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PERCEPTION AND AWARENESS ABOUT HYPERTENSION IN A LOW SOCIOECONOMIC AREA OF KARACHI

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ABSTRACT

Objective: To study the knowledge, attitude and practices of adult patients regarding of hypertension.
Design: A cross-sectional descriptive study.
Setting: The study was under taken in 100 patients visiting outpatient department of Medicine at Ziauddin Hospital Kemari Campus.
Subjects and Methods: Adult patients above the age of 25 years were screened for hypertension and a questionnaire was filled to assess their knowledge, attitude and practices regarding hypertension. The results were statistically analyzed on SPSS Version 10 and Chi square test was used to check the level of significance.
Results: According to the study there were 37% males and 63% females in the study. The mean age was 42±15 years, 65% patients were found to be hypertensive despite the fact that only 15% confessed to have hypertension. The mean BMI was 26±5 majority being overweight. Majority patients new about the risk factors but only 14% walked to prevent or control hypertension. 77% new that blood pressure should be checked regularly but only 13% got it checked. 92% patients thought that headache is a symptom of high pressure. Only 65% believed it to be without any symptom.
Conclusion: Hypertension is an important public health challenge in Pakistan. According to the reports about 12 million people suffer from it which makes it 7% prevalent. This study highlighted that most patients who were unaware about their readings were acutely hypertensive. Controlling hypertension would prevent renal failure and strokes a huge rehabilitation drain on the meager resources.

Key words: Hypertension related knowledge, KAP on hypertension, hypertension and developing countries.

INTRODUCTION:

Hypertension is one of the common disorders that are easy to screen and control. Unfortunately still lots of people are unaware about their baseline readings as there are no routine checkups at any educational or health level[1]. As a result most people present with disabling complications like stroke[2], myocardial infarction[3] or kidney failures. There are several reasons for this dilemma; the most important being ignorance about detecting, regular monitoring, lifestyle modifications (like low fat, reduced salt intake, regular exercise) and drug compliance[4].

In developing countries like Pakistan the magnitude of the problem of uncontrolled hypertension is even greater. The National Health Survey of Pakistan[5] (NHSP) conducted during 1990 to 1994 indicated hypertension affecting 18% of adults over 15 years and 33% of adults over 45 years; however only 3% had their BP controlled to 140/90 mmHg or below. It also showed that 70% of all hypertensive patients (85% in rural areas) in Pakistan are unaware of their diseases and they believe that a long term treatment is not required leading to high prevalence of the disease.

Lots of strategies are devised to control health and behavior. All strategies stress the importance of evaluating perceptions, attitudes, beliefs and outcome expectations of individuals as a crucial way to understand observed behaviors and to guide behavioral change[6]. Assessing and understanding these factors is particularly helpful in chronic conditions like hypertension, for which control and prevention necessitate lifelong healthy practices.

MATERIALS AND METHODS:

Study design: A cross-sectional descriptive study.

Study setting: This study was conducted at Kemari campus of Dr. Ziauddin Hospital which serves the underprivileged population of Kemari and other suburban outskirts.

Sample size and Methodology: A total of 100 (hypertensive and normotensive) patients were randomly selected and interviewed with a questionnaire regarding their perceptions and awareness about hypertension. Besides the questionnaire weight, height and blood pressure of all patients was taken and their BMI calculated.

Inclusion and Exclusion Criteria: All adult patients above the age of twenty five years were included in the study; similarly all patients younger than this age were excluded.

RESULTS:

Out of hundred patients 37 were males and 63 were females. Out of 37 males 21(30.9%) were hypertensive and 16(50%) were normotensive. Out of 63 females 47(69.1%) were hypertensive and 16(50%) were normotensive, with a p value of 0.053.

The mean age of the patients was 42±15 years. 58% patients lived near the vicinity of Kemari and out of them 43(63.2%) were hypertensive and 15(46.9%) were normotensive with a significant p value of 0.012.

14% were in the age group of 20-29 years, among them 7(10.3%) were hypertensive and 7(21.9%) were normotensive. 34.3% were in the age group of 30-39 and out of them 26(38.2%) were hypertensive and 8(25%) were normotensive with a p value of 0.019. 19% were in the age group of 40-49 years and among them 17(26%) were hypertensive and 2(6.3%) were normotensive. 33 patients were above 55 years of age and out of them 18(26.5%) were hypertensive and 15(46.5%) were normotensive.

91% patients were married with 65(95.6%) having high blood pressure and 26(81.3%) being normotensive. The p value was 0.028.

60% of the patients were illiterate, out of those 45(66.2%) were hypertensive and 15(46.9%) were normotensive .11% were undergraduate, 18% were graduate and 6% had higher education. 11% of the patients were occupationally not active. 91% of the patients were married.

68% of the patients were overweight, out of them 46(67.6%) were hypertensive and 22(32.4%) were normotensive with a p value of 0.005.

67(98.5%) patients who were hypertensive were unaware about it and only 19(59.4%) were aware of their true normotensive status with a p value of 0.00.

Regarding the risk factors 60% patients believed naswar to be a risk factor for hypertension. 63% patients believed ghutka to be a risk factor and 61% patients believed alcohol to be a risk factor.

51% people believed hypertension to be a cause of some mistake or fault of their own. 55% patients believed hypertension to occur for no reason.

TABLE 1:
CROSS TABULATION ON HYPERTENSION

Gender	Hypertensive N=68(%)	Normotensive N=329%)	Total %	P-value
Males	21(30.9)	16(50)	37.0	0.053
Females	47(69.1)	16(50)	63.0	
Age group (year)				
20-29	7(10.3)	7(21.9)	14.0	
30-39	26(38.2)	8(25)	34.3	0.019
40-49	17(25)	2(6.4)	19.0	
>50	18(26.5)	15(46.5)	33.0	
Lives in Kemari/ Union Council	43(63.2)	15(46.9)	58.0	0.012
Education (Illiterate)	45(66.2)	15(46.9)	60.0	0.115
Occupation				
None	41(60.3)	15(46.9)	56.0	0.697
Laborer	11(16.2)	8(25)	19.0	
Sedentary	16(23.5	9(28.1)	25.0	
Marital Status				
Married	65(95.6)	26(81.3)	91.0	0.028
Unmarried	3(4.4)	6(18.8)	9.0	
BMI				
<18	3(4.4)	3(9.4)	6.0	
18.5 - 24.9	1(1.5)	6(18.8)	7.0	
25 - 29.9	46(67.6)	1(3.1)	68.0	0.005
30 - 34.9	11(16.2)	1(3.10	12.0	
35 - 35.9	5(7.4)	0	5.0	
>40	2(2.9)5(7.4)	0	2.0	

DISCUSSION:

Worldwide awareness of hypertension was poor i.e. 30%, nearly one decade ago[7]. Awareness is much lower in developing countries as compared to developed industrial countries[8]. In our study out of 68% hypertensive patients, just 1.5% were aware about it and 39.1% were ignorant. Thus awareness about hypertension in our study was extremely poor.

Hypertension was more common in the females compared to the males which was supported by the previous studies[9, 10]. Most patients who participated in the study were in their forties like the previous studies[11]. The predisposition of hypertension was more pronounced in the younger age group compared to the previous studies[12, 13]. Probably we can hold stress and life competition and local city conditions of insecurity responsible for it. Besides that there are very few chances of recreation for the local man.

Majority of the hypertensive were married which was statistically significant and can be accounted for sedentary life style or stressful

TABLE 2:
CROSS TABULATION ON HYPERTENSION

Causes of hypertension	Hypertensive N=68(%)	Normotensive N=32(%)	Total %	p-value
Stress	58(85.3)	29(90.6)	87.0	0.347
Disease	32(47.1)	21(65.5)	53.0	0.156
Spell	13(19.1)	10(31.3)	23.0	0.294
Their Own Fault	30(44.1)	21(65.6)	51.0	0.036
Gods punishment	48(70.6)	21(65.6)	69.0	0.795
Overweight	58(85.3)	30(93.8)	88.0	0.191
Sedentary	47(69.1)	26(81.3)	73.0	0.151
No reason	33(48.5)	22(68.8)	55.0	0.046
Does it cause complication	58(85.3)	28(87.5)	86.0	0.516
Is it familial	41(60.3)	16(50)	57.0	0.225
What are its Symptoms?				
Headache	63(92.6)	29(90.6)	92.0	0.502
Head pulsation	55(80.9)	26(81.3)	81.0	0.557
Sweating	44(64.7)	21(65.6)	65.0	0.557
Vertigo	49(72.1)	25(78.1)	74.0	0.349
Neck ache	53(77.9)	26(81.3)	790.5	0.463
Epistaxis	29(42.6)	15(46.9)	44.0	0.422
Palpitations	53(77.9)	29(90.6)	82.0	0.101
Dyspnea	46(67.6)	24(75)	70.0	0.638
Edema feet	39(57.4)	23(71.9)	62.0	0.313
Anger	61(89.7)	28(87.5)	89.0	0.492
No symptoms	45(66.2)	20(62.5)	65.0	0.443

TABLE 3:
AWARENESS AND PERCEPTIONS ABOUT HYPERTENSION

Do you have HTN	Hypertensive N=68(%)	Normotensiive N=32(%)	Total N=100 (100%)	p-value
Yes	1(1.5)	13(40.6)	14.0	0.000
No	67(98.5)	19(59.4)	86.0	
Is it more common in				
Males	15(22.1)	7(21.9)	22.0	0.600
Females	53(77.9)	25(78.1)	78.0	
Do following affect HTN				
Exersise	57(83.8)	25(78.1)	82.0	0.334
Salt	64(94.1)	28(87.5)	92.0	0.224
Oil	60(88.2)	28(87.5)	88.0	0.576
Naswar	35(51.5)	25(78.1)	60.0	0.009
Smoking	46(67.6)	27(84.4)	73.0	0.062
Gutkha	36(52.9)	27(84.4)	63.0	0.002
Alcohol	36(52.9)	25(78.1)	61.0	0.013
Veg/Fruit	36(52.9)	18(56.3)	54.0	0.463

work compared to the previous studies[14]. Majority of the hypertensive lived in the vicinity of Kemari as the hospital was located in that area; depicting one of the major health problems of the area. Most of the hypertensive were illiterate and either not working or were sedentary. The education level and activity influenced the understanding of the disease along with favoring complications and noncompliance to medications[15].

The fact that majority of the patients in the study were overweight corroborates the results of previous studies[16]. It also makes us look into the lifestyle modifications that have to be stressed on. The concept of healthy diet free from especially saturated has to be stressed upon. Most of the patients had a good knowledge about the salt, fat, exercise and addictions that can affect blood pressure but majority had no idea that a regular walk was essential at a regular pace for a minimum time. They thought routine household work to be a form of exercise that they performed daily and were left with no time and energy to carry out what was essential.

Most of the hypertensive compared to the normotensives were aware that naswar and ghutka (containing tobacco) and alcohol to be a risk factor for hypertension however they failed to recognize smoking as a major threat which is similar to previous studies done in Pakistan[17]. This concept supports the added efforts required to curb smoking in our masses.

The patients recognized that blood pressure can manifest with some variable symptoms but is asymptomatic in the majority. This is the main reason for its emerging complications that are irreversible.

The stigmas and taboos about hypertension continue as does other diseases. Most patients believe hypertension to be caused by some fault of their own, some mistake they made in life that made God unhappy; this could be due to strong religious believes. It was strange that majority simultaneously realized it could also occur for no reason at all. It is very important to clarify the risk factors about hypertension to the masses and encourage them to be moderate in their practices that can lead to less morbidity and mortality.

CONCLUSION:

This study highlights that the knowledge about hypertension among the patients was good but their efforts to implement lifestyle modifications required motivation. Younger patients need to be more vigilant with their regular checkups to pick diseases at their early stages; when several measures can be taken to retard the disease process.

A preponderance of overweight patients further highlights the importance of diet and exercise that people fail to comprehend. Lots of efforts still need to be taken to inculcate the importance of regular blood pressure checkups on a regular basis. Strict drugs compliance is extremely important with the change in medications made only by the physician. The concept of taking the drugs only when blood pressure is elevated has to be curbed by continuous monitoring of patients and regular awareness programs to stress its importance.

Blood pressure is a silent killer as it is only by chance that it manifests as headache or epistaxis or other local indicators. Its importance has to be specified repeatedly through seminars and

studies on broader scales to control it in a better way.

Benefits of the study:

- This study would develop awareness preferably for general population.
- It would train junior doctors to be more vigilant about patient's level of understanding of knowledge.
- It would help educating patients from earlier ages for healthy life style practices.
- All in all our study would enable clinicians to participate more actively in the control and prevention of hypertension

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