



# ASSESSMENT OF THE KNOWLEDGE ON SELF CARE MANAGEMENT PRACTICES AMONG HYPERTENSIVE PATIENTS ADMITTED IN SELECTED HOSPITALS AT MANGALORE

Abhinand R.S<sup>1\*</sup> and Larissa Martha Sams<sup>2</sup>

<sup>1</sup>Department of Medical Surgical Nursing (M.Sc Nursing), Laxmi Memorial College of Nursing, Mangalore, India.

<sup>2</sup>Principal & HOD of Medical Surgical Nursing (Ph.D in Nursing), Laxmi Memorial College of Nursing, Mangalore, India.

### ABSTRACT

Hypertension is an important public-health challenge worldwide. Prevention, detection, treatment, and control of this condition should receive high priority. Hypertension is defined as an average systolic blood pressure 140 mm Hg or greater, diastolic blood pressure 90 mm Hg or greater. Hypertension is one of the most important cardiovascular risk factor but its control is still a challenge all around the world. Control of blood pressure can reduce cardiovascular morbidity and mortality, so the compliance to antihypertensive drugs, life style modification and self care management practices can play an important role for the control of hypertension. Poor adherence to long-term therapies severely compromises the effectiveness of treatment making this a critical issue both from the perspective of quality of life and of health economics. Interventions aimed at improving adherence would provide a significant positive return on investment through primary prevention (of risk factors) and secondary prevention of adverse health outcomes.

**KEYWORDS:** Hypertension, Self care management practices, Hypertensive patients.

Corresponding Author

**Abhinand R.S**

**Email:**-[abhinandraj25@gmail.com](mailto:abhinandraj25@gmail.com)

### INTRODUCTION

In the modern world each and every individual's life has become stressful. This stressful life is directly affecting a common person. There is no other gift greater than the gift of health. It is rightly said that health is

wealth. One should aspire to develop all round physical, mental and spiritual health. With the fast style changes that have taken place in the name of civilization, industrialization, urbanization and abuse of nature by various types of pollution and the constant colossal increase in population, various health problems and the category of diseases are also mounting up [1].

World Health Organization has defined as health is a state of physical, mental, emotional and spiritual wellbeing not merely the absence of disease or infirmity. If there is balance in the physical, mental, emotional and spiritual dimensions, then a person enjoys the total health [2]. Modern living with stresses and strains, mounting tensions and pressure in everyday life, changes in the structure of the society and family, high fat, junk food, technical advancements such as easy modes of transport and machines, which leave little room for physical exercise, and machines, all contributes to problems.

Chronic diseases are of long duration and generally slow progression. Chronic diseases such as heart disease, stroke, cancer, chronic respiratory diseases and diabetes, are by far the leading cause of mortality in the world, representing 60% of all deaths. Out of the 35 million people who died from chronic disease in 2005, half were under 70 and half were women. Non-communicable Diseases (NCDs) are assuming alarming proportions in the South-East Asia Region (SEAR) of WHO of which India is a part. They account the 51% of all deaths and 44% of the disease burden in the Region. Therefore NCDs should no longer be regarded as a problem confined to the developed countries and affluent segments of society. In fact they are clearly emerging as a major public health challenge in developing countries of SEAR [3].



The changes in the economic, social and demographic determinants of health and adoption of unhealthy lifestyles are contributing to observed conversion in the disease pattern characterized by a progressive and accelerated rise in morbidity and mortality due to NCDs in the region. NCDs are linked to a cluster of major risk factors such as tobacco use, unhealthy diets, physical inactivity, obesity, high blood pressure, cholesterol and glucose levels that are measurable and largely modifiable.

Based on current trends, it is expected that non-communicable diseases (NCD) will account for 73% of deaths and 60% of the global disease burden by 2020, and will account for a major proportion of disease and deaths in India. These deaths are mostly due to heart disease, strokes, diabetes mellitus, cancers and lung diseases [3].

Hypertension is the one of the most common chronic disease affecting humans. Hypertension and coronary heart diseases have become more than just chronic complaints. It has become a way of life dependent on regular medication and visit to doctors for routine check up, and is posing greater challenges to the medical world. Hypertension is the most important modifiable risk for coronary heart disease. Hypertension by itself tends to evoke anxiety and concern about the dreadful consequences, when the diagnosis is told. It is the prime duty of the therapist to help a person understand all about the problem and non-pharmacological method going on to medication. Hypertension is a sustained elevation of Blood Pressure. In adults, hypertension exists when systolic blood pressure (SBP) is equal to or greater than 140 mm Hg or diastolic blood pressure (DBP) is equal to or greater than 90 mm Hg for extended periods of time. The diagnosis of hypertension requires that elevated readings be present on at least three occasions during several weeks [4].

Hypertension is the condition of having high blood pressure consistently for more than six months. This occurs when the pressure of the blood caused by the pumping of the heart goes much beyond normal values. People with high blood pressure often do not feel sick. In fact it is called as "Silent Killer" and it is the leading cause of death in the world today. Hypertension is an important public health issue and contributes to the incidence of stroke and coronary heart disease. In India, about 25% of adult cities and 10% of adults in rural areas suffer from hypertension. The overall incidence of hypertension in India is estimated to be 66 million [5].

These disturbing trends indicate the need for renewed vigor in the battle against hypertension. Hypertension-related morbidity and mortality will not decrease until we appreciate the need for changes in existing treatment protocols that support a comprehensive holistic management plan and that are based on quantifiable client outcomes. The Healthy People who took part in the study were males. All the subjects

of the 2010 guidelines are also now primarily prevention-focused and strongly recommend lifestyle modification to prevent and treat hypertension [6].

## STATEMENT OF THE PROBLEM

Assessment of the knowledge on self care management practices among hypertensive patients admitted in selected hospitals at Mangalore.

## OBJECTIVES OF THE STUDY

1. To determine the knowledge of hypertensive patients regarding self care management practices.
2. To determine the association of knowledge level of hypertensive patients with the selected demographic variables.

## HYPOTHESES

The hypothesis will be tested at 0.05 level of significance. H<sub>01</sub>: There is no significant association of knowledge level of hypertensive patients with the selected demographic variables.

## MATERIALS AND METHODS

Cross sectional research design was adopted for the study. The study was conducted in A. J. Hospital and Research Centre and City Hospital and research center, Mangalore. Purposive sampling technique was used to select 50 patients with hypertension who were admitted to the above mentioned hospitals. Prior to data collection, permission was obtained from the concerned authority for conducting the study. Subjects were selected according to the selection criteria. Informed consent was obtained from the sample. A demographic proforma containing eight questions was administered to elicit baseline information from the subjects. Self care management practices index [7] was administered to the subjects to assess the level of knowledge regarding self care management practices. Descriptive and inferential statistics were used for analysis.

## RESULTS

### Section A: Description of Demographic and Clinical Characteristics.

This section deals with the description of sample characteristics. A total of 50 subjects were selected by non-probability purposive sampling technique from A.J Hospital & City Hospital. The details of these hypertensive patients were obtained using demographic proforma. They are summarized in terms of frequency and percentage, presented in Table 1.

Data in Table 1 shows that highest percentage of subjects (36%) belonged to the age group of 61-70 years and the least percentage of subjects (6%) belonged to the age group of 30-40 years. Majority of the subjects (80%) who participated in the study were married. Highest



percentage of subjects (40%) had only high school education and least percentage of subjects (14%) were graduates. All subjects (100%) who were part of the study consumed a mixed diet. Majority of subjects were taking medications for treatment of hypertension (98%). Majority of subjects (86%) had no previous knowledge regarding self care management practices. Majority of subjects (68%) had no bad habits to mention in particular while minority of subjects (6%) were having the combined habit of alcoholism and smoking. 10% of subjects were smokers alone and 16% of subjects were habitual alcoholics alone.

### Section B: Description of the knowledge level concerning self care management practices among patients with hypertension.

This section deals with assessing knowledge of self care management practices among patients with hypertension.

The self care management practices were assessed using a standardised questionnaire called as the self care management practices index.

Data in Table 2 shows that the range of scores concerning knowledge of self care management practices was in between 13-30, and mean score was 23.20 i.e., most of the subjects have average knowledge level regarding self care management practices pertaining to hypertension.

Data presented in Table 3 and Figure 1 show that the highest percentage (32%) of subjects scored between 25-27 and only (6%) of subjects scored between 13-15 in the self care management practices index.

### Section C. Description of the association of self care management practices of hypertensive patients with the selected demographic variables.

This section deals with the findings of the association of the self care management practices index

scores with the selected demographic variables like age, gender, education, marital status, diet consumed, medications, previous knowledge regarding self care, bad habits. The chi-square test was used to compute the association of the level of awareness with selected demographic and clinical variables.

The following null hypothesis  $H_{01}$  is stated:

$H_{01}$ : There is no significant association of knowledge level of hypertensive patients with the selected demographic variables.

The data in Table 4 show that there was a significant association between self care management practices with sex and bad habits of the research subjects but no significant association with their age, educational status, marital status, diet consumed, medications followed and previous knowledge regarding self care management. Hence the null hypothesis  $H_{01}$  was rejected in terms of sex and bad habits of the subjects and accepted in terms of the remaining demographic variables.

### LIMITATIONS

1. Generalization of findings was limited to sample under study.
2. The study was confined to a small sample group due to the lack of financial facilities and manpower.

### RECOMMENDATIONS

Based on the findings of the present study, the recommendations offered for future research are:

- A similar study can be conducted for a longer duration with a larger sample size.
- A similar study may be conducted at a hypertensive clinic and OPD of hospitals among hypertensive patients who visit regularly.
- A comparative study can be done on different age groups and between males & females.

**Table 1. Frequency and Percentage Distribution of Sample Characteristics According to Demographic Variables**

**N=50**

Demographic variable	Frequency(f)	Percentage (%)
Age (in years)		
30-40	3	6
41-50	8	16
51-60	8	16
61-70	18	36
71-80	13	26
Sex		
Male	40	80
Female	10	20



Marital status		
Married	50	50
Unmarried		
Divorced		
widowed		
Educational status		
Primary level	12	24
High school	20	40
Pre degree/PUC	11	22
Degree and above	7	14
No formal education		
The kind of diet consumed		
Vegetarian		
Non vegetarian		
Mixed	50	100
Are you taking any medicines for hypertension?		
Yes	49	98
No	1	2
Previous knowledge regarding self care management practices		
Yes	7	14
No	43	86
Any bad habits to mention in particular		
Smoking/Chewing tobacco	5	10
Alcoholism	8	16
Both	3	6
None	24	68

**Table 2. Range, Mean, Median & Standard Deviation (SD) of scores of self care management practices.**

N= 50

Obtained Range	Minimum obtained Score	Maximum obtained score	Mean	Median	SD	Mean Percentage
13-30	13	30	23.20	25.0	4.78	72

**Table 3. Frequency and Percentage Distribution of Samples Based on self care management practices among patients with hypertension.**

N=50

Range	f	%
13-15	3	6
16-18	8	16
19-21	5	10
22-24	8	16
25-27	16	32
28-30	10	20

Maximum score: 32

**Table 4. Chi-Square Test showing association of knowledge level of hypertensive patients with the selected demographic variables**

Sl. No	Demographic Variables	df	Table Value	Calculated X <sup>2</sup> value	Inference
1	Age	2	5.991	2.89	NS
2	Sex	1	3.841	4.72*	Significant
3	Marital status	1	3.841	0	NS



4	Educational status	1	3.841	2.4	NS
5	Diet consumed	1	3.841	0	NS
6	Medications used for treatment of hypertension	1	3.841	0.95	NS
7	Previous knowledge regarding self care management	1	3.841	3.68	NS
8	Bad habits	1	3.841	13.86*	Significant

$\bar{X}^2_{(1)}=3.84$ ,  $\bar{X}^2_{(2)}=5.99$ , \*Significant , NS- Not significant;

Figure 1. Frequency polygon showing level self care management scores among hypertensive patients



## CONCLUSION

Hypertension is a major health problem. The magnitude of the disorder is huge. According to the latest estimates, 5-6 crores of people in India from all age groups are suffering from hypertension. However, the disease remains easily diagnosable, potentially preventable and completely manageable with many of the complications being reversible. Nevertheless, the lifestyle modifications are recommended for the prevention as well as for the management of the disorder [8].

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## CONFLICTS OF INTEREST

There were no conflicts of interest reported in the study.

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