ORIGINAL ARTICLE

ASSESSMENT OF KNOWLEDGE REGARDING HYPERTENSION AMONG UNIVERSITY STUDENTS

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ABSTRACT

Background: Hypertension is a major health problem in Pakistan. The objective of the study was to determine the distribution of knowledge regarding hypertension among the university students.

Material & Methods: This cross sectional study was conducted in Faculty of Pharmacy, Gomal University, D.I.Khan from January, 2016 to March, 2016. A sample of 464 students was selected by convenience sampling technique, enrolled in various departments of Gomal University. Refusal was the only exclusion criteria. Socio-demographic variables were gender, age groups and departments, whereas research variables were knowledge regarding hypertension and source of information. Data collection instrument was a pretested, structured questionnaire, administered to students having twelve items. Yes, No and Don't Know were the choices given against each item. All variables being categorical, were expressed in counts and percentages. Data were analyzed by descriptive analysis plan through IBM SPSS version 20.

Results: Out of 464 students 303(65.31%) were males and 161(34.69%) were females. Three hundred and twenty (68.97%) students were from Faculty of Pharmacy, 29(6.26%) from Biological Sciences Department, 33(7.11%) from Institute of Chemical Sciences, 35(7.54%) from Business Administration Department and 47(10.12%) students were from ICIT Department. Three hundred and thirty six (72.4%) students were having good knowledge while 128(27.58%) students were having poor knowledge. Regarding source of information, the response rate of academic learning was 200(43.10%), Newspaper 100(21.55%), Brochures/ Pictures 12(2.58%), Health workers 59(12.27%) and Internet 93(20%) .

Conclusion: University students have good knowledge regarding hypertension. Academic learning and newspapers being the common sources of information.

KEY WORDS: Hypertension; Variables; Knowledge; Challenge; Participation.

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INTRODUCTION

Hypertension is one of the major risk factors for cardiovascular diseases.[1] It is a major public health challenge both in developed and developing countries including Pakistan. The occurrence of hypertension in children and teenagers is also increasing.[2] Smoking, obesity, alcohol intake, physical inactivity and sedentary lifestyle are major risk factors for developing hypertension. The awareness of high blood pressure by a person plays a significant role in changing the lifestyle and behavior.[3]

Hypertension is a major risk factor for ischemic heart disease (IHD) like atherosclerosis, myocardial infarction.[4,5] With proper control and management of blood pressure, the risk of IHD can be decreased.[6] According to 7th report of Joint National committee (JNC) the awareness of disease and motivation for changing lifestyle to a hypertensive patient are more important than active treatment.[7]

Although hypertension is a disease of older persons, its occurrence is increasing in children and young adults. In a study conducted in UAE where people have adapted western lifestyle, the prevalence of hypertension has been increased up to 19-25% in young adults.[8] The objective of the study was to determine the distribution of knowledge regarding hypertension among the university students.

MATERIAL AND METHODS

This cross sectional study was conducted in

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Faculty of Pharmacy, Gomal University, D.I.Khan from January, 2016 to March, 2016. A sample of 464 students was selected by convenience sampling technique, enrolled in various departments of Gomal University. Refusal was the only exclusion criteria. Socio-demographic variables were gender, age groups and departments, whereas research variables were knowledge regarding hypertension and source of information. Age group was having two attributes; 18-24 years and 25-30 years. Departments were; Faculty of Pharmacy, department of biological sciences, department of business administration, institute of chemical sciences and ICIT department. Sources of knowledge had five attributes; academic learning, newspaper, internet, brochure/ pictures and health workers. Knowledge regarding hypertension was having two attributes of good and poor knowledge. Data collection instrument was a pretested, structured questionnaire, administered to students having twelve items. Yes, No and Don't Know were the choices given against each item. All variables being categorical, were expressed in counts and percentages. Data were analyzed by descriptive analysis plan through IBM SPSS version 20.

RESULTS

There was no missing data so response rate was 100%. Out of 464 students 303(65.31%) were males and 161 (34.69%) were females. (Table-1)

Table 1: Gender distribution of the respondents regarding knowledge about hypertension among university students of D.I.Khan, Pakistan (n=464)

Gender	Frequency	Percentage (%)
Male	303	65.31
Female	161	34.69

Age group distribution of the respondents regarding knowledge about hypertension is given in the table 2.

Table 2: Age group distribution of the respondents regarding knowledge about hypertension among university students of D.I.Khan, Pakistan (n=464)

Age Group	Frequency	Percentage (%)
18-24 (Years)	356	76.73
25-30 (Years)	108	23.27

Three hundred and twenty (68.97%) students were from Faculty of Pharmacy, 29(6.26%) from Biological Sciences Department, 33 (7.11%) from Institute of Chemical Sciences, 35 (7.54%) from Business Administration Department and 47(10.12%) students were from ICIT Department.(Table: 3)

Table 3: Department wise distribution of the respondents regarding knowledge about hypertension among university students of D.I.Khan, Pakistan (n=464)

Departments	Frequency	Percentage (%)
Pharmacy	320	68.97
Biological Sciences	29	6.26
Business Administration	35	7.54
Chemical Sciences	33	7.11
ICIT	47	10.12
Total	464	100

Three hundred and thirty six (72.4%) students were having Good Knowledge while 128 (27.58%) students were having Poor Knowledge. (Table-4)

Table 4: Knowledge regarding Hypertension among university students of D.I.Khan, Pakistan (n=464).

Assessment of knowledge	Frequency	Percentage (%)
Good Knowledge	336	72.42
Poor Knowledge	128	27.58

Regarding source of information the response rate of Academic learning was 200 (43.10%;), Newspaper 100 (21.55%), Brochures/ Pictures 12 (2.58%), Health worker 59 (12.27%) and Internet 93(20%).

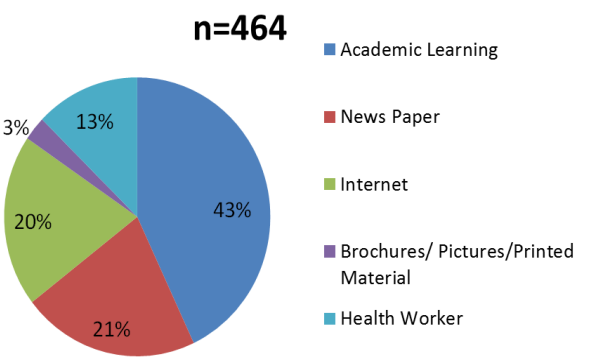

Figure 1: Source of information by the respondents

DISCUSSION

This study conducts the present position of information and wakefulness of hypertension in the students of different departments of Gomal University, D.I.Khan. Our results suggest that the students of Faculty of Pharmacy are well aware of hypertension in general, but the students from other departments are less aware of hypertension and

its related facts which is also reported by Oliveria[9] according to which majority of correspondents are aware about hypertension but are not aware about the factors related to it. This research also indicates that a quarter of study correspondents were not aware that life style changes can also effect hypertension described by Oliveria.[9,18] More than 50% of the correspondents knew that hypertension could lead to cardiovascular problems which are according to research findings by Aliinger[10] who reported that half of his study subjects were aware of the cardiovascular sequel of hypertension.[10] Ninety percent of people agreed that elevated blood pressure is hazardous to well-being which is in line to the established facts according to blood pressure association of UK. Because it damages the blood vessels which can lead to a heart attack, stroke, heart failure or kidney disease. Some twenty percent of the people responded negatively when asked can antihypertensive drugs control hypertension? This might be due to their past experiences or inefficiency of the medication they or their relatives are using. The dietary factors were also addressed in the questionnaire, two quarter of the people agreed that increasing salt intake can elevate hypertension.

Study correspondent's response show that a considerable number of people know about the sphygmomanometer and stethoscope which may imply that the numbers of hypertensive patients in our society are exceedingly increasing. Presently, it is expected that nearly 1 billion general public worldwide have elevated blood pressure (>140/90 mmHg), and this may reach to 1.56 billion by 2025.[11] The correspondents were also asked is the blood pressure of a person measured in sitting position. More than seventy percent people said yes. However dissimilar appendage situation underneath heart stage had major possessions on blood pressure interpretation. The most important strategies concerning appendage position throughout blood pressure capacity are not in agreement with the upper limb place used in the Framingham study, the most recurrently used learning for hazard judgment.[12,13-16] When it is asked that hypertension is a curable disease, almost a quarter of study correspondents disagreed. This might be due to the decentralized cause of hypertension as in most of the cases there is no one known cause or causative agent. The treatment normally includes a wide variety of medication, life style changes and diet changes. In the majority of cases, it is not possible to identify an accurate reason of elevated blood pressure.[17-21] There are numerous features that have been connected to elevated blood pressure.[13,20]

CONCLUSION

University students have good knowledge regarding hypertension. Academic learning and newspapers being the common sources of information.

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CONFLICT OF INTEREST
Authors declare no conflict of interest.
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None declared.

AUTHORS' CONTRIBUTION

Conception and Design:	SAR, SBA, HU, SM
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Manuscript writing:	SAR, HU, SBA, SM