

Human Journals

## Research Article

April 2024 Vol.:27, Issue:4
© All rights are reserved by V.Mabal Abisha et al.

## Knowledge on Alternative Treatment Modalities for Hypertension



Mrs.V.Mabal Abisha ${ }^{1}$, Dr..Kavitha ${ }^{2}$, Prof.Dr.M. Jeyagowri ${ }^{3}$

${ }^{1}$ Assistant Professor, ${ }^{2}$ Vice Principal, ${ }^{3}$ Pricnipal, College of Nursing, East Cost Institute of Medical Sciences, Puducherry. India.

Submitted: 21 March 2024
Accepted: 27 March 2024
Published: $\quad 30$ April 2024

ijsrm.humanjournals.com

Keywords: Alternative treatment modalities, hypertension, knowledge

## ABSTRACT

An estimated 1.28 billion adults aged 30-79 years worldwide have hypertension. Less than half of the adults (42\%) with hypertension are diagnosed and treated. Approximately 1 in 5 adults $(21 \%)$ with hypertension have it under control. Only about $12 \%$ of people with hypertension in India have their blood pressure under control. At present we are witnessing a highly receptive environment where the value of AYUSH systems in healthcare is widely recognized. The present study is aimed to evaluate the effectiveness of a structured teaching programme on alternative treatment modalities for hypertension among subjects with hypertension. One group pre test and post test study was conducted among 30 subjects with hypertension, who were selected by convenient sampling technique. The data was collected by self-structured questionnaire. Post test was conducted after one week of structured teaching programme. The results showed that, the structured teaching programme was effective on improving knowledge among the subjects.

## INTRODUCTION

Globally, hypertension is a major public health problem due to its high prevalence all around the globe. Other than regular widely used allopathic treatment tropical therapy also has cure effect on hypertension, which followed by a few percentages of population. Worldwide 1.28 billion adults aged 30-79 years have hypertension, two thirds living in low- and middle-income countries. An estimated $46 \%$ of adults with hypertension are unaware that they have the condition. Less than half of adults (42\%) with hypertension are diagnosed and treated. Approximately 1 in 5 adults ( $21 \%$ ) with hypertension have it under control.

Hypertension is a major cause of premature death worldwide. Nearly $63 \%$ of total deaths in India are due to non-communicable diseases. Hypertension Control Initiative India has set a target of $25 \%$ relative reduction in the prevalence of hypertension by 2025.

Only about $12 \%$ people with hypertension in India have their blood pressure under control. Studies revealed that long queue, invasive \& strange diagnostic procedures, mistrust towards allopathic management are factors of poor health seeking behavior. On the other hand, there is an emerging use of complementary treatment as an alternative to chemical medicine which could have many reasons including side effects of other alternative treatments. Putting these together with positive beliefs and experiences of complementary and alternative treatment among people and their traditions makes them to show more interest to trust and use indigenous medicine.

Alternative medicine is a term that describes medical treatments that are used instead of traditional (mainstream) therapies. There are various types of alternative treatment like Acupuncture, Ayurveda, Homeopathy, Naturopathy, and Chinese or oriental medicine. AYUSH is commonly following in India.

Preventive Ayurveda insisted to stop addictions like smoking, alcohol, reduce non - veg diet and eating more greens and vegetables, management of routine and be physically active and do regular yoga or some relaxing exercise. Eat a diet filled with fruits, whole grains, low - fat dairy, nuts, beans, celery, carrot, garlic, flaxseed, flaxseed oil, turnips, tulsi tea, green tea, ginger, cardamom tea, orange juice, coconut water, watermelon, black plum, banana, almond, walnuts, olive oil, etc.

## ijsrm.humanjournals.com

According to Siddha, diet and lifestyle are the major factors which influence susceptibility to this disease. One of the steps to lower your high blood pressure is to start using the DASH Diet. In research studies, people who were in the DASH diet lowered their blood pressure within 2 weeks. Meditation techniques appear to produce small yet meaningful reductions in blood pressure either as monotherapy or in conjunction with traditional pharmacotherapy. Transcendental meditation and mindfulness-based stress reduction may produce clinically significant reductions in systolic and diastolic blood pressure. Yoga and pranayama practice regulate the blood circulation to all parts of the body and oxygenates the blood, conscious breathing through pranayama helps lower blood pressure and stabilizes the nervous system. Music therapy has been investigated in many studies to reduce the blood pressure in the hypertensive population and it is found effective in response. Along with that being happy and laughing makes significant reduction in the blood pressure. Involvement pet therapy or gardening will relieve stress, and helps to reduce blood pressure.

AYUSH can play an important role in realizing the dream of "New India" by providing quality health care and medical care for its citizens. At present we are witnessing a highly receptive environment where the value of AYUSH systems in healthcare is widely recognized.

## STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of a structured teaching program on knowledge, regarding alternative treatment modalities for hypertension among subjects with hypertension at selected areas in Puducherry.

## OBJECTIVES

1. To assess the existing knowledge regarding alternative treatment modalities of hypertension among subjects with hypertension at selected areas in Puducherry.
2. Assess the effectiveness of a structured teaching program on knowledge regarding alternative treatment modalities of hypertension among subjects with hypertension at selected areas in Puducherry.
3. To associate the post-test level of knowledge regarding alternative treatment modalities of
hypertension with selected demographic variables of subjects with hypertension at selected areas at Puducherry.

## HYPOTHESIS

H1: There will be a significant difference in knowledge on alternative treatment modalities of hypertension among subjects with hypertension before and after the structured teaching program.

H2: There will be a significant association between knowledge on alternative treatment modalities of hypertension and selected demographic variables of subjects with hypertension.

OPERATIONAL DEFINITIONS: In this study,

EFFECTIVENESS: It refers to the outcome of a structured teaching programme on knowledge regarding alternative treatment modalities of hypertension among subjects with hypertension.

STRUCTURED TEACHING PROGRAMME: It refers to the information given using powerpoint presentation about knowledge regarding alternative treatment modalities of hypertension.

KNOWLEDGE: It refers to the information gained regarding management and alternative treatment modalities of hypertension. It is measured by a structured questionnaire.

ALTERNATIVE TREATMENT MODALITIES OF HYPERTENSION: It refers to group of diverse medical and health care systems, practices, and products that are not generally considered the part of conventional medicine which especially deal with care and control of hypertension.

SUBJECTS WITH HYPERTENSION: It refers to patients with chronic systemic illness of increased blood pressure (Hypertension) which is generally defined as a systolic blood pressure greater than 140 mm of Hg and diastolic blood pressure greater than 90 mm of Hg .

SELECTED AREAS: It's a limited geographical place where people live together. In this study it refers a specific geographic area where the investigator decided to collect data.

## ijsrm.humanjournals.com

## Methodology

A Quantitative one-group pre-test and post-test approach was adopted for this study. The study was conducted among 30 patients with hypertension who fulfilled the sample selection criteria, at pitchaveerampet village in Puducherry. after obtaining permission from the authority convenient sampling technique was used. The objectives and data collection procedure was clearly explained to the samples before obtaining consent. The data was collected by using selfadministered structured questionnaire. The questionnaire consisted of two sections, in which section 1 was to assess the demographic data and section 2, used to assess the knowledge with 30 multiple choice questions. After the pre-test, the someday structured teaching programme was administered. The session was conducted for 30 minutes. A post-test was conducted one week after the structured teaching program with the same questionnaire.


Figure : Schematic diagram of research methodology

## RESULTS

## Findings of Demographic Data

Regarding demographic characteristics of samples, the majority $13(43.3 \%)$ of the samples were in the age group of 51-60 years, $8(26.6 \%)$ were 41-50 years, $5(16.6 \%)$ were above 60 years and $` 14$ (13.5) between 30-40 years. Regarding gender majority $17(73.3 \%)$ were males, and 13(43.3\%) were females. In account of religion 25(83.3\%) were Hindus, 2(6.6\%) were Muslims, and $1(3.3 \%)$ was Christian. Among all samples majority $15(50 \%)$ finished primary school education, $9(26.6 \%)$ are illiterate, $4(13.3 \%)$ were graduates, and $3(10 \%)$ have finished higher secondary education. Regarding occupation, the majority 11 ( $36.6 \%$ ) were coolies, 8 ( $26.6 \%$ ) were unemployed, $6(20 \%)$ were self-employed and $4(13.3 \%)$ were private employees. Regarding monthly income majority $14(46.6 \%)$ had > Rs.3000, 7(23.3\%) had above Rs.5000, 6(20\%) had Rs.3001-4000 and only 3(10\%) had Rs.4001-5000. Majority 21(83.3\%) were married, 3(10\%) were unmarried, and only $2(6.6 \%)$ were widows. Out of 30 samples, $21(66.6 \%)$ were from nuclear family and only $10(33.3 \%)$ were from the joint family. In the account of habits, majority 22(73.3\%) had no habits such as tobacco chewing, smoking, and alcoholism, 5 ( $16.6 \%$ ) had the habit of chewing tobacco, and only $3(10 \%)$ had the habit of smoking.

## Pre and post test knowledge regarding alternative treatment modalities.

Table 1: knowledge regarding alternative treatment modalities for hypertension among subjects with hypertension

| (N=30) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Level of knowledge |  |  |  |  |
|  | Pre-test |  |  | Post test |  |
|  | Frequency | Percentage | Frequency | Percentage |  |
| Inadequate | 19 | 63.3 | 0 | 0 |  |
| Moderately <br> adequate | 11 | 36.6 | 4 | 13.3 |  |
| Adequate | 0 | 0 | 26 | 86.3 |  |

Table 1, reveals that in the pre-test $11(36.6 \%)$ of patients with hypertension had moderately adequate knowledge. $19(63.3 \%)$ of them had inadequate knowledge. While in post-test 26(86.3\%) had adequate knowledge, 4(13.3\%) had moderately adequate knowledge regarding
alternative treatment modalities for hypertension.

## Effectiveness of structured teaching program

Table 2: Effectiveness of structured teaching program on alternative treatment modalities for hypertension clients
( $\mathrm{N}=30$ )

| S.no. | Variables | Mean | Mean <br> difference | Standard <br> deviation | P - Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Pretest | 9.266 |  | 3.64 | $\mathrm{t}=15.05$ |
| 2. | Post-test | 23.5 | 14.234 | 3.35 | $\mathrm{P}=0.05$ |

Table 2 shows that the mean pre test score among patietns with hypertension was 9.266 with a standard deviation of 3.64 and the post test score was 23.5 with the standard deviation of 3.35 . The difference between pre and post-test score was 14.234 . The calculated ' $t$ ' value of 15.05 was statistically significant at 0.01 level ( $\mathrm{p}<0.05$ ).

Chi-square test was carried out, showed that no significant association was found between pre test knowledge with selected demographic variables such as age in years, sex, religion, educational status, occupation, family monthly income, marital status, type of family and habits.

## Discussion

The first objective was to assess the existing knowledge regarding alternative treatment modalities of hypertension among hypertensive patients. In pre-test $11(36.6 \%)$ of patients with hypertension had moderately adequate knowledge. 19(63.3\%) of them had inadequate knowledge. While in post-test 26(86.3\%) had adequate knowledge, 4(13.3\%) had moderately adequate knowledge regarding alternative treatment modalities for hypertension. The above findings were supported by Taye KebedeI, et.al (2021) in his study on Knowledge, attitude and practices of lifestyle modification and associated factors among hypertensive patients, at Yekatit General Hospital of East Africa. The results showed that $67.7 \%$ [ $95 \%$ CI ( $65.32 \%, 70.08 \%$ )] were knowledgeable; and $54.0 \%$ [ $95 \%$ CI $(51.34 \%, 56.6 \%)$ ] were reported to have favorable attitudes towards lifestyle modification.

The second objective was to assess the effectiveness of structured teaching program on knowledge regarding alternative treatment modalities among subjects with hypertension. The mean pre-test score among patietn with hypertension was 9.266 with the standard deviation of 3.64 and the post test score was 23.5 with the standard deviation of 3.35 . The difference between pre and post test score was 14.234 . The calculated ' $t$ ' value 15.05 was statistically significant at 0.01 level ( $\mathrm{p}<0.05$ ).

Hence, hypothesis H1, there will be a significant difference in knowledge on alternative treatment modalities for hypertension among subjects with hypertension before and after structured teaching programme was accepted.

The third objective was to associate the pretest level of knowledge regarding alternative treatment modalities for hypertension among subjects with hypertension and selected demographic variables. The analysis revealed that no association was found between pre test knowledge on alternative treatment modalities for hypertension with selected demographic variables such as age in years, sex, religion, educational status, occupation, family monthly income, marital status, type of family and habits.

Hence, hypothesis H2, There will be a significant association between pretest knowledge on alternative treatment modalities of hypertension and selected demographic variables of subjects with hypertension.

## Conclusion

Most of the subjects with hypertension had inadequate and moderate knowledge in regarding alternative treatment modalities for hypertension which shows the imperative need to educate the subjects on alternative treatment modalities of hypertension.

## REFERENCES

1. World Health Organization , Non ,- communicable diseases, Fact sheet 2017 , ( cited 2017 May 15
2. Lalkhen H, Mash R , Multimorbidity in non - communicable diseases in South African Primary health care . S Afr Med J. 2015 ; 105 ( 2 ) : 134-138.
3. Mary Beth M.R., Low S .Y . and Chung P . Y. Study to assess the knowledge on self - Blood Pressure Monitoring among hypertensive patientsin selected wards of Hospital Lam Wah Ee, Malaysia, School of Health Sciences, International Medical University, Kuala Lumpur, Malaysia, Ie JSME , 2012; 6 ( 2 ) : PP 43 - 45 .
4. Al - Wehedy A ., Abd Elhameed S .H . and Abd El - Hameed D ., Effect of Lifestyle Intervention Program on

## ijsrm.humanjournals.com

Controlling Hypertension among older Adults, Journal of Education and Practice, 2014 ; 5 ( 5 ): : 61.
5. Leconte M .M. and Ismael V . , Teaching plan for High Blood Pressure Management, College ofTechnology , New York City, 2012, P 126.
6. Allender J., Rector C ., and Warner K ., Community Health Nursing : Promoting and Protecting the publics Health , 7 - Edition ., New York : Lippincott, Williams \& Wilkins, 2010 ; PP 300.
7. Cunha J.P .and Marks JW . High blood pressure (Hypertension ) . Accessed 27 February 2011.

