



EFFECT OF RAJYOGA MEDITATION ON PHYSICAL WELL-BEING AMONG DIABETIC PATIENTS

Community Medicine

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ABSTRACT

We attempted to study the effect of Rajyoga meditation on physical well-being among diabetic patients. Rajyoga Meditation was taken as an independent variable whereas Diabetic disease patients were taken as dependent variables. The study design was a hospital based interventional study with two groups; the experimental group and the control group. The intervention was Rajyoga meditation. Sample size was 25 patients in each group. Our study revealed that there is significant positive effect of Rajyoga Meditation on physical well-being of diabetic patients.

KEYWORDS

Rajyoga Meditation, Physical Wellbeing, Diabetes

INTRODUCTION

There has been a rampant increase in the incidence of chronic non communicable lifestyle diseases such as Hypertension, Obesity, Diabetes, Heart attacks, Strokes etc. Type-II diabetes, often called non-insulin dependent diabetes, is the most common form of diabetes, affecting 90% - 95% of the 21 million people with diabetes.¹ Anyone can get type 2 diabetes. However, those at highest risk of the disease are those who are obese or overweight, women who have had gestational diabetes, people with family members who have type 2 diabetes and people who have metabolic syndrome (a cluster of problems that include high cholesterol, high triglycerides, low good 'HDL' cholesterol and a high bad 'LDL' cholesterol, and high blood pressure). In addition, older people are more susceptible to developing the disease since aging makes the body less tolerant of sugars. In addition, people who smoke, have inactive and stressful lifestyles, or have certain dietary patterns have an increased risk of developing type-II diabetes.²

Rajyoga is a powerful tool for holistic healing. Rajyoga practice has positive influence on the whole existence of human being. It harmonizes the physiological system as a whole as well as transforms all spheres of human existence - that is physical, emotional, intellectual, occupational, social and spiritual. Rajyoga therapy is truly a holistic treatment as it heals the governing mechanisms and the controller of the whole person. Rajyoga also 16 transforms one's life style and relieves emotional and mental conflicts as well as brings lasting peace and satisfaction in one's life. Rajyoga is not only an intellectual method but it's a way of living.³ One of the basic rules of holistic health care is healing takes place from within. Rajyoga also heals a person from within. Rajyoga practice transforms the biochemistry of brain intern having a harmonizing effect on whole organism. It is said that holistic healing is self initiated. Rajyoga is also a self initiated technique in which healing takes place as a result of activation of health promoting physiological and biochemical processes. During Rajyoga practice the person also re-establishes the harmony with other human beings, his environment and the universal life energy. Rajyoga practice potentiates the length, breadth and depth of human existence. Rajyoga practice is not a retreat from personal, social and professional responsibility but it's an art of fulfilling those responsibilities in a balanced way and achieving the goal of holistic self-development - physical, mental, intellectual, and spiritual.⁴ With this background, the present study was carried out to assess the impact of Rajyoga meditation on physical well-being among diabetic patients.

MATERIAL AND METHODS:

STUDY DESIGN : Hospital based Interventional study

SAMPLE SIZE: 25 patients in the age range of 40-80 years

STUDY PROCEDURE: The study was initiated after obtaining approval from Institutional ethical committee. The study design contained two groups; the experimental group and the control group, with information on the state of affairs before (pre) commencement of the study and that after (post) its completion. The intervention was

Rajyoga meditation. Sample size was 25 patients in each group

Group	Type- II diabetes
Experimental group	25
Control group	25
Total	50

Physical parameters were taken as Blood sugar fasting, postprandial sugar, HbA1C, Symptoms and Medicines for type II diabetic patients. After randomly choosing samples, pre-tests were administered. Then training in the intervention (Rajyoga meditation) was given only to the experimental group. Diet, exercise, sleep, mind-body connection, stress management and medicines were same for both the groups (EG and CG). Rajyoga meditation was not given to C.G. (Control group). Intervention was given daily one hour for six months. The follow up period was 6 months. After 6 months of follow up, same tests were again administered to collect post data. Then whole data was analyzed. Also some physical parameters (blood pressure, pulse rate, physical symptoms of disease and quantity of medicines patient needed) were checked /measured by respective physical parameter measuring tools/instrument. Statistical analysis: The collected data was analyzed statistically by using Percentages, chi square test trend, using Open Epi Info statistical package programme version 2.3 year 2009. Statistical significance was assessed at a type I error rate of 0.05.

RESULTS:

Table 1: Distribution of symptoms of pre and post among Diabetic subjects.

Symptoms category	DM 1		Statistical test $\chi^2=37.5$ df 2 P<0.0001	DM 2		Statistica l test $\chi^2=10.78$ df 1 P<0.001
	Pre	Post		Pre	Post	
I	0 (0)	21 (84)		0 (0)	0 (0)	
II	17 (68)	4 (16)		14 (56)	3 (12)	
III	8 (32)	0 (0)		11 (44)	22 (88)	

Table 1 shows the distribution of symptoms category in pre and post among diabetic subjects. In intervention group (DM-1), majority of the diabetic subjects shifted to category (I and II) from category III after intervention. Also, it was observed that the various category of symptoms were found to be statistically significant (p<0.001). Whereas in control group (DM-2), majority of subjects were in category II followed by category III. None of the subjects were in category I. In absence of intervention after a period of time, more number of subjects shifted to category III. The difference in category II and category III was found to be statistically significant (p<0.001).

Table 2: Distribution of quantity of medicines in pre and post among Diabetic subjects.

Medicines category	DM 1		Statistical test $\chi^2=19.44$ df 1 P<0.0001	DM 2		Statistica l test $\chi^2=10.5$ df 2 P<0.05
	Pre	Post		Pre	Post	
I	0 (0)	0 (0)		2 (8)	0 (0)	
II	11 (44)	25 (100)		17 (68)	8 (32)	
III	14 (56)	0 (0)		6 (24)	17 (68)	

Figures in parentheses indicate percentage

Table 2 shows the distribution of quantity of medicines in pre and post among diabetic subjects. In intervention group (DM-1), majority of the diabetic subjects shifted to category II from category III after intervention. Also, it was observed that the various category of medicines were found to be statistically significant ($p < 0.001$). Whereas in control group (DM-2), majority of subjects were in category II followed by category III. Only 2 subjects were in category I. In absence of intervention after a period of time, more number of subjects shifted to category III and category II. The difference in various categories was found to be statistically significant ($p < 0.05$).

DISCUSSION:

In the study as study subjects less than 18 years were excluded, the youngest study subject was 23 years of age and the oldest was found to be 73 years of age. As far as gender is concerned, majority of the study subjects were males (68%). Vyas R et al⁵ studied 105 human volunteers of both the sexes with 42 males and 63 females.

The noteworthy finding was that in the interventional diabetic group, the mean parameters (BSL-F, BSL-PP, HBA1c) were significantly reduced in post intervention ($p < 0.001$). A study conducted by Bairey Merz CN et al.⁶ on 103 patients with coronary heart disease found that individuals practicing Transcendental Meditation for four months had significantly lower blood pressure; improved blood glucose and insulin levels (which signify reduced insulin resistance); and more stable functioning of the autonomic nervous system compared to controls. Consistent findings have also been obtained by other studies.⁷⁻⁹

Rajyoga Meditation being simple and scientific technique to elicit relaxation response, to change one's attitude and transform life-style should be incorporated as the basis for an effective behavioral program in the management of diseases associated with lifestyle modification like hypertension, diabetes, coronary heart disease and cancers. For this, awareness needs to be created among masses regarding the positive health benefits of meditation.¹⁰ Further scientific studies are also required for understanding of the neural circuitry underlying emotions, cognitive behavior, negative and positive psychological processes which will definitely help scientists to explore the evidence we are seeking for the effectiveness of traditional practices like meditation. Thus we believe that reasonable evidence indeed exists for the use of meditation to promote general and psychological well being. Scientific studies are available demonstrating the beneficial effects of meditation; a few of them tell us about changes that are potentially more enduring. The long lasting effects of meditation are probably what we are looking for improving the well-being.

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