Effect of Yogic Practices and Aerobic Training on Systolic Blood Pressure Among Middle Aged Women

Prof. Dr. Subhash G. Nagargoje
S.S.P.M.Arts Comm & Science College
Dhanora, Tq. Ashti Dist Beed
M.A.,M.P.Ed.,M.Phil.,Ph.D., SET

Abstract :

The study mainly focused on assessing the effect of yogic practices and aerobic training on systolic blood pressure among middle aged women. To reach the goal of the investigation, 45 middle-aged women were selected subjects randomly. Their age ranges from 35 to 45 years. Subjects were teachers of several schools, India and therefore there were no differences in the routine life model and are therefore considered as a homogeneous group. Systolic blood pressure has been selected as a dependent variable for the study. Selected subjects were subdivided into 2 experimental groups and one control group with 15 subjects each (n = 15). Experimental Group I (YPG) has undergone yogic practices, Group II (ATG) has been subjected to aerobic training and Group III served as a control group (CG) during the 12-week training period. Data on the dependent variable selected for pre and post tests were collected two days before and two days after the training program, respectively. Data on systolic blood pressure was collected utilizing stopwatch, Electronic Sphygmomanometer, and nose clip. Analysis of covariance (ANCOVA) was used to evaluate the data collected from the three groups to find out the significant improvement. If F-ratio was relevant Schiff test was utilized as post Hoc test to discover which coupled means differed significantly. In every case, the significance statistical criterion was set as 0.05 confidence level ($P<0.05$). From the outcomes of the work it was conclude that two experimental groups, namely the yogic practices group (YPG) and the aerobic training group (ATG), achieved significant improvements over the control group (CG) to improve systolic blood pressure. It has also been shown that the yogic practice group was found better than the aerobic training group in improving systolic blood pressure in middle-aged women.

Keywords: Yogic Practices, Aerobic Training, Systolic Blood Pressure, Middle Aged Women.

Introduction :

The word Yoga is derived from Sanskrit root ‘Yuj’ means to bind and yoke. Yoga means to “yoke” to “unite” to “link” to connect or to “merge. As yoke joins two bulls, yoga consolidates together the mind and body. According to Patanjali's great essay, withdraw of sense organs from their inconsequential items and their control is yoga. Yoga utilizes static pose or asana and breathing or pranayama regulates. It has officially shown its incentive in enhancing oxidative anxiety and enhancing the glycemic condition of diabetics through the neuroendocrine system. Yoga is an ancient form of relaxation and exercise has many health benefits, including lowering cholesterol. When the cells work in unison, they bring back harmony and health to the system. 20 to 25 minutes (every morning or evening) of pranayama practice increases lung capacity, breathing efficiency, circulation, cardiovascular efficiency, helps to normalize blood pressure, strengthens and tones the

nervous system, combats anxiety and depression, improves sleep, digestion and excretory functions, provides mass ATGe to the internal organs, stimulates the glands, enhances endocrine functions, normalizes body weight, provides great conditioning for weight loss, improves skin tone and complexion. The current era of human life style increased strains and tensions. It translates into lifestyle-related health problems such as obesity, diabetes mellitus, hypertension, and coronary heart disease.

Aerobic exercise (also known as cardio) is physical exercise of low to high intensity that depends primarily on the aerobic energy-generating process and it is a new work, but not a new Idea. Aerobics refers to a variety of activities such as walking, jogging and running for a measured time. These produce beneficial changes in the body, in particular the action of the lungs, heart, and blood circulation. "Aerobics" is an uncommon type of oxygen consuming activity. Vigorous exercise classes more often than exclude quick, music-based models with the signs gave by an educator. This type of aerobic activity has turned out to be extremely prevalent and delivered videos or created television programs that promote this type of aerobic exercise8. The gathering's aerobic exercises can be separated into two principle sorts: pre-choreographed aerobics and freestyle aerobics. Aerobic exercise is essential for good cardiac vascular health. In short, aerobic exercises are activities that can be maintained for a long time without creating a lack of oxygen in the muscle. It is the type of activity that overloads the lungs and heart and makes them more difficult to do when the person is at rest.

Aerobic training involves repetition of movements while yogic practices include very few movements and only postures are kept up for a specific timeframe. Aerobic training has underlined strong muscular movements while yoga opposes violent movements. Aerobic training has repetitive movements, while yoga practices include very few movements and many positions that should be kept up for a specific timeframe. Yogic practices keep the body and mind as aerobic training primarily affects the human body. Postures include focus in specific parts of the body and the outcome is a conditioning of the mind and body. The caloric requirement in yogic practices ranges from 0.8 to 3 calories per minute, while the calorie requirement for aerobic training ranges from 3 to 30 calories per minute. Systolic blood pressure is the blood pressure, which represents the level of pressure created by the heart that contract and push blood through the arteries. When the heart beats and pumps blood, the pressure is high. It is especially the highest blood pressure during the contraction of the left ventricle of the heart. The systolic is called the time when ventricular contraction occurs. Systolic blood pressure id normally the main number recorded at a reading of blood pressure. A systolic blood pressure of 140 or more, repeatedly measured, is considered high blood pressure or hypertension.

Methodology :

The present work aimed at understanding the impact of yogic practices and aerobic training on systolic blood pressure among middle-aged women. To reach the goal of this study, 45 middle aged women were randomly selected as subjects. Its age ranges from 35 to 45 years. The subjects were teachers from several schools. Selected subjects were subdivided into two experimental groups and one control group with 15 subjects each

(n = 15). Experimental Group I (YPG) was subjected to yogic practices, Group II (ATG) has been subjected to aerobic training and Group III served as a control group (CG) during the 12-week training period. The subjects of the control group were not allowed to participate in any training program, with the exception of routine activities. Among the various physiological variables, systolic blood pressure was selected as a dependent variable for the study.

Results and discussion :

The influence of independent variables (yogic practices and aerobic training) on systolic blood pressure was determined by subjects the data collected using appropriate statistical techniques and the results are reported below. The analysis of covariance at the date obtained for systolic blood pressure pretest, post-test and adjusted post-test of yogic practices, aerobic training and control groups.

Conclusion :

In the current investigation, as a result of two training programs, namely yogic practices and aerobic training, the improvements in the systolic blood pressure of middle-aged women occurred. The results of the study concluded that the namely the yogic practice group (YPG) and the aerobic training group (ATG), (Experimental Groups) achieved significant improvements over the control group (CG) to improve systolic blood pressure. We conclude that the yogic practice group. (YPG) was better than the aerobic training group (ATG) in improving systolic blood pressure.

References :

1. Deshpande S., Nagendra H.R. and Raghuram N. (2008). A Randomized Control Trial of the Effect of Yoga on Gunas (Personality) and Health in Normal Healthy Volunteers. *Int. J. Yoga.*, 1(1), 2-10.

2. Vinu W. (2015). Effect of Yogic Practices on flexibility of men students. *STAR Res. J.*, 10(2), 7-9.

3.Meyer P., Kayser B. and Mach F. (2009). Stair use for cardiovascular disease prevention. *Eur. J. Cardiovasc. mPrev. Rehabil*., 16(2), S17.

4. Kamatham Sivananda & M.V. Srinivasan, ISSN 2320 – 9011, Dec 2017, Impact of yogic practices and aerobic training on systolic blood pressure among middle aged Women,

5. B.K.S. Iyengar's (1996). Light on the Yoga Sutras of Patanjali, London. 1-384.