

# Knowledge, attitude and practice about hypertension among adult people of selected areas of Bangladesh

## Abstract

Hypertension is a major risk factor for several cardiovascular diseases (CVD). The prevalence of hypertension is increasing in Bangladesh day by day. The objective of this study was to assess knowledge, attitude and practice about hypertension among adult people. A cross-sectional survey was conducted among 120 people aged 20-93 years of four divisions (Dhaka, Mymensingh, Khulna and Sylhet) between December, 2017-February, 2018, using random sampling. KAP score about hypertension was deducted from a set of KAP related questions. Result shows that 55.83% were male and 44.17% were female. About 37.5% of the respondents were housewives followed by 21.7% farmers, 13.3% retired, 6.7% students and private-job holders. More than half (average 56.36%) of the respondents had proper knowledge on hypertension. On an average 85.68% had positive attitude toward hypertension. About 68.3% of the respondents never checked their BP and 94.2% of the respondents could not recall when they exercised. It a nutshell majority of the respondents had higher knowledge and positive attitude toward hypertension but low level of practices.

**Keywords:** hypertension, adult people, knowledge, attitude, practice

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## Introduction

Hypertension is a worldwide public-health challenge because of its high frequency and related risks of cardiovascular and kidney disease.<sup>1</sup> It has been identified as the prominent risk factor for mortality and is ranked third as a cause of disability-adjusted life-years.<sup>2</sup> Most people with hypertension have no symptoms at all; this is why it is known as the “silent killer”.<sup>3</sup> Bangladesh is in the midst of an epidemiologic transition. This country is starting to observe a shift in the major causes of death from mainly infectious diseases and nutritional deficiencies to those due to chronic diseases. The scant population-based data available indicate that prevalence of hypertension in Bangladesh is increasing. Moreover, in Bangladesh, about 85% of total population lives in villages. They are not interested to go to physicians when they become sick due to their poor socio-economic condition, life style as well as due to lack of awareness.<sup>4</sup> Therefore in villages undetected and untreated hypertensive patients are more. The proportion of hypertension among rural population is still undetected though this has strong impact on physical, mental and social burden. It can be dangerous to ignore such symptoms, but neither can they be relied upon to signify hypertension. Hypertension is a serious warning sign. The condition can be a silent killer and it is important for everybody to know their blood pressure reading. If hypertension is detected early, it is possible to minimize the risk of heart attack, heart failure, stroke and kidney failure. As with other non-communicable diseases, self-care can facilitate early detection of hypertension, adherence to medication and healthy behaviors, better control and awareness of the importance of seeking medical advice when necessary. Self-care is important for all, but it is particularly so for people who have limited access to health services due to geographic, physical or economic reasons. Also, this research may facilitate the visibility of this community to policy makers, NGO

workers and donors, therefore increasing understanding of the main causes of hypertension. In addition, my research can be an attempt to fill the gap of resources for upcoming researchers and contribute to academic discourse on hypertension.

## Methodology

The study was mainly based on primary data, however prior to collect primary data, relevant document was reviewed and collected. The study was carried out in four upazilas of four districts of four divisions. The four divisions are Dhaka, Mymensingh, Khulna and Sylhet. The four districts are Dhaka, Sherpur, Khulna and Sunamganj. The Four upazilas are Dhamrai, Jhinaighati, Batiaghata and Jamalganj respectively. The villages were Kalidaspotti, Bondovatpara, Sundar Mahal, Jamalganj respectively. The study population were adult (more than 19 years) of four selected districts. It was cross-sectional study. After using formula sample size was 96 but to make more accurate and more significant i took a sample of 120 respondents. Thirty respondents were taken from each division. A pre-coded, clarified and pre-tested questionnaire was formulated to collect information from the selected respondent. The KAP study questionnaire was first piloted in both our home where it was translated and back translated for comprehension and response consistency. The data set was first checked, scrutinized, cleaned and entered into the computer from the numerical codes on the form. The data were edited to check if there was any discrepancy (double entry, wrong entry). The frequency distribution of the entire variable was checked using SPSS 23 windows program. It gave overall information about the variables. All participants in the study were asked for their consent before collection of data and all had complete rights to withdraw from the study at any time without any threat or disadvantage. This study protocol was approved by the Ethical Review Committee of Bangladesh Medical Research Council, Dhaka, Bangladesh. Ethical guidelines

of Declaration of Helsinki IV (2001) were followed throughout the study. [40] Informed written consent was taken from every subject. The questionnaire was designed considering the privacy of the subject. The subject’s personal information was kept confidential.

**Results**

Figure 1 illustrates that 31.67%, 30%, 27.5% and 10.83% of the respondents were 36 to 50 years, 51-65years, 18-35 years and more than 65 years old respectively. Figure 2 shows that 55.83% were male and 44.17% were female. Figure 3 illustrates that 37.5% of the respondents were housewives followed by 21.7% farmers, 13.3% retired, 6.7% students and private-job holders, 5.8% day laborer, 5% businessman and 3.3% unemployed.

**Distributuion of Study Sample According to Age Categories**

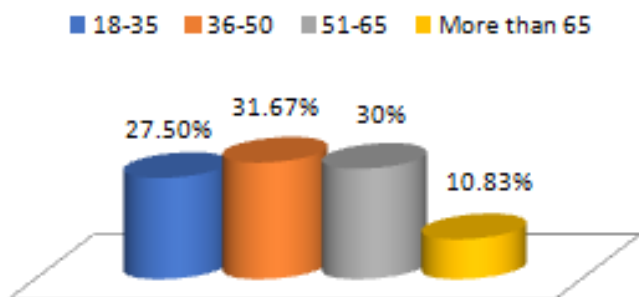


Figure 1 Distribution of Study Sample According to Age Categories.

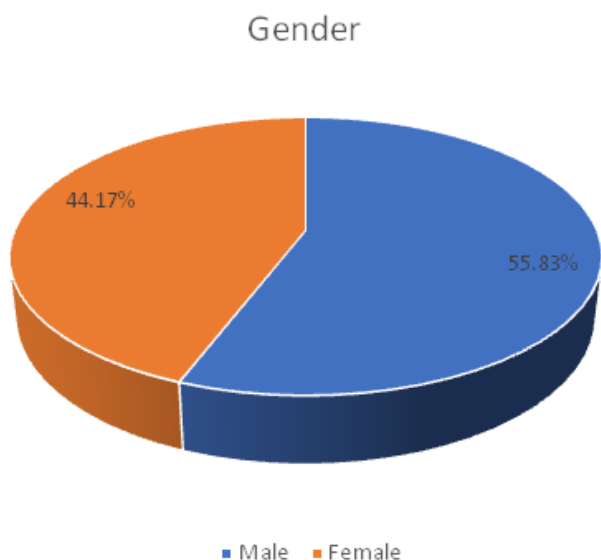


Figure 2 Distribution of Gender.

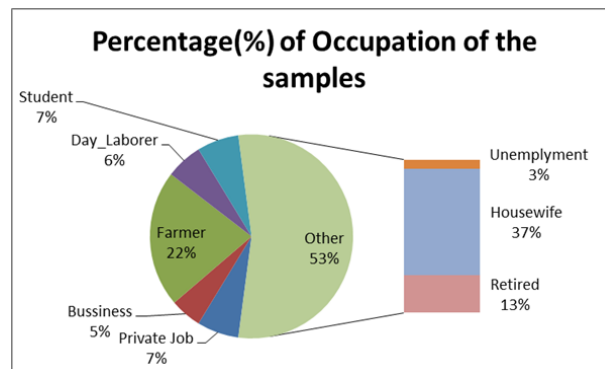


Figure 3 Distribution of the occupation of respondents.

Table 1 indicates that more than 50% (average 56.36%) of the respondents had proper knowledge on hypertension. Figure 4 illustrates that more than 80% (average 85.68%) had positive attitude about hypertension.

Table 1 Knowledge level about hypertension

Knowledge related questions	Yes	No	Don't know
Is HTN a disease?	68.30	18.30	13.30
What are the causes of HTN?	56.70	23.80	17.50
Normal range of HTN	30.00	13.30	56.70
Is salt the causal of HTN?	71.70	18.30	10.00
Is tobacco the cause of HTN?	57.50	24.20	18.30
Is overweight related to HTN?	63.30	23.30	13.30
Is physical exercise beneficial?	64.20	20.80	15.00
Do you know the symptoms of HTN?	39.20	15.00	45.80

Results were expressed as percentage

Table 2 indicates that 68.3% of the respondents never checked their BP, 65.8% of the respondents visited doctor last month. 76.70% and 75% of the respondents never checked their Urine and Blood Sugar and 94.2% of the respondents could not recall when they exercised.

**Table 2** Practice level about hypertension

Practices about HTN	Yesterday	7 Days ago	15 Days ago	1 month ago	3 months ago	Do not recall	Never
When did you check up BP last?	0.00	4.20	5.80	4.20	6.70	10.80	68.30
When did you visit doctor last?	3.30	10.00	2.50	65.80	11.70	6.70	0.00
When did you check up urine last?	0.00	0.00	0.00	0.00	12.50	10.80	76.70
When did you check up blood sugar last?	0.00	0.00	8.30	8.30	8.30	0.00	75.00
When did you exercise last?	2.50	3.30	0.00	0.00	0.00	94.20	0.00

Results were expressed as percentage

## Discussion

High blood pressure is a burning issue now, rising developing countries. It is the top cause of mortality. Prevention is always desirable but it is actually difficult where there is poor awareness, attitude, and practices. This study reveals that 31.67%, 30%, 27.5% and 10.83% of the respondents were 36 to 50 years, 51-65years, 18-35 years and more than 65 years old respectively. This finding was supported by another study which shows that greater number of participants age range was 35-54 (50.2%), followed by 15-34 yrs (11.9%).<sup>5</sup> Male and female distribution was not far away. Housewives were more but another study found dominant occupation was civil service (34.9%) with married people (64.7%). [5] More than half of the respondents had proper knowledge on hypertension. On an average 85.68% had positive attitude toward hypertension. About 68.3% of the respondents never checked their blood pressure. This scenario is almost same in case of other non-communicable diseases i.e. average level of knowledge, good and positive attitude but lower practice level. Similar good levels of basic exposure to hypertension information have been reported in several previous studies among both hypertensive and non-hypertensive patients,<sup>6-10</sup> especially women.<sup>11</sup> Exposure to hypertension knowledge was significantly associated with family history of hypertension but not with education or occupation. Awareness of the asymptomatic nature of the condition could affect attitude toward screening and early health-seeking behavior. Azubuike & Kurmi<sup>5</sup> found in their study that strong positive attitude towards the use of drugs in the management of hypertension was seen only in 44 (17.5%) of the respondents while strong positive perception towards etiology of hypertension seems to be harbored by only 23 (9.1%) who strongly disagreed with the opinion that hypertension could be caused by evil spirits or charms. It has been reported that lack of awareness of asymptomatic presentation of hypertension affect positive attitude towards screening.<sup>12</sup> Another cross sectional study found that the patient's knowledge on blood pressure and exercise was 59.2% and 67.7%, respectively.<sup>13</sup> The attitude toward exercise is good when compared with the result of a research done in Ghana (60%).<sup>14</sup> On the contrary, knowledge about hypertension is low when compared with a research done in Kinondoni Municipality, Dar es Salaam (66.8%).<sup>14</sup> The attitude of the patients in avoiding salt intake and smoking cigarette was 94.6% and 98.5%. Evidence recommended that patients should be educated on the components and application of life style modification for better control and prevention of their blood pressure. The health care providers can come forward and play vital

role to enable the patients to control their blood pressure by giving consistent advices on the life style modification. Community based health education programme can be instituted to raise awareness level as well as practice level.

## Conclusion

This survey revealed specific lapses in knowledge, attitude, and practice behaviors in regards to hypertension. Individuals were less proficient in knowledge, attitude and practices about hypertension. Majority of the respondents had higher knowledge and positive attitude toward hypertension but low level of practices.

## Acknowledgements

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## Conflict of interest

Author declares that there is no conflict of interest.

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