

Study on Status of Blood Pressure among Adults in Selected Villages of Modhukhali

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Abstract

Introduction: Hypertension (HTN) is the most common cardiovascular ailment, a very important preventable cause of cerebro-vascular accidents (CVAs) and coronary heart diseases (CHDs). Hypertension is classically an “iceberg disease”-even in most developed countries, only half of the hypertensive persons are aware of their condition.

Objective: Objective of the study was 'To assess the status of blood pressure among the adults of selected villages of Modhukhali.

Methodology: It was a descriptive cross sectional study conducted for the period of six months from October, 2018 to March, 2019. Purposive sampling technique was used to collect 371 samples. The data were collected by face to face interview by a pretested questionnaire from the selected villages of Modhukhali. Then data were analyzed according to the objectives.

Results: The study reveals that most (65.5%) of the respondents were female and majority (25.61%) of the respondents belong to 30 – 39 years age group. Among the respondents most (39.35%) of the family had monthly income Tk.10001– Tk.20000. The study also reveals that 21.56% respondents' knew that they were hypertensive; around 7.20% were newly diagnosed case of HTN. About 34.21% had optimal range of BP, 27.22% were within normal range, 8.60% had high normal blood pressure and 1.20% had isolated systolic hypertension. Majority (62.52%) of the high blood pressure was diagnosed by MBBS doctor and about 72.5% respondents were taking medicine for high blood pressure. Regarding factors associated to HTN, about 37.47% were tobacco user and among the all tobacco users 59.0% were taking smokeless tobacco, 20.86% were taking smoked tobacco and 20.14% were both smokeless and smoked tobacco user. About 47.43% took extra salt in meal and 39.35% do not perform physical activity regularly.

Conclusion: From this study it is concluded that HTN is one of the major non-communicable disease among rural people about which more measures & appropriate action should be taken.

Key words: Blood pressure, Hypertension, Rural, Adults

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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.¹ It has been identified as the prominent risk factor for mortality and is ranked third as a cause of disability-adjusted lifeyears². Most people with hypertension have no symptoms at all; this is why it is known as the “silent killer”. Normal adult blood pressure is defined as a systolic blood pressure of 120 mm Hg and a diastolic blood pressure of 80 mm Hg. Hypertension is defined as a systolic blood pressure equal to or above 140 mm Hg and/or diastolic blood pressure equal to or above 90 mm Hg. Normal levels of both systolic and diastolic blood pressure are particularly important for the efficient function of vital organs such as the heart, brain and kidneys and for overall health and wellbeing. Risk factor of hypertension includes behavioral risk factors, socioeconomic factors and others. In some cases there is no known specific cause for hypertension. Genetic factors may play a role, and when hypertension develops in people below the age of 40 years it is important to exclude a secondary cause such as kidney disease, endocrine disease and malformations of blood vessels. If hypertension is detected early it is possible to minimize the risk of heart attack, heart failure, and stroke and kidney failure. All adults should check their blood pressure and know their blood pressure levels. Globally cardiovascular disease accounts for approximately 17

million deaths in a year, nearly one third of the total. Among those deaths, complications of hypertension account for 9.4 million deaths worldwide every year. Hypertension is responsible for at least 45% of deaths due to heart disease, and 51% of deaths due to stroke.³

Material and Methods

This descriptive type of cross sectional study was conducted to assess the status of blood pressure among the adults of selected villages of Modhukhali. It also aimed to determine the attributes related to tobacco use, type of physicians for diagnosis, number of respondents diagnosed as cases & under medication, interpretation of blood pressure by the respondents including socio-demographic characteristics of the respondents as well. Study period was six months from October 2018 to March 2019. Purposive sampling technique was used to collect 371 samples from the population. The data were collected by face to face interview through a pretested questionnaire. Then data were cleaned and checked for consistency and analyzed according to the objectives of the study.

Results

A total of 371 people were interviewed and findings are presented in the form of tables and diagrams as follows:

Table 1: Distribution of the respondents according to socio demographic characteristics (n=371)

Attributes	Frequency	Percentage
Distribution of the respondents by age (Years)		
20-29	87	23.45
30-39	95	25.61
40-49	61	16.44
50-59	57	15.36
60-69	37	9.97
70-79	23	6.2
80-89	11	2.96
Mean age of the respondents was 43.82 (±5.2) years		
Distribution of the respondents according to sex		
Male	128	34.5
Female	243	65.5
Distribution of the respondents by monthly family income (Tk)		
<10000	117	31.53
10001-20000	146	39.35
20001-30000	72	19.40
30001-40000	15	4.04
40001-50000	14	3.77
>50000	12	3.23

Table-1 shows that mean age of the respondents was 43.82

(±5.2) years and highest 25.61% were from 30-39 years age group. Among the total respondents 128(34.5%) were male and Majority 146(39.35%) had monthly family income Tk.10001-Tk.20000.

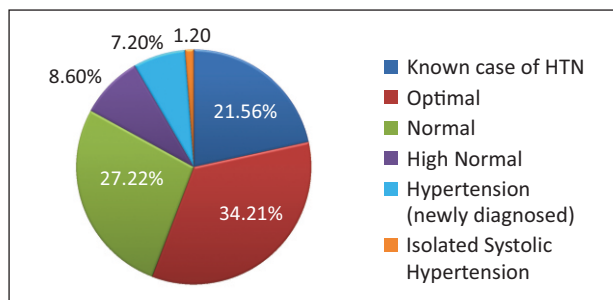


Figure 1: Distribution of the respondents by interpretation of blood pressure (n=371)

Figure 1 shows that 21.56% respondents' knew that they were hypertensive; around 7.20% were newly diagnosed case of HTN. About 34.21% had optimal range of BP, 27.22% were within normal range, 8.60% had high normal blood pressure and 1.20% had isolated systolic hypertension.

Table 2: Distribution of the respondents by physicians for diagnosis as hypertension (n=80)

Physician	Number	Percentage
MBBS doctor	50	62.52
Specialized doctor	14	17.51
Assistant of doctor	1	1.25
Village doctor	13	16.25
Homeopath	1	1.25
Others	1	1.25
Total	80	100.00

Table 2 shows that majority (62.52%) of the high blood pressure patients were diagnosed by MBBS doctors, 17.51% by specialized doctors, 16.25% by village doctors and 1.25% by doctor's assistant.

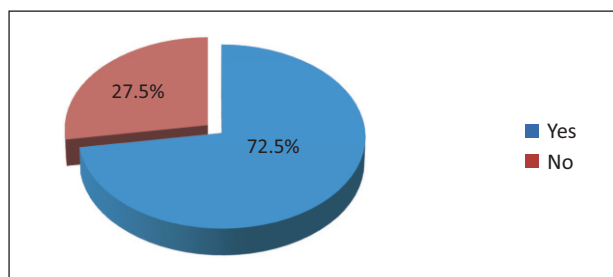


Figure 2: Distribution of the respondents by taking medicine for high blood pressure (n= 80)

Figure 2 shows that majority 72.5% of the respondents was taking medicine for high blood pressure but 27.5% were with no medication.

Table 3: Distribution of the respondents by attributes related to blood pressure (n=371)

Attribute	Frequency	Percentage
Taking Tobacco Product		
Yes	139	37.47
No	232	62.53
Types of Tobacco Consumption		
Smokeless	82	59.00
Smoking	29	20.86
Both	28	20.14
Taking extra salt in meal		
Yes	176	47.43
No	195	52.56
Perform physical exercise regularly		
Yes	225	60.64
No	146	39.35

Table 3 shows that majority 232(62.63%) respondents were not taking any tobacco product and rest 37.47% of the respondents were taking tobacco product among them 59.0% were smokeless tobacco user, 20.86% were involved in smoking and 20.14% consumed both smokeless and smoked tobacco. About 47.43% respondents were taken extra salt in meal and 60.64% perform physical exercise regularly.

Discussion

The result showed that mean age of the respondents was 43.82(±5.2), among total respondents 34.5% were male and 65.5% were female. The result also showed that 39.35% had monthly family income was taka 10001-20000. The result showed that 62.53% respondents don't take any tobacco products. About 59.0% respondents were consumed smokeless tobacco, 20.86% smoking tobacco product & 20.14% both smokeless & smoking tobacco products. The result showed that majority (70.04%) of the respondents had normal blood pressure and total 29.96% suffered from HTN. About 62.52% of the high blood pressure patients were diagnosed by MBBS doctor. However, 47.43% take extra salt in meal, 60.64% perform physical exercise regularly. A study conducted in Eastern Sabah, Malaysia showed that the number of diagnosed cases of hypertension was 24.5%. There were little variations between those studies as both were conducted in rural area⁴. Another study done in Amirkola, North of Iran showed that about 62.8% people were suffering from hypertension and among them 41.2% were diagnosed. These variations were due to the fact that they conducted the study on above 60 years old population who were more prone to HTN⁵. The high blood pressure was diagnosed

mostly 62.52% by MBBS doctors. The study also showed majority respondents 73% were taking medicine for controlling of blood pressure & 27% didn't. Hypertension among adults in Bangladesh (evidence from a cross sectional study) showed that the overall prevalence of hypertension was 26.4%. The prevalence rate differ from this study because it was cross sectional study & purposive in nature. Prevalence of hypertension in people living in coastal districts (Barisal, Borguna, Vola, Pirojpur, Potuakhali & Jhalukathi) was 17.8%. It was lower than this study because of larger sample size.

Conclusion

According to the study, majority of people of Modhukhali village had no sound knowledge about hypertension. The study revealed that among the total respondents many were free from high blood pressure but some were affected. The majority of the high blood pressure cases were diagnosed by MBBS doctors. Among the respondents most of them were not taking any tobacco product and some were taking tobacco products in various forms. Among the smokeless tobacco consumer, some were involved in smoking and very little were involved in both. The majority of the respondents were taking some medicine for high blood pressure but some didn't. It is hoped that government will provide due emphasize on the spread of information through effective Behavior Change Communication (BCC) in every corner of community on this particular issue of controlling hypertension with special focus on rural people to gain more and more knowledge through motivation towards prevention and control of hypertension. Thus it will help achieving SDGs goals towards a potential and dynamic future generation.

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