



Effect of Yogic Practices on Selected Physiological Variables among Postnatal Care Women

Dr.S.Selvalakshmi

Assistant Professor, Department of Yoga, Tamilnadu Physical Education and Sports University, Chennai, Tamilnadu, India.

Received 29th April 2015, Accepted 22nd June 2015

Abstract

The purpose of the study was to investigate the effects of yogic practices on physiological variables among postnatal care women. To facilitate the study, 30 postnatal women were selected from various hospitals in Gobichettipalayam as subjects at random. In this study yogic practices were given to experimental group for the period of six weeks. The pre test was taken from the post natal mothers before administering the training. The subjects were involved with their training for a period of six weeks. The subjects were monitored throughout the sessions. At the end of the six weeks training post test with respect to Systolic and Diastolic Blood Pressure were measured by using the standardized tests and methods. The significant difference between the means of the experimental group and control group for the pre test and post test scores were determined by 't' test. The level of significance was fixed at 0.05 level of confidence. It was concluded that systolic blood pressure and diastolic blood pressure of the experimental group showed significant decrease when compared to the control group.

Keywords: Yoga, Physiological, Postnatal, Women.

© Copy Right, IJRRAS, 2015. All Rights Reserved.

Introduction

Health care is the diagnosis, treatment and prevention of illness, injury and other physical and mental impairment of human being. Health care is delivered by allied health, dentistry, midwifery, medicine, optometry, nursing, pharmacy, psychology and other health profession. According to the WHO, Health care embraces all the goods and services designed to promote health, including preventive, curative and palliative interventions, whether directed to individuals or to populations. It is important that every women should have access to knowledge, related to their health and fitness. It has proven that the waist size measurement is more than 35 inch (89 centimeter). This is more likely to develop heart diseases and other health related problems.

The word "yoga" comes from the Sanskrit root yug, which means "union." In the spiritual sense, yoga means union of the mind with the divine intelligence of the universe. Yoga aims through its practices to liberate a human being from the conflicts of duality (body-mind), which exists in every living thing, and from the influence of the gunas, the qualities of universal energy that are present in every physical thing. (Universal energy has three qualities, known as gunas, that exist together in equilibrium: Sattva [purity]; Rajas [activity, passion, the process of change]; and Tamas [darkness, inertia]). Put

forces and processes of life as a partner—coupled, rather than in conflict and unease with their own nature. On the broadest level yoga refers to the enormous body of spiritual values, attitudes, precepts and techniques that have been developed in India over three millennia that may be regarded as the very first foundation of the ancient Indian civilization (Feuerstein, 1989).

Yoga is often presented as a complex of different paths leading to a common goal of union. Some paths or margas, include janana yoga (spiritual knowledge), bhakthi yoga(devotion), karma yoga(action or selfless work), raja yoga(meditation), mantra (sound) and hatha yoga (purification of the body-mind). Yoga is practiced all over the world it produces consistent physiological changes and have sound scientific basis. The cardiovascular changes due to the process of ageing are being pre-poned over since the past few decades. One of the yoga practices, Hatha Yoga, is based on the knowledge, development, and balance of psychophysical energies in the body and can, therefore, be referred to as the "psychophysical yoga." The three main elements used in Hatha Yoga to attain its purposes are the body, the physical part of man; the mind, the subtle part; and the element that relates the body with the mind in a special way, the breath. Hatha Yoga offers special techniques for each one of these elements. For the physical part, or body, it offers the asanas ("postures"), techniques for physical conditioning, called kriyas ("actions"), mudras ("seals"), bandhas ("locks"), as well as techniques for total and conscious physical relaxation. Although a small part of the practice of yoga, the capacity of kriyas, mudras, and bandhas to deepen

Correspondence

Dr.S.Selvalakshmi,

E-mail: selvishakthi1212@yahoo.co.in, Ph. +9198412 91923

simply, the follower of yoga learns to work with the

awareness and consciousness should not be overlooked.

Methods

The purpose of the study was to investigate the effects of yogic practices on physiological variables among postnatal care women. To facilitate the study, 30 postnatal women were selected from various hospitals in Gobichettipalayam as subjects at random. In this study yogic practices were given to experimental group for the period of six weeks. The pre test was taken from the post natal mothers before administering the training. The

subjects were involved with their training for a period of six weeks. The subjects were monitored throughout the sessions. At the end of the six weeks training post test with respect to Systolic and Diastolic Blood Pressure were measured by using the standardized tests and methods. The significant difference between the means of the experimental group and control group for the pre test and post test scores were determined by 't' test. The level of significance was fixed at 0.05 level of confidence.

Table I. Mean, standard deviation and the 't' test of the control group and the experimental group for systolic blood pressure

Group	Test	N	Mean	SD	T
Control	Pre test	15	143.73	7.914	1.713
	Post Test	15	139.2	6.504	
Experimental	Pre test	15	147.5	6.197	9.645
	Post test	15	127.15	5.077	

*Significant at 0.05 level of confidence

The data from the pre test and post test on blood pressure (systolic) levels of the control group and experimental group have been statistically analyzed using dependent 't' test and the results are presented in the Table I. The table I shows that the pre test means of control group and experimental group were 143.73 and 147.5 respectively. The pre test standard deviation of the control group and the experimental group were 7.914 and 6.197 respectively. Table I shows that the post test means of the control group and the experimental group were 139.2 and 127.15 respectively. The post test standard deviation of the control group and the experimental group were 6.50 and 5.07 respectively.

Table I shows that the pre test mean and the post test mean of the experimental group were 147.5 and 127.15 respectively. The standard deviation of the pre test and the post test of the experimental group were 6.197 and 5.077 respectively. The obtained 't' value 9.645 of the experimental group with respect to the blood pressure(systolic) levels was significantly higher than the required 't' value (2.048) and it is proven that there is a significant difference in the blood pressure(systolic) levels of the experimental group. The obtained mean values in pre-test and post-test values of control group and the experimental group are represented through bar diagram figure for better understanding of the results.

Figure I. Bar diagram showing post test and pre test values of control group and experimental group on systolic blood pressure

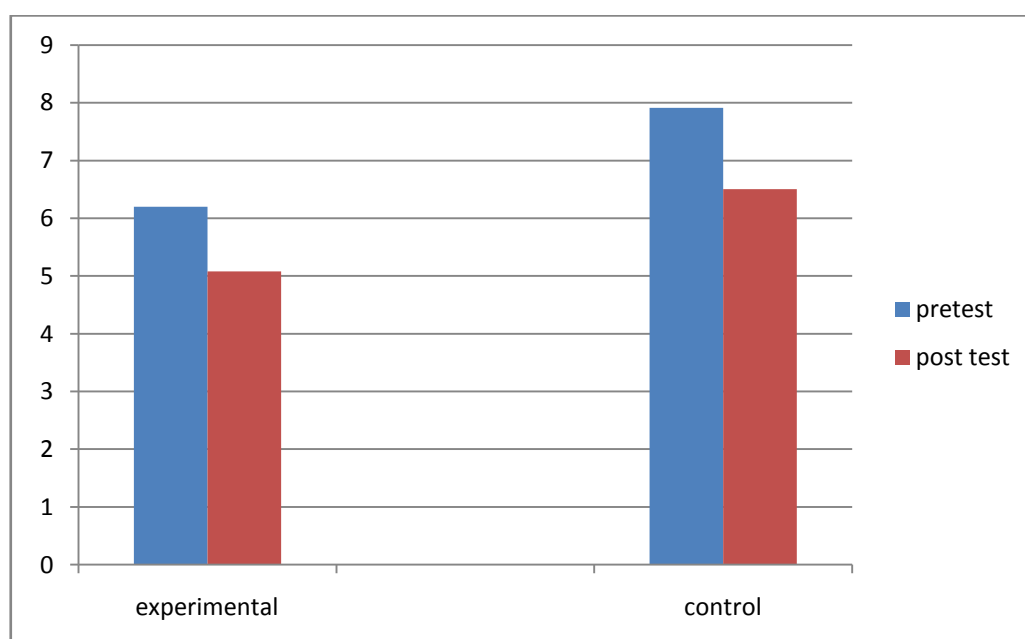


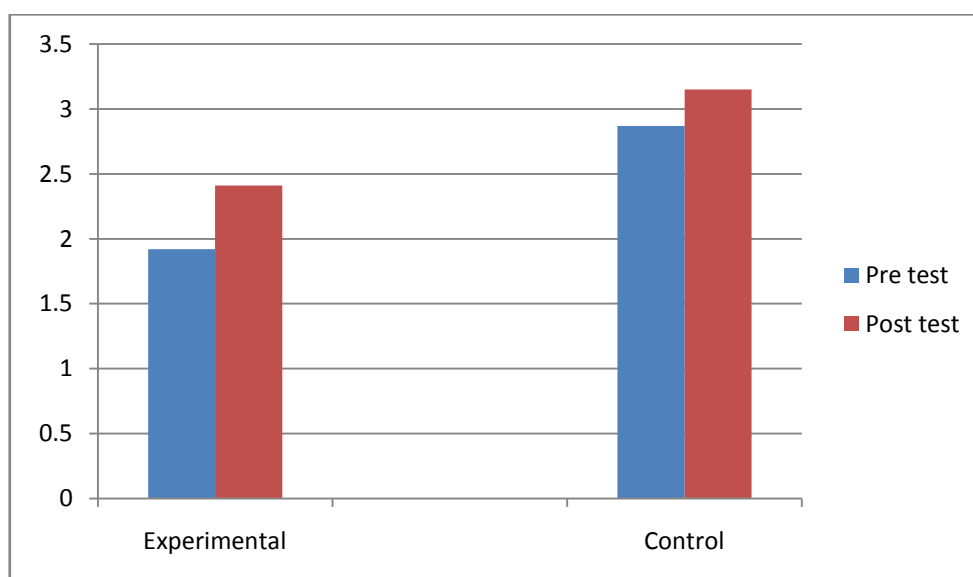
Table II. Mean, standard deviation and the 't' test of the control group and the experimental group for diastolic blood pressure.

Group	Test	N	Mean	SD	T
Control	Pre test	15	84.6	2.87	1.027
	Post Test	15	83.46	3.15	
Experimental	Pre test	15	83.13	1.922	4.599
	Post test	15	79.46	2.41	

*Significant at 0.05 level of confidence

The data from the pre test and post test on Blood pressure (diastolic) levels of the experimental group and the control group have been statistically analyzed using dependent 't' test and the results are presented in the Table II. Table II shows that the pre test means of control group and the experimental group were 84.6 and 83.13 respectively. The pre test standard deviation of the control group and the experimental group were 2.87 and 1.922 respectively. Table II shows that the post test means of control group and the experimental group were 83.46 and 79.46 respectively. The post test standard deviation of the control group and experimental group were 3.15 and 2.41 respectively.

Table VI shows that the pre test mean and the post test mean of the experimental group were 83.13 and 79.46 respectively. The standard deviation of the pre test and post test of the experimental group were 1.922 and 2.41 respectively. The obtained 't' value 4.599 of the experimental group with respect to the blood pressure (diastolic) levels was significantly higher than the required 't' value (2.048) and it is proven that there is a significant difference in the blood pressure (diastolic) levels of the experimental group. The obtained mean values in pre-test and post-test values of control group and the experimental group are represented through bar diagram figure for better understanding of the results.

Figure II. Bar diagram showing post test and pre test values of control group and experimental group on diastolic blood pressure

Conclusion

Within the limitation of the present study, the following conclusions were drawn:

1. It was concluded that systolic blood pressure and diastolic blood pressure of the experimental group showed significant decrease when compared to the control group.
2. Diastolic Blood pressure of the experimental group showed significant decrease when compared to the control group.

References

1. Dorling Kind Ersely, (1969), Yoga - Mind and body, (USA D.K. publishing book.), p.75
2. Dtey K.K.,M.L.Gharote and Solipani.(1983) Yoga and your Heart 5th),Bombay:Jaico Publishing House,.P.43.
3. Dwivedi, Girish & Dwivedi, Shridhar (2007). History of Medicine: Sushruta – the Clinician – Teacher par Excellence. National Informatics Centre (Government of India)
4. Easy yoga for beginners by Dr.S.Hema: Tara yoga Publications 2008

5. Gala's yoga for Yogasana and Pranayama for health by Dr.P.D.Sharma:Navneet publications limited 2000.
6. Gharote,M.L.,(1982) Guidelines for Yogic Practices, Lonavla: Medha Publications.. Henry Cecil Wyld and Eric H. Patridage. Ed. Webster universal (Bombay: The Thulsi Shah Enterprises, 1970) p.85
7. Garfinkel M, Schumacher HR., Jr. Yoga. Rheum Dis Clin North Am. 2000;26: 125–32, x. doi: 10.1016/S0889-857X(05)70126-5.
8. Chandler K. The emerging field of yoga therapy. Hawaii Med J. 2001;60:286–287
9. Garrow J.S., Webster J.D. Quelet's index (W/H²) As a measure of fatness. Int J of Obesity 1985 9(2)147–53.
10. He J., Klag M.J., Whelton P.K., Chen J.U., Qian M.C. and He G.Q. Body mass and blood pressure in a lean population in Southwest China. Am J Epidemiol 1994; 139:380-9.
11. Hoare Sophy ,(1984), Tackle Yoga (3rd ed) , London :Stanly Paul and company Ltd., P.10
12. Indira Devi, (1967) Yoga: The Technique of Health and Happiness, Bombay: Jaico Publishing House, p. 20.
13. Kreitzer MJ, Gross CR, Ye X, Russas V, Treesak C. Longitudinal impact of mindfulness meditation on illness burden in solid-organ transplant recipients. Prog Transplant 2005;15:166–72.
14. Madanmohan, Udupa K, Bhavanani AB, Shatapathy CC, Sahai A. Modulation of cardiovascular response to exercise by yoga training. Indian J Physiol Pharmacol 2004; 48:461–5.
15. McCaffrey R, Ruknui P, Hatthakit U, Kasetomboon P. The effects of yoga on hypertensive persons in Thailand. Holistic Nurs Prac 2005;19:173–80. Vasan RS, Beiser A, Seshadri S, Larson MG, Kannel WB, D'Agostino RB, Levi.
16. McCaffrey R, Ruknui P, Hatthakit U, Kasetomboon P, The effects of yoga on hypertensive persons in Thailand. Holistic Nurse Practitioner.2005
17. Nissien A, Bothig S, Grenroth H, Lopez AD. Hypertension in developing countries. World Health Stat Q. 1988;41:141–154
18. Raub JA. Psychophysiologic effects of Hatha Yoga on musculoskeletal and cardiopulmonary function: a literature review. J Altern Complement Med. 2002;8:797–812.