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EFFECT OF VARIED PACKAGES OF YOGIC PRACTICES ON SELECTED PHYSIOLOGICAL AND HEMATOLOGICAL VARIABLES AMONG OBESE GIRLS

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Abstract

To achieve the purpose of this study, 45 obese (bmi 30 ± 2.5) girls were selected as subjects and their age were ranged between 16 and 19 years, they were assigned into three groups, group i underwent asanas and pranayama, group ii underwent asanas and meditation and group iii acted as control. the selected subjects were measured their physiological variables [peak expiratory flow rate (pefr), systolic blood pressure (sbp) and diastolic blood pressure(dbp)] and hematological variables [haemoglobin (hb) and postprandial glucose (ppg)] the interventional period for this study were six weeks for both the experiment groups the control group was not given any practice. Data were collected on selected variables before and after the training period, and were subjected to statistical treatment using analysis of covariance (ancova). in all the cases 0.05 level of confidence was fixed to test the significance. when the obtain 'f' ratio was significant. scheffe's post hog test was used to find out the paired mean difference. Within the limitations set for this study, it was concluded, that both the experimental group were significantly influence the selected physiological and haematological variables than the control. However asana with pranayama practice shows better effect than the asana meditation. Hence, it was recommended that asana with pranayama practice may have better effect on obese patient in respect to bp, pefr, hb, ppg level.

Key words: Obese, Asana, Pranayama, Meditation.

INTRODUCTION

Technological advancement in modern life has induced less physical activity. At homes, people use electrical gadgets to save on hard physical labour, thereby, resulting in inactive lifestyle. Nervous tension and disturbances, improper functioning of the endocrine glands or digestive disorders also causes obesity. Indiscriminate eating without any wisdom to control leads to an invariable obesity. The fast life of modern times has caused this melody, affecting many.

METHODOLOGY

To achieve the purpose of this study, 45 obese (BMI 30 ± 2.5) girls were selected as subjects and their age were ranged between 16 and 19 years. They were assigned into three equal (n=15) groups, group I underwent asanas and pranayama, group II underwent asanas and meditation and group III acted as control.

TABLE I- ANCOVA FOR SYSTOLIC BLOOD PRESSURE, DIASTOLIC BLOOD PRESSURE, PEAK EXPIRATORY FLOW, HAEMOGLOBIN AND BLOOD GLUCOSE

Variables	Asanas	Asanas	Contr					
variables	i	meditatio	ol	\mathbf{SV}	SS	df	MS	F
	pranayam	1		S V	DD .	CI.	1110	1
	a group	n group	group		500.16		201.50	
Systolic				Betwe	583.16	2	291.58	20.60
blood	109.75	114.83	118.56	en				28.68
pressure				Within	426.96	41	10.17	*
(SBP)					ļ			
MmHg								
Diastolic	81.29	90.19	91.79	Betwe	959.43	2	479.72	
blood				en				93.28
pressure				Within	216.41	41	5.14	*
(DBP)								
MmHg								
Haemoglob	13.53	11.94	11.20	Betwe	40.36	2	20.18	
in (HP)				en				94.70
grm/100ml			ļ	Within	8.950	41	0.21	*
Peak	308.58	299.51	252.58	Betwe	26438.3	2	13219.1	
expiratory				en	0		5	37.66
flow rate				Within	8765.4	41	351.00	*
(PEF)	·							
L/sec		. "						
Blood				Betwe	325.81	2	162.90	
glucose	89.91	93.78	96.78	en				24.17
(BG)				Within	276.34	41	6.74	*
mgs//dl								

Table F- ratio at 0.05 level of confidence for (2) (41) = 3.21. Table II-MEAN DIFFERENCE BETWEEN EXPERIMENTAL GROUP AND CONTROL **GROUP**

Variable	Control Vs Asanas meditation	Control Vs Asanas pranayama	Asanas meditation vs Asanas pranayama	CI
Systolic blood pressure (SBP) mmHg	3.64*	8.72*	5.08*	2.95
Diastolic blood pressure (DBP) mmHg	1.60	10.50*	8.90*	2.10
Haemoglobin (HP) Grm/100ml	1.59*	2.33*	0.79*	0.422
Peak expiratory flow rate (PEF) L/sec	9.07*	56.00*	46.93*	17.35
Blood glucose (BG) Mgs//dl	3.00*	6.87*	3.87*	2.40

Conclusion

Within the limitations set for this study, it was concluded, that both (asana pranayama and asana meditation) the experimental group were significantly influence the selected physiological and haematological variables than the control. However asana with pranayama practice shows better effect than the asana meditation in reduce SBP, PPG and increase Hb, PEFR.

Recommendation

It was recommended that asana with pranayama practice may have better effect on obese patient in respect to BP, PEFR, Hb, PPG level.

Implication

Asana with pranayama practice may be used as theraphy to reduce or control obesity. However asana with meditation may also be given instead of asana with pranayama to reduce or control obesity.

REFERENCES

- 1. Ambika Shanmugam (2001) Fundamental of Biochemistry for medical student Chennai; sterling publication, PP. 134 230.
- 2. B K S Iyengar .(2008) **Light on yoga** New Delhi Harper cpllins Publications, PP. 120-402
- 3. Leslie Kaminoff. (2007) Yoga anatomy United states of America: Human Kinetics, PP 35- 60
- 4. Meghna Virk Brins .(2007) Yoga for Wmen New Delhi: Pustak Mahal Publication, pp 33-120
- 5. Pooja Malhaotra. (2007) Calories New Delhi publication Pvt.Ltd pp. 16-56.
- 6. Swami Muktibodhanada. (Hatha Yoga pradipika Bihar, Publication Trust: PP.56-313