Effect of yogic practices on selected physiological and psychological variables among type II diabetic patients

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Abstract

The purpose of the study was to find out the Effect of Yogic Practices on Selected Physiological and Psychological Variables among Type II Diabetic Patients. To achieve the purpose of the present study, 30 middle aged Type II Diabetic Patients was selected from Coimbatore, were selected as subjects at random and their age ranged from 35 to 45 years. The subjects were divided into two groups consisting of 15 each. The present study is an experimental one and to test the effect of varied forms of intervening strategies, the care was taken in distributing the samples to experimental group. For this, the selected samples (N= 30) were divided into two equal groups. Experimental Group I named as (yogic practices) and Group II acted as control group. They are doing the regular yoga practice the experimental group were given specific training for 5 days a week for six weeks in total. After completion of six weeks of training post – test was conducted on selected variables and the score were records in their respective units as post – test score. The pre and post test scores were analyzed with analysis of Co–variance. In all the cases 0.5 level of significance was fixed. The results of the study showed that there was a significant difference found among the experimental groups.

Keywords: Blood pressure (systolic and diastolic) and anxiety

Introduction

Yoga is one of the India’s wonderful gifts to mankind. Yoga believes that exercise is essential for speedy removal of toxins and for keeping blood circulation and all internal processes functioning smoothly. Yoga has a complete message for humanity as a message for the human body, human mind and human soul Kuvlayananda (1977). Yoga enables one to learn to unite his jeematma (individual soul) with the paramatma (universal soul) and the final union is the fulfillment of ‘yoga’. Even the techniques which promote one’s progress towards realization of the supreme are called “Yoga” (Chakrabarthi et al., 1984). Diabetes is a disease that involves problems with the hormone insulin. Normally, the pancreas (an organ behind the stomach) releases insulin to help the body store and use the sugar and fat from the food eat Diabetes occurs. (American Diabetes Journal, 2009) Diabetes mellitus is a group of metabolic diseases characterized by high blood sugar (glucose) levels that result from defects in insulin secretion, or action, or both. Diabetes mellitus, commonly referred to as diabetes (as it will be in this article) was first identified as a disease associated with “sweet urine,” and excessive muscle loss in the ancient world. Elevated levels of blood glucose (hyperglycemia) lead to spillage of glucose into the urine, hence the term sweet urine. Normally, blood glucose levels are tightly controlled by insulin, a hormone produced by the pancreas. Insulin lowers the blood glucose level. Yoga believes that exercise is essential for speedy removal of toxins and for keeping blood circulation and all internal processes functioning smoothly.

Methodology

The purpose of the study was to find out the Effect of Yogic Practices on Selected Physiological and Psychological Variables among Type II Diabetic Patients. To achieve the purpose of the present study, 30 middle aged Type II Diabetic Patients was selected from Coimbatore, were selected as subjects at random and their age ranged from 35 to 45 years. The subjects were divided into two groups consisting of 15 each. The present study is an experimental one and to test the effect of varied forms of intervening strategies, the care was
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Analysis of the data
The data collected from the experimental groups and control group on pre and after experimental on selected variables were statistically examined by analyses of covariance (ANCOVA) if there was any significant difference among the treatment means of each variable. Scheffe’s post hoc test was applied to test the significance of difference between the paired adjusted means at 0.05 level of confidence. The analysis of covariance (ANCOVA) on Blood pressure (systolic and diastolic) and Anxiety of experimental group and control group have been analyzed and presented in Table-1

<table>
<thead>
<tr>
<th>Group</th>
<th>Experimental Group</th>
<th>Control Group</th>
<th>Source of Variance</th>
<th>Sum of square</th>
<th>Degree of Freedom</th>
<th>Mean square</th>
<th>F ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systolic Blood Pressure</td>
<td>58.98</td>
<td>55.97</td>
<td>Between</td>
<td>61.13</td>
<td>1</td>
<td>61.13</td>
<td>17.76*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>With in</td>
<td>127.15</td>
<td>37</td>
<td>3.45</td>
<td></td>
</tr>
<tr>
<td>Diastolic Blood Pressure</td>
<td>86.01</td>
<td>91.04</td>
<td>Between</td>
<td>251.97</td>
<td>1</td>
<td>251.97</td>
<td>36.99*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>With in</td>
<td>255.57</td>
<td>37</td>
<td>6.79</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>18.03</td>
<td>5.56</td>
<td>Between</td>
<td>909.69</td>
<td>1.00</td>
<td>909.69</td>
<td>44.93*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>With in</td>
<td>425.18</td>
<td>21.00</td>
<td>20.25</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level of confidence

Table 1 shows that the adjusted posttest mean value of Blood pressure(systolic and diastolic) and Anxiety for Group I named as (yogic practices) and Group II acted as control group (CG) were (58.98, 55.97), (86.01, 91.04) and (18.03, 5.56) respectively. The obtained $F$ – ratio (17.76), (36.99) and (44.93) for the adjusted posttest mean was more than the table value 3.23 for df 1 and 37 required for significance at 0.05 level of confidence. The results of the study indicate that there was a significant mean difference on posttest means of experimental group and control group on the decrease of Blood pressure (systolic and diastolic) and Anxiety. To determine which of the paired mean had a significant difference scheffe s test was applied as post hoc test and the results are presented in table 1

**Results and Discussion**
The experimental groups showed significant improvement on pre to post test on Blood pressure (systolic and diastolic) and Anxiety then control group.

**Conclusion**
The Blood pressure (systolic and diastolic) and Anxiety was significantly decreased due to 6 weeks of yogic practices, but particularly very good differed for the experimental group and control group.

**References**