

EFFECT OF INTEGRATED MODULES OF YOGIC PRACTICES AND DIET ON STRESSED TYPE II DIABETES

Amit Kumar Shaw¹, Dr. S. Murugesen²

¹Full-Time PhD Scholar in Yoga Science, Faculty of Yoga Science and Therapy, Meenakshi Academy of Higher Education and Research, No.12, Vembuliamman Koil Street, West K.K. Nagar, Chennai-78, Tamil Nadu, India. E- Mail ID: jaijaisitaram110@gmail.com

²Professor, Faculty of Yoga Science and Therapy, Meenakshi Academy of Higher Education and Research, No.12, Vembuliamman Koil Street, West K.K. Nagar, Chennai-78, Tamil Nadu, India. E-Mail ID: murugesyoga@gmail.com

ABSTRACT

The purpose of the present study is to find out the effect of Integrated modules of yogic practices with and without diet on the risk factors among the Type II Diabetes. The study is conducted on 45 Type II Diabetes in totally three groups, namely, experimental group – I & II and Control Group, each group consisted of 15 Type II Diabetes. They underwent twelve weeks of practice in Pawanamuktasana series, Asana, Pranayama, Meditation and Relaxation with and without diet of both the experimental groups whereas the control group do not undergo any type of training. The stress of the Psychological variables are measured before and after using the standard questionnaires (Dr.Latha Sathish Questionnaire). The Analysis of Covariance (ANCOVA) analyzes the data and it is concluded that the Pawanamuktasana series, Asana, Pranayama, Meditation and Relaxation with diet have a significant of ($P < 0.05$).

Key words: Pawanamuktasana series, Asana, Pranayama, Meditation and Relaxation with diet and psychological variables.

INTRODUCTION

Health issues have attained higher international visibility and renewed political commitment in recent decades. While targeted policies and programs have enabled to lead healthier lives, significant gender-based health disparities remain in many countries. With limited access to education or employment, high illiteracy rates and increasing poverty levels are making health improvements for exceedingly difficult.

Yoga is the science of right living and, as such, is intended to be incorporated in daily life. It works on all aspects of the person: the physical, vital, mental, emotional, psychic and spiritual. The word *yoga* means 'unity' or 'oneness' and is derived from the Sanskrit work *yuj*, which means 'to join'. This unity or joining is described in spiritual terms as the union of the individual consciousness with the universal consciousness. On a more practical level, yoga is a means of balancing and harmonizing the body, mind and emotions.

Pranayama is an excellent means of dealing with tensions. By exercising and strengthening the lungs, rebalancing the autonomic nervous system, and strengthening the entire nervous system, it diminishes the possibility of a future asthma attack. Essentially pranayama is designed to allow us to master the body's energy systems. The practices lead to increase the self-confidence and mastery the mind. Through greater control of prana, we gain greater control over ourselves. Kriya means action. Shat kriya consists of six groups of purification practices. These process intent to purify the body from its impurities and the three dhosas or humors in the body (i.e. – phlegm, wind and bile), and balance them to help the free flow of prana.

The sound of mantra integrates us. It brings focus and concentration on us. It makes us balanced and help us attain clarity. One of the most important aspects of meditation through the mantras is to chant aloud and after the loud chanting, to remain in calmness without doing anything at the end. Mantras help the mind in its quest to transcend its normal limitations. Chanting Mantras develop the detachment and wisdom in life, removing anger and greed and other failings that obscure our innate purity. Mirror can reflect only when it is clean, just as a mirror, the mind can also reflect higher spiritual truth only when the negative thoughts are removed. Even a small amount of recitation with the feeling and one-pointed concentration on the meaning of the mantra destroys the negativities. Revealing the supreme essence to the meditator's consciousness, it confers illumination and supreme joy.

STATEMENT OF THE PROBLEM

The purpose of the study is to find out the effect of Integrated modules of yogic practices and diet on stressed Type II Diabetes.

REVIEW OF RELATED LITERATURE

David, et al. (2009) studied comparing aerobic exercise and medical management in patients with obesity, diabetes, and Chronic Kidney Disease found that exercise training increased exercise duration and decreased proteinuria, but did not alter GFR, hemoglobin, glycated hemoglobin, serum lipids, or C-Reactive Protein. The study concluded that exercise training in obese diabetic patients with CKD is feasible and may have clinical benefits. A largescale randomized controlled trial is planned to determine the effects of exercise on renal functions, cardiovascular fitness, inflammation, and oxidative stress.

METHODOLOGY

The purpose of the study was to find out the effect of Integrated modules of yogic practices with and without diet on the risk factors among the Type II Diabetes. For the purpose of this study, forty-five Type II Diabetes were chosen on the random basis from Chennai only. Their age group ranges from 60 to 70.

The subjects were divided into three groups, first group considered as Experimental Group - I would undergo Integrated modules of yogic practices with diet and the second group considered as Experimental Group - II would undergo Integrated modules of yogic practices without diet

and third group consider as Control Group not attend any practices, and the pre test and posttest would be conducted before and after the training. Training would be given for twelve weeks. It would be found out finally the effect of Integrated modules of yogic practices with and without diet on the selected psychological variables among the Type II Diabetes in scientific method. The collected data were statistically analyzed by using the Analysis of Covariance (ANCOVA).

TRAINING SCHEDULE

Experimental Group – I : Integrated modules of yogic practices with diet Training Programme:

- ✓ Pawanamukthasana ü Jathara for all joints Parivardhanasana
- ✓ Suryanamaskar ü Bhujangasana
- ✓ Thalāsana ü Ardha Shalabhasana ü Ardha Kati ü Shashankasana
Chakrasana ü Shavasana
- ✓ Utthita Trikonasana ü Kapalabhati
- ✓ Kati Chakrasana ü Ujjayi
- ✓ Drutha Halasana
- ✓ Nadi Shuddhi ü Meditation
Pranayama ü Diet

Experimental Group – II: Integrated modules of yogic practices without Diet Modifications.

Group III : Control Group (No Training).

RESULTS AND DISCUSSIONS

The statistical analysis comparing initial and final means of stress due to Integrated modules of yogic practices with and without diet among the female geriatrics people is presented in the Table I.

Table I: COMPUTATION OF ANALYSIS OF COVARIANCE OF THE TWO

EXPERIMENTAL GROUPS AND CONTROL GROUP ON STRESS (scores in marks)

Test	Exp.	Exp.	Cont.	Source	Degree			
Sum of	Means	Obtained						
variance	Gr. I	Gr. II	Group	of of squares	squares	F	value	
	freedom							
				between	51.24	2	25.622	
PRE TEST	67	68.53	69.60	0.12				
				within	8895.33	42	211.79	
				between	1176.93	2	588.47	
POST TEST	57.866		61.80	70.13	7.21*			
				within	3429.87	42	81.66	
ADJUSTED	between		1071.00	2	535.50			
POST TEST	58.17	61.77	69.86	within	3000.464	41	73.18	7.32*
MEAN								

9.1333 6.73 0.53

GAIN

*Significant at 0.05 level of confidence. * $F(0.05) (2,42 \text{ and } 2, 41) = 3.23$.

Since significant improvements were recorded, the results were subjected to post hoc analysis using the scheffe's confidence interval test. The results were presented in the table II.

Table II: SCHEFFE'S POST-HOC TEST FOR STRESS

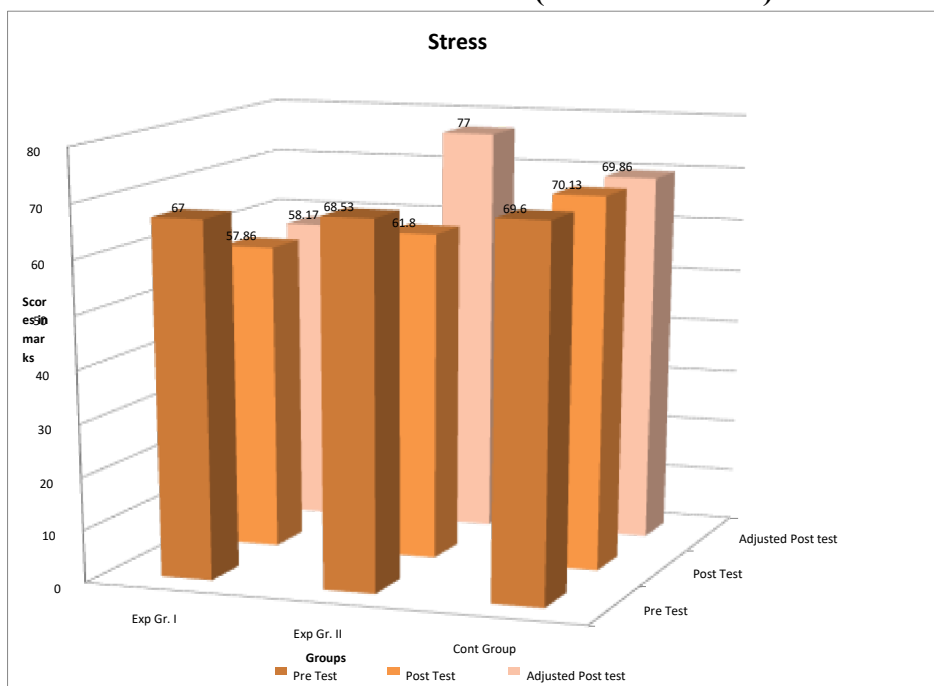
Control Group	Exp. Gr. I	Exp. Gr. II	Mean difference	C.I
69.86	58.17		11.70*	2.78
69.86	-	61.77	8.10*	2.78
-	58.17	61.77	3.60	2.78

*significant

The obtained adjusted mean values were presented through bar diagram in the figure 1.

Figure – 1: BAR DIAGRAM SHOWING THE MEAN DIFFERENCE AMONG

EXPERIMENTAL GROUP I, EXPERIMENTAL GROUP II AND CONTROL GROUP OF STRESS (Scores in marks)



DISCUSSIONS ON THE FINDINGS OF THE PSYCHOLOGICAL VARIABLES

Taking into consideration of the post test means and adjusted post test means were determined and analysis of covariance was done and the obtained F value 7.12 and 7.32 were greater than the required value of 3.22 and hence it was accepted that the Integrated modules of yogic practices with and without diet significantly improved (reduced) the stress of the Type II Diabetes.

CONCLUSION

The analysis of co-variance of stress indicated that the Experimental Group – I (Integrated modules of yogic practices with diet) and Experimental Group – II (Integrated modules of yogic practices without diet) Group III (Control group), were significantly improved in (reducing) the stress. It may be due to the effect of Integrated modules of yogic practices with and without diet.

The findings of the study showed that the Experimental Group – I (Integrated modules of yogic practices with diet) and Experimental Group – II (Integrated modules of yogic practices without diet) group III (Control group) had improvement (reduced) in stress.

REFERENCES

1. David J Leehey, Irfan Moinuddin, Joseph P Bast, Shahzad Qureshi, Christine S Jelinek, Cheryl Cooper, Lonnie C Edwards, Bridget M Smith and Eileen G Collins (2009), "Aerobic exercise in obese diabetic patients with chronic kidney disease: a randomized and controlled pilot study". *Cardiovascular Diabetology*, 8: pp.62 Swami sankara devananda (2007) "yogic management of asthma and diabetes" publications trust pp- 23-65
2. Esteghamati A, Hassabi M , Halabchi F and Bagheri M (2008), "Exercise Prescription in Patients with Diabetes Type 2", *Iranian Journal of Diabetes and Lipid Disorders*, 8: pp:1-15.
3. Swami satyananda saraswathi (2006), "Asana Pranayama Mudra Bandha" Bihar, yoga publications trust: pp.402
4. Nagarathna. R HR (2006) "Yoga for asthma" Yoga Research Paper Published by, SVYASA
5. Iyengar B.K.S (2004) "Light on yoga" hoper Collins publishers India p-488.
6. PUCKETT, (2010 "Sudarshan Kriya Yogic breathing in the treatment of stress, anxiety, and depression. Part II—clinical applications and Michael guidelines". *J Altern Complement Med* 11 (4): 711–7
7. PENNAZZA (2010): Evidence for Raloxifene as a Breast Cancer Risk Reduction Agent for asthmal Women. 5(8):817-22.
8. Maxwell et. al, 2007 Results of meta-analyses showed that simple biofeedback, relaxation-assisted biofeedback, progressive muscle relaxation, and stress management training
9. Uppal,(1990) conducted a study to determine the effects of interval training and two continuous load methods on cardio respiratory and selected physiological parameters. Unpublished thesis.