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Original Article

The Assessment of Knowledge and Lifestyle Modification among People with Hypertension

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ABSTRACT

High or elevated blood pressure is referred to as hypertension, which is a problem for public health. **Objectives:** To the assessment of knowledge and lifestyle modification among people with hypertension at Jinnah hospital. **Methods:** A Descriptive Cross Sectional Research Study Design was used to assess the lifestyle modification among people with hypertension. The convenient sampling technique was used to gather the information from population. Clients diagnosed of hypertension and who regularly met appointment dates at the Outpatients Departments for at least nine months duration were included in this study. **Results:** The Knowledge was assessed by knowledge questionnaire. The descriptive analysis was done. Cranach alpha, Bartlett's and KMO and Kolmogorov Smirnov Test values have been checked to insure the validity in our context. A Descriptive Cross Sectional research design was used. A total of 300 respondents were conveniently sampled for this study. The overall results of this study show that peoples have knowledge, but they do not implement on their selves and lack of practice also affects high blood pressure. **Conclusions:** In this study, the prevalence of lifestyle change among hypertensive patients was generally low. There is a lack of practice and awareness of lifestyle change among hypertensive patients. Patients should implement their knowledge regarding hypertension. Patient should be informed about suggested lifestyle changes that may help them to control their blood pressure.

INTRODUCTION

High or elevated blood pressure is referred to as hypertension (HTN), which is a problem for public health. Heart disease, stroke, kidney failure, and early mortality are all made more difficult by it [1]. Worldwide, the prevalence of hypertension is rising quickly. Renal and cardiac failures are both significantly attributed to hypertension. Overweight, eating too much salt and not enough fruits and vegetables, not exercising enough, eating an unhealthy diet, smoking, drinking too much alcohol or coffee, and sleeping poorly all increase the risk of developing high blood pressure [2, 3]. One of the primary causes of cardiovascular disease (CVD) and a leading factor in mortality is high blood pressure. 10.4 million Deaths worldwide each year are attributed to hypertension. Between 15 to 35% of urban adult populations in Asia have hypertension by the current standards (140/90 mm Hg) [4]. It is estimated that 11.8 million adults aged 16 years or older in England had hypertension in 2017 [5]. Different strategies including lifestyle changes including a reduction in dietary sodium intake, increased physical activity, and adherence to medication can help in managing high blood pressures and improve health outcomes by decreasing or slowing complications associated with high blood pressure and other CVD [6, 7]. According to studies, many persons with high blood pressure go undetected or fail to reach blood pressure control goals. A proper treatment plan can help less than one-third of patients control their excessive blood pressure [8]. Programs for altering one's way of life have been proven to be successful in lowering blood pressure. Additionally, the study provided prevalence and risk information for both known and undiagnosed diabetes, as well as for both self-reported and clinically recognized high blood pressure and newly diagnosed high blood pressure [9]. According to the study, 40% of individuals had

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stage 1 high blood pressure with a cutoff of systolic blood pressure (SBP) 130 mmHg or diastolic blood pressure (DBP) 80 mmHg or using antihypertensive, and 82% of these adults had never received a diagnosis [10]. A prior cluster randomized clinical trial recorded a comparable mean decrease in SBP [11]. The risk of stroke is said to decrease by 14% and 17%, respectively, and the risk of coronary artery disease by 9% and 6%, respectively, with very small decreases of 2 mmHg in SBP and DBP [12]. The Knowledge and awareness of blood pressure among patients are crucial for effective hypertension management [13]. A number of studies were carried out in different parts of the world to evaluate the degree of awareness and application of lifestyle changes among hypertension patients. Another research study In Nigeria conducted in hospitals and particularly in communities have revealed low levels of awareness, knowledge, and practice of lifestyle-modification interventions, but high levels of willingness to embrace them. This is in addition to the low adherence rate. We also evaluated the validity and reliability of the typical knowledge and lifestyle measures used to assess hypertension patients [14]. This study assesses how successful it is at lowering blood pressure in persons with high blood pressure [15]. For the prevention and management of hypertension, adopting a healthy lifestyle is essential. Although numerous research have been carried out that focus on the implementation of educational programmers for altering people's perceptions and educating them about healthy lifestyles and the significance of lifestyle change. Consequently, the study's goal is to determine how common lifestyle adjustment is among persons with hypertension.

METHODS

A Descriptive Cross- Sectional Research Design will be used. The study setting will be Outpatient Department of Jinnah Hospital Lahore. The targeted population was patients diagnosed with hypertension and visiting to out-patient department only. The study sample was 300 calculated by Slovin's formula. Convenient sampling technique was used to gather the information from population. The knowledge will be assessed by using adopted modified knowledge assessment questionnaire consisting of 19 items. Responses filled on the behalf of patients who cannot read or write.

RESULTS

Table 1 shows that from total no of participants who responded in this study, those with the age group 15-25 years were 34(11.3%), those with the age group 26-35 years were 111(37.0%), those with the age group 36-45 years 93(31.0%) and those with the age group 46-55 years were 62(20.7%).Those who were male 151(50.3%) and similarly who were female 149(49.7%). Those who were married 246(82.0%), those whose were unmarried 49(16.3%),those who were divorce 1(3%) and those who were widow 3(1 %).Those who were uneducated 141(47.0%), those who were primary 58(19.5%), those who were matric 73(24.3%),those who were intermediate 25(8.3%) and those were graduation 3(1.0%).

Variables	Frequency (%)	Cumulative Percentage
Age		
15-25	34(11.3%)	11.3
26-35	111(37.0%)	48.3
36-45	93(31.0%)	79.3
46-55	62(20.7%)	100.0
Gender		
Male	151(50.3%)	50.3
Female	149(49.7%)	100.0
Marital status		
Married	247(82.3%)	82.3
Unmarried	49(16.3%)	98.7
Divorce	1(3%)	99
Widow	3(1.0%)	100.0
Education		
Uneducated	141(47.0%)	47.0
Primary	58(19.3%)	66.3
Matric	73(24.3%)	99.7
Intermediate	25(8.3%)	99.0
Graduation	3(1.0%)	100.0

Table 1: Demographic Characteristics of Participants

Table 2 shows that from total no of participants who responded in this study, "If someone blood pressure is 160/100 it is ..." those who respond high were 263(89.3%), those respond low were 4(1.3%), those who respond normal were 18(6.0%) and similarly who respond they do not know were 10(3.3%). "people with high blood pressure should take their medicine" those who respond everyday were 175(58.3%), those respond at least few times a week were 9(3.0%), those who respond only when they feel sick were 112(37.3%) and similarly who respond they do not know were 4(1.3%)"high blood pressure can cause diabetes" " those who respond yes were 239(79.7%),those who respond no were 27(9.0%)and similarly who respond that they do not know were 34(11.3%).

Variables	Frequency (%)	Cumulative Percentage
If someone blood pressure is 160/100, it is		
High	268(89.3%)	89.3
Low	4(1.3%)	90.7
Normal	18(6.0%)	96.7
Do not know	10(3.3%)	100.0
People with high blood pressure should take their medicine		
Everyday	175(58.3%)	58.3
At least few times a week	9(3.0%)	61.3
Only when they feel sick	112(37.3%)	98.7
Do not know	4(1.3%)	100.0

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Variables	Frequency (%)	Cumulative Percentage
High blood pressure can cause diabetes		
Yes	239(79.7%)	79.7
No	27(9.0%)	88.7
Do not know	34(11.3%)	100.0

Table 2: Responses of Participants regarding questions of blood pressure

Table 3 shows that from total participants who respond about the question "smoking a pack of cigarette per day will not a fact a person risk of hypertension" those who respond yes were 231(77.0%), those who respond no were 37(12.3%) and similarly who respond that they do not know were 32(10.7%). "Motivational interviewing techniques are not useful when guiding a person to make lifestyle "those who respond yes were 218(72.7%), those who respond no were 71(23.7%) and similarly who respond that they do not know were 11(3.7%). "a person who has high blood pressure should eat less fat" those who respond yes were 287(95.7%), those who respond no were 7(2.3%) and similarly who respond that they do not know were 5(1.7%).

Variables	Frequency (%)	Cumulative Percentage
Smoking a pack of cigarette per day will not fact a person risk of hypertension		
Yes	231(77.0%)	77.0
No	37(12.3%)	89.3
Do not know	32(10.7%)	100.0
Motivational interviewing techniques are not useful when guiding a patient to make lifestyle		
Yes	218(72.7%)	72.7
No	71(23.7%)	96.3
Do not know	11(3.7%)	100.0
A person who has high blood pressure should eat less fat		
Yes	287(95.7%)	95.7
No	7(2.3%)	98.0
Do not know	5(1.7%)	99.7

Table 3: Responses of Participants regarding questions related to smoking and lifestyle

DISCUSSION

The Descriptive Cross Sectional Research Study was examining the assessment of knowledge and lifestyle modification among people with hypertension. The study result shows that the total respondents who respond to the study majority were male. The tool knowledge used for the assessment of lifestyle modification among people with hypertension was adopted. The KMO, Bartlett test and Chronbac alpha values has been checked to insure the validity and reliability in our context. The values show positive and significant result and tools were considered as reliable and valid for performing statistical analysis. The study finding was consistent with previous study finding by Ike *et al.*, [16, 17]. The Descriptive analysis shows that from total participants who respond, with the age group 15-25 years were 34(11.3%), those with the age group 26-35 years were 111(37.0%), those with the age group 36-45 years 93(31.0%) and those with the age group 46-55 years were 62(20.7%).majority with the age group 26- 35 years were 111(37.0%).Those who were male 151(50.3%) and similarly those who were female 149(49.7%) .The total no of participants majority were male 151(50.3%) Those who were married 246(82.0%), those whose were unmarried 49(16.3%),those who were divorce 1(3%) and those who were widow 3(1 %). The total no of participants who responded in this study, majority were married 246(82.0%). Those who were uneducated 141(47.0%), those who were primary 58(19.5%), those who were metric 73(24.3%),those who were intermediate 25(8.3%) and those were graduation 3(1.0%). The total participants who respond about question "if someone blood pressure is 160/100 it is" those who respond high were 263(89.3%), those respond low were 4(1.3%), those who respond normal were 18(6.0%) and similarly who respond they do not know were 10(3.3%). majority of the respondent think that 160/100 mmHg is high. The total participants who respond about question "people with high blood pressure should take their medicine" those who respond everyday were 175(58.3%), those respond at least few times a week were 9(3.0%), those who respond only when they feel sick were 112(37.3%) and similarly who respond they do not know were 4(1.3%).majority of the participants think that people with high blood pressure should take their medicine every day. Total participants who respond about question "high blood pressure can cause diabetes" those who respond yes were 239(79.7%), those who respond no were 27(9.0%) and similarly who respond that they do not know were 34(11.3%). Majority of the participants answered that High blood pressure can cause diabetes. From total participants who respond about the question "smoking a pack of cigarette per day will not a fact a person risk of hypertension" those who respond yes were 231(77.0%), those who respond no were 37(12.3%) and similarly who respond that they do not know were 32(10.7%) [18, 19]. majority of the participants answered that smoking a pack of cigarette per day will not a fact a person risk of hypertension. The total participants who respond about the question "motivational interviewing techniques are not useful when guiding a person to make lifestyle "those who respond yes were 218(72.7%), those who respond no were 71(23.7%) and similarly who respond that they do not know were 11(3.7%). majority of the participants answered that motivational interviewing techniques are not useful when guiding a person to make lifestyle. From total participants who respond about the question "a person who has high blood pressure should eat less fat" those who respond yes were 287(95.7%), those who respond no were 7(2.3%) and similarly who respond that they do not know were 5(1.7%). Majority of the participants answered that a person who

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has high blood pressure should eat less fat" The study finding is consistent with previous study finding by Abu *et al.*, [20].

CONCLUSIONS

The study result showed the assessment of knowledge regarding lifestyle modification among hypertensive patients was generally low. Patients with hypertension have low levels of awareness and practice of lifestyle adjustment. For hypertension patients, lifestyle modification includes a change in eating habits, abstaining from alcohol, managing weight, quitting smoking, and engaging in regular exercise. There should be educational sessions held, that have a special emphasis on helping hypertension individuals change their lifestyles. Patients should be informed about suggested lifestyle changes that may help them control their blood pressure.

Conflicts of Interest

The authors declare no conflict of interest

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