

A Study To Assess The Effectiveness Of Surya Namaskar In Reducing BP Among Prehypertensive Individuals At Selected Villages Of Ankleshwar.

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Abstract

Introduction: Pre hypertension, the intermediate stage between normal blood pressure and hypertension, is associated with subclinical atherosclerosis and target-organ damage. Pre hypertension and hypertension pose significant clinical and public health challenges for both economically developing and developed nations. Yoga therapy is a type of therapy that uses yoga postures, breathing exercises, meditation, and guided imagery to improve mental and physical health. The holistic focus of yoga therapy encourages the integration of mind, body, and spirit. Modern yoga therapy covers a broad range of therapeutic modalities, incorporating elements from both physical therapy and psychotherapy. Surya Namaskar is a dynamic yoga sequence that improves cardiovascular health, which is essential for endurance and stamina. **Aim:-** : To find out the effectiveness of Surya namaskar on blood pressure among pre-hypertensive clients. **Materials and Methods:** In the present study, quantitative approach, a Quasi experimental research design was adopted. Non-probability purposive techniques was used to select 80 prehypertensive individuals in selected area of Ankleshwar, Bharuch. The data-collection tool consisted of a personal profile, medical history and BP measurements. The data were analyzed and interpreted using descriptive and inferential statistics. **Results:** The present data revealed that the mean post-test systolic blood pressure mean difference is 12.75 and Mean post-test diastolic blood pressure mean difference is 3.32 which showing improvement in pre and post intervention. Mean systolic calculated 't' value 24.46 and mean diastolic calculated 't' value 15.61 was greater than tabulated 't' value which showing Conclusion: The above findings supported that Surya Namaskar was effective in reducing the blood pressure level among the pre-hypertensive clients.

KEY WORDS: Surya Namaskar, Pre-hypertensive, BP

Introduction

Good health is a pre-requisite of human productive and development process. In the past most individuals and societies viewed good health or wellness as the opposite or absence of disease. Health is a multidimensional concept and must be viewed broader perspective. An assessment of the client 's state of health is an important aspect of nursing.

“Prehypertension” is defined as systolic BP (SBP) 120 to 139 or diastolic BP (DBP) 80 to 89 mm Hg, based on “2 or more properly measured seated BP readings on each of 2 or more office visits.” (According to AHA).

About 33% urban and 25% rural Indians are hypertensive. Of these, 25% rural and 42% urban Indians are aware of their hypertensive status. Only 25% rural and 38% of urban Indians are being treated for hypertension. One-tenth of rural and one-fifth of urban Indian hypertensive population have their BP under control.

Jasmine Sharmilla (2017) conducted a quasi experimental study to evaluate the effectiveness of yoga therapy on blood pressure among adult with hypertension in nanchipalayam, Dharapuram among 60 hypertensive clients in experimental and control group. sample was taken by simple random sampling. The blood pressure was assessed by sphygmomanometer. The intervention was performing yoga therapy for 30 minutes for a period of 15 days. The study revealed that effectiveness of yoga therapy in reducing the blood pressure level in hypertensive clients. The result shows that while comparing the pre-test and post-test level of blood pressure in the experimental and control group the mean \pm SD of systolic pressure in experimental group was 134.16 ± 6.89 and in control group it was as 150.47 ± 9.97 , with p test value of A short yoga program for the patient to practice at home seems to have an antihypertensive effect, as well as a positive effect on self-rated quality of life compared to controls. This implies that simple yoga exercises may be useful as a supplementary blood pressure therapy in addition to medical treatment when prescribed by primary care physicians.

Research Methodology

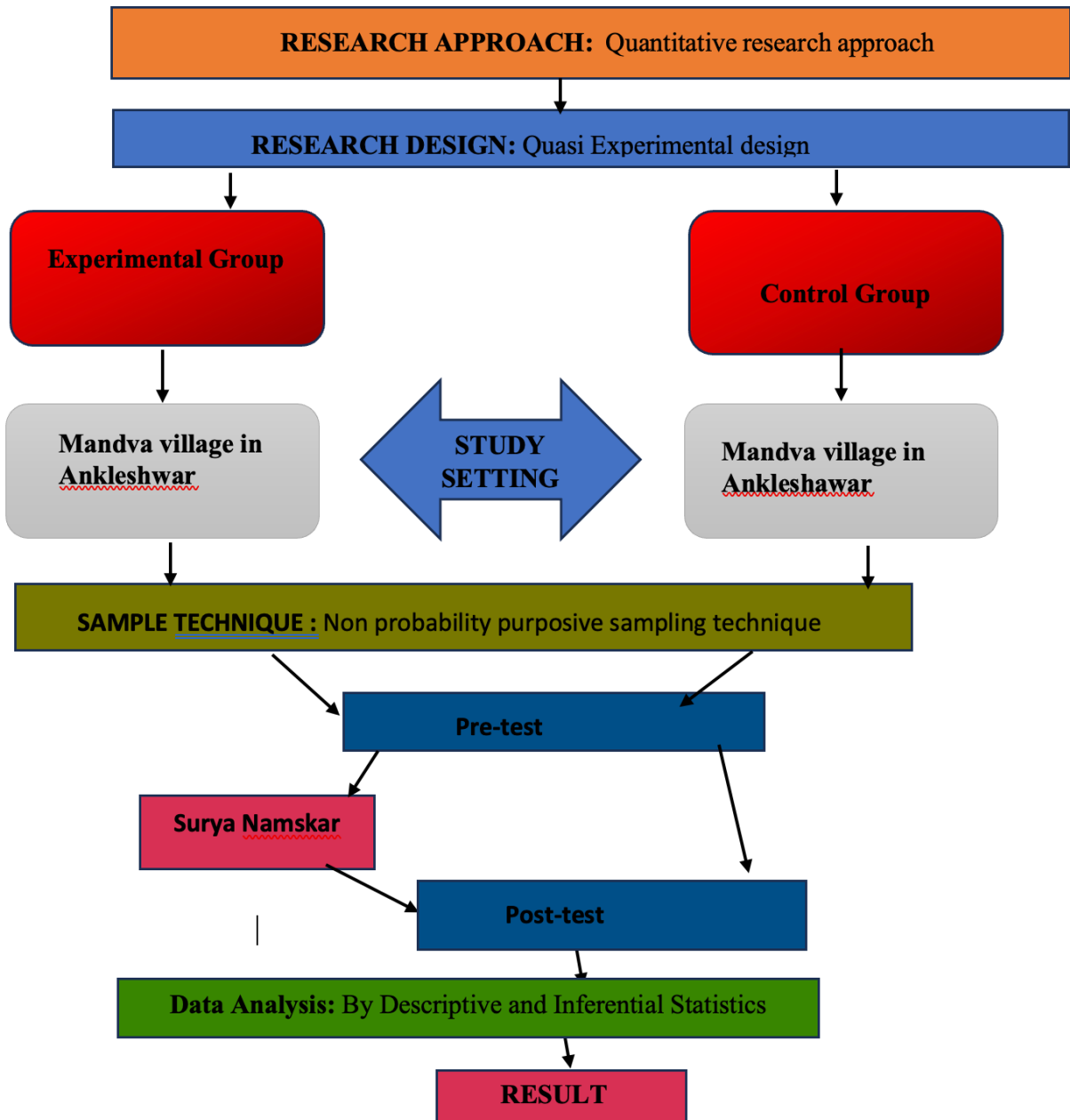


Figure: Schematic representation of research methodology

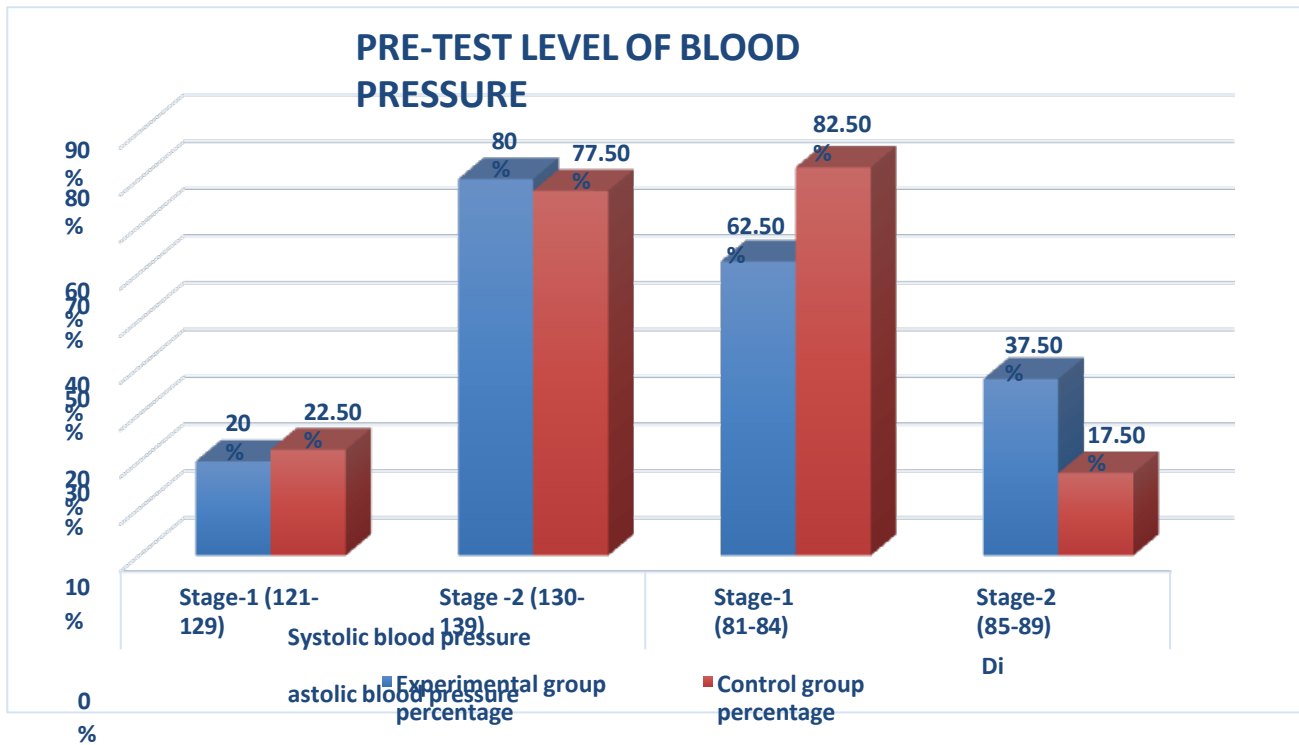


Figure 2: - Bar Graph Showing percentage wise distribution of samples based on PRE-TEST level of Systolic blood pressure and diastolic blood pressure in experimental group and control group.

Table 1. Frequency and percentage wise distribution of POST -TEST level of Systolic blood pressure and diastolic blood pressure of samples in experimental group and control group.

Level of blood pressure		Experimental group		Control group	
		f	%	f	%
Systolic blood pressure	Normal (<121)	22	55%	00	00%
	Stage-1 (121-129)	18	45%	05	12.5%
	Stage-2 (130-139)	00	00%	35	87.5%
Diastolic blood pressure	Normal (< 81)	29	72.5%	00	00%
	Stage-1 (81-84)	11	27.5%	35	87.5%
	Stage-2 (85-89)	00	00%	05	12.5%

Section II: findings related to effectiveness of Surya Namskar on post-test level of blood pressure among pre-hypertensive clients in experimental group and control group.

Table 2: Effectiveness of Surya Namsakar on level of blood pressure among client with Pre hypertension in control group

Group	Blood pressure	Test	Mean	SD	Mean difference	DF	Paired "t" test	Table value
Experimental Group	Systolic blood pressure	Pre-test	133.97	3.40	12.75	39	24.76	2.02
		Post test	121.22	1.77				
	Diastolic blood pressure	Pre-test	83.62	1.46	3.32	39	15.61	2.02
		Post test	80.3	0.51				

Table 3: Effectiveness of Surya Namsakar on level of blood pressure among client with Pre hypertension in control group

Group		Test	Mean	SD	Mean difference	DF	Paired "t" test	Table value
Control Group	Systolic blood pressure	Pre-test	133.62	3.54	0.275	39	0.67	2.02
		Post test	133.35	3.19				
	Diastolic blood pressure	Pre-test	82.77	1.65	0.225	39	1.71	2.02
		Post test	82.55	1.46				

The result was supported by Arpith M.N. et al (2019) conducted study on the effect of selected asanas and pranayam on mild to moderate hypertension. The present study was conducted among 80 hypertensive patients trained in yoga at S-VYASA, Mysuru and 80 control group of hypertensive patients not practicing yoga attending Dept of cardiology, KR Hospital, Mysuru. The parameters assessed were Pulse Rate, Systolic Blood Pressure, Diastolic Blood Pressure and Pulse Pressure. They were measured at baseline (before start of yoga), at 12 weeks and 24 weeks of intervals. The data was analyzed using paired and unpaired t test. Pulse rate, Systolic blood pressure, Diastolic blood pressure and pulse pressure were observed between yoga and control group. Statistically significant reduction was observed in Pulse Rate, Systolic Blood Pressure, Diastolic Blood Pressure and Pulse Pressure

among yoga practitioners. These changes in blood pressure are probably due to reduced stress and decreased sympathetic activity attributable to Yoga.

Recommendation:

On the basis of the study findings the following recommendations were made for further research.

1. A similar study can be conducted with increased in the sample size.
2. A similar study can be conducted among another hypertensive client.
3. A similar study can be conducted in various community settings.
4. The similar study can be conducted in all stress related problems like depression and anxiety.

CONCLUSION

The present study findings that the mean post-test blood pressure level of experimental group is significantly less than the mean post-test blood pressure level of control group with the mean difference of 12.12 and the calculated unpaired 't' value (t 20.95) was greater than tabulated 't' value (t =2.02) which was statistically proved at 0.05 level of significance. In comparison of mean post test diastolic blood pressure level in control group was 82.55 and in experimental group mean post-test diastolic blood pressure level of samples was 80.3. the mean post-test blood pressure level of experimental group is significantly less than the mean post-test blood pressure level of control group with the mean difference of 2.25 and the calculated unpaired 't' value (t= 9.151) was greater than tabulated 't' value (t =2.02) which was statistically proved at 0.05 level of significance. From the result of the study it was concluded that yoga therapy was effective in reducing the blood pressure level among clients with pre-hypertension. From the result of the study it was concluded that Surya namskar was effective in reducing the blood pressure level among clients with pre-hypertension.

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Conflict of interest: None

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