EFFECT OF SIMPLIFIED KUNDALINI YOGA ON SYSTOLIC BLOOD PRESSURE AND BLOOD SUGAR AMONG MIDDLE AGED SEDENTARY WOMEN

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ABSTRACT: The aim of the experimental random group research was to establish the influence of Condensed Kundalini Yoga on systolic blood pressure and blood sugar among sedentary middle-aged women. Because of Simplistic Kundalini Yoga on anxiety among middle-aged sedentary women, it was hypothesised that there would be substantial discrepancies from the control group. For the purposes of the research, 30 middle-aged sedentary women were randomly selected using Chennai’s random sampling group design between the ages of 40 and 50 and were divided into two groups, A and B, each of 15 subjects. For the two classes (A and B), a pre-test was performed on the chosen dependent variable prior to the start of the training programme. Simplified Kundalini Yoga was given to Group A; Group B (Control Group) did not undergo any special care, but was in active repose. The two classes (A and B) were retested on the same preferred dependent variable after an experimental period of eight weeks. The values for systolic blood pressure and blood sugar (fasting) were reported. Co-variance analysis (ANOVA) was used to assess the relevant distinctions between the experimental group and the control group. The significance test was set at a degree of trust of 0.05. It was concluded that among middle-aged sedentary women, Simplistic Kundalini Yoga reduced Systolic blood pressure and blood sugar (Fasting). The theory was therefore agreed at a degree of confidence of 0.05.

Keywords: Systolic blood pressure, Blood sugar (Fasting), Simplified Kundalini Yoga, Sedentary women.

INTRODUCTION

Physical inactivity has thoughtful insinuations on grassroots health. About 2 million deaths per year are credited to physical dormancy. An inactive existence is among the 10 foremost causes of death and infirmity in the world. Deskbound lifestyles upsurge all causes of humanity. Rendering to WHO, 60 to 85% of people in the world—from both advanced in addition emergent republics lead inactive lifestyles, manufacture it one of the additional serious yet inadequately spoken community health difficulties of our period. These chronic diseases are, for the most part, entirely preventable.
A deskbound lifestyle is a main risk issue for heart besides blood container (cardiovascular) sickness. Being inactive is linked to high blood pressure. Persons who are less active and less bodily fit have a greater incidence of hypertension than their more energetic peers. It has been observed that corporeal movement may decrease blood pressure in hypertensive people.
Yoga supports to develop all system of human body such as cardiovascular, respiratory, intestinal, eliminative, endocrine, nervous in addition muscle-skeletal system thus firming, emptying also purifying the body.
The structure of physical exercises established by Shri Vethathiri Maharishi after years of concentrated research fulfils the need of preserving the proper circulation of blood, heat, air, energy and bio-magnetism, ensuring conservation of health and anticipation of disease in a mild way. It progresses the immunity system and thus acts as a precautionary and as a curative to numerous diseases.
Simplified Kundalini Yoga practice can deliver women with both understandable besides unanticipated assistances for the body, mind and spirit. International yoga skilled Colleen Saidman says yoga “offers women solace, reflection, joy, getting besides ease in their bodies.” Yoga bolsters your psychological health and can ease the pressure that frequently comes with the manyhat’s women wear. Yoga is contributory in treating stress as it helps kindle feel-good chemicals in the brain, variations thought designs besides helps alleviate the stress reply.

Objectives of the Study
The goal of the research was to figure out if there would be any substantial difference between middle aged sedentary women on selected bodily variables such as Systolic Blood Pressure and Biochemical Variable such as Blood Sugar because of simpler kundalini yoga practises.

Purpose of the Study
The goal of the study was to define the influence of simplistic kundalini yoga among middle-aged sedentary women on systolic blood pressure and blood sugar (fasting).

Hypothesis
Because of simplified kundalini yoga practises on selected physical variables such as systolic blood pressure and biochemical variables such as blood sugar (fasting) due to simplified kundalini yoga practises among middle-aged sedentary women than the regulator group, it was hypothesised that there would be noteworthy differences.

Delimitations
- The research was restricted only to sedentary elderly women from Chennai City, India.
- The age of the subject was just between 40 and 50 years old.
- The study was confined to simplified kundalini yoga practices as independent variable only
- The study was confined to Systolic Blood Pressure and Blood Sugar (Fasting) as dependent variables only.

Limitations
- The Factors like Socio-Economical status were not taken into consideration.
- The climatic conditions were not considered.
- Factors like Life style habits were not taken into consideration.
Subjects’ day to day activities were not taken into account.

Diet and Medication followed by subjects was not controlled.

REVIEW OF RELATED LITERATURE
A research was conducted by Narayanan Dr (2017) [1] to discover the impact of Condensed Kundalini Yoga among middle-aged hypertensive women on blood pressure. It was speculated that there would be major variations in middle-aged hypertensive women than in the control group due to Simplistic Kundalini Yoga on Blood Pressure. For the purposes of the research, 30 middle-aged hypertensive women were randomly selected from Chennai, between 35 and 45 years of age, and divided into two classes, A and B, each with 15 subjects. For the two classes (A and B), pre-testing was carried out on the designated independent variables before the exercise programme. Simplified Kundalini Yoga was given to Group A; Group B (Control Group) got no special care at all except in regular and routine work. The two classes (A also B) were retested again on the same chosen reliant on variables as post-test after the experimental duration of eight weeks. Systolic and diastolic blood pressure was measured using a Sphygmomanometer. Covariance analysis (ANCOVA) was second hand to assess the relevant distinctions amongst the investigational group in addition the control group. The significance test was set at a degree of trust of 0.05. It was concluded that Simplistic Kundalini Yoga in middle-aged hypertensive women reduced Systolic Blood Pressure in addition Diastolic Blood Pressure. The theory was therefore agreed at a degree of confidence of 0.05.

Rajasekaran VM (2013) [2] conducted pilot study to find the effects of The Kaya Kalpa Method besides Streamlined Corporeal Exercise (Maharasana) Regimen of Vethathiri Maharishi for the Treatment of Type-2 Diabetes Mellitus- a Pilot Trial This education used a single group, open labeled measured trial project aged between 40 and 65 years of age, non exercisers for the previous 12 months, and had impaired fasting glucose (FBG >125 mg/dl) and postprandial glucose (PPBG >160mg/dl); hypertension (systolic BP/diastolic BP: above 120/above 80 mmHg). The involvement group participated in a 3- month Vethathiri Maharishi’s style of yoga practice involvement program advanced and led by a specialized yoga teacher in the temple of consciousness a, Aliyar (Coimbatore district), Tamil Nadu. Arithmetical analyses were achieved with SPSS version 12.0 for Windows. We used the paired t-test to regulate within-group alterations of biological strictures before (baseline) and after the involvement. For expressive resolutions, the results are uttered as unreconstructed and unadjusted callous morals. Unremitting variables are expressed as mean ± SD, and unconditional variables are expressed as complete numbers. A two-tailed value of P less than 0.05 was painstaking significant. In this study, statistically significantly greater (P ≤ 0.001) mean decreases from baseline to day 90 were observed in the group for Fasting blood glucose 115.1± 11.5 to 92.8±11.7, postprandial glucose 203±12.5 to 178±11.5, HbA1c 8±1.2 to 6±0.8, Blood pressure Systolic 141±5 to 121.5±5.5 and Diastolic 85±4.2 to 80±2.5. In together sexes, who attended 3 months of yoga besides Kayakalpa instruction, there was a substantial diminution in FBS, PPBS, HbA1c values. During this analysis, as contributors were enquired not to adjust their level of exercise by introducing any new type of exercise, we confined our physical activity guidelines to reinforcing the position of being healthy in everyday life.

METHODOLOGY
80 were submitted for the purpose of the random sample experimental sample, 50 were screened and 30 middle-aged sedentary women were randomly selected using a random sampling
procedure from Chennai City between the ages of 40 and 50 years and were separated into two
groups A and B, each group having 15 subjects. Before the start of the training programme, a
preliminary evaluation for the two classes (A and B) on the designated reliant on variables was
performed. Simplified Kundalini Yoga practises were granted to group A. With no preparation, 
Group B was viewed as a control group.
The two classes (A and B) were retested on the same preferred dependent variable after an
experimental period of eight weeks. Fasting sugar blood checks and the Systolic Blood Pressure
Test were performed and replies were registered. Co-variance analysis (ANCOVA) was used to
assess the relevant distinctions between the trial group and the control group. The significance
trial was set at a degree of trust of 0.05.

RESULTS AND DISCUSSIONS
Statistics relating to the variable obtained from the two collections before besides after the
exercise dated were statistically analysed to assess the relevant difference using Analysis of Co-
variance (ANCOVA) and evaluated at a degree of confidence of 0.05.
These are shown in the Tables below

| Test          | Group- A SKY Yoga | Group- B Control | Source of Variation | Degrees of Freedom | Sum of Squares | Mean Sum of Squares | F-Ratio |
|---------------|-------------------|------------------|---------------------|--------------------|----------------|----------------------|---------|
| Pre           | 132.53            | 133.20           | Between             | 1                  | 3.33           | 3.33                 | 0.03    |
|               |                   |                  | With in             | 28                 | 3178.13        | 113.50               |         |
| Post          | 120.60            | 131.87           | Between             | 1                  | 952.03         | 952.03               | 12.18*  |
|               |                   |                  | With in             | 28                 | 2189.33        | 78.19                |         |
| Adjusted Post | 120.79            | 131.68           | Between             | 1                  | 888.65         | 888.65               | 20.34*  |
|               |                   |                  | With in             | 27                 | 1179.36        | 43.68                |         |

*Important at a confidence level of 0.05 (Table F ratio at a confidence level of 0.05 for df
1 and 28 = 4.20, 1 and 27 = 4.21)

On pre-test scores of 0.33, the F value obtained was less than the necessary F value of 4.2 to be
meaningful at the stage of 0.05. This showed that there was no substantial alterationamongst the
pre-test and post-test clusters and that the pre-test randomization was equal. The review of the
post-test scores revealed that there was a substantial differential amongst the classes, as the F
value of 12.18 was higher than the F value of 4.20 demanded. This showed that there were major
variations in the means of post processing of the subjects. Accustomed mean grooves were
measured and endangered to arithmeticalconduct, taking into account the pre and post test scores
of the categories. The F value of 20.34 obtained was superior than the F value of 4.21 required.
This showed that in line with the research conducted by Narayanan Dr, there was a substantial
gap between the means owing to six weeks of condensed kundalini yoga practises on Systolic
Blood Pressure (2017).
The well-ordered at tuned means on Systolic Blood Pressure was obtainable finished bar figure
for better sympathetic of the consequences of this learning in Figure - 1.
Figure: 1 Control group bar diagram displaying pre, post and modified post-test values, two experimental systolic blood groups

Pressure
*Significant at a confidence level of 0.05 (Table F ratio at a confidence level of 0.05 for df 1 and 28 = 4.20, 1 and 27 = 4.212)

Table – II Computation of mean and analysis of covariance of blood glucose of experimental also control group (Scores in mg/dl)

| Test         | Group-A SKY Yoga | Group-B Control | Source of Variation | Degrees of Freedom | Sum of Squares | Mean Sum of Squares | F-Ratio |
|--------------|------------------|-----------------|---------------------|--------------------|----------------|---------------------|---------|
| Pre-test mean| 134.53           | 135.20          | Between             | 1                  | 3.33           | 3.33                | 0.06    |
|              |                  |                 | Within              | 28                 | 1514.13        | 54.08               |         |
| Post-test mean| 95.40            | 133.87          | Between             | 1                  | 11097.63       | 11097.63            | 275.64* |
|              |                  |                 | Within              | 28                 | 1127.33        | 40.26               |         |
| Adjusted mean| 95.54            | 133.73          | Between             | 1                  | 10917.35       | 10917.35            | 336.59  |
|              |                  |                 | Within              | 27                 | 875.75         | 32.44               |         |

*Significant at a confidence level of 0.05 (Table F ratio at a confidence level of 0.05 for df 1 and 28 = 4.20, 1 and 27 = 4.212)

On pre-test scores of 0.06, the F value obtained was fewer than the necessary F value of 4.2 to be meaningful at the level of 0.05. This showed that there was no substantial alteration between the
pre-test besides post-test groups and that the pre-test randomization was equal. The review of the post-test scores revealed that there was a substantial differential among the classes, as the F value of 275.64 was higher than the F value of 4.20 demanded. This showed that there were major variations in the means of post processing of the subjects. Familiar mean notches were measured besides subjected to numerical treatment, taking into account the pre and post test scores of the categories. The F value of 336.59 obtained was superior than the F value of 4.21 required. This revealed that due to six weeks of condensed kundalini yoga practises on Pulse rate in line with the research performed by the study, there was a substantial gap between the means. Rajasekaran VM (2013). For a clearer interpretation of the effects of this analysis in Figure - 2, the ordered modified means on the pulse rate is shown via the bar diagram.

**Figure – 2** Control group bar diagram displaying pre, post and modified post-test values, two experimental blood glucose classes

*Significant at a confidence level of 0.05 (Table F ratio at a confidence level of 0.05 for df 1 and 28 = 4.20, 1 and 27 = 4.211)*

The findings of the study found that Systolic Blood Pressure and Blood Sugar (Fasting) decreased substantially for Group-A than Group B due to simplistic kundalini yoga activities. The theory was then agreed at 0.05 confidence level. The above answers were also authenticated by the explanations made by authorities such as Narayanan Dr (2017) and Rajasekaran VM (2013) [1-2].

**DISCUSSION ON HYPOTHESIS**

It was hypothesised that due to simpler kundalini yoga activities among middle-aged sedentary women than the control group, there will be substantial variations between selected physiological variables such as Systolic Blood Pressure and Biochemical Variable such as Blood Sugar (Fasting). The findings revealed that Systolic Blood Pressure (Decreased) and Blood Sugar (Fasting) (Decreased) were substantially distinguished from the control group of middle-aged sedentary women due to simplistic kundalini yoga activities. The theory is agreed at a confidence level of 0.05.

**CONCLUSION**

It is concluded that simplified kundalini yoga practices decreased Systolic Blood Pressure and Blood Sugar (Fasting) significantly among middle aged sedentary women. Hence, simplified
kundalini yoga is beneficial to middle aged sedentary women to maintain healthy Systolic Blood Pressure and Blood Sugar (Fasting).

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