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# Effect of Varied Yogic Practices Program on Physiological and Biochemical Variables of Male Alcoholist

Shashirekha. P.K<sup>1</sup> & Dr. V. Vallimurugan<sup>2</sup>

<sup>1</sup>Ph.D. Research Scholar, Bharathiar University, Coimbatore, Tamilnadu, India. <sup>2</sup>Assistant Professor, Bharathiar University, Coimbatore, Tamilnadu, India

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### **Abstract**

The purpose of the study was to investigate the effects of varied yogic practices program on physiological and biochemical variables of male alcoholist For this research (N=90) male student were selected from Sri Kshetra Dharmasatala rural development project (SKDRDP) Belagavi district, Karnataka state. The age group of the girls ranged from 30 to 40 years. To achieve the purpose of this study, the subjects were divided into three equal groups of 30 subjects each. Group I underwent Asanas and Pranayama (AP), group II underwent Asanas Pranayama and Psycho Somatic Practice (APPSP) and group III acted as a control group. The duration of the experimental period for yogasana and suryanamaskar group was restricted to six weeks and the number of session per week confined to six days. It was concluded that there was significant reduction in physiological and biochemical variables due to yogic practices program as compared to control group. It was concluded that there was significant improvement in physiological and biochemical variables due to Asanas and Pranayama, Asanas Pranayama and Psycho Somatic Practice as compared to control group. On the basis of the findings and conclusions of the present study, the following recommendations were made. Similar study may be conducted for various other age groups.

Keywords: Asanas and Pranayama, Asanas Pranayama and Psycho Somatic Practice, physiological and biochemical.

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### Introduction

Yoga is an original and ancient holistic art of living that includes physical, mental, moral and spiritual spheres. The Sanskrit word Yoga means "to join or union" and the practice of Yoga brings this union to all levels of one's self. The popular usage of the term focuses primarily on postures beneficial for physical health and many people have witnessed the same. Yoga has increasingly become an accepted practice. Yoga originated in India more than 4000 years ago. Yoga is not a religion but rather a philosophy of living. Yogic lifestyle is a way of living, which aims to improve the body, mind and day to day life of individuals. Patanjali Muni, the founder of Yoga described eight limbs of Yoga as a practical way to evolve the mind, body and spirit to achieve balance and harmony. The eight limbs of Yoga are Yama, Niyama, Asana, Pranayama, Pratyahar, Dharana, Dhyana, and Samadhi.

Yogic life style is a way of living which aims to improve the body, mind and day to day life of individuals. The most commonly performed yoga practices are postures (asana), controlled breathing (pranayama), and meditation (dhyana). Yoga has been

### Correspondence

Shashirekha. P.K

E-mail: bhuvangagan@gmail.com, Ph. +9198808 80715

utilized as a therapeutic tool to achieve positive health and control and cure diseases. The exact mechanism as to how yoga helps in various disease states is not known. There could be neuro-hormonal pathways with a selective effect in each pathological situation. Integrated approach of yoga therapy can improve hot flushes and night sweats. There is increasing evidence suggesting that even the short-term practice of yoga can decrease both psychological and physiological risk factors for cardiovascular disease (Sulabha Joshi 2010).

Since the last few years, Yoga has spread around the whole world and has been studied so as to help people to cope with various health conditions including menopause. The most commonly performed Yoga practices are postures (asana), controlled breathing (pranayama), and meditation (dhyana). Asana is a Sanskrit word used to describe a position of the body. It is defined as a steady and comfortable posture. Traditionally, many asanass are practiced in Hatha Yoga primarily to achieve, better physical and mental health. There are around 84 asanas, each one has a special name, special form and a distinct way of performing. Asanas have an extraordinary capacity to overhaul, rejuvenate and bring the entire system into a state of balance. In different studies, the postures chosen are based on the effectiveness in relieving menopausal symptoms. The nature of these poses and the associated deeper and slower breathing patterns

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physiologically reduce men oxygen consumption while stabilizing blood pressure and heart rate.

Pranayama is a Sanskrit word meaning "restraint of the prana or breath", which is often translated as breath control. Several researchers have reported that pranayama techniques are beneficial in treating a wide range of stress disorders. Practitioners report that the practice of pranayama develops a steady mind, strong will power and sound judgment. Pranayama strengthens the lungs, improves their function and enhances the lung power. It improves the defense mechanism of the body, slows down mental chatter and infuses positive thinking. Meditation is a process whereby consciousness looks in and acts upon itself. The aim of meditation is to help still the mind and to practice some form of contemplation or introspection. Meditation has been found to be associated with increased plasma melatonin level and improved sleep quality, particularly if done in the evening before rest. Yoga has been utilized as a therapeutic tool to achieve positive health and control and cure diseases. Interest has been shown in this direction by many workers and studies on the effect of Yoga on some ailments like bronchial asthma, hypertension, diabetes mellitus and obesity have been carried out. The exact mechanism as to how Yoga helps in various disease states is not known. It has been suggested that there could be neuro hormonal pathways with a selective effect in each pathological situation. For example, it has been observed that plasma levels of cortisol increase in bronchial asthma and decrease in diabetes mellitus after practice of pranayama. It is possible that yogic exercises bring about normalization of the pathological state by control of counter-regulatory hormones or by increased receptor sites. It has also been suggested that yogic practices create a hypothermic state and an alteration in the sympathoparasympathetic axis.

### Methodology

The purpose of this study is designed to effect of varied yogic practices program on physiological and biochemical variables of male alcoholist. This study totally ninety (N=90) sri kshetra dharmasatala rural development project (SKDRDP) Belagavi district, Karnataka state. The age of the subjects are ranging from 30-40 years. The subjects were divided into three equal groups of thirty each (n=30). Group I underwent Asanas and Pranayama (AP), Group II underwent Asanas Pranayama and Psycho Somatic Practice (APPSP) and Group III underwent control (CG). Further, to find out the physiological, biochemical and psychological variables of male alcoholist.

### Selection of the Variables

The following variables were selected for this study.

Dependent Variables:

### 1. Physiological

- 1. Systolic blood pressure
- 2. High density lipoprotein cholesterol
- 3. Low-density lipoprotein cholesterol

### 2. Biochemical

1. Triglycerides

### Independent Variables:

- 1. Asanas and Pranayama
  - 2. Asanas Pranayama and Psycho Somatic Practice.

Computation of analysis of covariance on physiological and biochemical variables

Variables	Test	AP Group	APPSP Group	Control Group	S V	SS	df	MS	F
Systolic blood pressure	pre test	97.93	98.18	97.05	b	13.96	2	6.98	0.344
					W	1764.22	87	20.27	
	post test	96.76	97.88	98.46	b	129.84	2	64.92	9.16*
					W	616.63	87	7.08	
	adjusted	96.72	97.78	98.60	b	35.45	2	67.73	10.12*
	post test	90.72	97.76		W	582.18	86	6.69	
	pre test	55.65	54.65	55.20	b	8.03	2	4	1.58
High donaity					W	220.30	87	2.52	
High density lipoprotein cholesterol	post test	55.60	55.80	55.95	b	17.23	2	8.61	3.25*
					W	230.95	87	2.65	
	adjusted post test	55.24	56.19	55.92	b	20.31	2	10.16	6.91*
					W	125.87	86	1.47	
Low-density lipoprotein cholesterol	pre test	126.57	120.46	123.68	b	323.45	2	161.72	2.95
					W	4755.99	87	54.67	
	post test	112.84	107.88	122.97	b	2364.83	2	1182.42	23.73*
					W	4333.99	87	49.81	
	adjusted	110.01	110.82	122.86	b	2072.27	2	1036.14	192.59*

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	post test								
Triglycerides	pre test	181.52	183.89	180.35	W	463.07	86	5.38	0.90
					b	129.72	2	64.86	
	post test	179.30	180.20	179.42	W	6254.61	87	71.89	3.89*
					b	129.55	2	64.78	
	adjusted 170.6	179.66	178.44	180.82	W	6301.73	87	72.43	3.26*
	post test	1/9.00			b	255.57	2	127.79	

Table F-ratio at 0.05 level of confidence for 2 and 87 (df) =3.16, 2 and 86 (df) =3.16 \* Significant

As shown in table 1 obtained F value on the scores pre test means 0.344, 1.58, 2.95 and 0.90 that random assignment of the subject were successful and their scores in Systolic blood pressure, High density lipoprotein cholesterol, Low-density lipoprotein cholesterol and Triglycerides. The analysis of post test means proud that the obtained F value 9.16, 3.25, 23.73 and 3.89 was greater than the required value of 3.16 to be significant at 0.05 level taking in to consideration of

the pre test means adjusted post test means were done and the obtained F value 10.12, 6.91, 192.59 and 3.26 was greater than the required value of 3.16 and hence it was accepted that the varied yogic practices program significantly dicers the physiological and biochemical variables. Since significance differences were recorded, the results were subjected to post hoc analysis using scheffe's confidence interval test. The results were presented in table 2.

Table 2 Scheffe's confidence interval test scores on physiological and biochemical variables

Variables		M	MD	RCI		
G ( !! ) ]	APG	APPSP G	CG	WID	KCI	
Systolic blood pressure	96.72	97.78	-	1.06	0.81	
<b>P</b> - 1000	96.72	-	98.60	1.88	0.81	
LOW DENSITY		97.78	98.60	0.82	0.81	
High density	55.24	56.19	-	0.95	1.78	
lipoprotein cholesterol	-	56.19	55.92	0.27	1.78	
	55.24	-	55.92	0.68	1.78	
Low-density	110.01	110.82	-	0.81	2.26	
lipoprotein cholesterol	110.01	-	122.86	12.85*	2.26	
0110100101	-	110.82	122.86	12.04*	2.26	
	179.66	178.44	-	1.22	1.60	
Triglycerides	-	178.44	180.82	2.38	1.60	
	179.66	-	180.82	1.16	1.60	

From the table 2, it was proved that there was significant differences between varied yogic practices program it was also interred that there was significant difference between Asanas and Pranayama , Asanas Pranayama and Psycho Somatic Practice and control group.

### **Discussion on Hypothesis**

For the purpose of the study the investigator formulated hypothesis number one stating that 'It was hypothesized that that would be a significant deferens on selected in physiological and biochemical variables among male alcoholist due to varied yogic practices program. The result presented in tables I proved that there were significant differences among the Asanas

and Pranayama, Asanas Pranayama and Psycho Somatic Practice and control group on the selected criterion variables such as Systolic blood pressure, High density lipoprotein cholesterol, Low-density lipoprotein cholesterol and Triglycerides the results proved that varied yogic practices program has significantly improved than the control group The result proved that varied yogic practices program groups control groups significantly different. It was hypothesized that there was significant difference among Asanas and Pranayama, Asanas Pranayama and Psycho Somatic Practice and control group would be the dependant variables would be improvement due to varied yogic practices program and the same were improved at 0.05 level of significant also.

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### Conclusion

Within limitations and delimitations of this study it was concluded that there was significant reduction in Systolic blood pressure, High density lipoprotein cholesterol, Low-density lipoprotein cholesterol and Triglycerides improvement due to Asanas and Pranayama, Asanas Pranayama and Psycho Somatic Practice to control group.

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