

Review Article

Awareness of Hypertensive Patients about Disease, Self Care and Complication Management

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Abstract: Hypertension is an important public health- challenge in the developing and the developed world alike. However, hospital-based studies on cardiovascular diseases including hypertension in a developing country like Nepal have been limited. Objective: The objective of the present study was to determine the awareness of hypertensive patient about self-care and complication management. Methods: A total of 50 adult hypertensive patients over who attend in medical outpatient department and in patient department of Manomohan Cardiovascular Thoracic and Transplant Centre, Tribhuvan University Teaching Hospital, Kathmandu, were included using a descriptive research design. The data was collected by face to face interview, using a questionnaire consisting of a combination of structured and semi-structured questions from 8 April 2012 to 6 May 2012A.D. This study shows that only 14% of respondents were aware about hypertension while highest number of respondents (56%) was moderately aware about it. Only 15% of respondents were unaware about it. Total awareness score is 45. Average level of awareness is 27.14. It can be concluded that the awareness level of hypertensive patients is still low. The modification of life style is satisfactory for most risk factors, except for few like salt intake, additional salty food. So Focus should also be given on modification of lifestyle for reducing the adverse consequences of hypertension. Data analysis was done by using SPSS 16 version.

Keywords: Hypertension; self-care; Hypertensive Patient, complication management.

INTRODUCTION

Chronic non-communicable disease are assuming increasing importance among adult population in both developed and developing countries cardiovascular disease and cancer are at present leading cause of death in developed countries (e.g. Europe and North America) accounting for 70-75% of total deaths[1].

Hypertension is a major health problem common in economically developed country than in developing country. It is essential to cause 7.1 million deaths annually accounting 13% of death globally. Overall 26.4% adult population was estimated to have hypertension in 2000 A.D. A number that was projected to increase to 29.2% by 2005 A.D [2].

80% of death worldwide related to high blood pressure occurs in developing countries. High Bp is becoming an epidemic worldwide. The prevalence of HTN is caused by lifestyle factors such as inactivity, high fat diet and high salt consumption [3].

The prevalence of chronic disease is showing an upward trend in most countries and for several reason this trend is likely to increase. The burden of chronic condition such as hypertension has been linked to an iceberg phenomenon in which we only see a part of

whole problem. Even within the visible portion, there are different strata of hypertension with or without controlled blood pressure [4].

38% heart disease, 33% COPD, 10% DM and 19% cancer, a Nepal Health Research Counsel Report on Prevalence of non-communicable disease [5].

Prevalence rate of hypertension has been increased by 3 times in last 25 years. If blood pressure is controlled at initial stage rate of hypertensive complication can be reduced by 50-75% [6].

In the Western Pacific and South Eastern Asia regions the prevalence of hypertension ranges from 5-47% in men and from 7-38% in women, which is comparable with that in developed countries. Although the age standardized rate of hypertension in Korea, Thailand and Taiwan is the lowest among the seven world regions defined by World Health Organization, the incidence of hypertension is actually high due to increasing obesity and metabolic syndrome[7].

Hypertension is defined as systolic blood pressure is 140 mmHg or high and diastolic blood pressure is 90 mmHg or more on three separate occasion. It is totally not curable but can be controlled

with medication and maintaining healthy habits and lifestyle [1].

The commonest present cause of secondary hypertension is oral contraception because of estrogen component in combined preparation [4].

Noncompliance with treatment has long been plague of national health system in U.K. In management of hypertension, figures from U.K suggests that noncompliance with medication may be as high as 50-80%, with compliance rapidly decreasing over time [8].

The prevalence is higher in person, who has other cardiovascular disease like stroke, heart failure; coronary artery disease. The incidence of hypertension is actually high due to increasing obesity and metabolic syndrome [7].

Multivariate logistic regression analysis for risk factors showed that hypertension is significantly associated with salt intake, sedentary habit, obesity and alcohol intake but no significant co-relation was found with tobacco use. Comparison of risk factors between two periods showed that salt intake and obesity were main culprits for this increase [9].

Hypertension is divided into primary (essential) and secondary. Hypertension is classified as "essential" when the causes are generally unknown. Essential hypertension is most prevalent form of hypertension accounting for more than 90% of cases of hypertension. Hypertension is classified as "secondary" when some disease process and abnormality is involved in its causation. Prominent among these are disease of kidney (chronic glomerulo-nephritis and chronic pyelo-nephritis), tumors of adrenal glands, congenital narrowing of aorta and toxemias of pregnancy. Altogether these are estimated to account for about 10% or less of the cases of hypertension. Risk factors of hypertension are:

- 1) Non-modifiable Risk Factors: age, sex, genetic factors, ethnicity
- 2) Modifiable Risk Factors: obesity, salt intake, saturated fat, dietary fiber, alcohol, heart rate, physical activity, environmental stress and socio economic status[4].

Certain lifestyle habits including unhealthy dietary habits, smoking and inactivity are risk factors for cardiovascular disease that in part may be medicated through effort of blood pressure and adolescents are less clear than adulthood [10].

It has become one of the very common diseases in modern society. It is a result of mental tension and steeping into highly sophisticated lifestyle of modern society. Beside that lack of people on their food habit also played a crucial role in expansion of disease.

Likewise, increasing pace of organization and industrialization of the developing countries has contributed significant impact on accelerating the disease. It can be assumed that there is highly positive co relation between increased number of hypertension and the pace of modernization [1].

Objectives of Study

General Objective

To find the awareness of hypertensive patients about the disease, self-care and complication management

Specific Objectives

- To find out knowledge of hypertensive patients about disease.
- To find out awareness of self-care regarding hypertension.
- To find out knowledge about complication management among hypertensive patients.

Research Study Design

- Study Area: ManoMohan Cardio Vascular Thoracic and Transplant Centre.
- Population: All inpatients and outpatients of ManoMohan Cardiovascular Thoracic and Transplant Centre, Kathmandu.
- Patients of all sex, age group, ethnicity and various residential areas.

Sampling Method

Non probability purposive sampling method was adopted. All subjects who met the criteria and who have interest to participate and spend time in study were taken.

Data Gathering Instrument

The questionnaires were developed according to objective in structure and semi-structure format and design to show bio-demographic data of respondents, personal habits, and knowledge regarding hypertension.

DISCUSSION

This study entitled Awareness about Awareness of Hypertensive Patients about Disease, Self Care and Complication Management. The design of this study is descriptive in nature and was conducted in 50 samples. Hypertension is one of the most common disease affecting humans worldwide. Hypertension is the risk factor for coronary heart disease, stroke, congestive heart failure, end-stage renal disease, and peripheral vascular disease.

Findings on Demographic Features

The findings of this study shows that majority of the respondents belonged to the age group 41-60 years (58%), followed by 61-80 years (12%). Brahmins (38%) were the majority of the respondents, the next were Chhetri (28%), Newar(24%) and Mongolian (10%).

Majority of the respondents were Hindus (92%), then Buddhist. This represents the mixed society of Kathmandu. The majority of the respondents were illiterate (12%) and (58%) could read and write. Remaining (8%) received certificate level education and next 22% had received higher education. These reflect the true situation in our country. Highest number of respondents were female (56%) but male respondents were (44%).

But as per research on "Life style of patient before and after diagnosis of hypertension in Kathmandu" [11]. The study used adult hypertensive patients above 30 yrs. of age from two hospital of Kathmandu. Mean age of the respondents was 41-50 years. Male patients (57%) exceeded female patients. Men tend to display higher blood pressure than women, more evident in young and middle-age. This corresponds to the incidence and prevalence of hypertension in Nepal, as majority of hypertension is found to affect middle adult population. The prevalence of hypertension and the blood pressure levels increased with age in both men and women.

Findings regarding awareness about Hypertension among respondents

The majority of respondents (30%) were diagnosed as hypertension since one year and diagnosed as hypertension for more than 5 years. Only 6% of respondents had faced heart attack as a complication of hypertension and only one respondent had blurred vision as complication. Majority of respondents (66%) used to do regular exercise. But the study on "Awareness of Hypertensive Patient Before and after Diagnosis of Hypertension," [11], shows that exercise increased to 47% from 23%. Similar findings were also reported by [6], he found that walking an hour per day at the rate of 4km/hour to be an effective exercise for reducing hypertension.

Another study [9] also showed that there is an inverse relationship between an aerobic physical activities and blood pressure. Regular aerobic physical activity has been demonstrated to be beneficial both for prevention and treatment of hypertension. As per study on "Pattern of lifestyle among hypertensive patients", [5], 78% of respondents perform regular exercise. This study shows that majority of respondent (86%) used to take medicine regularly.

This study shows that 28% of respondents were aware about hypertension as a heart disease and only 24% of respondents were aware about it is related to pressure of heart. But A study on "A sub-urban hypertension-related knowledge, attitudes and life-style practices among hypertensive patients in Nigerian community"[12], shows that 61% of our respondents knew hypertension to indicate high BP, The findings of that study also suggest that hypertensive patients are not sufficiently aware about hypertension regarding its

causes, signs and symptoms, control measures and complications.

[13] Studied of prevalence, awareness and control of hypertension in a suburban area of Kathmandu, Nepal. This study showed prevalence of hypertension is significant in Nepal and awareness, treatment and control rates are poor.

Another study carried out by [14] in China also showed high prevalence of hypertension in rural adults in north east China with low rate of awareness and control. This study shows that the highest number of respondents (68%) was aware about much intake of oil and salt is the cause of hypertension and only 36% of respondents think that stress is cause of hypertension. This study shows that 82% of respondents were aware about headache as a sign/symptom of hypertension but only 20% were aware about blurred vision and palpitation. 82% of respondents were aware about heart attack as a complication of hypertension but only 15% of respondents were aware about stroke. The highest number of respondents (86%) managed increased blood pressure by taking medicine but only 58% of respondents minimized intake of salt/oil. Highest number of respondents (82%) were aware about reducing salt/oil can manage complication of hypertension but only 56% of respondents were aware about reducing weight. Highest number of respondents(50%) were aware about stress can be managed by sharing while only 22% think that stress can be managed by doing nothing. Among those who were on continuous medication only 72% of respondents were aware about name of medicine they were using. The study by [15] it was estimated that a reduction of 3 g/d in salt intake would lower blood pressure by 2.5/1.4 mmHg, which would reduce strokes by 12 to 14% and ischemic heart disease by 9% to 10% and could prevent about 7,300 to 8,300 stroke deaths and 10,600 to 12,400 ischemic heart disease deaths in the UK per year.

This study shows that highest number of respondents (90%) takes little salt. Highest number of respondents (34%) was aware that egg should not be consumed by hypertensive patient while only 16% of respondents were aware that also- chief should not be consumed by hypertensive patient. 84% of respondents were aware about minimizing intake of salt to maintain blood pressure as per Pattern of lifestyle among hypertensive patient, [13]. This study shows that only 14% of respondents were aware about hypertension while highest number of respondents (56%) was moderately aware about it. Only 15% of respondents were unaware about it. Total awareness score is 45. Average level of awareness is 27.14.

[16] Studied on knowledge and awareness of hypertension among patients with systemic hypertension in Nigeria which showed inadequate knowledge of hypertension in patients with hypertension in Nigeria.

Among 254 patients, only one third knew that hypertension should be treated for life while 58.3% believed that antihypertensive drugs should be used only when there is a symptom.

* The respondents were considered as aware if they scored 34 or more than 34 out of 45.

* The respondents were considered as moderately aware if they scored 23 or more than 23 out of 45.

* The respondents were considered as unaware if they scored 0 to 23 out of 45.

Only 14% of respondents were aware about hypertension while highest number of respondents (56%) was moderately aware about it. Only 15% of respondents were unaware about it. Total awareness score is 45. Average level of awareness is 27.14.

CONCLUSION

From this study, the awareness of hypertensive patients about their disease was found to be very poor. Hence, it can be concluded that the awareness level of hypertensive patients is still low. The modification of life style is satisfactory for most risk factors, except for few like salt intake, additional salty food. So Focus should also be given on modification of lifestyle for reducing the adverse consequences of hypertension. This can be done by: Mobilizing the key informants' e.g. political leader, social workers for public awareness, Broadcasting pro-program and information regarding hypertension, developing IEC (Information, Education and Communication) material (e.g. pamphlet, poster) which helps in prevent and control of hypertension and Setting up a hypertension-counseling clinic in each hospital to be launched by the trained nurse.

RECOMMENDATIONS

The following recommendations are made following completion of this study:

1. A similar study would be done in other hospital to evaluate their awareness.
2. A large scale study encompassing a large number of respondents who represent every respondent from different part of Nepal should be done to draw conclusions.
3. Planners and policy makers should incorporate the need to improve awareness on hypertension when they address the national needs.
4. A comparable study can be done between urban and rural people.

IMPLICATION

- The result of this study will be helpful for policymaker and planner for planning and implementing the appropriate measure for prevention and control of hypertension.
- The findings of this study will be implicates to conduct health education session in hospital as well as in community regarding the prevention of hypertension of hypertension through awareness and lifestyle modification.
- The investigator gained knowledge and experience on how to conduct research on future.

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