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Prevalence of Hypertension Among Adults of Block Hajin: A Cross Sectional Study

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ABSTRACT

Despite hypertension being a common condition among adults attending medical OPD of Community Health Centre (CHC), blood pressure (BP) control is often poor. Greater insight into socio-demographic factors that influence the control of BP will assist in the development of an intervention to address the issues identified. The aim of the study was to determine the prevalence of hypertension and its relationship with socio-demographic variables among adults attending medical OPD of a CHC. This was an analytical cross-sectional study with 175 participants selected over a 1-month period. A self-designed questionnaire was used to collect socio-demographic data of the participants and their BP was recorded. Fourty two.9% of the study subjects in the present study had raised blood pressure (either systolic or diastolic or both).Thirty percentage of the subjects below 30 years of age were hypertensive while among those 30 years and above 51.4% were hypertensive and the difference was statistically significant (p>0.005). Hypertension was also seen in a significantly higher proportion of smokers than non-smokers/ex-smokers (47.7-29.8% respectively, p>0.034). Also significantly higher number of known hypertensives had raised BP (73.2%) than those who did not have a history of hypertension (33.6%) (p>0.000). These findings indicate that raised BP and uncontrolled hypertension were significant health problems in the study population. Therefore, concerted efforts should be made to promote health education with emphasis on BP control.

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Key Words
Smoking, blood pressure, control, hypertension

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INTRODUCTION

Developing countries, facing a high burden of communicable and non-communicable diseases, are struggling to provide adequate healthcare services to their population[1]. Hypertension is one of the most prevalent non-communicable diseases worldwide, with an estimated 1 billion afflicted people in 2008,[2] a number which is projected to increase to 1.56 billion by 2025[3].Hypertension is a complex chronic condition often referred to as a "silent killer" and a key contributor to the development of Cardiovascular and Cerebrovascular diseases[2]. Hypertension or high blood pressure is defined as having persistent, elevated systolic blood pressure of 140 mmHg or above and/or diastolic blood pressure of 90 mmHg or above[4]. Untreated or sub optimally treated hypertension could lead to increased risk of morbidity and mortality due to Cardiovascular, Cerebrovascular, or Renal diseases. The World Health Organization reported that suboptimal blood pressure (>115mmHg systolic blood pressure) was the cause of 62% of Cerebrovascular diseases and 49% of Ischemic heart diseases[5]. The ultimate goal of managing hypertension, like any other non-communicable disease, is to achieve target control and prevent the development of complications. This involves a multipronged approach including education of patients about the causes, management and Complications of hypertension. Poor control of hypertension is a major risk for the development of Cardiovascular and Renal diseases and a clear, consistent plan at diagnosis has been shown to help prevent complications[6].

MATERIALS AND METHODS

A cross-sectional analytical study was conducted at a CHC of district Bandipora. In the current study 175 subjects were included and data was collected for a period of one month. People above the age of 18 years and willing to participate were included. People under 18 years and those not willing to participate were excluded. Newly detected hypertensives and known hypertensives with uncontrolled hypertension were appropriately referred. A self designed questionnaire was used to collect data on socio-demography of subjects and their BP was recorded. Blood pressure was measured from the right arm after the subject had been sitting for at least five minutes. The average of the two readings taken five minutes apart was recorded. By use of The Seventh Report of the Joint National Committee VII each subject was classified as Normotensive (blood pressure 90-119/60-79 mmHg) and hypertensive(>120/>89mmHg)[7].

RESULTS

Table1 It was observed that 40% of the study population was younger than 30 years while 60% of them were 30 years of age or more. There were higher number of females (69.7%) than males (30.3%) and almost an equal number of illiterates and literates in the study population (50.9-49.1% respectively). 56% of the study subjects were either unemployed or homemakers while 44% were either students or working. Socioeconomic status was assessed using the modified BG Prasad's classification. For analysis the Class I and II were grouped together as Upper Class, Class III was considered as Middle Class and Classes IV and V were grouped together as Lower Class. It was observed that majority of the study subjects belonged to the Lower Class (56.6%) followed by Upper Class (26.3%) and Middle Class (17.1%). 82.9% of the study subjects were married while 17.1% were either unmarried, separated or widowed.

Table 2 shows that 73.1% of the study subjects were smokers. In the present study 23.4% of the subjects were known hypertensives and 48% of them had a family history of hypertension. Table 3 depicts that 42.9% of the study subjects in the present study had raised blood pressure (either systolic or diastolic

Table1: Socio-demographic characteristics of the study population

Age	Frequency	Percentage
<30 years	70	40.0
30yearsorabove	105	60.0
Gender		
Male	53	30.3
Female	122	69.7
Education		
Illiterate	89	50.9
Literate	86	49.1
Occupation		
Unemployed/homemaker	98	56.0
Working/student	77	44.0
Socioeconomic status		
Upper	46	26.3
Middle	30	17.1
Lower	99	56.6
Marital status		
Unmarried/single	30	17.1
Married	145	82.9
Total	175	100.0

Table2: Smoking status of thes tudy population

	Frequency	Percentage
Smoker	128	73.1
Current nonsmoker	47	26.9
Total	175	100.0

Table 3: Blood pressure status of the study population

Blood pressure	Frequency	Percentage
Normal	100	57.1
Raised	75	42.9
Total	175	100.0

Table 4: Mean Blood pressure of the study population

	Minimum	Maximum	Mean	Std. deviation
Systole	97	180	125.37	16.294
Diastole	56	120	84.24	10.193

Table5: Relation of hypertension withSocio-demographic variables

	Normal BP		Raised BP		
Age group	No.	Percentage	No.	Percentage	p-value
<30 years	49	70	21	30	0.005
30yearsorabove	51	48.6	54	51.4	
Gender					
Male	32	60.4	21	39.6	0.569
Female	68	55.7	54	44.3	
Education					
Illiterate	47	52.8	42	47.2	0.239
Literate	53	61.6	33	38.4	
Occupation					
Unemployed/homemaker	53	54.1	45	45.9	0.356
Working/student	47	61	30	39	
Socioeconomic status					
Upper	23	50	23	50	0.354
Middle	20	66.7	10	33.3	
Lower	57	57.6	42	42.4	
Marital status					
Unmarried	20	66.7	10	33.3	0.247
Married	80	55.2	65	44.8	
Smoking					
Smoker	67	52.3	61	47.7	0.034
Current nonsmoker	33	70.2	14	29.8	
Known hypertensive					
Yes	11	26.8	30	73.2	0.000
No	89	66.4	45	33.6	
Family history					
Yes	44	52.4	40	47.6	0.221
No	56	61.5	35	38.5	
Total	100	57.1	75	42.9	

or both). The mean systolic blood pressure of the study population was 125.37 mmHg with an SD of ±16.294mmHg and the mean diastolic blood pressure was 84.24 mmHg with an SD of ±10.193 mmHg (Table 4).

Table 5 shows the relation between status of blood pressure and socio-demographic variables of the study population. 30% of the subjects below 30 years of age had raised BP while among those who were 30 years and above, 51.4% had raised BP and the difference was statistically significant (p>0.005). Raised BP was also seen in a significantly higher proportion of smokers than non-smokers/ex-smokers (47.7% and 29.8% respectively, p>0.034). Higher number of known hypertensives had raised BP (73.2%) than those who did not have a history of hypertension (33.6%)and the difference was statistically significant (p = 0.000). 66.4% of those who did not have a history of hypertension were newly detected as having raised BP.

DISCUSSIONS

In the present study it was observed that 73.1% of the study subjects were smokers. A much lower prevalence of smoking was reported by Masoodi *et al.*[8] from Kashmir and by An *et al*.[9] among elderly hypertensives in Korea (24.18% and 6.8% respectively). Our study revealed 48% of participants had a family history of hypertension. In a study conducted by Masoodi *et al.*[8] on prevalence of hypertension in Kashmir, only 16.42% of the study subjects had a family history of hypertension. 42.9% of the study subjects in the present study had raised blood pressure (either systolic or diastolic or both). Almost a similar prevalence of hypertension was reported by Masoodi *et al.*[8] from Kashmir (49.79%). The prevalence of raised blood pressure was significantly associated with age and smoking. Similar observations were made by Masoodi *et al.*[8] in Kashmir where the prevalence of hypertension was significantly associated with age and smoking. A significantly higher number of known hypertensives in the present study had raised BP (73.2%) showing that they their blood pressure was uncontrolled. Lesser figures of uncontrolled hypertension were reported by Ross *et al.*[10] in South Africa (49%) and by Ambaw *et al.*[11] in Ethiopia (53.4%) .

REFERENCES

1. Seneviratne, S.L., G.N. Malavige and H.J. de Silva, 2006. Pathogenesis of liver involvement during dengue viral infections. Trans. Royal Soc. Trop. Med. Hyg., 100: 608-614.
2. WHO, 2013. A global brief on Hypertension-Silent killer, global public health crisis., https://www.who.int/publications/i/item/a-global-brief-on-hypertension-silent-killer-global-public-health-crisis-world-health-day-2013
3. Chockalingam, A., N.R. Campbell and J.G. Fodor, 2006. Worldwide epidemic of hypertension. Can. J. Cardiol., 22: 553-555.

4. CPG., 2012. Malaysian ministry of health clinical practice guideline (CPG): Management of hypertension., https://www.moh.gov.my/moh/resources/penerbitan/CPG/MSH%20Hypertension%20CPG%202018%20V3.8%20FA.pdf
5. Rodgers, A., C. Lawes and S. MacMahon, 2000. Reducing the global burden of blood pressure-related cardiovascular disease. J. Hypertens. Suppl., 18: 3-6.
6. Brown, M.T. and J.K. Bussell, 2011. Medication adherence: Who cares? Mayo Clinic Proc., 86: 304-314.
7. Chobanian, A.V., G.L. Bakris, H.R. Black, W.C. Cushman and L.A. Green *et al*., 2003. Seventh report of the joint national committee on prevention, detection, evaluation, and treatment of high blood pressure. Hypertension., 42: 1206-1252.
8. Masoodi, Z.A., R.A. Mir, 2020. Prevalence and determinants of hypertension in kashmir: A cross sectional study. Hypertension., 15: 57-64.
9. An, N. and I.S. Park, 2016. The effect of health literacy and self-efficacy on treatment adherence of hypertensive elders. Indian J. Sci. Technol., Vol. 9 .10.17485/ijst/2016/v9i25/97205
10. Olowe, O.A. and A.J. Ross, 2017. Knowledge, adherence and control among patients with hypertension attending a peri-urban primary health care clinic, kwazulu-natal. Afr. J. Primary Health Care Family Med., 9: 1-7.
11. Ambaw, A.D., G.A. Alemie, S.M. W/Yohannes and Z.B. Mengesha, 2012. Adherence to antihypertensive treatment and associated factors among patients on follow up at university of gondar hospital, northwest Ethiopia. BMC Public Health, 12: 2458-2412.