Original Article

KNOWLEDGE, ATTITUDE AND PREVENTIVE PRACTICES REGARDING HYPERTENSION AMONG 40 YEARS AND ABOVE POPULATION RESIDING IN MAHADEVSTHAN, KATHMANDU

Khatri E[1,2†], Marahatta SB[3], Yadav RK[4,2], Devkota N[5]

[1]Patan Academy of Health Sciences

[2]Health Research Together (HeaRT)-Initiative

[3]Manmoham Memorial Institute of Health Sciences

[4]School of Health and Allied Sciences, Pokhara University

[5]Central Institute of science and Technology, Pokhara University

[†]Corresponding Author: Elina Khatri Patan Academy of Health Sciences

Email: elinakhatri1992@gmail.com

ABSTRACT

Background: Hypertension is a leading cause of cardiovascular diseases in both developed and developing countries. In recent time the epidemiological transition of countries from communicable diseases to non-communicable diseases had increased its importance. Hypertension had been ranked as a top five cause of mortality in Nepal. Assessment of knowledge, attitudes, and practices (KAP) is a crucial element of hypertension control, but little information is available from developing countries where hypertension has lately been recognized as a major health problem.

Objectives: To assess knowledge level, attitude and preventive practices regarding hypertension among 40 years and above population residing in Mahadevsthan, Kathmandu.

Methodology: A cross sectional analytical study was conducted using Probability Proportionate Sampling (PPS) in 9 wards of Mahadevsthan, Kathmandu. Interview was done with closed ended Questionnaire for data collection among 165 respondents aged 40 years and above.

Results: The study shows that the distribution of hypertension among respondents to be 22.4%. The mean age of respondents was 55 years with maximum of 97 years. The average knowledge score was 12.9 out of total 41 score. More than half of respondents i.e. 52.1% had a good knowledge on hypertension.

Keywords : Attitude; Hypertension; Knowledge; Practices; Mahadevsthan VDC

INTRODUCTION

Hypertension is one of the most crucial health problems and also the most common chronic disease in both developed and developing countries[1]. Hypertension has become a significant problem in many developing countries experiencing epidemiological transition from communicable to non-communicable chronic disease[2]. It is known as the silent killer disease which is diagnosed incidentally. Hypertension is a preventable and treatable condition but if not treated on time leads to serious life threatening complications such as heart, brain and renal disorders which in most cases results in disability [1].

Globally, 7 million people die every year because of hypertension[3]. Hypertension is the leading risk factor for mortality worldwide, contributing to 13% of all deaths. It is estimated that 62% of cerebrovascular disease and 49% of ischemic heart diseases are contributed by high blood pressure[4].The assessment of knowledge, attitudes, and practices (KAP) of hypertension is a crucial element for its control, but very little information is available on developing countries like Nepal where hypertension has lately been recognized as a major health problem[5].

Objectives:

The primary objective of the paper was to study knowledge, attitude and practices regarding Hypertension among 40 years and above residing in Mahadevsthan VDC. However, the specific objectives were to determine the level of knowledge regarding, attitude and preventive practices among participants for hypertension.

Methods and materials:

The study design was cross sectional analytical done by using a questionnaire to get their level of knowledge, attitudes and practices regarding hypertension among 40 years and above permanent residents of Mahadevsthan VDC, Kathmandu. The study population was chosen as such as world prevalence of hypertension has shown high prevalence among older adults (50 years and above).

The sampling design was Probability proportionate sampling (PPS). It was done in two stages where in first step sampling was done proportionately among wards after that the proportion of participants were taken simple randomly based on the sampling frame (voters list) obtained from

the village development committee office. The study was almost four months starting from September to December 2014.

After the completion of data collection, it was reviewed, organized and entered into epi data software to validate and analyze the entries in SPSS 20. Validity was maintained by continued review of the available literatures and consultation with experts. For the data reliability, 10% of the sample population was taken for pretesting in Thankot VDC. Also, researcher was directly engaged in data collection, cross-checking, data entry, processing and analysis so as to maintain consistency.

Limitations of the study

The sample size might not be sufficient enough to generalize the findings to all the older adults of Kathmandu district. The factors associated with the knowledge, attitudes and practices regarding hypertension were not explored in detail by this study.

Ethical Consideration

The ethical consideration for the conduction of research was taken from Nepal Health Research Council. A verbal consent was taken from study participants prior to data collection by explaining the purpose and objectives of study. The privacy and confidentiality of the information was maintained.

RESULTS

This study shows that the majority of the respondents comprised of age group 40-49 (34.5%) followed by age group 50-59 (32.1%). The study covered 97 (58.8%) male and 68 (42.2%) female respondents. The majority of respondents i.e. 158 (95.8%) were Hindu. Among these respondents 24.2% were illiterate, 32.1% can read & write.

Table 1: Socio-demographic characteristics of respondents

Variable	Frequency (n=165)	Percent
Age group		
40-49	57	34.5
50-59	53	32.1
60-69	33	20
70-79	18	11

80-89	2	1.2
90-99	2	1.2
Sex		
Male	97	58.8
Female	68	41.2
Religion		
Hindu	158	95.8
Buddhist	1	0.6
Christian	6	3.6
Ethnicity		
Brahmin	22	13.3
Chettri	51	31
Janajati	77	46.7
Dalit	10	6
Others	5	3
Education		
Illiterate	40	24.2
Can read and write	53	32.1
Primary level	14	8.5
Secondary level	40	24.2
Higher education	18	11

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Knowledge on Hypertension

Table 2: Knowledge on Hypertension

Definition of HTN	**No of respondents (n=165)**	**Percent**
Elevated blood pressure	89	54
Rise in systolic blood pressure	6	3.6
Rise in diastolic blood pressure	1	0.6
Don't know	69	41.8
Normal range of BP	**No of respondents (n=165)**	**Percent**

Don't know	102	61.8
110/80 mm Hg	2	1.2
120/80 mm Hg	56	34
130/90 mm Hg	5	3
Symptoms	**No of respondents (n=165)**	**Percent**
Severe Headache	67	40.6
Drowsiness or confusion	85	51.5
Vision problems	10	6
Difficulty breathing	10	6
Irregular heartbeat	8	4.8
Aggressiveness	55	33.3
Nosebleeds	4	2.4
Numbness or tingling in hands or feet's	28	17
Don't know	45	14.4
Complications	**No of respondents (n=165)**	**Percent**
Paralysis (stroke)	84	51
Heart attack	74	44.8
Eye problems	9	5.5
Kidney Failure	17	10.3
Don't know	46	27.8
Risk factors	**No of respondent (n=165)**	**Percent**
Unhealthy habits (Smoking & alcohol consumption)	30	18.2
Obesity	25	15.2
Age	10	6
Physical inactivity	32	19.4
Genetics	3	1.8
Over consumption of salt	85	51.5
Stress	58	35.2
Saturated fat intake	53	32.1
Don't know	25	15.1
Treatment	**No of respondents(n=154)**	**Percent**
Medications	113	73
Diet control	85	54.8
Daily exercise	49	31.6
Don't know	7	4.5
lifestyle modifications	**No of respondents(n=165)**	**Percent**
No	8	4.8

Yes	157	95.1
Changes	**No of respondents(n=157)**	**Percent**
Food Habits	118	75.2
Quit unhealthy habits	31	19.7
Physical activity	70	44.6
Maintain healthy weight	20	12.7
Don't know	7	4.5
Medicine consumption	**No of respondents (n=165)**	**Percent**
When BP high	21	12.7
Whole life	96	58.1
Others	5	3
Don't know	43	26
Prevention	**Frequency**	**Percent**
Physical activity	78	47.3
Healthy weights	12	7.3
Quit smoking & alcohol consumption	28	17
Less consumption of salt	89	53.9
Healthy foods	55	33.3
Don't know	29	17.6
HTN & smoking/alcohol	**No of respondents (n=165)**	**Percent**
No	31	18.8
Yes	134	81.2

The above table shows that among the respondents only 54% (89) were able to define the hypertension as an elevated blood pressure, 3.6% as a rise in systolic blood pressure and 0.6% as a rise in diastolic blood pressure and only 34% of respondents were able to recognize the normal range of blood pressure. Majority of respondents 51.5% reported drowsiness or confusion as a major symptom of hypertension. 27.8% of respondents don't have knowledge on complication of hypertension. 51.5% responded over consumption of salt as risk factors of hypertension.

Table 3: Distribution of respondents by level of knowledge

Category of knowledge	No of respondents	Percent
Poor knowledge (<mean)	79	47.9
Good knowledge (>mean)	86	52.1

The table shows that the 47.9% of respondents have poor knowledge whereas 52.1% have good knowledge regarding hypertension.

Attitude on hypertension

Table 4: Attitude of respondents about hypertension

Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Hypertension is closely associated with individual's habit.	27.9	27.3	23	14.5	7.3
Hypertension requires regular medications.	46.1	42.4	9.7	1.8	
Hypertensions cannot be treated completely.	19.4	26.7	19.4	29.7	4.8
Hypertensive patients can skip their medications when the blood pressure slows down.	13.3	22.4	10.9	35.2	18.2
Hypertension can be prevented with diet control and physical activity.	39.4	43.1	14.5	3	
Hypertensive people should quit smoking.	55.2	32.7	9.7	2.4	
Hypertensive people should completely avoid red meat.	27.9	29.7	29.7	12.1	0.6
Hypertension is genetic disease.	17	17	24.2	31.5	10.3
Blood pressure should be checked on Regular basis.	63	30.3	5.5	1.2	
Hypertension if untreated can result in death.	64.3	32.1	1.8	1.2	0.6

The attitude of the participants on medications for controlling high blood pressure is found to be agreed by 46.1%. 31.5% of respondents disagreed that hypertension is a genetic disease.

Table 5: Distribution of respondents by category of scoring on attitude based on attitude percentage

Category of attitude	No of respondents (n=165)	Percent
Negative attitude (<80)	92	55.8
Positive attitude (>80)	73	44.2

The table on scoring of attitude shows that 55.8% of respondents had negative attitude whereas 44.2% had positive attitude relating hypertension.

Preventive practices section

Table 6: Distribution of respondents by preventive practices

Daily exercise	**No of respondents (n=165)**	**Percent**
Yes	75	45.5
No	90	54.5
Time of exercise	**No of respondents (n=75)**	**Percent**
less than 30 minutes	23	30.7
more than 30 minutes	22	29.3
1hr	12	16
more than 1 hr	18	24
Consumption of fresh vegetables and fruits	**No of respondents (n=165)**	**Percent**
Regular	87	52.7
3-4 days in a week	66	40
Occasionally	12	7.3
Saturated fat intake	**No of respondents**	**Percent**
Regular	10	6.1
Occasionally	136	82.4
Never	19	11.5
Unhealthy habits	**No of respondents**	**Percent**
Smoking	49	72.1
Alcohol consumption	32	47.1

The above table shows that 45.5% had habit of exercising daily among which majority of respondent's exercise for less than 30 minutes. Similarly, 52.7% regularly consume fresh vegetables and fruits and only 6.1% consume saturated fat on regular basis. Also 72.1% and 47.1% were found to be smokers and alcoholics.

DISCUSSION:

In this study the definition of hypertension as an elevated blood pressure had been identified by 54% of respondents. Also only 34% of respondents correctly identified the normal range of blood pressure whereas 61.8% did not know the normal blood pressure which is similar to another study of Oliveria[6] et.al where 30% of patients identified normal BP. In this study, 40.6% and 51.5% of samples responded severe headache and drowsiness or confusion as main symptoms of hypertension followed by 33.3% aggressiveness similar to Iyalomhe[7] and Sarah I. Iyalomhe (40% indicate headache as a prominent symptom) The risks factors of hypertension had been identified as a over consumption of salt (51.5%), stress (35.2%), saturated fat intake (32.1%), and obesity

(15.2%) in this study. The average knowledge score of respondents was 12.9 out of maximum 41 score. The mean percent knowledge score was 31.5% with maximum knowledge percent of 88% and minimum of 0%. In this study, 47.9% had a poor knowledge and 52.1% had a good knowledge on hypertension. The overall knowledge level of respondents was found to be good but the knowledge on specific portions of hypertension were lacking such as normal value of blood pressure and meaning of high blood pressure.

The attitude score of 44.2% respondents on hypertension found to be positive. The average attitude score was 38.8 out of maximum 50 score. The maximum attitude score was 98% and minimum 54% with an average of 77.58%. The attitude of the participants on medications for controlling high blood pressure is found to be agreed by 46.1%. In contrast to this another study by Shakya[8] et.al among hospital staff in Sahid Gangalal hospital showed that 72% had positive attitude towards medication for hypertension. In another similar kind of study by Pramar[9]et.al 72% respondents agreed on regular medications for hypertension control.

In this study 45.5% of respondents were found to be engaged in a daily exercise with the highest proportion i.e. 30.7% exercising for less than half hour. The considerable number of participants 54.5% was found to be not having the practice of exercise. In this study 72.1% of respondents were reported to be smokers and 47.1% were drinking alcohol. This is comparable to the Mlunde Linda's[10] cross-sectional study where 52.35% reported to be doing physical exercise regularly, 9.54% were reported being smokers and 29.26% as drinking alcohol.

CONCLUSION:

The study aimed to assess KAP on hypertension showed that more than half (52.1%) of respondents had good knowledge although there was a lack of knowledge on specific factors regarding risk factors, symptoms, complications, treatment and prevention of hypertension. Majority of respondents i.e. 55.8% had a negative attitude towards hypertension. Despite of the good knowledge and positive attitude large number of participants had poor preventive practice so they are predisposed to the risk factors of high blood pressure.

RECOMMENDATIONS:

Mass awareness and health promotion programs should be organised by the health personnel and concerned authorities in order to increase the knowledge among people regarding complications, symptoms and normal value of blood pressure. The awareness program should focus the people with lower educational status and people of older age. Minimization of saturated fat intake, promotion of fruits and vegetables consumption including motivation for regular exercise and quitting unhealthy habits should be promoted as a key healthy life free from hypertension. The behaviour change communication program should be launched so as to improve the preventive practices of people.

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