respiratory disorders. Chronic rhino sinusitis is a common clinical condition affecting the general population. Changing life styles, increased pollution, rapid urbanization and increase in resistance to antibiotics are responsible for the increased prevalence to upper respiratory tract infection and sinusitis. Chronic Rhino Sinusitis (CRS) affects 1 in 8 people in India, about 5-15% of urban population. Sinusitis is a common health problem that leads to frequent visit to primary care physicians and to ear, nose and throat specialists in all over the world. It contributes to a significant amount of health care expenditure due to direct costs arising from physician visits and antibiotics, as well as indirect costs related to missed days at work and a general loss of productivity due to a decrease in life-quality of those affected.

Yoga is being increasingly used as an adjuvant therapy for various conditions based on research done in the past many decades. Yoga can be done gently to help white blood cell production, regulate blood circulation and give you a little bit of an endorphin boost. Certain yoga asanas ease breathing during sinusitis by opening the air passage of the nose. This study makes an effort to concentrate on the methods lead of simplified kundalini yoga Practices can aid in the management and prevention of sinusitis.

## REVIEW OF LITERATURE

Anita Choudhary, TS Choudhary and Radheshaym Mishra (2012) published a paper entitled "Effect of yoga intervention in chronic Rhino sinusitis." The study's objective was to evaluate the effects of an 8-week yoga intervention therapy programme on the problem of chronic rhino sinusitis. Both the clinical score and the CT score improved significantly, according to this study. The results of the research showed that regular application of Jala Neti, which improves muco-cilliary clearance, and chanting Nada pranayama, which improves sinus ventilation, both support the reduction of inflammation. The study's results confirmed the use of yogic practices as an alternative therapy for chronic rhino sinusitis patients in order to reduce their severity of symptoms and medication use.

Abishek.K, Satvinder Singh Bakshi and Ananda Balayogi Bhavanani (2019) published a paper entitled "The Efficacy of Yogic Breathing Exercise Bhramari Pranayama in Relieving Symptoms of Chronic Rhino sinusitis". The study's aim was to assess the efficacy of Bhramari pranayama in treating the condition of chronic sinusitis. According to the results of the study, after a 4-week intervention of Bhramari pranayama breathing exercises, the mean score value has increased from  $39.1 + 9.10$  to  $24.79 + 8.31$  ( $p = 0.0002$ ). This improvement was noticeable at the end of the first four weeks and remained through the assessment's 12-week mark. Therefore, the research came to the conclusion that regular Bhramari pranayama practice is more effective than conventional management alone in people who have chronic rhino sinusitis.

## STATEMENT OF THE PROBLEM

The purpose of this present study was to find out the "Impact of Simplified Kundalini Yoga on Sinus Problem Among College Women Students".

## OBJECTIVES

The objective of the study was to observe the impact of simplified kundalini yoga practices on sinus problem among college women students.

## HYPOTHESIS

There would be a significant improvement on Sinusitis for college women students due to simplified kundalini yoga practices.

## INCLUSION

This study was delimited to the following aspects.

1. To achieve the study's objectives, 24 female undergrads with sinusitis issues, aged from 18 to 21 years were selected from NGM College, Pollachi, Tamil Nadu, India.
2. The Sinus problem students were randomly divided into two groups of twelve students each, such as group-I (SKY yoga practices) and group-II (control group)
3. The experimental group treatment was administrated for period of six weeks, five days per week, one session per day and each session lasted 60 minutes in the evening session.

## EXCLUSION

This study was not taking into account external aspects like nutrition, environmental factors, economic & social background, climatic conditions and medical background.

## METHODOLOGY

This study is based on a purposive sample design. In which, twenty four female subjects with sinus problem were chosen for the study and divided into two groups: Group I received SKY yoga training, while Group II served as the control group and only engaged in daily activities. Each group has twelve participants. Each of the variables used for the study were originally assessed on the chosen subjects. Following the initial test, the members of the experimental group received careful SKY yoga instruction. Five days a week, for an hour in the evening, of training were provided to the experimental group. The training intervention lasted for this study's 6 weeks overall.

## SELECTION OF SUBJECTS

The purpose of the study was to find out the effects of SKY yoga training on sinus problem among college women students. For these purpose twenty four college women students from Nallamuthu Gounder Mahalingam College, Pollachi, Coimbatore District, Tamil Nadu, India were selected as subjects. The subject's age ranged from 18 to 21 years.

### Measuring Instruments

The following tool was utilized to measure the variable understudy.

#### Sino-Nasal Outcome Test (SNOT-22) questionnaire

SNOT-22 test Questionnaire has been developed Washington University in St. Louis, Missouri. (2006). The SNOT test questionnaire consists of twenty two questions six statement. It is measured on five point Likert's method, ranging from 0 to 5. The subjects can evaluate each statement on the basis of their judgment on the following 5 point rating.

1. No problem
2. Very mild problem
3. Mild or slight problem
4. Moderate problem
5. Severe problem
6. Problem as bad as it can be

Note: The most important five items.

## PROCEDURE

The questionnaire consists Of 22 items and can be administered in an individual. Researcher gave necessary instructions for filling up the questionnaire. There were requested to go through the statements clearly and make a tick mark in the corresponding column adjacent to each statement according to the individual's suitability.

## SCORING

The SNOT-22 is a validated 22-item CRS-specific QoL instrument which is scored using a Likert scale where 0="No problem", 1="Very mild problem", 2="Mild or slight problem", 3="Moderate problem", 4="Severe problem", and 5="Problem as bad as it can be". Higher scores on the SNOT-22 survey items suggest worse patient functioning or symptom severity (total score range: 0-110).

## YOGA INTERVENTION

Simplified Kundalini Yoga (Neuromuscular Breathing Exercise & Kapalapathi)

## RESULT AND DISCUSSION

The primary objective of the paired 't' ratio was to describe the differences between the pre-test and post-test mean of experimental and control group.

Thus the obtained results were interpreted with earlier studies and presented in this chapter well along with graphical presentations

**TABLE-1 THE SUMMARY OF MEAN AND DEPENDENT 'T' TEST FOR THE PRE AND POST-TESTS ON SINUSITIS OF EXPERIMENTAL AND CONTROL GROUPS**

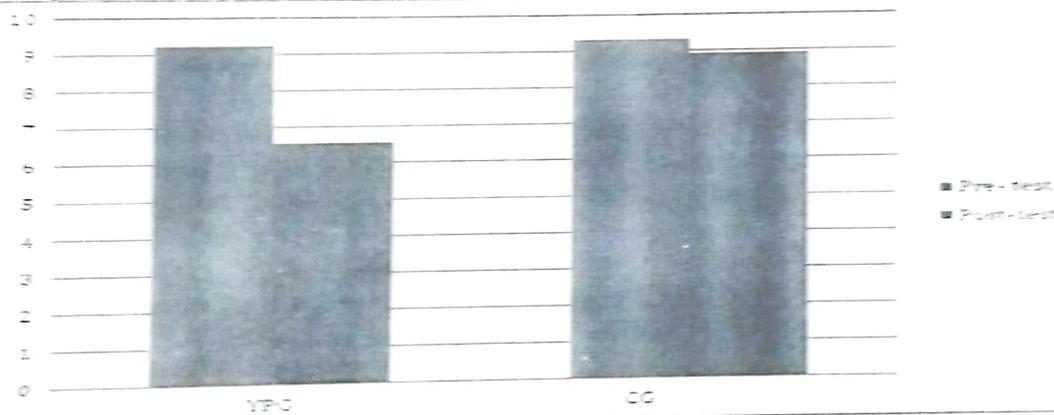
Mean	Experimental Group - (I)	Control - (II)	Group
Pre- test 't' value	9.2378	9.3247	
Post-test 't' value	6.5612	8.9118	
Mean	12.3058	4.0826	
't'-test	-2.77*	-0.23	

Significance at 0.05 level of Confidence

(Table value required for significance at 0.05 level for 't'-test with df 11 is 2.04)

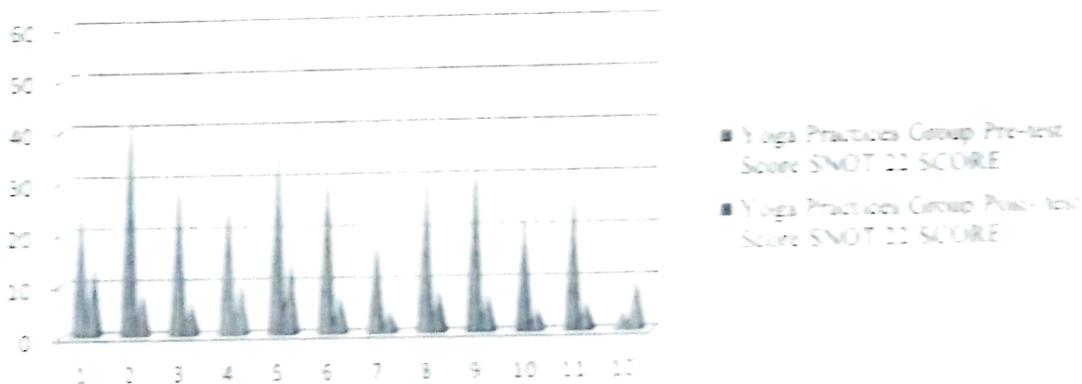
The paired sample 't' was computed on selected dependent variable. The results are presented in the above Table-1 the 't' test value yoga practice group and control group are 2.77 and 0.23 for sinusitis. The experimental 't' values are significantly higher than the required table value of 2.04 with degrees of freedom 11 at 0.05 level of confidence. The result of the study shows that SKY yoga practice group has significantly improved the sinusitis.

The pre, post- test and adjusted post-test mean values of experimental group and control group on sinusitis graphically represented in the Figure -1.



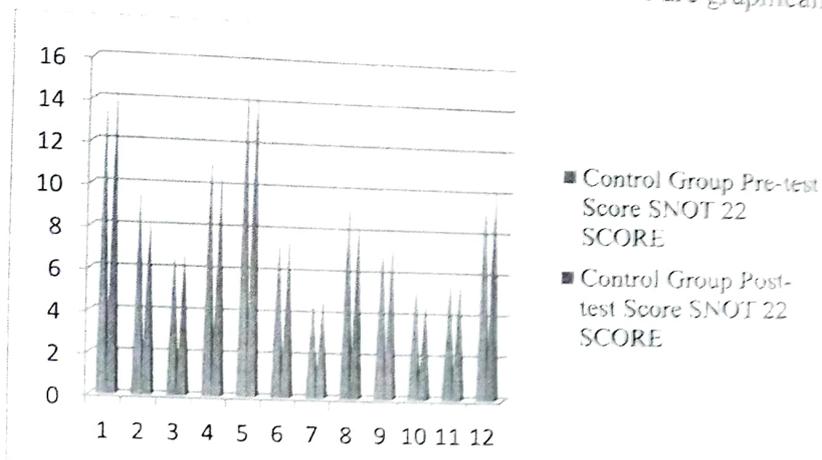
**Figure - 1** The graphical representation of the pre and post t-values of SKY yoga practice group and control group on sinusitis.

The pre and post raw score values of experimental group on Sinusitis are graphically represented in the Figure -2.



The figure above is a comparison of data taken before and after SKY yoga practice in the study group. There has been significant improvement in the measurement of data taken before and after data.

The pre and post raw score values of control groups on Sinusitis are graphically represented in the Figure -3.



The figure above is a comparison of data taken before and after control group in the study group. There has been not significant improvement in the measurement of data taken before and after data.

### DISCUSSION ON HYPOTHESIS

After SKY yogic practices, sinusitis level reduced among sinus problem women students than the control group. Hence hypothesis was accepted at 0.05 level of confidence.

### CONCLUSION

It was concluded that SKY yogic practices (Group I) reduced sinusitis than the Control group among college women students. Conclusion Based on the discussion of the data obtained we can conclude that the impact of SKY yoga therapy on Sinusitis can be assessed by using SNOT 22 score Questionnaire test. Present research work showed that and other inflammatory diseases and it can be used as a parameter to assess the efficacy of yoga therapy. This study proves that SKY yoga can be used as a better therapeutically method in the treatment of Sinusitis.

The present study was aimed to explore the yoga practices in sinusitis. In conclusion, the present study showed that reduce the sinusitis problem by particular SKY yoga practices.

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