

Original Research Paper

Efficacy of Yoga and Meditation on Depression, Anxiety and Stress level of Post-menopausal Women

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ABSTRACT

Diabetes can have a significant impact on both physical and psychological functioning of individuals which can impair individual's quality of life. In terms of psychological functioning, the demands of diabetes care can have a potent impact on emotions and adjustment process. Psychological stress can also affect diabetes control and the release of counterregulatory hormones often results in elevated glucose levels. In other words, in order to develop a healthy personality and emotional intelligence one of the ways is the practice of yoga exercises which provides peace of mind, energize and balance of the body ultimately leads to a sense of control, happiness and well-being. The present research makes an attempt to ascertain the efficacy of yoga exercises on the emotional intelligence and subjective well-being of diabetic type-II patients. The sample of 40 diabetic type-II patients was selected purposefully. Further, total sample was divided randomly into two categories i.e. experimental group (20) and control group (20). The present research takes into consideration the two psychological tests. First is Emotional

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Intelligence Scale and the second is Subjective Well-being Scale. The positive impact of yoga exercises has been found on the emotional intelligence and subjective well-being of diabetic patients in an experimental group whereas insignificant improvement was seen in the control group.

Keywords: *Yoga, Subjective well-being, Emotional intelligence, Diabetes.*

INTRODUCTION:

In this contemporary world, people are facing an increasing number of chronic psychological and other stressors that impinge on their overall health, well-being and quality of life. Diabetes is a chronic disease that occurs when the pancreas does not produce enough insulin, or insulin cannot effectively use the body. Insulin is a hormone that regulates blood sugar. Normally, the pancreas produces the right amount of insulin to accommodate the quantity of sugar; however, when the person has diabetes, either the pancreas produces little or no insulin or the cells do not respond normally to the insulin. Sugar builds up in the blood, overflows into the urine, and the passes from the body unused (WHO, 2010). The International Diabetes Federation (IDF) estimated at least 285 million people globally are suffering from diabetes (about 6.4% of adults), with 46% of all those affected in the age range of 40-59 years; it is predicted that it may reach up to 435 million by 2025 (IDF, 2010). Asia is one of the regions that have a high prevalence of diabetes.

Type 2 diabetes (formerly called non-insulin-dependent or adult-onset) results from the body's ineffective use of insulin. Type 2 diabetes comprises 90% of people with diabetes around the world and is largely the result of excess body weight and physical inactivity.

The word Yoga is derived from the Sanskrit word 'Yuj' meaning the union of the body, breath and mind. Good health due to Yogic practices could be the effect of right thought and action. Yoga as a way of life is more true to its ancient tenets. It constitutes asanas, regulated breathing (pranayama), and awareness of yoga sutras (principles) that govern the mind. Yoga is the oldest system of holistic health in the world with its roots originating in Indian philosophy. The contribution of yoga on mental health practice has been acknowledged globally and it is used as an adjunct to psychotherapy in several countries.

General well-being might be defined as the subjective feeling of contentment, happiness, satisfaction, with life experiences and of individuals' role in the world of work, sense of achievement, utility, belongingness, and no distress, dissatisfaction or worry, etc. It may well be maintained in unpleasant circumstances and conversely, may be lost in a favourable situation. Research has shown that people who do not lead an active life are more at risk of developing type 2 diabetes. The less exercise you do, the greater your chances of developing diabetes. To avoid most of the stresses one must try to attain peace of mind and body, this may be possible with the help of yoga exercises.

Subhash, M. et al. (2015) demonstrated that the yoga is effective in reducing the blood glucose levels in patients with T2DM. Kumar, k. (2012) reported that a significant decrease in FBS and PPBS has been reported in T2DM patients on oral hypoglycemic agents (OHA) undergoing yoga training when compared to those only on OHA.

Thangasami SR (2015) observed that yoga might be an attractive alternative to traditional aerobic exercises and strength training program, as it needs only a little space and no equipment and literally devoid of side effects, principally focusing on the relaxation of mind and body. It makes available a less strenuous

and more pleasurable exercise experience to a person. Yoga can help an individual to feel better, both improving the physical fitness and elevating the mood. Yoga can be considered as a good alternative for exercise therapy.

METHODOLOGY

Statement of Problem:

The main aim of the present investigation has been to compare the pre and post-test scores of emotional intelligence and subjective well-being of diabetic patients. The exact problem of the present study is ***“Efficacy of Yoga on Emotional Intelligence and Subjective Well-being of Diabetic Patients”***

The significance of problem:

To investigate the best means of improving the health status of individuals with diabetes, changes in body habits (decreased body mass index, weight, or waist circumference), and improved glycemic control. Unfortunately, most of the studies do not address the mechanisms for maintenance of healthy lifestyle. Further complicating the challenge to improve health status among adults with diabetes, a growing body of evidence suggests additional racial/ethnic disparities in the practice of dietary behaviour.

Objectives:

For the present research work following objectives were formulated.

- To understand the efficacy of yoga on the emotional intelligence of the diabetic patients.
- To understand the efficacy of yoga on the subjective well-being of the diabetic patients.

Hypotheses:

- There will be a significant difference in emotional intelligence of diabetic patients before and after yoga exercises in the experimental group (H_{a1}).
- There will be a significant difference in subjective well-being of diabetic patients before and after yoga exercises in the experimental group (H_{a2}).
- There will be no significant difference in emotional intelligence of diabetic patients before and after yoga exercises in the control group (H_{O1}).
- There will be no significant difference in subjective well-being of diabetic patients before and after yoga exercises in the control group (H_{O2}).

Research Design:

For the present research pre and post-experimental design with the control group was used where the intervention of yoga exercise was the independent variable, whereas subjective well-being and emotional intelligence were dependent variables. A control strategy was adopted in the present investigation.

Sample:

Incidental purposive sampling technique was used in the present study a sample of 30 diabetic patients was selected, age range between 35- 50years for all subjects with a mean of 42.50 and SD of 7.56. The sample was further randomly subdivided into two categories of 15 each ie (experimental group 15 & control group 15). The 15 diabetic patients were given intervention of yoga exercise in experimental group by the yoga expert.

Tools: For the present research work, following psychological tests were selected.

- ***Emotional Intelligence Scale:-*** Emotional Intelligence Scale was developed by Hyde, Pethe and Dhar (2002). This scale has total 34 items and each statement has five alternatives.

The split-half reliability coefficient was found to be 0.88. The scale has a high content validity which is 0.93.

- **Subjective Well-being Scale:-** Subjective Well-Being Scale (Hingar et al., 2008) - consisted of 42 items measuring 7 dimensions, namely positive affect, negative affect, family life satisfaction, social support, financial security, health and energy and sense of accomplishment. A 5 point scale is used to seek the response, where a higher score indicated higher perceived well-being on the particular dimension of well-being. The scale has a content validity of 0.93.

Procedure:

The investigator with prior permission of the diabetic type-II patients personally established a good rapport and explained the purpose of research work. The study took place over a period of 3 months. The investigator along with experts of yoga and meditation had worked with thirty diabetic patients. They were placed randomly into two groups. The first group was an experimental group in which yoga and meditation schedule was practised daily at 6 AM (45 minutes) for three months according to standard principles and techniques regarding breathing, clothing, position, posture and movements. Each subject was given a questionnaire of Emotional intelligence as well as subjective well-being prior to intervention. All were requested to read all statements one after another and give their responses in the responses column by choosing appropriate response for each statement, which they felt correct and appropriate.

In the second group, which was the control group, the intervention was not produced. After the completion of three months, participants in both the control as well as the experimental group were administered assessment through the tools used for the pre-assessment process.

Scoring:

For the present research work, scoring of the obtained data was done with help of respective manuals available for the test. The data have been arranged in the respective tables according to the statistical test applied.

Statistical Analysis:

In the present study to find out the significant mean difference between pre and post-test scores of subjective well-being and emotional intelligence of diabetic patients. Statistical tests like paired sample 't' test, Mean and SD were conducted.

RESULT AND DISCUSSION

Experimental Group:

Table:- 1 Showing Mean, SD and 't' values between pre and post tests score of diabetic patients for subjective well-being.

Measures	Groups	N	Mean	SD	't' Value
Subjective Well-being	Pre-test	20	153.73	16.71	3.82
	Post-test	20	172.84	14.81	$p<.01$
Emotional Intelligence	Pre-test	20	135.87	15.40	2.60
	Post-test	20	147.57	12.71	$p<.01$

It may be inferred from table 1 that scores of both the sessions i.e. pre and post-test have a significant difference on the subjective well-being of diabetic patients. Calculated 't' value is to be found significant ($t=3.82, p<.01$). Mean scores of pretests and post-tests are 153.73 (SD=16.71) and 172.84 (SD=14.81) respectively. On the basis of a significant mean difference, it can be said that yoga sessions play a significant role to increase the subjective well-being of diabetic patients.

Similarly, the table also highlighted that 3-month schedule of yoga exercise improves the emotional maturity of diabetic patients. Mean scores of pretests and post-tests are 135.87 (SD=15.40) and 147.57 (SD=12.71) respectively. Paired sample 't'

value is to be reported significant ($t'=2.60, p<.01$). Thus, it may be concluded that systematic schedule of yoga therapy has the potential to enhance the beneficial effects of standard medical management of diabetic patients.

Control Group:

Table:- 2 Showing Mean, SD and 't' values between per and a post-tests score of diabetic patients for subjective well-being.

Measures	Groups	N	Mean	SD	't' Value
Subjective Well-being	Pre-test	20	154.71	18.71	0.15
	Post-test	20	155.56	16.70	NS
Emotional Intelligence	Pre-test	20	129.18	17.18	0.54
	Post-test	20	132.19	17.50	NS

Findings of Table 2 is based on pre and post-test scores of subjective well-being and emotional intelligence of diabetic patients in control group which scored a Mean of 154.71 (SD= 18.71) for pre-test session and after the period of three month Mean was 155.56 (SD= 16.70) for post-test session which shows that there is an insignificant difference between both the sessions. The calculated paired sample 't' value obtained was also insignificant ($t'=0.15, p>.05$) which states that the group has shown trivial improvement in subjective well-being. The patients were still found themselves in difficulty with reference to subjective well-being. In the same way, emotional intelligence was not improved without the intervention of yoga exercise. Mean score of 129.18 (SD= 17.18) for pre-test session and after the period of three months (without intervention) Mean was 132.19 (SD= 17.50) for post-test session which shows that there is an insignificant difference between both the sessions ($t'=0.54, p>.05$).

DISCUSSION:

This study has been unique in the sense that intervention technique of yoga exercise schedule has been analyzed. It is

apparent from the analysis that diabetic patients have improved certain characteristics with reference to emotional intelligence and subjective well-being which promote the use of yoga therapy.

All for hypotheses are accepted, Thus it can be said that intervention of yoga schedule is beneficial for the diabetic patients. Findings might be interpreted in terms of yoga and meditation is an ancient discipline designed to bring balance and health to the physical, mental, emotional, and spiritual dimensions of the person. A comprehensive yoga therapy schedule has the potential to enhance the beneficial effects of standard medical management of diabetic patients and can be used in an effective complementary or integrative therapy. The improvement in various biochemical indices and stress reduction by practising yoga can enable individual with diabetes a better healthy life.

CONCLUSION:

Diabetes occurs due to a disorder of metabolism. People of any age get diabetes. Diabetes is caused when blood cells of individuals do not respond to the insulin produced in the body. When regular exercise schedule follows a regimen, the body starts responding to insulin, helping to reduce blood glucose level. Yoga exercise also helps improve blood circulation in our body, particularly in the arms and legs, where diabetic patients most commonly encounter problems. Regular yoga practice can help to reduce the level of sugar in the blood, along with lowering blood pressure, keeping our weight in check, reducing the severity of the symptoms.

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Conflict of Interest

The authors colorfully declare this paper to bear not conflict of interests

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