



Influence of Physical Exercises on Body Mass Index among Obese Women

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Abstract

The purpose of the study was to find out the influence of physical exercises on body mass index among obese women. To achieve the purpose of the present study, thirty obese women from Coimbatore district, Tamilnadu, India were selected as subjects at random and their ages ranged from 30 to 40 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=30) were randomly assigned to two equal groups as physical exercises group (PEG) and control group (CG) in an equivalent manner. The experimental group participated for a period of six weeks for alternate three days in a week and the post-tests were taken. To find out the difference between the two groups paired 't' test was used. The result reveals that the physical exercises group showed better performance on BMI than the control group.

Keywords: Physical Exercises, BMI, Obese Women.

Introduction

Physical exercise is a cornerstone of a healthy life style. The human body is designed for physical activity and movement. Physical activity makes the individual look and feel better, and is a source to improve health and extend life. Throughout his life, man has to be physically active. Physicians suggest that patients must use physical activities as a medicine or therapy for deadly diseases such as coronary heart diseases, diabetics and respiratory diseases, as physical activities preserve the patients from side effects due to use of medicines. Today, exercise scientists are exploring the limits of exercise as a therapy, as a medicine. Physical fitness is the functioning of the heart, blood vessels, lungs, and muscles to function at optimum efficiency. In previous years, fitness was defined as the capacity to carry out the day's activities without undue fatigue. It is performed for many different reasons. These include: strengthening muscles and the cardiovascular system, honing athletic skills, and weight loss or

maintenance. Frequent and regular physical exercise boosts the immune system, and helps prevent diseases.

Methods

The purpose of the study was to find out the influence of physical exercises on body mass index among obese women. To achieve the purpose of the present study, thirty obese women from Coimbatore district, Tamilnadu, India were selected as subjects at random and their ages ranged from 30 to 40 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=30) were randomly assigned to two equal groups as physical exercises group (PEG) and control group (CG) in an equivalent manner. The experimental group participated for a period of six weeks for alternate three days in a week and the post-tests were taken. To find out the difference between the two groups paired 't' test was used. Data were analyzed using SPSS (Statistical Package for Social Science) version 15.0. The level of significance was fixed at 0.05.

Results and Discussion

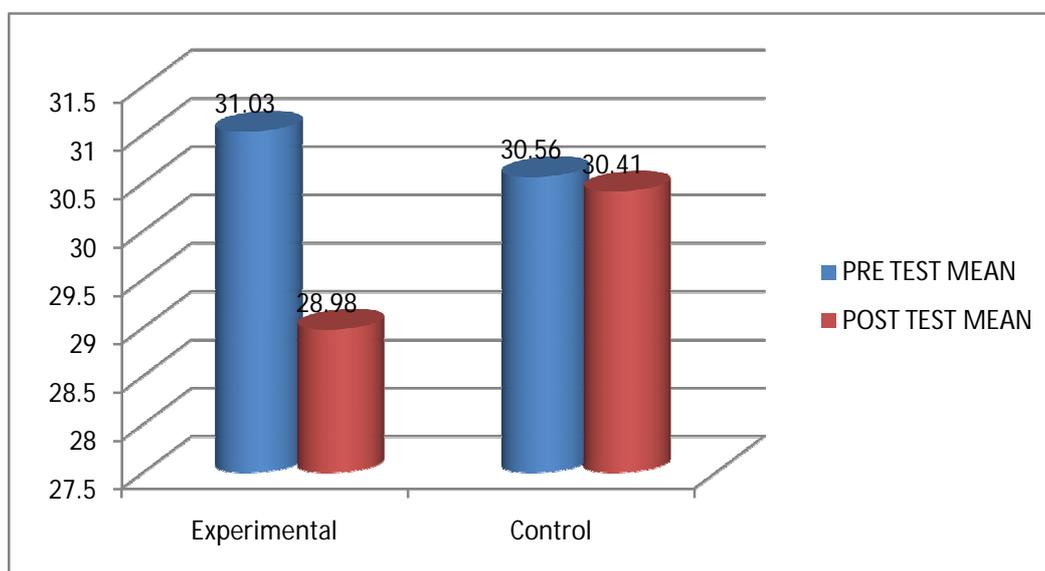
The statistical results of both experimental and control groups on body mass index among obese women are presented in the table below,

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Table 1. Summary of 't' Ratio on Body Mass Index of Experimental and Control Groups

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (\pm)	σ DM	't' Ratio
Experimental Group							
1	BMI	31.03	28.98	2.04	2.33	0.60	3.40*
Control Group							
2	BMI	30.56	30.41	0.15	0.65	0.16	0.90

Table 2. Figure I. Pre and Post Test Differences on Body Mass Index of Experimental and Control Groups

Conclusions

In case of BMI the results between pre and post (6 weeks) test has been found significantly higher in experimental group in comparison to control group. The findings of the present study have strongly indicates that six weeks of physical exercises group had significant influence on BMI of obese women. Hence the hypothesis earlier set that physical exercises would have been significant influence on BMI in light of the same the hypothesis was accepted. The result reveals that the physical exercises group showed better performance on BMI than the control group.

References

1. Agnieszka Zak-Golab, Barbara Zahorska-Markiewicz, Jozef Langfort, Michal Holeccki, Piotr Kocelak, Katarzyna Mizia-Stec, Magdalena Olszanecka-Glinianowicz and Jerzy Chudek. (2010). The influence of weight loss on anaerobic threshold in obese women. *Journal of Sports Science and Medicine*, 9, 564 – 571.
2. Ankad, R.B., Herur, A., Patil, S., Shashikala, G.V. & Chinagudi, S. (2011). Effect of short term pranayama and meditation on cardiovascular functions in healthy individuals. *Heart Views*. 12(2):58-62.
3. Anne, L. Rothstein. (1985). *Research Design and Statistics for Physical Education* Englewood Cliffs, N.J: Prentice Hall, Inc.
4. Whyte LJ, Gill JM, Cathcart AJ. (2010). Effect of 2 weeks of sprint interval training on health-related outcomes in sedentary overweight/obese men. *Metabolism*. 2010 Oct;59(10):1421-8.