Efficacy of traditional yogic practices in psychological variable among type 2 diabetic middle age women

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Abstract---Diabetes Mellitus is, a long period (or 'persistent') condition that happens when an individual’s glucose level increase and the ensuing discharge of sugar in urine, since Pancreas not make any or adequate Insulin. Yoga practices are fundamental among Type 2 Diabetic middle age women. The goals of the review was to analysis where would be any tremendous decrease on chosen Psychological variable such as Stress because of practices of Traditional yoga among Type 2 Diabetic middle age women. 30 middle age of 35 and 45 years Type 2 Diabetic women from Chennai were choose through random sampling group and they were split into Group A and B with 15 each subjects. It was hypothesised that due of practices of Traditional yoga on Stress was decreased among Type 2 Diabetic women with middle aged. Group A (experimental) was given traditional yoga, Group B (Control) got no particular treatment except for were in dynamic rest. Both pre and post test was given for the Group A and B before and after twelve weeks of traditional yoga program and Analysis of Co-variance was used as statistical tool. The outcome result proved that practices of traditional yoga decreased stress among Type 2 Diabetic middle age women at confident level 0.05. Final conclusion state the
traditional yoga practices are necessary Type 2 Diabetic women of middle age.

**Keywords**--- Diabetes, Stress, Middle age women, Traditional Yoga.

**Introduction**

Diabetes is one of the quickest developing wellbeing challenges, with the quantity of grown-ups living with diabetes having dramatically multiplied throughout recent years. Diabetes Mellitus is a significant general medical issue, all the more essentially called diabetes, is a serious, long term (Chronic) condition that happens when there are brought degrees of glucose up in an individual's glucose level and the ensuing discharge of sugar in the pee in light of the fact that their body can't create any or enough of the chemical insulin, or can't really utilize the insulin it make.

Women’s major role has changed in the 21st century years. Today women is driving in family, each field, society, Because of this responsible and life style disorder, women’s health are highly affect. As a result of this dependable and way of life problem, ladies’ wellbeing are exceptionally influence. In that Diabetes is one of the most common disease in women now a day. In 20 million ladies, 16% of live births had some type of hyperglycaemia in pregnancy. An expected 84% were because of gestational diabetes. In India, An estimated 60 million people have diabetes—the highest number compared to any one country of the world. In Tamil Nadu, As per Indian Council of Medical Research. (ICMR), Among the 15 states Tamil Nadu had the highest number of diabetics (10.4 per cent prevalence).

After numerous long periods of effectively strategies with victims of diabetes by giving the interior yogic. Yoga has acquired ubiquity during the most recent couple of years, and presently north of 30 million individuals ordinary practices Yoga. Yoga is the most speedy developing wellbeing exercises of today, notwithstanding existed for a long time as of now. Today Individuals' mentality move towards wellbeing, otherworldliness, lifestyle and in the public arena changed decisively.

**Statement of the Problem**

The purpose of the study was to find out the efficacy of traditional yogic practices in psychological variable among type 2 diabetic middle age women.

**Hypothesis**

It is hypothesized that there would be any significant differences due to the practices o traditional yoga on psychological variable among type 2 diabetic middle age women than the control group.
Research Objectives

To find out there would be any significant difference on the psychological variable such as stress among type 2 diabetic middle age women due to practice of traditional yoga.

Inclusion Criteria

- The study was to be delimited to Type 2 diabetic among middle age between 35 and 45 years only.
- The study was delimited to women suffering from type 2 diabetic residing in Chennai only.
- The intervention selected is Traditional yogic practices only.
- The outcome was restricted to psychological variable stress only.

Exclusion Criteria

- Changing lifestyle conditions, body structure, occupation, diet taken and otherenvironmental factors were not taken into consideration.
- Climate conditions were not considered.
- The other ways of treatment undergone by the subjects were not taken into account.
- Personal observation and verification were considered limitations.
- Socio-economic conditions were considered limitations

Materials and Methods

This experimental random group study among type 2 diabetic is founded on ninety subjects screened by random group sampling, in that thirty were selected, and divided equally into two Group A and Group B. The Group A (experimental) with fifteen participants was given practices on traditional yoga, and the control group was not given any practices. Analysis of variance (ANOVA) used here to check the significant differences among both the groups at 0.05 confidence significance level. The below listed yogic practices given for twelve weeks:

<table>
<thead>
<tr>
<th>Yogic Practices</th>
<th>1</th>
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Results and Discussion on Pain

For the psychological stress score value Latha Satish questionnaire had been used, It has of 52 items questions from mild stress, moderate to severe stress based on the value of change or adjustment make to life than undesirability
with themselves. Stress questionnaire – Post Test reliability of 24.03 is Good validity Score interpretation 0 – 17 low stress, 18 – 35 moderate stress than 36 – 52 high stress. Both the groups A and B before and after the yoga practices were proved by Analysis of Variance (ANOVA), to determine the significant difference and tested at a P>0.05 level of significance. The analysis was presented in Table I

### Table I
Anova of the means experimental group and the control group on stress (In Scores)

<table>
<thead>
<tr>
<th>Test</th>
<th>Group A (Experimental)</th>
<th>GroupB -Control</th>
<th>Source of variance</th>
<th>Degree of freedom</th>
<th>Mean Sum of Squares</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>35.47</td>
<td>36.71</td>
<td>between</td>
<td>1.00</td>
<td>11.41</td>
<td>1.23</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>within</td>
<td>28.00</td>
<td>9.30</td>
<td></td>
</tr>
<tr>
<td>Post-test</td>
<td>24.03</td>
<td>36.87</td>
<td>between</td>
<td>1.00</td>
<td>1185.67</td>
<td>118.45*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>within</td>
<td>28.00</td>
<td>10.01</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level of confidence. (Table F-ratio at 0.05 level of confidence for 1 and 28= 4.2)

In this table above, the pre- test scores on Group A (Experimental) were 1.23 only. After twelve week of traditional yoga practices the score is 118.45. From the above investigation and table value, it is proved that practices of yoga decreased the stress among type 2 diabetic middle age women was in line with research conducted by Venugopal V et al., (2021) published in Bentham Science Publishers. In their studies, Public health is significantly impacted by diabetes mellitus. The pathogenesis of Type 2 Diabetes Mellitus (T2DM), which causes a number of problems, is significantly influenced by oxidative stress. T2DM is frequently managed with the use of yoga. Understanding the effects of yoga on oxidative stress parameters among adult T2DM patients is the main goal of this comprehensive review and meta-analysis. Malondialdehyde (MDA) levels were the main endpoint, whereas fasting plasma glucose, HbA1C, and Superoxide Dismutase (SOD) levels were the secondary results. The inclusion criteria were met by four trials totaling 440 patients. According to the findings of a meta-analysis, yoga significantly lowered Malondialdehyde (MDA) -(SMD: -1.4, 95.0% CI -2.66 to -0.13, P = 0.03; I² = 97.0%) then fasting sugar levels (SMD: -1.87; 95.0% CI -3.83 to -0.09; P = 0.06; I²= 99.0%), and HbA1c (SMD: -1.92; 95.0% CI -3.03 Superoxide Dismutase (SOD) showed no evidence of such an impact (SMD: -1.01; 95.0% CI -4.41 to 2.38; P = 0.56; I²= 99.0%). According to the available research, yoga lowers MDA, fasting plasma glucose, and HbA1C, making it a
viable adjunct therapy for the management of T2DM. In support of the above analysis, results were represented in Bar Diagram in Figure II below:

![Figure I Bar Diagram Showing The Mean Difference Among Experimental Group And Control Group On Stress (In Scores)](image)

Significant at 0.05 level of confidence. (Table F-ratio at 0.05 level of confidence for 1 and 28 =4.2)

**Discussion on Hypothesis**
From this results, it is proved the F ratio of post-test 12 Weeks after yoga program was 118.45. So hypothesis at a 0.05 confidence level was accepted.

**Conclusion**
Traditional yoga practices assist to reduce the stress in type 2 diabetic middle age women. So thus, stress reduce for middle age women sufferers type 2 diabetic was reduced moderately due to practices of traditional yoga.

**Conflict Of Interest**
There is no Conflict of Interest concerning the above efficacy of traditional yogic practices reduce the stress of type 2 diabetic middle age women.

**Ethical Clearance**
Meenakshi Medical College Hospital given the ethical clearance certificate by the Medical Team.
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