# Evaluate the Effectiveness of Structured Teaching Programme on Knowledge Regarding Home Remedies of Hypertension among Hypertensive Clients at S.V.S Hospital, Mahabubnagar, Telangana. 

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#### Abstract

Objectives of the study:

To assess the existing knowledge of regarding home remedies of Hypertension by pretest. To plan and implement structured teaching programme on knowledge regarding Home remedies of Hypertension among hypertensive clients.

To evaluate the effectiveness of structured teaching programme on knowledge regarding Home remedies of Hypertension among hypertensive clients.

To find out the association between pre and post test knowledge scores regarding Home remedies of Hypertension among hypertensive clients with their selected demographic variables.

\section*{Methodology}

The research design adopted for the study was one group pre test and post test, which belongs to pre experimental design. 30 hypertensive clients were selected by using simple random sampling technique of probability sampling technique method. A structured interview schedule with questionnaire was used for data collection which consisted of two parts. Part A consists of11 demographic data of the hypertensive clients and part B consists of 32 items of knowledge regarding home remedies of hypertension. A pilot study was conducted in Sushrutha People's Hospital, Mahabubnagar, Telangana. From 4/5/2018to 11/05/2018, after obtaining formal permission from Residential Director of Sushrutha People's Hospital to assess the feasibility and reliability of the tool. The obtained value of Karl Pearson correlation of coefficient was ' $r$ ' $=0.8$, which infers the tool as reliable. The main study was conducted from 24/05/18 to $31 / 05 / 18$. The collected data was analyzed by using both descriptive and inferential statistics such as Percentage distribution, Mean, Standard deviation, Paired ' $t$ 'test and Chi square test at 0.001 level of significance with 29 df .


## RESULTS

In regards frequency and percentage distribution based on knowledge scores of hypertensive clients in pre test and post test about home remedies of hypertension. Below average knowledge scores ( $0-34.9 \%$ ) indicates the scores between 0 to 21, average knowledge scores ( $35-64.9 \%$ ) indicates the scores between 22-31, and above average knowledge scores ( $65-100 \%$ ) indicates the scores between 32-44. $23(76.7 \%$ ) had below average knowledge score in pre test where as in post test none were found with below average knowledge score in post test. 7 ( $23.3 \%$ ) had average knowledge score in pre test where as $4(13.3 \%$ ) had average knowledge score in post test. None were found above knowledge level in pre test but surprisingly $26(86.7 \%)$ had above knowledge score in post test. Frequency and percentage based on knowledge levels of the hypertensive clients about general information of hypertension 22(73.3\%) hypertensive clients had below average knowledge scores in pre test where as in post test none were found with below average knowledge scores. $7(23.3 \%)$ hypertensive clients had average knowledge scores in pre test, where as in post $2(6.7 \%$ ) found in average knowledge score. Above average score in pre test $1(3.4 \%)$ where as in post test 28 ( $93.3 \%$ ) hypertensive clients had above average knowledge scores in post test. frequency and percentage distribution of knowledge score of hypertensive clients about home remedies of hypertension $23(76.7 \%$ ) hypertensive clients had below average knowledge score in pre test, where as in post test none were found with below average knowledge scores. $7(23.3 \%)$ hypertensive clients had average knowledge scores in pre test, where as in post test $4(13.3 \%)$ hypertensive clients had average knowledge scores. None were found in below average knowledge scores in pre test but surprisingly $26(86.7 \%$ ) hypertensive clients had above average knowledge scores in post test.pretest mean was 12.83 and that of post test was 37.10 , pre test standard deviation was 4.74 and that of post test was 4.46 the calculated ' $t$ ' value was 20.82 , which is higher than the table ' t ' value 3.65 at 29 df with 0.001 level of significance. it shows that there is significant difference ( $\mathrm{p}<0.001$ )in pre test and post test knowledge scores .Hence, it is concluded that after structured teaching programme on home remedies of hypertension, the knowledge scores of hypertensive clients have been increased. The formulated hypothesis $\mathrm{H}_{1}$ was accepted

Chi square value was computed to determine the association between the post test knowledge score with selected demographic variables of hypertensive clients. Significant association was not found between the post test knowledge score with demographic variables of hypertensive clients. Hence $\mathrm{H}_{2}$ was rejected.

## Interpretation and conclusion

The study has showed that was an overall improvement in the knowledge levels of the hypertensive clients after implementation of structured teaching programme , and there must be a constant reinforcement to the nurses by conducting various educational programmes.

## INTRODUCTION:

Health is a condition expressing the adequate functioning of the human organism. In human body, all the organs are vital and essential. The normal functioning of the heart include adequate blood circulation and oxygen supply needed. In blood circulation some of the alterations may arise in pressure changes. It can lead to hypertension or hypotension.

Hypertension (HTN) or high blood pressure is a cardiac chronic medical condition in which the systemic arterial blood pressure is persistently elevated. Blood pressure involves two measurements, systolic and diastolic, which are the maximum and minimum blood pressure respectively. Normal blood pressure is at $120 / 80 \mathrm{mmHg}$. High blood pressure is anything above $140 / 80 \mathrm{mmHg}$.

Hypertension is one of the most crucial health problems and the most common chronic disease in developed and underdeveloped countries. It is called the silent killer which is usually diagnosed incidentally.Generally the first line of defense for hypertension is drug therapy. But before starting drug therapy, one should try lifestyle changes and some home remedies for high blood pressure.Medications can be harsh, and while best avoided if possible. Natural remedies can interfere with their functioning. Learning how to lower high blood pressure with home remedies are the thing least can do to help control high blood pressure.

Hypertension is a major health problem throughout the world because of its high prevalence and its association with increased risk of cardio vascular disease, advance in the diagnosis and treatment of hypertension have played a major role in recent dramatic decline in the coronary artery disease and stroke mortality in industrialized country.Globally nearby one billion people have high blood pressure of these two thirds are in the developing countries. Hypertension kills nearly 8 million people every year, worldwide and nearly 1.5 million people each year.

In India Recent 2017 studies have reported that shown that hypertension is present in 25-30 per cent urban and 10-20 per cent rural subjects in India. This translates into an approximate population burden of 100-110 million persons with high blood pressure (BP).

The Telangana state has the second highest rate of high blood pressure in the country, with 39 per cent men and 29 per cent women are found to suffer from hypertension, according to the National Institute of Nutrition.

In SVS hospital annually 40 per cent of cases are admitted with the complaints of hypertension in medical ward and 30 per cent of cases are admitted hypertension associate diseases in casualty.

## Hypotheses:

- $\quad \mathbf{H}_{1}$ : There will be a significant difference between the pretest and post test knowledge scores regarding home remedies of hypertension among Hypertensive clients.
- $\quad \mathbf{H}_{2}$ : There will be a significant association between the pre \& post test knowledge scores regarding home remedies of Hypertension among Hypertensive clients. With their selected demographic variables.


## Conceptual frame work

A conceptual frame work Based on Roy's adaptation model is used to guide nursing practice, select research variables and helps in clinical assessment and intervention and the model is best suitable for the study since the hypertensive clients need to adapt themselves to their environment throughout the life and the home remedies of hypertension will reduce the mortality and morbidity. So the investigator used the Roy's adaptation model.

## REIEW OF LIEATURE

- Studies related to the knowledge of hypertensive clients on hypertension.
- Studies related to effectiveness of structured teaching programme and various other educational modalities on the knowledge of home remedies of hypertension.
- Studies related to effectiveness of home remedies on hypertension.



## ANALYSIS AND INTERPRETATION

Data was presented in following headings.
Section A: Frequency and percentage distribution of Hypertensive clients according to their selected demographic variables.
Section B: Frequency and percentage of knowledge scores of Hypertensive clients on Home remedies of Hypertension according to the level of knowledge scores in pre test and post test.

Section C: Paired t test of significance for knowledge scores of Hypertensive clients on Home remedies of Hypertension in pre test and post test and comparing pre test and post test knowledge scores.

Section D: Association between knowledge scores of Hypertensive clients on Home remedies of Hypertension in accordance with selected demographic variables.

Frequency and percentage of distribution of knowledge score of Hypertensive clients according to level in pre test and post test on Home remedies of Hypertension ( $\mathbf{n}=30$ )

| Categorization <br> (knowledge scores) | Pre test |  | Post test |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Frequency | Percentage <br> $(\%)$ | Frequency | Percentage <br> $(\%)$ |
| Below average $(0-34.9 \%)$ |  |  |  |  |
| Average (35-64.9\%) | 21 | 70 | 0 | 0 |
| Above average $(65-100 \%)$ | 9 | 30 | 4 | 13.3 |



Pre test and post test mean knowledge scores and paired t-test of significance on Home remedies of Hypertension among Hypertensive clients.

| Knowledge scores | Pre test | Post test |
| :--- | :--- | :--- |
| Mean | 12.83 | 37.10 |
| Standard Deviation | 4.74 | 4.46 |
|  | 20.82 |  |
| Paired t-test |  | $\mathrm{P}<0.001$ |



Association between pre test and post test knowledge scores of Hypertensive clients on Home remedies of Hypertension with general education. ( $\mathrm{n}=30$ )

| General <br> Education | Level of Knowledge |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pre test |  |  |  |  |  |  | Post test |  |  |  |  |  |  |
|  | Below <br> Average |  | Average |  | Above Average |  | Total <br> Fre | Below <br> Average |  | Average |  | Above Average |  | $\begin{array}{\|l} \hline \text { Total } \\ \text { Fre } \\ \hline \end{array}$ |
|  | F | \% | F | \% | F | \% |  | F | \% | F | \% | F | \% |  |
| Illiterate <br> $10^{\text {th }}$ class <br> Inter <br> Degree | $\begin{aligned} & 15 \\ & 6 \end{aligned}$ | $\begin{aligned} & 50 \\ & 20 \end{aligned}$ | $\begin{aligned} & 4 \\ & 2 \\ & 3 \end{aligned}$ | $\begin{aligned} & 13.3 \\ & 6.7 \\ & 10 \end{aligned}$ |  |  | $\begin{aligned} & 15 \\ & 10 \\ & 2 \\ & 3 \end{aligned}$ | - - - - |  | $3$ | $\begin{aligned} & 10 \\ & 3.3 \\ & - \end{aligned}$ | $\begin{aligned} & 12 \\ & 9 \\ & 2 \\ & 3 \end{aligned}$ | $\begin{aligned} & \hline 46.7 \\ & 30 \\ & 6.7 \\ & 10 \end{aligned}$ | $\begin{aligned} & 15 \\ & 10 \\ & 2 \\ & 3 \end{aligned}$ |
| Total | 21 | 70\% | 9 | 30\% | - | - | 30 | 0 | 0 | 4 | 13.3\% | 26 | 86.7\% | 30 |

Pre test $\chi 2=11.59$
Post test $\chi 2=13.75$

3 df
3df
$\mathrm{P}<0.05$
$\mathrm{P}<0.05$

The above table shows that association between pre test and post test knowledge scores on Home remedies of Hypertension among Hypertensive clients with general education. For pre test the table value of $\chi 2$ at 0.05 level of significance with 3 df is 7.82 , as the calculated value of $\chi 2$ (11.59) was more than the table value that shows there wassignificant association between the level of knowledge on Home remedies of Hypertension among Hypertensive clients with general education. For post test the table value of $\chi 2$ at 0.05 level of significance with 3 df is 7.82 , as the calculated value of $\chi 2$ (13.75) was more than the table value that shows there was significant association between the level of knowledge on Home remedies of Hypertension among Hypertensive clients with general education.

Association between pre test and post test knowledge scores of Hypertensive clients on Home remedies of Hypertension with source of information on hypertension.
( $\mathrm{n}=30$ )

| Source of Information on hypertension | Level of Knowledge |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pre test |  |  |  |  |  |  | Post test |  |  |  |  |  |  |
|  | Below <br> Average |  | Average |  | Above Average |  | Total Fre | Below <br> Average |  | Average |  | Above Average |  | Total Fre |
|  | F | \% | F | \% | F | \% |  | F | \% | F | \% | F | \% |  |
| $\begin{aligned} & \text { Yes } \\ & \text { No } \end{aligned}$ | $\begin{aligned} & 1 \\ & 20 \end{aligned}$ | $\begin{aligned} & 3.3 \\ & 66.7 \end{aligned}$ | 1 8 | $\begin{aligned} & 3.3 \\ & 26.7 \end{aligned}$ | 2 | - | $\begin{aligned} & 2 \\ & 28 \end{aligned}$ | - | - | - | $13.3$ | $\begin{aligned} & 2 \\ & 24 \end{aligned}$ | $\begin{aligned} & 6.7 \\ & 80 \end{aligned}$ | $\begin{aligned} & 2 \\ & 28 \end{aligned}$ |
| Total | 21 | 70\% | 9 | 30\% | - | - | 30 | 0 | 0 | 4 | 13.3\% | 26 | 86.7\% | 30 |

Pre test $\chi 2=0.41$
Post test $\chi 2=0.33$

1 df
1df
$\mathrm{P}<0.05$
$\mathrm{P}<0.05$

The above table shows that association between pre test and post test knowledge scores on Home remedies of Hypertension among Hypertensive clients with source of information on hypertension. For pre test the table value of $\chi 2$ at 0.05 level of significance with 1 df is 3.84 , as the calculated value of $\chi 2$ ( 0.41 ) was less than the table value that shows there was no significant association between the level of knowledge on Home remedies of Hypertension among Hypertensive clients with source of information on hypertension. For post test the table value of $\chi 2$ at 0.05 level of significance with 1 df is 3.84 , as the calculated value of $\chi 2(0.33)$ was less than the table value that shows there was significant association between the level of knowledge on Home remedies of Hypertension among Hypertensive clients with source of information on hypertension.

## DISCUSSION

The study findings have been discussed in terms of objectives stated and other research findings.

## CONCLUSION

The following conclusion drawn from the findings of the present study with regards to knowledge of hypertensive clients, 21(70\%)hypertensive clients had below average knowledge scores in pre test, where as in post none were found with below average knowledge scores. $9(30 \%)$ of the hypertensive clients had average knowledge scores in pre test where as in post test $4(13.3 \%$ ) had average knowledge scores, in post test none were found to have above average knowledge scores but surprisingly $26(86.7 \%)$ hypertensive clients had above average knowledge scores, thus indicating that the structured teaching programme was effective in increasing the knowledge of hypertensive clients regarding home remedies of hypertension.

## The first objective to assess the existing knowledge regarding home remedies of Hypertension by pretest.

With regard to knowledge of hypertensive clients, $21(70 \%)$ hypertensive clients had below average knowledge scores in pre test where as in post test none were found with below average knowledge scores $9(30 \%)$ of the hypertensive clients had average knowledge scores in pre test where as in post test $4(13.3 \%)$ had average knowledge scores. None were found with above average knowledge scores in pre test but 26(86.7\%) hypertensive clients had above average knowledge scores in post test. These differences indicating that the structured teaching programme was effective in increasing the knowledge of hypertensive clients regarding home remedies of hypertension.

The second objective to plan and implement structured teaching programme knowledge regarding Home remedies of Hypertension among hypertensive clients.

Planned, developed, implemented and administered structured teaching programme in view of improving knowledge of hypertensive clients regarding home remedies of hypertension.

Structured teaching programme on home remedies of hypertension was conducted it was 60 minutes of structured teaching programme.

## The third objective To evaluate the effectiveness of structured teaching programme on knowledge regarding Home remedies of Hypertension among hypertensive clients.

Pre test mean was 12.83 and that of post test was 37.10 , pre test standard deviation was 4.74 and that of post test was 4.46 . the calculated ' $t$ ' value was 20.82 which is higher than the table ' $t$ ' value 3.65 at 29 df with 0.001 level of significance it shows that there is significant difference ( $\mathrm{P}<0.001$ ) in pre test \& post test knowledge scores.

The present study supported by Padmini Devi M Rao St. John's National Academy of Health Sciences Delhi. Quasi-experimental study was conducted on assess the effectiveness of structured teaching programme on knowledge regarding home remedies of hypertension. 150 subjects were selected by using systematic random sampling and data was obtained by using questionnaire. The results shown that the current study, regarding correct knowledge of the studied group before and after the health education program and the different aspects of hypertension, showed that there was a significant improvement of the patients' knowledge after structured teaching programmeconcerning the correct knowledge of the definition of hypertension, signs and symptoms of hypertension and home remedies of hypertension ( $\mathrm{P}<0.001$ ). The researcher concluded that Patient education and public enlightenment are imperative.
The fourth objective to find out the association between pre and post test knowledge scores regarding Home remedies of Hypertension among hypertensive clients.

Chi square value was computed to determine the association between the post test knowledge score with selected demographic variables of hypertensive clients. Significant association was not found between the post test knowledge score with selected demographic variables of hypertensive clients on home remedies of hypertension with age, gender, occupation, area of living, duration of illness, family history of hypertension and practices Hence $\mathrm{H}_{2}$ was rejected. And significant association was found between the post test knowledge score with selected demographic variables of hypertensive clients on home remedies of hypertension with general education and source of information Hence $\mathrm{H}_{2}$ was acceped.

## IMPLICATIONS

Several implications have been derived from the study for Nursing education, Nursing practice, Nursing Administration and Nursing Research.

## Nursing Education

Nurse educators play a vital role in improving the knowledge regarding home remedies of hypertension. Nurse educators can plan for varied teaching methods in conducting health education campaigns e.g.- computer assisted programmesetc. Nurses are in a unique position to provide interventions to improve the knowledge of hypertensive clients.

## Nursing practice

The nurses must possess highly specialized skills and necessary knowledge essential for professional nursing practice. Nurses have to follow the instructions while taking care and educating the clients. The nurses must know about their role in creating awareness among the hypertensive clients regarding home remedies of hypertension. Nurses must find the opportunities to assist in various activities involve home remedies of hypertension ad
conduct of clinical teaching programme on home remedies of hypertension. They should participate in in-service and continuing education training programme on home remedies of hypertension to prevent complication.

## Nursing administration

Nurse administrator ensures professional practice and research based practice, which is clinically effective. Nurse administrators can organize the staff development programme for nurses to update their knowledge on home remedies of hypertension.

Nurse administrator can carry out continuing nursing education programme for health care providers to develop efficient nurse practitioners. Nurse administrators can develop instructions to take care of the clients who have serious hypertension related complications.

## Nursing Research

There is a severe dearth in the Nursing research studies regarding home remedies of hypertension. In India, there are few studies done on the brief intervention programmes. Nurse researchers should further conduct studies on effectiveness of other alternative therapies in order to reduce the risks, complications of hypertension.

## RECOMMENDATIONS

Based on the findings the following recommendations are proposed for future researchers.

- A similar study can be carried out in various settings among hypertensive clients.
- A similar study can be replicated on a large sample.
- A comparative study can be conducted to evaluate the effectiveness of information booklet.
- An experimental study can be conducted on the effectiveness of any other home remedies in the management of hypertension.


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