



Yoga Therapy for Breathlessness Among Women

Dr. K. Krishna Sharma

Chairman, Department of Human Consciousness and Yogic Sciences, Mangalore University, Mangalagnagothri-574 199

Dr. Udayakumara .K

Guest Lecturer / Yoga Consultant , Dharnmanidhi Yogapeetha, Department of Human Consciousness and Yogic Sciences, Mangalore University, Mangalagnagothri-574 199

Dr.Thirumaleshwara Prasada H

Guest Lecturer / Yoga Consultant , Dharnmanidhi Yogapeetha, Department of Human Consciousness and Yogic Sciences, Mangalore University, Mangalagnagothri-574 199

ABSTRACT

Aim of the current study is to assess the effect of yogic practices on Breathlessness. Yoga therapy sessions were conducted at Hostel's hall in Women's university hostel, Mangalore University, Mangalagangothri. Known cases of breathlessness females aged between 20 years to 25 years were selected for the study. The subjects were randomly divided into an Experimental group (10) and a Control group (10). Yogic practices were progressively introduced to the experimental group everyday in the morning from 6.00a.m to 7.00am, for period of 30 days. The result revealed that the practice of Yoga significantly helped to reduce the breathlessness

KEYWORDS

Yoga therapy, Breathlessness

Introduction

Breathlessness are one of the main problems that challenge to the present society. The environmental Allergens, Pollution, Dust allergy, Cough, Cold, Obesity, Noses block, ache, Abnormal breath, Asthma, COPD[Chronic Obstructive Pulmonary Disease] Psychogenic [E.g. anxiety], Emotional imbalance and Excretion are the triggering factors for the Breathlessness.

Yoga is a great gift of God or great part of Gods teaching which can destroy the ailments embracing the world with open arms. Yoga is used as preventive, promotive and curative measured in the treatment of various Breathlessness as various practices like Asanas, Pranayamas, Meditation and Relaxation technique. Which helps to relief the bronco constriction, strengthens the lungs, improves the vital capacity and thus effectively used in the management of Breathlessness hence here is a small effort to study the effect of Yoga practices on Breathlessness.

Review of literature

Krishna Bharamappa. K . "A study on the effect of yoga therapy on breathlessness and allied disorders" conducted at well ventilated spacious hall in the "GWASF" Quality Castings(P)LPT, Industrial Area Baikampady, Mangalore-575011 in 2008-2009. The main aim of the current study is to assess the effect of yogic practices on Breathlessness and Allied Disorders Known Breathlessness and Allied disorders patients, all males between the ages 26 years to 40 years. The sample consist of 18 all males persons containing 9 experimental group and 9 control group patient time was fixed one hour and ten minutes for everyday in the evening at time 5p.m to 6.10p.m and the yoga practices for period of 30 days. The result revealed that the practices of Kriya, Asanas, Mudra, Pranayama, Meditation and Relaxation technique (yoganidra), significantly removes the breathlessness and allied disorders.

Materials and methods

Aim of The Study

The main aim of the current study is to assess the effect of yogic practices on Breathlessness.

Hypotheses

It is hypothesises that "The yogic practices will have a significant impact in the improvement of lung functioning".

Duration of Study

The selected Breathlessness subjects were trained in yoga practices for a period of 30 days.

Design of the study

The yoga therapy sessions were conducted at University hostel for women from 26-2-2015 to 30-3-2015 for regularly one hour except every Sundays, during the time 6.00 to 7.00 am. Case history was taken in the beginning of the study. According to subjects problem lab test was given. After 2 days by seeing their lab report yoga practices were designed. The experimental project intended to understand the variation on disorder level of the subjects as a result introducing yogic practices.

Proper instruction was given to the subjects regarding the practice, basics of yoga, its relevance and importance. The asanas were introduced gradually. On the first day three asanas, one pranayama and yoganidra were taught and one new asana was taught for every next day. For the subjects having Breathlessness, all yogic practices were taught. Gradually all pranayama were taught and subjects were asked to take five breathing properly in the final position of the asanas. Subjects also advised to keep concentrating on the practice. During the yogic practice session asanas were taught for 30 minutes,, next 15 minutes subjects practiced pranayama and last 15 minutes they undergone savasana. During yogic practice session individual concentration given to the subjects and mainly concentration given to the synchronization of breath and along with the body movement.

The list of yogic practices administered for Experimental group

Asanas: 1.Svastikasana, 2.Vajrasana, 3.SuptaVajrasana, 4.Simhasana, 5.Tadasana I, 6. Katiparivarthasana, 7.Trikonasana, 8.

Parsvakonasana, 9. Purvottanasana, 10. Pavanamuktasana, 11. Bhujangasana, 12. Dhanurasana, 13. Ustrasana, 14. Bharadwajasana, 15. Ardhamatsyendrasana, 16. Viparitarakarani, 17. Utanapadasana

Pranayama: 1. Ujjayee, 2. Anuloma-viloma, 3. Bhastrika, 4. Bhramari

Relaxation: 1. Savasana 1&2, 2. Yoganidra.

Parameters

FVC- Forced Vital Capacity

This measures the amount of air you can exhale with force after you inhale as deeply as possible.

FEV1- Forced Expiratory Volume (in 1 second)

This measures the amount of air you can exhale with force in one breath. The amount of air you exhale may be measured at 1 second (FEV1), 2 seconds (FEV2), or 3 seconds (FEV3). FEV1 divided by FVC can also be determined, it is FEV1/FVC.

PEFR- Peak Expiratory Flow Rate

This is maximum flow rate achieved by the subject during forced vital capacity maneuver beginning after full inspiration starting and ending with maximal expiration.

MVV- Maximum Voluntary Ventilation

This measures the greatest amount of air you can breathe in and out during one minute.

A Paired "t" test was employed in the study to analyze the significance of the result statistically.

Result

All the subjects under study were tested before and after 30 days of yoga training which consisted of 60 minutes of practice in a day. The result shows an overall improvement in FEV1, FEV1/FVC, PEFR and MVV in the Experimental group. There was an improvement in the parameters for every individual of the Experimental, but not such significant improvement from the Control group.

- As far as Forced Expiratory Volume in 1 second (FEV1), is concerned, 10 out of 10 subjects of the Experimental group showed a significant result in FEV1.
- Maximum Voluntary Ventilation (MVV), which measures the greatest amount of air one can breathe in and out during one minute, this capacity has improved like anything in the Experimental group.
- There is no significant result in the control group compared to the experimental group.

Statistical analysis

For the present study a paired 't' test is used to assess the effect of yoga practices on Breathlessness.

A highly significant value $t = -6.25086$ and $P = 0.00014$ [< 0.05] were obtained in FEV1.

A highly significant value $t = -6.20934$ and $P = 0.000157$ [< 0.05] were obtained in PEFR.

The Pulmonary function test which indicates the patients results that it has shown improvement in Breathlessness. The statistical values obtained for the control group were not shown any significant result for the pulmonary function test in breathlessness subjects.

EXPERIMENTAL					
Mean \pm standard deviation					
TEST	PRE	POST	't' value	'p' value	Result
FVC	1.713 \pm 0.729	2.3 \pm 0.591	-2.1431	0.060714	Non significant

FEV1	0.953 \pm 0.6567	2.064 \pm 0.336	-6.25086	0.00014	Highly significant
FEV1/FVC	58.455 \pm 34.228	99.451 \pm 4738	-3.77491	0.004383	Highly significant
PEFR	1.749 \pm 0.68468	4.774 \pm 1.52428	-6.20934	0.000157	Highly significant
MVV	44.7 \pm 22.206354	70.8 \pm 20.02109	-284607	0.019212	Significant

CONTROL GROUP					
Mean \pm standard deviation					
TEST	PRE	POST	't' value	'p' value	Result
FVC	1.38 \pm 0.352703	1.233 \pm 0.386696	1.255493	0.240916	Non significant
FEV1	1.024 \pm 0.472750	10.907 \pm 31.3072	-0.99797922	0.34436338	Non significant
FEV1/FVC	72.549 \pm 19.9464	73.192 \pm 19.6066	-1.35275	0.20914	Non significant
PEFR	1.384 \pm 0.6899	1.277 \pm 31.18126	-0.99865	0.344055	Non significant
MVV	33.1 \pm 18.06439	36.6 \pm 17.957975	1.102822	0.298719	Non significant

Discussion

Yoga therapy has given for 10 subjects in Women's University hostel Mangalagangothri, with a duration of one month. Among 10 subjects 8 subjects are regular to the class and more than the 85% of attendance, showed significant changes. Other 2 subjects were less than 85% of attendance showing insignificant in the result. By this we can say that to get the good results regular practice of yoga is needed. The yogic practices are brought changes in the breathlessness subject's body, so the hypothesis of this project work is the yogic practices are helpful to bring up the balance in between breathlessness.

Conclusion

In this present study, the result obtained shows that yogic practices give positive results on Breathlessness. Pulmonary function tests for Breathlessness statistically proved significant improvement. Pulmonary function test shows improvement in FVC, FEV1, etc... in case of experimental group. Compared to experimental group, Control group does not show any significant improvement after the study period. Long term study with more samples and parameters could bring significant result in the case of Breathlessness.

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