



## IMPACT OF RAJYOGA MEDITATION ON PHYSICAL WELL-BEING AMONG HYPERTENSIVE PATIENTS

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**ABSTRACT** The present study is an attempt to assess the effect of Rajyoga meditation on physical well-being among hypertensive patients. Rajyoga Meditation was taken as an independent variable whereas hypertensive 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 Hypertensive patients.

**KEYWORDS :** Rajyoga Meditation, Physical wellbeing, Hypertension

### INTRODUCTION

Chronic non communicable diseases are now known as modern epidemics. Heart attacks and strokes are now a global health problem knowing no boundaries of geography, gender or socio-economic status. Of all the countries in the world, India has prominently become land of patients suffering from hypertension, diabetes, and other psychosomatic diseases. Stress stimulates a specific part of one's nervous system medically known as sympathetic nervous system. As these nerves get stimulated the level of blood pressure increases. The nicotine present in tobacco is also responsible for high blood pressure. There is a natural tendency for high blood pressure as age advances. The flexibility of the blood vessels is inversely proportional to age. As age advances blood vessels become rigid leading to high blood pressure. But high blood pressure observed amongst persons who are not even fifty years old is possibly due to the stress and life style factors.<sup>1</sup>

Meditation is a complex phenomenon that involves several coordinated cognitive processes and autonomic nervous system alterations. Meditation as a form of therapy may facilitate positive effect resulting in a sense of physical and mental wellbeing in patients. Research has found meditation to produce positive and demonstrable stress reduction effects on brain and immune functions. Meditation has entered the mainstream of health care as a method of stress and pain reduction. Meditation concepts have been applied to clinical settings in order to measure effects on somatic motor function as well as cardiovascular and respiratory function. As a method of stress reduction, meditation has been used in hospitals in cases of chronic or terminal illness to reduce complications associated with increased stress that include depressed immune systems. While modern science has focused on formulating ingenious chemical compounds to help us overcome toxic emotions, traditional practices such as meditation, albeit more labour-intensive, is an important method for training the mind.<sup>2-4</sup> With this background, the present study was carried out to assess the impact of Rajyoga meditation on physical well-being among hypertensive patients.

### MATERIAL AND METHODS:

**Study design :** Hospital based Interventional study

**Sample size:** 25 patients in the age range of 30-70 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	Disease
Experimental group	25
Control group	25
Total	50

Physical parameters were blood pressure, pulse rate, physical symptoms/ complaints of disease and quantity of medicines the patient

needs to check/measure the improvement or decline in physical health (or disease). 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 of hypertensive subjects

- I- Category 1- (Patients with mild physical symptoms of the disease and needs no medicines)  
 II- Category 2 - (Patients with moderate physical symptoms of the disease and needs moderate quantity of medicines)  
 III- Category 3 - (Patients with severe physical symptoms of the disease and needs very high quantity of medicines)

Symptom s category	HT 1		Statistic al test	HT 2		Statistic al test
	PRE	POST		PRE	POST	
I	0 (0)	20 (80)	$\chi^2=34.7$ df 2 P<0.001	0 (0)	0 (0)	$\chi^2=3.9$ df 1 P<0.04
II	16 (64)	5 (20)		9 (36)	3 (12)	
III	9 (36)	0 (0)		16 (64)	22 (88)	

Figures in parentheses indicate percentage

Table 1: shows the distribution of symptoms category in pre and post of hypertensive subjects. In intervention group (HT-1), majority of the hypertensive 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 (HT-2), majority of subjects were in category III followed by category II. 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 ( $p<0.05$ ).

#### Table 2: Distribution of quantity of medicines in pre and post of hypertensive subjects.

Medicines category	HT 1		Statistic al test	HT 2		Statistic al test
	Pre	Post		Pre	Post	
I	0 (0)	4 (16)	$\chi^2=22.9$ df 2 P<0.0001	0 (0)	0 (0)	$\chi^2=5.33$ df 1 P<0.02
II	10 (40)	21 (84)		14 (56)	6 (24)	
III	15 (60)	0 (0)		11 (44)	19 (76)	

Figures in parentheses indicate percentage

2 shows the distribution of quantity of medicines in pre and post of hypertensive subjects. In intervention group (HT-1), majority of the hypertensive subjects shifted to category (I and 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 (HT-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 ( $p < 0.05$ ).

#### DISCUSSION:

The research findings show that there is significant positive effect of Rajyoga Meditation on physical well-being of Hypertensive patients. Vyas et al<sup>5</sup> found diastolic blood pressure and Heart rate to be significantly lower in both short and long term meditators as compared to non-meditators. Similar findings have been obtained by Haaga David (1995).<sup>6</sup> Patients with high blood pressure who learned the Transcendental meditation (TM) program showed a significant reduction of systolic and diastolic blood pressure after three months, in contrast to those randomly assigned to a control technique or to those who received education on how to reduce blood pressure through diet and exercise. Consistent findings have been obtained from other research studies.<sup>7-9</sup>

Our study results stating significant positive effect of Rajyoga Meditation on Physical Well-being of Hypertensive patients support the hypothesis that adoption and maintenance of this unique user-friendly Brahmakumaris Rajyoga Meditation lifestyle. Rajyoga Meditation (healthy lifestyle) is feasible, safe and compatible with other treatments in the amelioration of these diseases.

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