PREVALENCE OF HYPERTENSION IN 500 TEACHERS OF UNIVERSITY OF PESHAWAR

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ABSTRACT

OBJECTIVE: To determine prevalence of Hypertension in University teachers of University of Peshawar who are having sedentary life style and stressful work routine.

METHODOLOGY: It was a cross sectional study conducted in University of Peshawar on teaching faculty. 500 teachers of University of Peshawar were interviewed and checked for hypertension. Simple random sampling technique was used in selection of sample. Duration of the study was six months

RESULTS: prevalence of hypertension both in male and female teachers was 25.6 %. It was prevalent in obese and smokers. Among hypertensives, 46.8 % did not know that they are hypertensive.

CONCLUSION: Unlike prevalence of hypertension in general population, it is more prevalent in teaching faculty of University of Peshawar.

KEY WORDS: Hypertension, BMI, Compliance.

INTRODUCTION

High blood pressure is one of the leading causes of morbidity and mortality in the world which affects about 970 million people globally¹. It is a preventable disease². More than 15 % general population is suffering from hypertension³. It is mainly the complications of hypertension which are responsible for high morbidity and mortality rates in the world⁴. More than 18 % population in Pakistan is suffering from hypertension and every third person above the age of 40 is at risk of some kind of cardiovascular diseases⁵. Causative factors for hypertension mainly include sedentary life style, obesity and genetic predisposition⁶. Hypertension and its complications can be prevented in general public by modifying the risk factors and early diagnosis and prompt treatment⁷. More than 50 % of the hypertensive patients are unaware of the condition⁸. One of the reasons of uncontrolled hypertension is noncompliance to drug therapy⁹.

METHODOLOGY

It was a cross sectional descriptive study which was conducted in campus of University of Peshawar which is located on main jamrud road

and is the largest public sector University of KPK. Total teaching staff including its constituent colleges is more than 2000. The study was conducted within six months from June 2014- December 2014. Teaching staff of the University was our study population. Total 500 teachers were included in the study. Simple random sampling technique was used in the selection of sample size. Variables include Blood pressure, age, sex, weight, smoking, life style, knowledge about hypertension and treatment were analyzed. All the teachers working in different departments of the University of Peshawar for more than three years were included in the study. Teachers unwilling to give interview were excluded. Those teachers working abroad were also excluded from the study. A structured questionnaire containing all information about the variables was used for collection of data. Digital weighing machine was used for measuring weight of the subjects. Mercury blood pressure machine was used for measuring blood pressure. MS word and excel was used for the analysis of data.

RESULTS

Both male and female teachers were grouped in different age strata. Maximum respondents were in the age group of 40-50 years.

Age group	Male	Female	No of Respondents
< 30 yrs	28	27	55
30 - 40	71	38	109
40 - 50	135	48	183
50 - 60	107	32	139
>60	12	2	14
Total	353	147	500

Hypertension Prevalence

Prevalence of hypertension was 25.6 % which is slightly higher in female teachers than their male counterpart.

BP Status	Frequency	Percentage
Hypotensive	0	0 %
Normotensive	372	74.4 %
Hypertensive	128	25.6 %
Total	500	100 %

Relationship between Gender & Hypertension

Gender	Normal	Hypertension
Male	266 (72.5 %)	87 24.6 %
Female	106 (72.1 %)	41 27.9 %
Total	372 (72.3 %)	128 (27.7 %)

Smoking: Out of the total, 26.6 % were smokers. Smoking frequency was zero in female staff. So the smoking frequency among male teachers was 37 %. **Life style and exercise:** Out of the total, 143 (28.6 %) are active in their daily life while 319 (63.8 %) were average and 38 (7.6 %) were living a sedentary life style. Only 18.8 % (94) are taking regular exercise.

Body Mass Index (BMI): Hypertension is more prevalent in obese than non-obese teachers.

	Hypertensive	Non-Hypertensive
Underweight	02	30
Normal	70	264
Overweight	41	66
Obese	15	12

Awareness about Hypertension among

hypertensive: Among hypertensive, more than 53 % (68) did not know that they are suffering from high blood pressure

DISCUSSION

The worldwide prevalence of hypertension is more than 20 % in general public. This number is increasing yearly. One of main causes of increasing prevalence of hypertension is advances in medicine. Communicable part of diseases has been greatly controlled while the world main focus is on non-communicable diseases in which hypertension is on the top. There are many reasons for high prevalence of hypertension of which stressful life, sedentary lifestyle, smoking, obesity, diabetes, aging and unhealthy diet¹⁰ are the leading causes.

National Health Survey of Pakistan (NHSP) conducted a survey from 1990-94 showed that more than 18 % of adolescent population above 15 years of age and 33 % of adult population above 45 years of age is suffering from hypertension. More than 70 % of hypertensive patients in rural and more than 50 % in urban area do not know that they are suffering from hypertensive¹¹.

In our study prevalence of hypertension in teachers of Peshawar University is 25 % which is slightly higher than the international prevalence while still lower than the prevalence in Pakistan¹². Slightly lower value than the general public in Pakistan may be due to the fact that the teachers are highly educated and have prompt knowledge about the prevention of the disease.

High prevalence may be due to sedentary lifestyle and stressful working environment.

In our study gender wise distribution of hypertension is almost equal. This is not according to the prevalence of general population in which hypertension is more prevalent in males than females¹³.

Like national and international studies hypertension is more prevalent in obese than normal weight persons. Obesity is one of the main factors for hypertension. Another risk factor for hypertension is lifestyle. In our study, prevalence of hypertension is more in sedentary lifestyle than active lifestyle¹⁴.

In our study 53 % teachers did not know that they are suffering from hypertension. Although this figure is less than the general population (56 %), still it is high because high blood pressure is a slow killer as chances of development of complications is quite high in subclinical hypertensives than apparent cases. Detection of hypertension and prompt treatment with modification of risk factors can reduce high mortality rate and high economic cost¹⁵.

CONCLUSION

Hypertension is common among University teachers which are subclinical in more than 50 % of hypertensive cases. Early detection and modification of risk factors can reduce mortality and morbidity due to hypertension.

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