



## Study To Assess Knowledge And Attitude Regarding Hypertension, Compliance To Treatment And Control Measures Adopted By Hypertensive Clients

Ramandeep Kaur<sup>1\*</sup>

<sup>1\*</sup>Assistant Professor HOD Community health nursing College Of Nursing, Public Khalsa College For Women Kandhala Jattan, Hoshiarpur (PUNJAB INDIA) Email: ramandeepkaur27131@gmail.com

**\*Corresponding Author:** Ramandeep Kaur

\*Assistant Professor HOD Community health nursing College Of Nursing, Public Khalsa College For Women Kandhala Jattan, Hoshiarpur (PUNJAB INDIA) Email: ramandeepkaur27131@gmail.com

### ABSTRACT

Hypertension is a silent killer increasing day by day. *The objective of the study was to assess the Knowledge and attitude, compliance to treatment and control measures of hypertensive clients regarding hypertension. 200 clients suffering from hypertension, were selected through purposive sampling technique. In view of the nature of the problem and to accomplish the objectives of the study, structured knowledge questionnaire and attitude scale and compliance scale and observational checklist was prepared and Reliability of the tools was tested by Kr20 for knowledge questionnaire, cronbach's alpha for attitude scale and compliance to treatment scale and inter-rated reliability for control measures was used, which was 0.76 for knowledge, 0.78 for attitude and 0.86 for compliance and 0.7 for control measures respectively. From the study findings, it was found that the hypertensive clients had fair Knowledge regarding hypertension. The hypertensive clients had favorable attitude regarding prevention and control of hypertension. The hypertensive clients have Good compliance to treatment regarding hypertension. The hypertensive clients are having fair control of hypertension. The findings suggest that hypertensive clients are having fair knowledge, favorable attitude regarding hypertension, good compliance but they are having fair control over hypertension.*

**KEYWORDS:** *Knowledge, Attitude, Compliance to treatment, control measures.*

### INTRODUCTION

“Know your numbers Check your blood pressure Care for your heart” Put a stop to hypertension before it stops your heart beat Hypertension is a major public health problem of worldwide distribution and is most common risk factor of CVDs, and its burden is increasing disproportionately in developing countries as they undergo demographic transition. Hypertension affects approximately 1 billion people worldwide, annually it cause 7.1 million of global prematurely deaths. It is estimated that by 2025 in the developing countries worldwide, there would be a rise of 1, 15 billion people living with hypertension .If the Pre-hypertension, which was also defined as a concern for cardiovascular risk, has been included, then the rate would be much higher.<sup>1</sup>

The *World health statistics* released a report highlighting the growing problem of non-communicable diseases, a leading threat to human health and development. The prevalence of chronic disease such as hypertension, diabetes mellitus, etc is showing upward trends in most countries. The joint national committee reports on prevention, detection, evaluation, and treatment of high blood pressure (JNC-VI & VII) emphasized the necessity of clinician's appropriate judgment of their patient in diagnosis and treatment. The national guidelines should serves as a tool to be adopted and implemented in the local and individual situation.<sup>2</sup> According to Indian studies it is noted that the prevalence of hypertension has increased by 30 times among the urban population over a period of 55 years and about 10 times among the rural population over a period of 36 years.<sup>5</sup> The prevalence of hypertension in India is low compared to world. In India, about 15 Million people are effected from hypertension out of which 23.10 percent men and 22.60 percent of women over 25 years old suffer from hypertension, says the world health organization ‘global health statistics 2012’ Increase blood pressure is high-risk condition that cause approximately 51 percent deaths from stroke and 45 per cent from coronary artery disease in India.

The prevalence of hypertension in Ambala district is 38.2%, out of which in rural population in Mullana village, the 59.2% and 40.8% were male and female respectively suffering from hypertension.

**Table : 1**

AREA	Incidence
Global	135 billion
South east Asia region	49.60 million

<b>India</b>	15 million
<b>Haryana</b>	7.91%
<b>Ambala</b>	38.2%
<b>Mullana village</b>	59.2 % Male 40.8% Female

**STATEMENT OF THE PROBLEM**

A study to assess Knowledge and Attitude regarding hypertension ,compliance to treatment and control measures adopted by hypertensive clients in selected rural areas of Ambala , Haryana.

**OBJECTIVES OF STUDY**

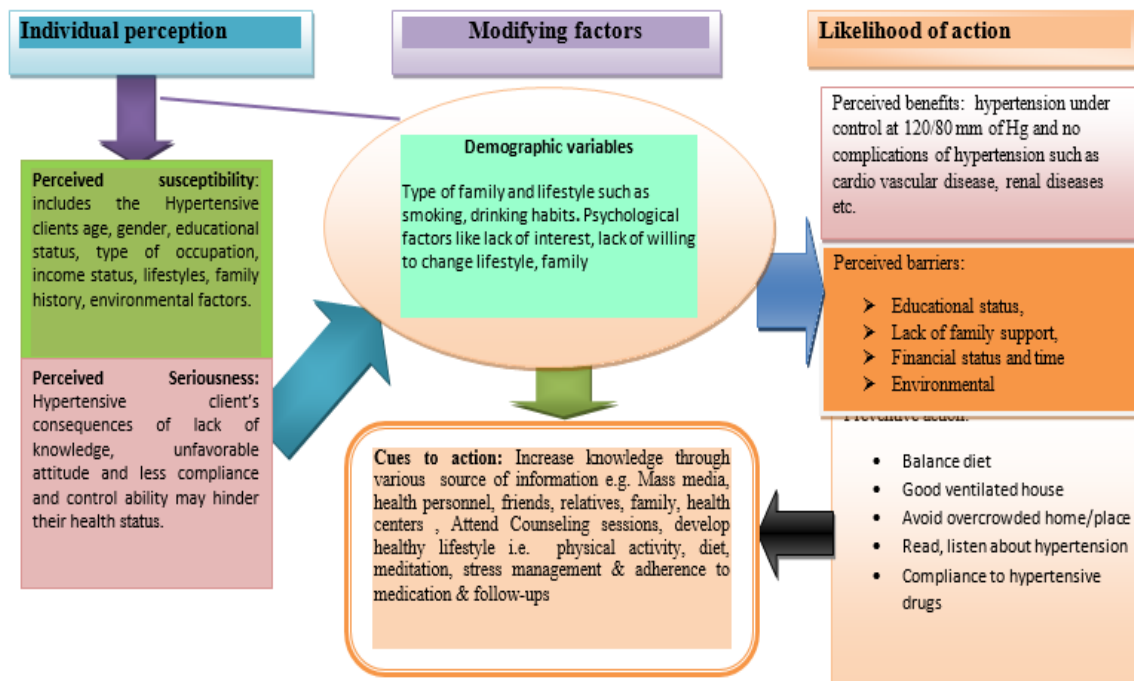
1. To assess Knowledge, Attitude, compliance to treatment and control measures of hypertensive clients regarding hypertension.
2. To determine the relationship between knowledge score with attitude score, compliance score and control measures score of hypertensive clients.
3. To determine the association of level of knowledge and attitude, compliance to treatment and control measures with selected demographic variables.

**HYPOTHESES**

**Hypotheses will be tested at 0.05 level of significance.**

1. **H<sub>1</sub>**: There will be a significant relationship between Knowledge score, Attitude score, compliance scale, control measures score of hypertensive clients
2. **H<sub>2</sub>**: There will be a significant association of knowledge score with selected demographic variables.
3. **H<sub>3</sub>**: There will be significant association of attitude with selected demographic variables of hypertensive clients.
4. **H<sub>4</sub>**: There will be significant association of compliance to treatment and control measures with selected demographic variables of hypertensive clients.

**CONCEPTUAL FRAMEWORK:** Conceptual framework is a cohesive, supporting linkage selected, inter related concepts. It is the device for organizing ideas and, in turn bringing order to related objects, observation, events and experiences. It serves as a guide to research and spring board for the generation of research hypotheses.



**Figure. 1 CONCEPTUAL FRAMEWORK BASED ON MODIFIED ROSEN STOCK AND BECKER'S HEALTH BELIEF MODEL**

**MATERIAL AND METHODS**

A Quantitative non-experimental approach and descriptive survey design was used. 200 hypertensive clients, were selected through purposive sampling technique. In view of the nature of the problem and to accomplish the objectives of the study, structured knowledge questionnaire, attitude scale, compliance to treatment scale and observation checklist regarding control measures Assessment Tool was prepared to assess the knowledge, attitude compliance to treatment and control measures by interview technique. Validity was ensured in the field of Nursing and medical departments. Reliability of the tools was tested by Kr20 for knowledge questionnaire, cronbach’s alpha for attitude and compliance scale and observation checklist for control measures, which was found to be 0.76, 0.78, 0.86 and 0.7 respectively Both descriptive and inferential statistics were used.

**Table : 2 Level of Knowledge**

S.no	Level Of Knowledge	Ranges Of Score
1.	Good	12-18
2.	Fair	5-11
3.	Poor	0-4

**Table: 3 Scoring of Statement for attitude**

Attitude	Ranges of Score
Favorable (>70%)	74-100
Neutral (50-70%)	44-73
Unfavorable (<50 %)	20-43

**Table : 4 Blue Print of Modified Hill Bone Compliance Scale for Assessment of Compliance of Hypertensive Clients**

S.NO	CONTENT	NO. OF ITEMS	TOTAL SCORE
1.	Compliance to medicine	9	27
2.	Follow up	2	6
3.	Total:	11	33

**Table : 5 Reliability of Tool and Its Accepted Values**

Tool	Formula used	Reliability	Accepted range
Knowledge questionnaire	Kuder Richardson (KR20)	0.76	0.6-0.9
Attitude scale	Cronbach Alpha	0.78	0.7- 0.9.
Modified Hill-bone compliance scale	Cronbach Alpha	0.84	0.7-0.9
Observation checklist on control measures	Inter-rated reliability	0.7	0.6-1

**RESULTS**

The hypertensive clients had fair Knowledge regarding hypertension. Area wise mean of knowledge score of hypertensive clients indicates that hypertensive clients have more knowledge in the area of diagnosis and treatment. The least knowledge was in the area related to concept of hypertension.

The hypertensive clients had favorable attitude regarding prevention and control of hypertension. The hypertensive clients have Good compliance to treatment regarding hypertension. The area wise compliance score of hypertensive clients indicate that the majority of hypertensive clients are having good compliance to treatment in the area of follow-up. The hypertensive clients are having fair control of hypertension. It was also found that the sample characteristics such as educational status was significantly associated with the knowledge of hypertensive clients and diagnosis as hypertensive clients , with the p value of 0.017(p≤0.05) and 0.002 (p≤0.05)and in attitude, occupation is significantly associated attitude with p value (0.0390) and in medication (<0.0001) respectively. The coefficient of correlation shows that there is a positive correlation (0.332\*) between knowledge and compliance to treatment.

**Table : 6 Correlation between Knowledge and compliance to treatment of hypertensive clients regarding hypertension N=200**

Variables	Mean	SD	r
knowledge	12.38	2.64	+0.332*
compliance to treatment	29.5	3.46	

**\*Significant(p<0.05)**

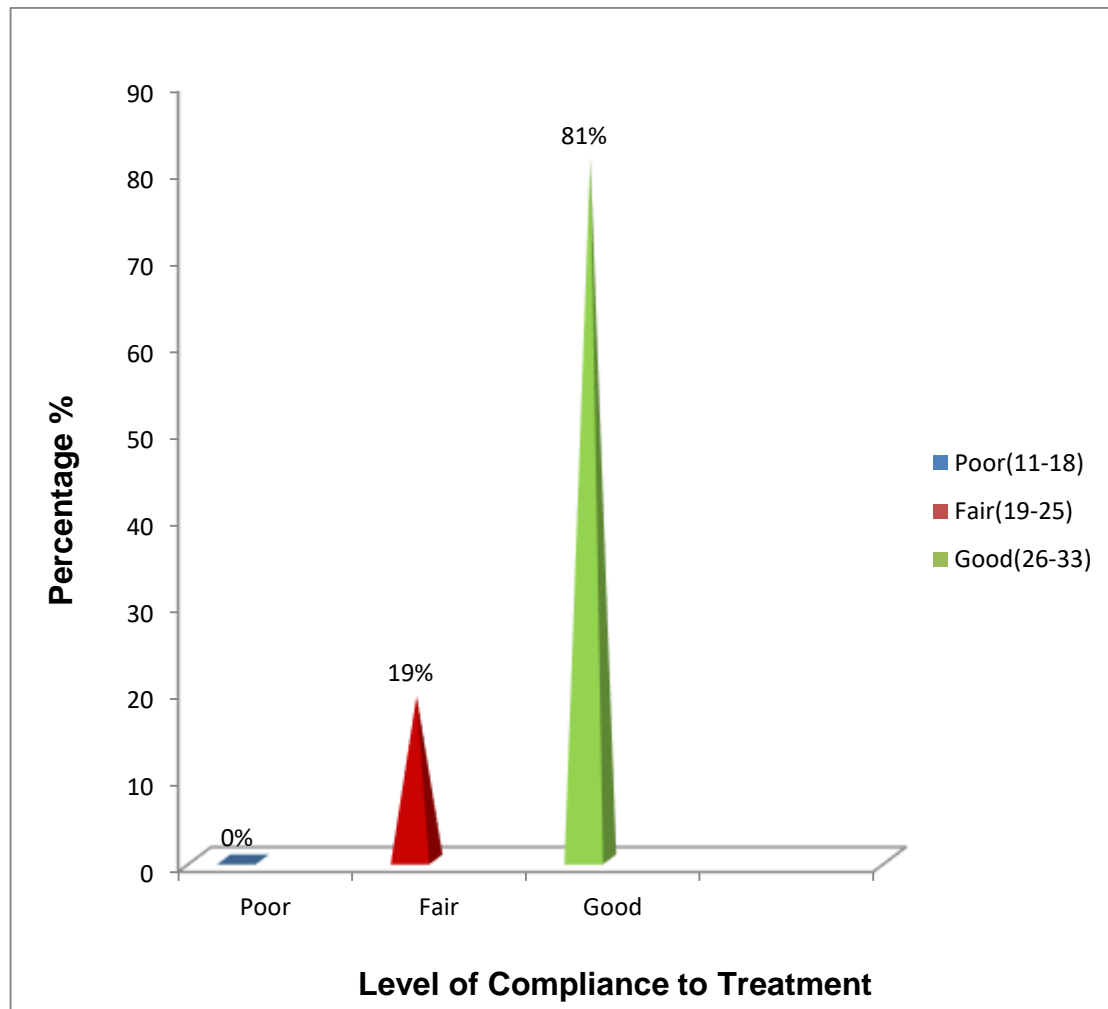


Figure 2: Cone diagram showing area wise percentage of hypertensive clients as per their compliance to treatment.

## DISCUSSION

The study findings are discussed with consistent and inconsistent findings. In the present study, knowledge score of hypertensive clients was 12.38. nearly similar type of study was reported by Wendy Zernike in his study i.e. it showed that hypertensive clients are having fair knowledge regarding hypertension. In the present study, maximum knowledge deficit existed indicates that maximum knowledge deficit existed in this area followed, meaning, etiology, sign and symptoms. The maximum mean percentage gain has been in the area of diagnosis and treatment. B. Oluranti et al in his study that they have knowledge in the area of diagnosis, treatment and control area (70.25) . A finding of the study is similar with the study conducted by Mumtaz Ali Shaikh performed analyses regarding knowledge, control and complications of hypertension. This study revealed that educated people (Education grade 4) had better understanding of hypertension than patients who were less educated (Education grade 3 and less). Another study Nudrat N and et al shows that young patients were more aware about hypertension and received treatment whereas those 65 years of age or above had increasing difficulty of controlling blood pressure. The correlation between knowledge with compliance was moderately significant and knowledge and attitude shows that there was significant correlation between knowledge and attitude and knowledge and control measures of hypertensive clients. The knowledge score of hypertensive clients with selected demographic variables shows that there was significant association with marital status, occupation, education and family history of hypertension. The attitude score of hypertensive clients with selected sample characteristic shows that there was significant association attitude with variables dependent on age, marital status and occupation. The compliance scale of hypertensive clients with selected sample characteristic shows that there was no any significant association of compliance to treatment with selected variables. The control measure of hypertensive clients with selected sample characteristic shows that there was no any significant association of control measures with selected variables.

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