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RESEARCH ARTICLE

APPRAISAL OF PRESENT SITUATION OF HYPERTENSION IN PORT CITY CHATTOGRAM, BANGLADESH

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Abstract

Background: Hypertension is a very much common disease. While data collection on hypertension in resource poor environments has been improving through the use of standardized surveys, little is known about how well treatments are being applied. Knowledge of gaps in diagnosis, treatment pattern and changing lifestyle is necessary if appropriate illness management are to developed.
Methods: Using a community based sample has been taken from Chittagong Medical College Hospital, Chittagong and from the Chittagong city, studied through some questions asked to the suspicious patients.
Results: Randomized sampling methods were used to identify adults from 18 to above from different wards and areas of CMCH and Chittagong city. Using World Health Organizations guidelines, data were collected on subject's demographics, medical history, blood pressure and health behaviors. The study was conducted on 500 hypertensive patients at the Chittagong Medical College Hospital and Chittagong city between 23October 2021 to 8 December 2021, total 7 weeks. This survey was done by a structured questionnaire written in Bangla and English.
Conclusions: It might be concluded from this research study that half of respondents were female in addition to half of respondents were male. It can be assumed that outcomes of this research study will play as the baseline for the future studies in same context.
Keywords: Chattogram, diagnosis, hypertension, survey, treatment pattern and changing lifestyle.

INTRODUCTION

Hypertension is by far the most common disease affecting humans, and it is highly prevalent in both sexes and extends to industrialized and developing countries. Compared with standard factors, individuals with high blood pressure have a significantly higher chance of developing during their lifetime a stroke, coronary heart disease, heart or kidney failure, and peripheral artery disease with also a higher risk of developing atrial fibrillation, deterioration in cognitive function, and dementia[1]. The high occurrence and the multifold significant contribution of the hypertension to the cardiovascular in addition to renal risk reason for its site as top contributor to disease burden worldwide[2]. Despite extensive investigation the cause before causes of the hypertension in given patient persist in most cases as unclear currently such as they were spans ago[3]. Yet, data that had been obtained by the basic and the clinical studies had provided considerable information of factors that can be potentially included as well as of molecular, neural, humeral and structural appliances through which blood pressure increase can occur[4]. The aim of compendium, first devoted to the hypertension by the Circulation Research, is to proposal clinicians and researchers a critical review of knowledge, it is, and from genetic in addition to molecular to the integrated diagnosis, path physiology and treatment[5]. Sex differences happen in both prevalence and existence of patients with the idiopathic pulmonary arterial hypertension (IPAH)[6]. It was sought to illustrate the sex related variances in the right ventricular remodeling in an age matched male and also female patients with the IPAH using the cardiac magnetic resonance imaging[7]. The endothelium shows crucial role in the acute regulation of the vascular tone and also in long-term the vascular remodeling[8]. However, the vascular features of the physiological aging and also hypertension is not necessarily analogous[9]. However, with the increasing age, the vascular response to the Ach is analogously reduced among HT and also NT[10]. The eutrophic remodeling is the most frequently found in important hypertension[11]. Vascular fibrosis is the critically important in the determining

the vascular remodeling in the hypertension and also it involves, variations in the collagen deposition[12]. Strong epidemiological in addition to experimental evidence designate that both age in addition to hypertension lead to the significant functional plus structural impairment of cerebral microcirculation, the predisposing to development of the vascular cognitive impairment (VCI) in addition to Alzheimer's disease[13]. Preclinical studies begin a causal connection between cognitive declines in addition to micro vascular rarefaction in hippocampus; a zone of brain significant for learning in addition to memory[14].There is the growing evidence which alterations of cerebral microcirculation show a vital role in the age-related deterioration in the higher brain [15]. Importantly, there is the strong evidence which aging is the associated with decline in the cerebral capillary density in addition to decreases in the microvascular density give to age related deterioration in the regional cerebral blood flow[16]

The aim of the work is to present the current scenario of hypertensive patients in Chittagong Medical College Hospital and to find the relationship between age and hypertension, as well as to find out the prevalence of habits associated with hypertension such as smoking.

METHODS

Study Design & Participants

This research work was based on a sample of 500 patients who were diagnosed with hypertension seeking care in Chittagong Medical College Hospital, Bangladesh between 23 October 2021 to 8 December 2021.

Data Collection Procedures

This survey was done by a structured questionnaire written in Bangla and English. This questionnaire was practiced to collect the data from patients. Questions were requested to the patient in addition to finally answers of patient were enclosure into data collection form.

RESULTS AND DISCUSSION

From above Figure 1 it can be observed that about 50% of patients are male and 50% of patients are female. Age are categorized into four different group and the patient below 20 years, 21-40 years, 41-60 years, above 60years and the percentage of this age group are 0%, 21%, 65%,14% respectively (Figure 2).

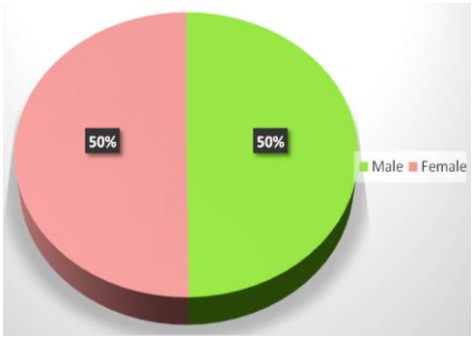

Figure 1: Gender distribution of hypertensive patients.

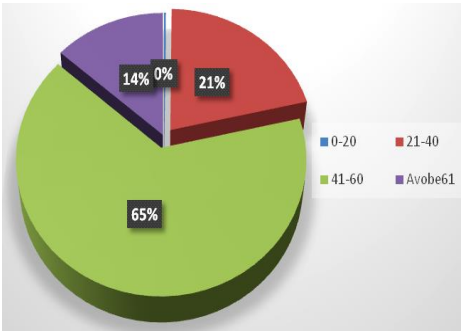

Figure 2: Different age group of patients.

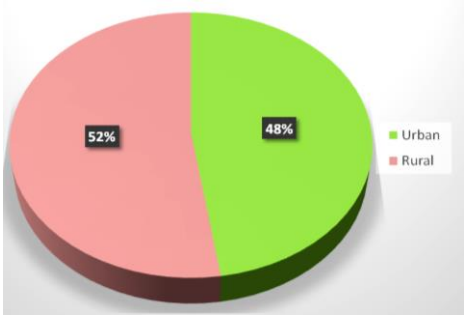

Figure 3: Percentage of patient's area.

In this study 48% patients live in urban area and 52% patients live in rural area (Figure 3). In this study 10% patients were gone to Doctor on monthly for checking up their blood pressure, 15% patients were 3-4 months, 48% patients were 6 months and 27% patients were once a year (Figure 4).

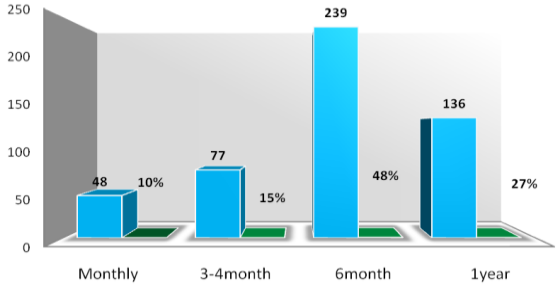

Figure 4: Visit Doctor for blood pressure check-up.

About 7% patients have family history (due to Mother) having hypertension, about 76% patients replied negative and 17% patients replied that they do not know (Figure 5). About 14% patients have family history (due to father) having hypertension, about 69% patients replied negative and 17% patients replied that they do not know (Figure 6).

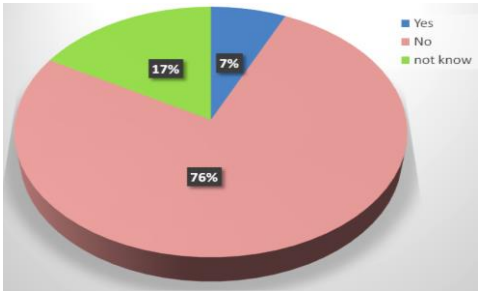

Figure 5: Mother death from or suffer a heart attack or stroke.

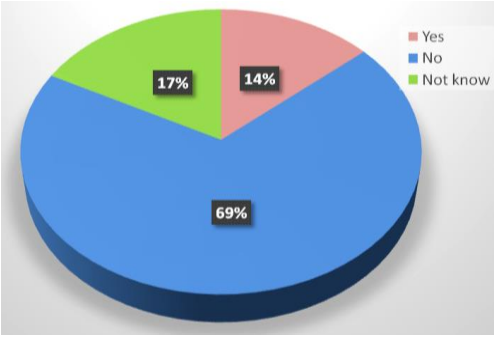

Figure 6: Father death from or suffer a heart attack or stroke.

Most of the patients don't checkup their blood pressure at home which was 78% and 22% patients do check-up their blood pressure at home (Figure 7).

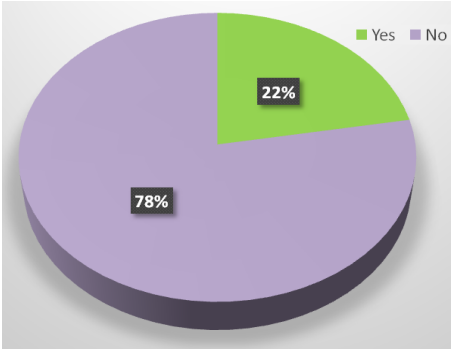

Figure 7: Blood pressure check-up at home.

Smoking is one of the reasons of hypertension. In this study 36% patients were smoker and 64% patients were non-smoker (Figure 8).

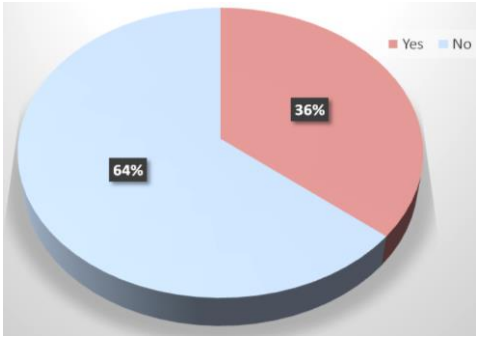

Figure 8: Percentage of patient's habit like smoking.

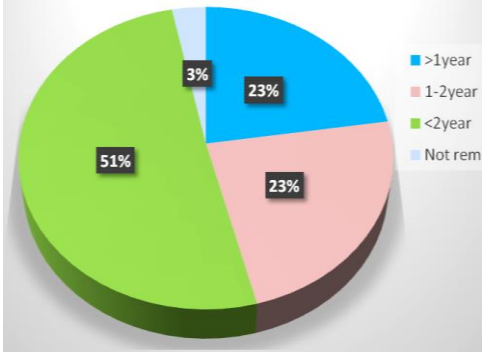

Figure 9: Percentage of patient treatment duration.

Here 23% patients took treatment less than one year, 23% patients took treatment about 1-2 years, 51% patients took treatment more than 2 years and 3% patients did not remember their treatment duration (Figure 9).

CONCLUSIONS

It might be concluded from this research study that half of respondents were female in addition to half of respondents were male. Based on findings of research, it was realized that the patients with 41-60 years patient, hurt hypertension and also its related illnesses. Based on findings of research study, following vital recommendations should be taken: Religious organizations might be used as the platform for the disseminating fitness-related information mostly hypertension management methods in rural areas. Government and also NGOs should assist rural inhabitants by providing and also organizing ICT training epicenters for them to empower in addition to source for the information on internet. The government could subsidize cost of the special hypertension treatment to be reasonable by rural dwellers. It can be assumed that outcomes of this research study will play as the baseline for the future studies in same context.

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AUTHOR'S CONTRIBUTIONS

Islam MS: writing original draft, collecting data and analysis. **Jannat T:** statistical analysis, data collection and processing. Both authors read and approved the final version of the manuscript.

DATA AVAILABILITY

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

CONFLICT OF INTEREST

None to declare.

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