

# Knowledge Attitude and Practice towards Hypertension among Adult Population in a Rural Area of Lahore, Pakistan

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## ABSTRACT

**INTRODUCTION:** Hypertension is a term used to describe high blood pressure. Hypertension related knowledge and practices of people play an important role in controlling hypertension and prevent them its long-term complications. Knowledge and attitudes of patients have impact on the management of their illnesses, and improving knowledge is known to improve compliance with treatment in conditions such as hypertension.

**METHODS:** This was an observational, cross-case study that was conducted in rural area. Respondents 'selection was convenient sampling technique. Selected sample of 129 male and female residents of rural area Lahore, Pakistan.

**RESULTS:** The result of this study showed that adult population have knowledge about hypertension similarly have negative attitude and poor practices.

**CONCLUSIONS:** The prevalence of hypertension is increasing globally. Current study signifies that people require support and guidance for practicing better disease management.

**KEYWORDS-** Knowledge, Attitude, Practice, Hypertension

## INTRODUCTION

Hypertension is a term used to describe high blood pressure. Hypertension can be defined as "a condition in which the person has a systolic blood pressure (SBP) of about 140 mm Hg or more than, and a diastolic blood pressure (DBP) of about 90 mm Hg or more" (Kofi, 2012). Hypertension related information and practices of individuals assume an imperative part in controlling hypertension, and prevent them its long term complications. People with hypertension must have the information they have to deal with themselves, to have the capacity to characterize their condition, to assess risk factors, and to a precipitate the significance of deep rooted medicinal control (Malik, Yoshida, Erkin, Salim, & Hamajima, 2014). Knowledge and attitudes of patients have effect on the management of their sicknesses, and enhancing knowledge

Is known to enhance consistence with treatment in conditions, for example, hypertension. Information and attitude of the patients can impact condition, blood pressure control, morbidity rate and mortality rate of the patients (Jimoh et al., 2010).

In addition, Knowledge is a critical determinant of behaviour change and lifestyle practices regarding hypertension. The social, economic and environmental factors are also important in hypertension control. Raised knowledge through health education and health promotion heavily influences lifestyles change regarding hypertension, which means that people should adapt to behaviour or lifestyles that help them maintain an optimal health status (Zungu & Djumbe, 2013).

Moreover, it has been believed that many peoples do not have a thorough knowledge of hypertension. Lack of knowledge could result in significant patient anxiety and inappropriate use of medical services. Hypertension if left unchecked especially in the rural area where the population is mostly uneducated, it would increase its incidence, cases of stroke, heart failure, glaucoma and renal failure .(Osuala Eunice, 2017)

Mostly rural people due to illiteracy have lack of knowledge, poor attitude and poor practice towards hypertension. The community blood pressure and attitude to hypertension prevention, as well as lifestyle habits of the people is not known.(Osuala Eunice, 2017). However, individuals with a decent knowledge of their ailment are more roused to practice home blood pressure checking, which essentially Improves prescribed medication adherence and BP control. The end goal to effectively enhance their way of life, individuals must have knowledge and comprehension of hypertension and the potential health risks related with the condition (Malik et al., 2014).

Moreover, hypertension classified into two classes. These are called as primary hypertension and secondary hypertension. Primary hypertension is known as fundamental hypertension and it influences ninety-five percent of people. Secondary hypertension is caused by another medical conditions and it is less common.uncontrolled hypertension can lead deaths (Kofi, 2012).

Reasons for hypertension are not referred to, in any case, factors, for example, age, high salt admission, low potassium eat less carbs, sedentary way of life, worry and stress have been found as adding to hypertension (Kofi, 2012).

#### **RESEARCH QUESTION**

- *Research Question 1* – What is the knowledge of adult people towards hypertension in a rural area of Lahore?
- *Research Question 2* – What is the attitude of adult people towards hypertension in a rural area of Lahore?
- *Research Question 3* – What are the practices of adult people towards hypertension in a rural area of Lahore?

#### **AIMS OF THE STUDY**

The aim of this study was to assess knowledge, attitude and practices regarding hypertension among adult population in a rural area of Lahore.

#### **SIGNIFICANCE OF THE STUDY**

This study will enhance the knowledge, attitude and practice of community residents towards hypertension. After the research finding will conduct health education session regarding hypertension for residents living in rural area. Moreover, this study has a great significance being a nurse will identify the ratio of knowledge, attitude and practice of community residents towards hypertension. Through this study, will direct the policy maker, Non-governmental organizations and other

governmental service provider shows guidelines to concerned bodies on how to implement the service in order to overcome the problem.

#### **CONCEPTUAL FRAMEWORK**

In this research study Bennett's (1976) knowledge, attitude, skills, and aspirations (KASA) have been used to show the relation between these variable knowledge attitude, practice and hypertension

This hypothetical change demonstrate targets results. Before building up an educational program to enhance practices, the researcher must recognize what knowledge is required and survey the members' states of mind, abilities, and want to change (Bennett, 1976).

### **I. LITERATURE REVIEW**

Hypertension has turned into a noteworthy issue in numerous developing countries encountering epidemiological progress from transmittable to non-transferable chronic diseases (Ahmad and Ahmad, 2015). As indicated by WHO (2009), death thus to non-transmittable diseases, for example, hypertension will increment by seventeen percent throughout the following decade, with the greatest increment in the African area twenty seven percent (Kofi, 2012)

According to statistical reports from medical education and health care ministry hypertension prevalence in Iran is twenty seven percent and fourty two percent in people aged between 45 to 69 years.(Shrestha et al., 2016).

A survey in 2004 revealed that due to lack of knowledge the prevalence of hypertension in India was twenty five percent in urban and ten percent in rural population due to poor health practices, and it leads to fifty seven percent of all stroke deaths and fourty two percent of deaths due to cardiovascular disease.(Bollampally et al., 2017).

In Americas because of literacy rate is high and people have knowledge about their health status. Generally speaking, high-pay countries have a lower prevalence of hypertension thirty five percent than other groups at fourty percent . (GUDA, 2015)

Moreover a study conducted in Quetta Pakistan study revealed that due to lack of knowledge of hypertension 18 % of the general population in Pakistan experience the ill effects of hypertension. Each third individual over 40 years progressively vulnerable against an extensive variety of illnesses, including myocardial dead tissue, stroke, atrial fibrillation, heart disappointment and renal failure (Saleem, Hassali, Shafie, Awad, & Bashir, 2011).

Besides a cross sectional study done in Karachi Pakistan showed that, 45.8% (ninety nine) men and thirty three (seventy one )women agreed that high blood pressure can be asymptomatic, 82.8%(184)men and 84%(186) women agreed that changing lifestyle improves blood pressure. (GUDA, 2015).

Reasons for hypertension are not referred to, in any case, factors, for example, age, high salt admission, low potassium abstain from food, stationary way of life and worry been found as adding to hypertension. All young people should check their BP and know their blood pressure levels (Association, 2013).

However, National Health System of Pakistan NHSP of Pakistan showed that hypertension influence 18% of young people above 15 years of age and 33% of adults over 45 years of age. Most of the people at this age group are not involved in any form of physical activity or they have very low frequency of exercise (Zungu & Djumbe, 2013).

Integrated programed must be set up at the primary care level over control of hypertension. Talented and prepared wellbeing workers at all levels of tend to the accomplishment of hypertension control program (Association, 2013).

## II. METHODS

### SETTING

The research was conducted in rural area of Lahore, Pakistan.

### POPULATION

The target populations were male and female educated and uneducated aged 20 years to70 years.

### SAMPLING

Respondents' selection was convenient sampling technique. Selected sample was 129 male and female residents of Hussain Abad Lahore.

### RESEARCH INSTRUMENT

In this study well adopted questionnaire was used with closed ended and multiple choice question as per Likert scale. The knowledge related questionnaire adopted from article (Oliveria, Chen, McCarthy, Davis, & Hill, 2005).Attitude and practice regarding hypertension adopted question from article (Shrestha et al., 2016)

Questionnaire consists of four parts. First part is based on the demographic data of the participants. Second, third and fourth part of the questionnaire is the variables of this study.

### DATA GATHERING PROCEDURE

The questionnaire was translated English into Urdu. Data was collected from house to house survey and questionnaire was distributed among adult peoples.

### METHODS USED TO ANALYZE DATA

Data was entered and analyzed by using the Statistical Package for the Social Sciences (SPSS) Programme version 21.0. Descriptive statistics was conducted to obtain frequencies and percentages, proportion tables, charts, graphs and tables.

### STUDY TIMELINE

The data was collected from September, 2017 to January, 2018.

### ETHICAL CONSIDERATION

Ethical principle was performed during research study. Written permission was taken from the Ethical committee of LSN department in University of Lahore. Permission was taken from the stakeholders of the Hussain Abad to conduct research study. A written consent was taken from the participants. All the participants were informed about the purpose of the study. It makes sure that no harm was given to the participant. Study was beneficial. All peoples had open opportunity to participate in research. No one was forced to participate in research.

## III. RESULTS

This section presents the outcomes of the study.

Table.1 Demographic Details Of The Study Participants

Variables		frequency	%
Gender	Male	78	60.4
	Female	51	39.5
	Total	129	100
Age Group	20-29year	7	5.43
	30-39year	22	17.5
	40-49year	37	28.6
	50-59year	30	23.26
	60-70 years	33	25.58
Qualification	Primary	46	35.66
	Secondary	31	24.3
	Tertiary	11	8.53
	Any other	3	2.33
	Illiterate	38	29.4
Marital Status	Single	4	3.10
	Married	118	91.47
	Divorce	2	1.55
	Widow	5	3.88
	Total	129	100
Occupation	Government Sector	16	12.40
		34	26.36

Private Sector	33	25.58
Self-employed	46	35.66
Unemployed		

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**PROFILE OF THE RESPONDENTS**

This section presents the outcomes of the study. Out of 129 participants, all were response to the questionnaire. Most of the respondents were male (60%) and (40%) were female. About (29 %) belong to the age group 40-49 years (26 %) belong to the age group 60-70 years and (24%) belong to the age group 50-59 years.

Most of them (35.6 %) were educated at primary level, (30%) people are illiterate. (91.47 %) people are married. (36%) people are unemployed, (26%) are working in private sector sand 12 % are government employed as per Table 1

*Table.2; Response of Participants towards Knowledge*

Questions	Frequency	%	
What does the term hypertension mean?	High blood pressure High level stress/tension	69 46	53.4 35.6
	Nervous condition	8	6.20
	High blood sugar	--	0%
	Over activity	6	4.65
How dangerous is hypertension to your health?	Extremely	50	38.7
	Somewhat	58	44.6
	Not at all	4	3.10
	Don't know	17	13.1
Which measure(s) is (are) more important?	Top (systolic)	6	4.7
	Bottom (diastolic)	17	13.2
	Both (top and bottom)	61	47
	Don't know	45	34.
Can people do things to lower their blood pressure?	Yes	69	54
	No	24	19
	Don't know	36	27
Can lowering blood	Yes	52	42
	No	30	22
	Don't know	47	36

The greater part of these participants of individuals were learned about the significance of HTN and the reality of the condition to their health. (54%) of people were knowledgeable about the meaning of HTN and (46%) were knowledgeable about the seriousness of the condition to their health.( 35% ) knew that lowering BP would improve health and 54% believed that people can do things to lower their high BP. When asked more specific questions about BP, patients were less knowledgeable. Thirty-four percent of patients correctly identified SBP as the "top" number of their reading 32% correctly identified DBP as the "bottom" number; and, overall, only 47% of the patients were able to correctly identify both SBP and DBP measures

*Table.3 Response of Study Participants Towards Attitude*

Questions	F	%	
Do you think regular checking of BP is important?	Strongly disagree Disagree Neutral Strongly agree	3 34 50 18	2.3 26.4 38.8 14.0
	Agree	24	18.6
	Total	129	100
Should we reduce salt intake to prevent hypertension?	Strongly disagree Disagree Neutral Strongly agree	6 28 48 20	4.7 21.7 37.2 15.5
	Agree	27	20.9
	Total	129	100
Should we keep in touch with the physician regularly?	Strongly disagree Disagree Neutral Strongly agree	4 39 51 13	3.1 30.2 39.5 10.1
	Agree	22	17.1
	Total	129	100
Do you think regular medication is important in hypertension?	Strongly disagree Disagree Neutral Strongly agree	1 33 54 15	0.8 25.6 41.9 11.6
	Agree	26	20.2
	Total	129	100
Should we exercise regularly for	Strongly disagree Disagree Neutral	16 41 16	12.4 31.8 12.4

healthy life?	Strongly agree	46	35.7
	Agree	10	7.8
	Total	129	100

Attitude responses were only 38.8 % neutral about importance of regular checking of BP. (37.2%) neutral people know that salt intake to Prevent hypertension. (40%) percent people are neutral that touch with the physician regularly for BP control. (36%) people are strongly agree to exercise regularly for healthy life.

*Table.3 Response Of participants Towards Practice*

Questions		Frequency	%
How often do you measure your BP?	Frequent	12	9.3
	Occasional	64	49.6
	Never	53	41.0
How often do you moderate your salt intake?	Frequent	15	11.3
	Occasional	62	48.3
	Never	52	40.3
	Total	129	100
How often do you avoid fatty food consumption?	Frequent	27	20.9
	Occasional	42	32.6
	Never	60	46.5
	Total	129	100
How often do you consume alcohol?	Frequent	27	20.9
	Occasional	51	39.5
	Never	51	39.5
	Total	129	100
How often do you perform physical exercise?	Frequent	6	4.7
	Occasional	46	35.7
	Never	77	59.7
	Total	129	100
How often do you check your body weight?	Frequent	5	3.9
	Occasional	46	35.7
	Never	78	60.5
	Total	129	100
How often do you smoke?	Frequent	50	38.8
	Occasional	44	34.1
	Never	35	27.1
	Total	129	100
How often do you miss the dose of your medication?	Frequent	56	43.4
	Occasional	56	43.4
	Never	17	13.2
	Total	129	100
How often do you consult your healthcare provider?	Frequent	24	18.6
	Occasional	64	49.6
	Never	41	31.8
	Total	129	100

Most patients occasionally measured their BP (49.6%) occasionally. Moderated their salt intake 48.3 %, avoided fatty foods (46.5%), frequently measured body weight (35.6%), a never consumed alcohol (39.0%), frequently performed physical exercise( 35.7%), never smoked ( 21%), never missed their medication (13.2)% as showed in table 3

#### IV. DISCUSSION.

The aims of this study were to assess the present status of HTN knowledge, attitude and practices in a rural community of Lahore. Results of this study propose that participants are knowledgeable about HTN all in all, yet are less educated about particular elements identified with their condition, and particularly their own particular level of BP control. Members were unconscious that SBP is imperative in BP control.

Participants were knowledgeable about the meaning of HTN, and the seriousness of the condition to their health. Thirty five percent people knew that lowering BP would improve health and fifty four percent people believed that people can do things to lower their high blood pressure. Current study showed that the overall KAP scores was found to be medium except knowledge seems to be at a better position than the other two scores. In this study people have poor attitude and poor practices towards hypertension. They consume alcohol and don't avoid fatty foods. People don't check their body weight and blood pressure. Not perform physical exercises for healthy life.

#### LIMITATIONS

The study has some limitations that need to be acknowledged in the interpretation of the result.

The study was limited to assess knowledge attitude and practice towards hypertension among adult population of rural area of Lahore

As the data was collected from only one setting, it has limited generalizability.

Convenient sampling was applied in data collection process whereas the probability sampling method can enhance the induction of different strata of the participants.

#### V. CONCLUSION

The prevalence of hypertension is increasing globally. Current study signifies that people require support and guidance for practicing better disease management. A proper educational intervention is essential on the aspect

of dietary habit that would rather improve their attitude and practices.

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