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Knowledge and Prevalence of Hypertension and its Associated Risk Factors among the People in Thiruvallur Districts

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ABSTRACT:

Introduction:

Hypertension remains a major public health challenge and it is identified as the leading risk factor for cardiovascular morbidity and mortality. It accounts for one-third of the global

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preventable premature deaths annually. Knowledge gaps are important barriers in the effective prevention and treatment of hypertension. Knowledge and understanding of hypertension and its associated health risks remain inadequate despite the increasing trend of hypertension prevalence. This study was conducted to assess the prevalence, knowledge and perceptions of hypertension among the people in ThiruvallurDistrict,Tamilnadu , India .

Materials and methods:

A set of 15 questionnaires regards to assess the level of knowledge and prevalence of hypertension and its associated risk factors were taken and 100 participants of independent age and sex were selected by random sampling method and asked them to fill the questionnaire. Survey was conducted on an online forum and the results were obtained and statistically analysed.

Results:

Among 100 participants, 62 of them were Male and 38 of them were Female. 30 % of them were known hypertensive and more than 50 % of the participants don't know whether they were hypertensive or not. More than 60 % of the participants were not aware whether their blood pressure is under control. 70 % of the participants were not aware that hypertension is a chronic disease and stroke is an associated risk factor of hypertension.

Conclusion:

This study demonstrates an increased occlusion, prevalence of hypertension, knowledge gaps and misconceptions surrounding hypertension among the people in ThiruvallurDistrict . This evidence is useful in streamlining interventional programmes aimed at improving knowledge and prevention of hypertension. This study has unveiled important barriers to hypertension prevention ; lack of appropriate information about hypertension and misconceptions . This study further identified a positive enabler ; a high level of awareness which is useful in realigning existing interventions to prevent and control hypertension in rural settings .

KEYWORDS: Hypertension;Knowledge;Prevalence; Awareness.

INTRODUCTION:

Hypertension is one of the most common chronic diseases and one of the most critical health problems causing death as a single contributor in developed and developing countries (1,2). It accounts for one-third of the global preventable premature deaths annually (3). In 2006, hypertension was documented as the primary cause of death in over 56,000 deaths and as a contributing factor in an additional 250,000 deaths out of the 2.4 million deaths in the United States alone (4). There is an estimated increase in the prevalence of hypertension by 17% in the next decade of effective preventive measures are not implemented , making it a major health problem in developing countries(5).In most cases of hypertension, the primary cause was not detected, and these cases are known as essential hypertension. Essential hypertension is not curable, but with medication the blood pressure (BP) can be controlled to that of the

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physiological level. Nevertheless, as hypertension itself usually does not present with symptoms, it can remain undiagnosed for a long time. Hypertension is also called a silent killer disease, which is often diagnosed incidentally. If a hypertensive patient remains untreated, it can lead to serious life-threatening complications of vital organs such as the brain, eye, heart, and kidney, resulting in death or serious patient disability (6,7). It is believed to be one of the main risk factors for peripheral vascular, cerebrovascular and cardiovascular diseases (CVD) which include stroke, coronary disease, peripheral artery disease, renal disease and heart failure (8,9). Obesity, sedentary behaviors, and other individual risks for one of these cardiovascular illnesses could be increased by two to three times due to hypertension .

Knowledge gaps are important barriers in the effective prevention and treatment of hypertension (10). In the advent of scarce resources to improve management and control of hypertension, there is the need to focus attention on preventive measures, which target behavioural change through education and awareness creation. Several models have proposed knowledge as important for health behaviours and sustained behavioural changes (11). Although these models may differ in content and perspective, they stress the importance of evaluating the perceptions, attitudes, beliefs, and outcome expectations of individuals as crucial means to understand observed behaviours and to guide behavioural change. Knowledge of a disease condition influences a patient's attitude and practice, and improves compliance with treatment and subsequent reduction in prevalence (12). Patients' knowledge and understanding of the potential health risks associated with hypertension, and the potential positive effects of lifestyle modification are inadequate (13). A study by Rizwana et al (14) reported a huge gap in knowledge of modifiable risk factors of hypertension.

It is essential to control hypertension to minimize the side effects of hypertension. Rates reported for hypertension control were disappointing , which were suggested to be 13 to 56 percent around the world (15,16). An important component to control hypertension is knowledge, which is relative to lower rates of ceasing interventions, following the interventions behavior and better control on disease by patients. As a result, careful evaluation of hypertension has been considered as an inseparable part of general care of the patients (17). Studies suggested low levels of knowledge on hypertension among patients (18), and lack of correct information and improper understanding of hypertension did not appertain to rural sites; it has been widely reported in urban environments and industrial countries, too

The objective of this study is to assess the level of knowledge prevalence on hypertension, to analyse the knowledge and prevalence of associated risk factors of hypertension and to spread awareness on hypertension and its associated risk factors among the people in ThiruvallurDistrict,Tamilnadu , India .

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MATERIALS AND METHODS:

The cross-sectional descriptive and analytical study design was used to assess the Knowledge and prevalence regarding hypertension among the people in Thiruvallur District, Tamilnadu , India . 100 participants of independent age and sex by random sampling method were selected for the study . A set of 15 questionnaires was designed and prepared, which was later reviewed by the experts in this field of study. The questionnaire consists of Socio-demographic information of the respondents such as Age, Gender and educational status, also sections on knowledge, attitude and practice regarding hypertension. The Survey was conducted on an online forum . The results were obtained and statistically analysed.

RESULTS AND DISCUSSION:

Among 100 participants, 62 of them were Male and 38 of them were female. On the educational status , 25 % of the participants completed primary schooling , 46 % were graduates and 29 were uneducated. 30 % of them were known hypertensive and more than 50 % of the participants don't know whether they were hypertensive or not . 54 % of the participants were undergoing treatment for hypertension. More than 60 % of the participants were not aware whether their blood pressure is under control. 40 % of the participants have the habits of smoking and alcohol intake and 60 % have no such habits. Among the participants, 19 % were diabetic and 68 % of the participants don't know whether they were diabetic. 60 % of the participants have blood relations with a history of hypertension. 70 % of the participants were not aware that hypertension is a chronic disease. 75 % of the participants were not aware of the complications of hypertension and stroke is an associated risk factor of hypertension.

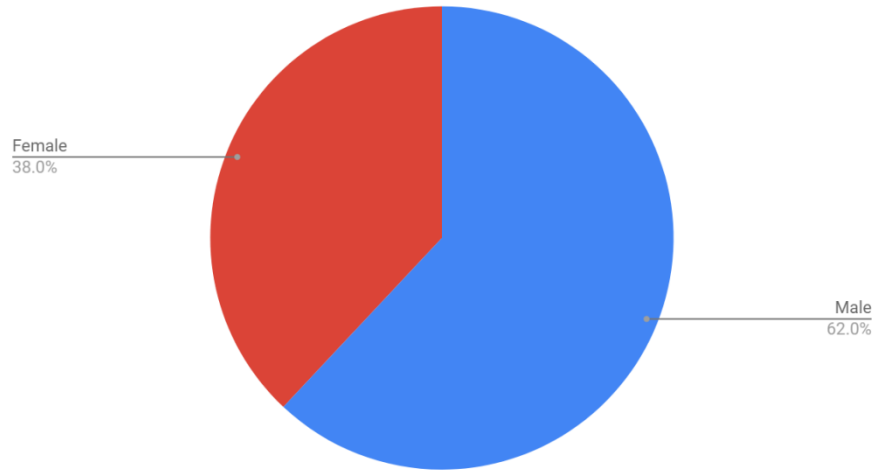

Figure 1 - Pie chart showing percentage distribution of gender. Majority (62%) of the participants were male and the remaining (38 %) of the participants were female.

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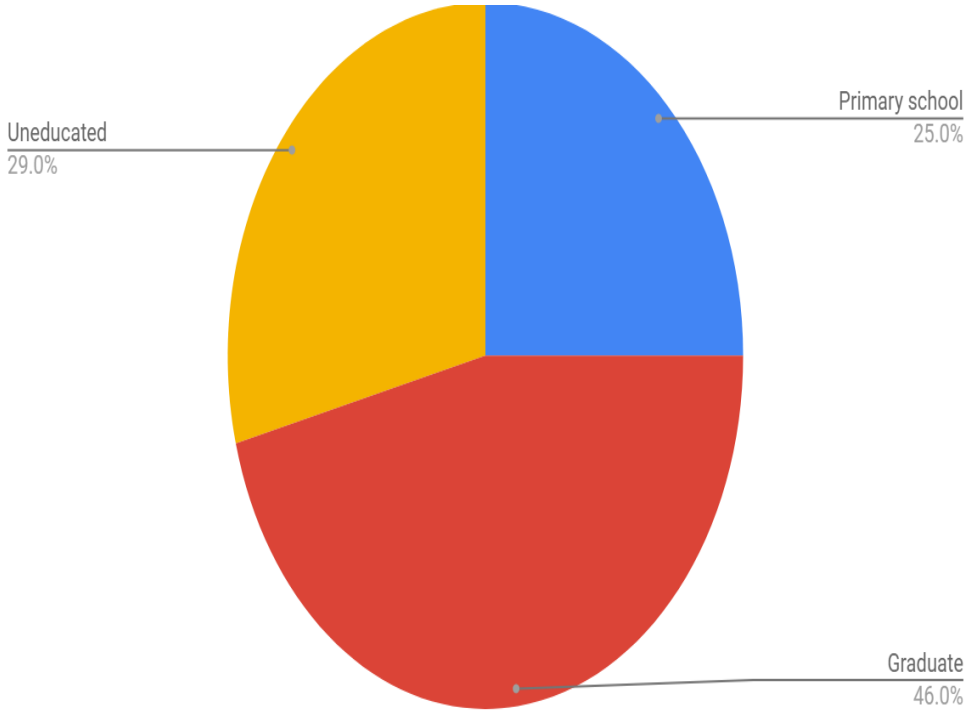

Figure 2 - Pie chart showing the percentage distribution of educational status. Majority (46 %) of the participants was graduates, and 29 % of the participants were uneducated.

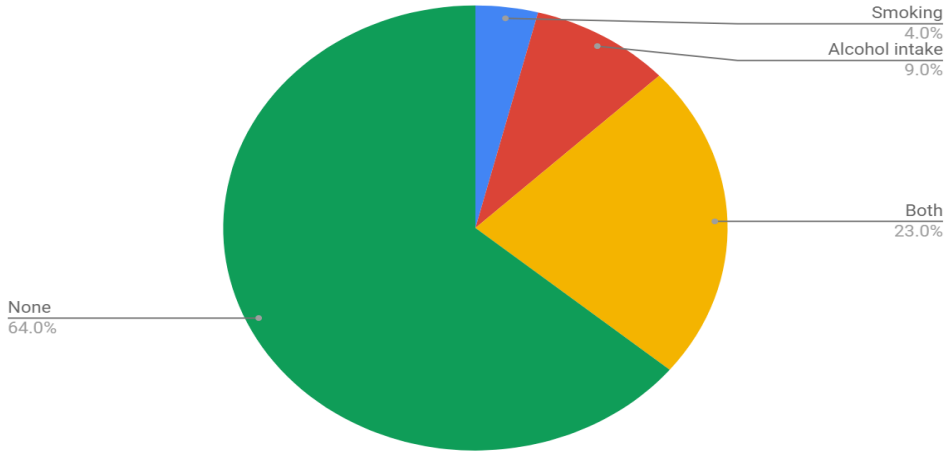

Figure 3 - Pie chart showing percentage distribution of the habits of the individuals. Majority (64 %) of the participants don't have any bad habits, 4 % of the participants have a habit of smoking, 9 % of the participants have a habit of alcohol intake and the remaining 23 % of the participants have a habit of both alcohol and smoking.

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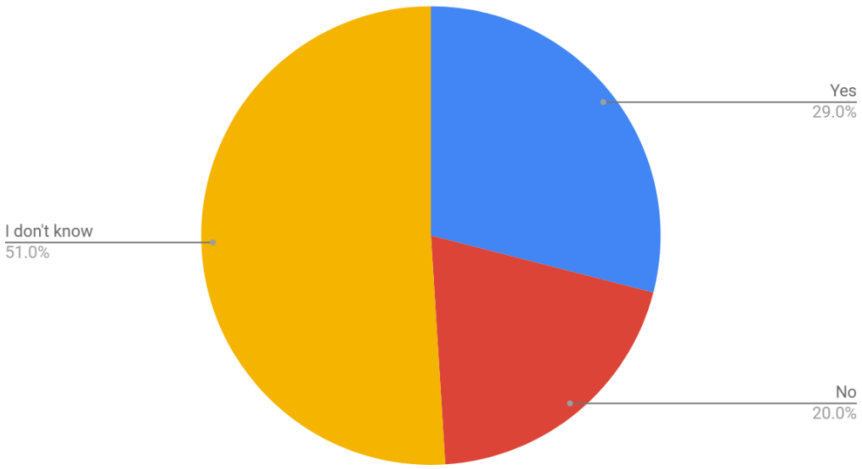

Figure 4 - Pie Chart showing percentage distribution on the prevalence of hypertension. Majority (51 %) of the participants are not aware whether they are hypertensive, 29 % of the participants were known hypertensive .

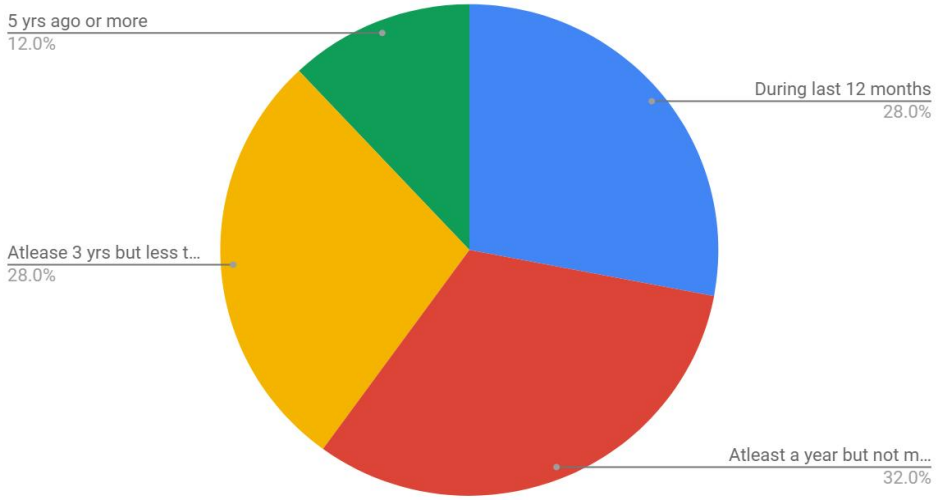

Figure 5 : Pie chart showing percentage distribution of recent check of blood pressure by the participants . Majority (32 %) of the participants checked their blood pressure at least a year before but not more than 3 yrs . 28 % of the participants checked their blood pressure at least before 3 yrs but not more than 5 yrs , 12 % of the participants checked before 5 yrs or more and 28 % of the participants checked during last 12 months .

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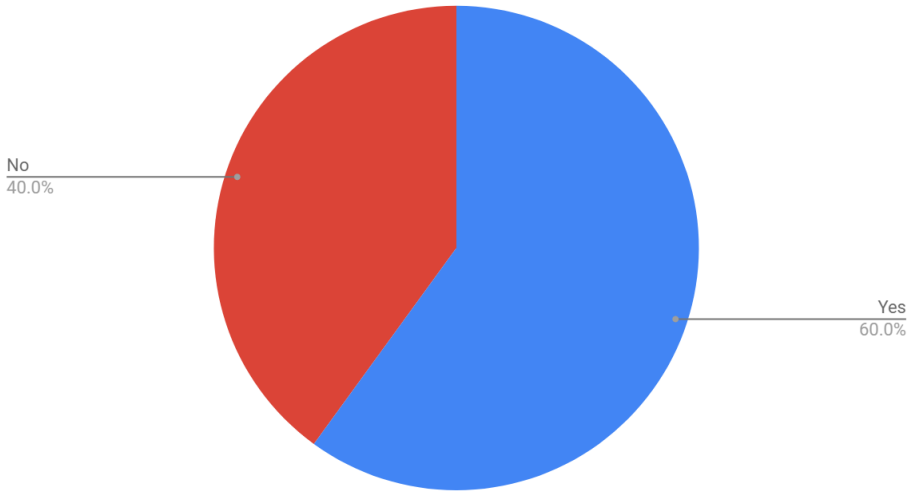

Figure 6 : Pie chart showing the percentage distribution of participants having blood relations with a history of hypertension . Majority (60 %) of the participants have blood relations with a history of hypertension and 40 % of the participants were not having any such relations.

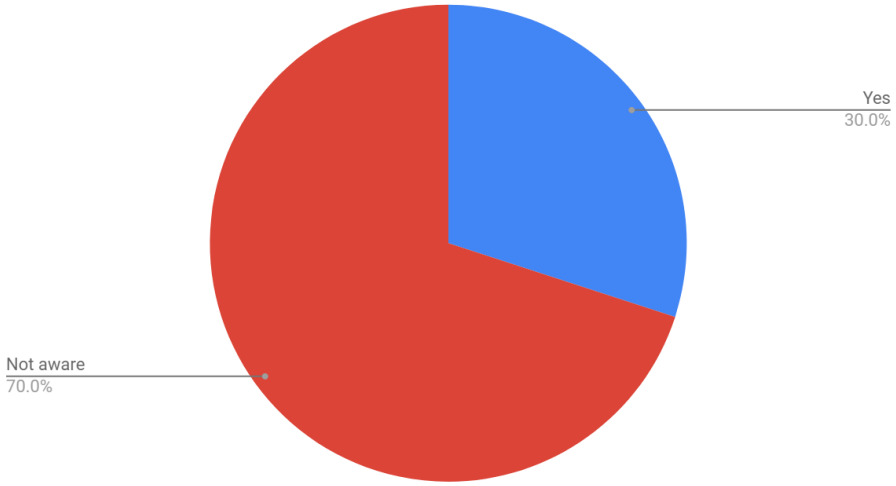

Figure 7 : Pie chart showing the percentage distribution of awareness among the participants on hypertension as a chronic disease . Majority (70 %) of the participants were not aware and 30 % of the participants were having awareness.

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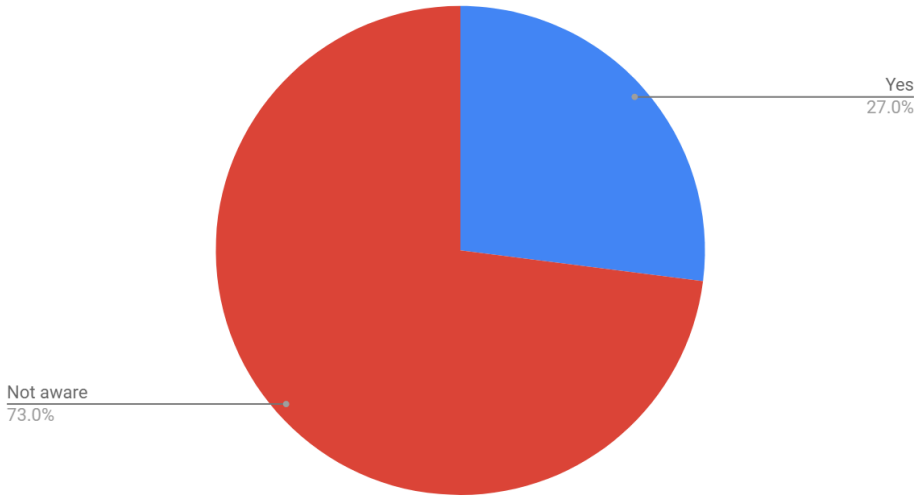

Figure 8 : Pie chart showing percentage distribution of awareness among the participants on complications of hypertension . Majority (73 %) were not aware and 27 % of the participants were having awareness.

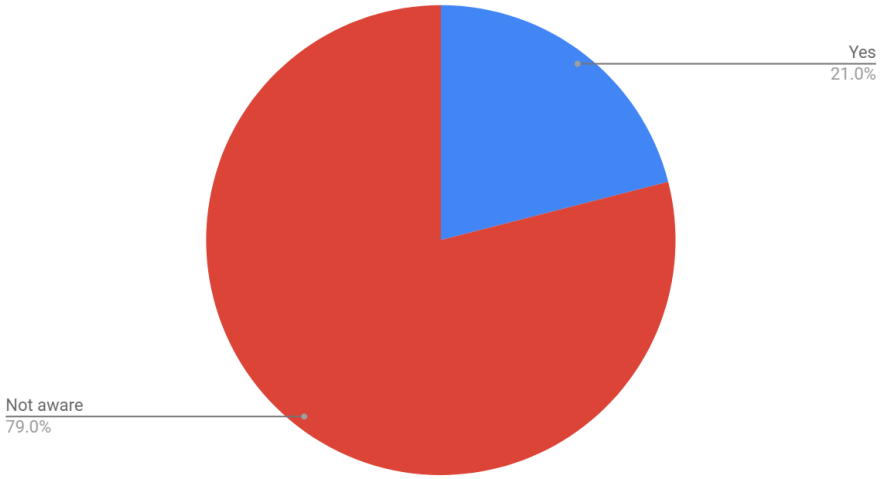

Figure 9 : Pie chart showing percentage distribution of awareness among the participants in relation of stroke with hypertension . Majority (79 %) of the participants were not aware and 21 % of the participants were aware.

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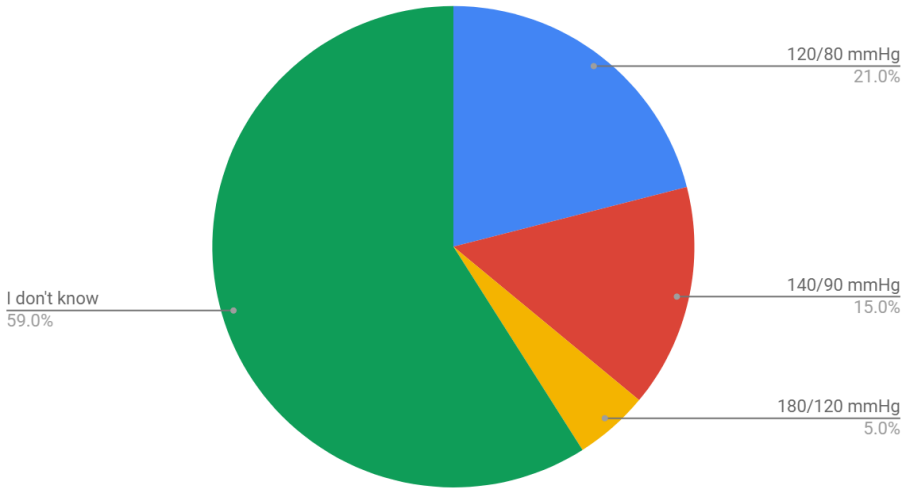

Figure 10 : Pie chart showing percentage distribution of knowledge among the participants on normal blood pressure range . Majority (59 %) of the participants were not knowledgeable on the normal blood pressure range . 21 % of the participants answered 120/80 mmHg , 15 % of the participants answered 140/90 mmHg and 5 % of the participants answered 180/120 mmHg .

CONCLUSION:

This study demonstrates an increased occlusion, prevalence of hypertension, knowledge gaps and misconceptions surrounding hypertension among the people in ThiruvallurDistrict . This evidence is useful in streamlining interventional programmes aimed at improving knowledge and prevention of hypertension. This study has unveiled important barriers to hypertension prevention; lack of appropriate information about hypertension and misconceptions. This study further identified a positive enabler; a high level of awareness which is useful in realigning existing interventions to prevent and control hypertension in rural settings .

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