

Knowledge, Attitude and Practice of Life Style Modification in the Management of Hypertension

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Abstract

Background: Hypertension remains as one of the most important public health challenges Worldwide because of the associated morbidity, mortality, and the cost to the society. Despite the availability of safe and effective antihypertensive medications and the existence of clear treatment guidelines, hypertension is still inadequately controlled in a large proportion of patients worldwide. Unawareness of lifestyle modifications, and failure to apply these were one of the identified patient-related barriers to blood pressure control.

Methodology: It was this cross sectional study was conducted to assess knowledge, attitude and practice of life style modification in the management of hypertension among 100 conveniently selected study subjects.

Result: Mean±SD age of respondents was Average age of the patients was 36.96±13.04 years. More than half of the respondents (56%) passed SSC level of education. Almost 99% of the study subjects knew that smoking is associated with hypertension. About 94% respondent told excessive salt intake is bad for health. Almost all of them knew that excessive salt intake results high blood pressure. About 93% told that physical exercise has effect on blood pressure. Three-fourth of the study subjects told that physical exercise decrease cholesterol. About 40% took part physical exercise regularly. The study found levels of knowledge on non-drug control of hypertension was quite good but practice level was poor.

Conclusion: Knowledge regarding hypertension is an important measure used for decreasing the prevalence of hypertension. Life style modification is the easiest way to prevent or control high pressure. The increase level of knowledge on life style changes will help to have desired intervention goal in people who are most motivated. This study was an attempt to assess knowledge, attitude and practice of life style modification in the management of hypertension.

Keywords: Blood Pressure, Non Communicable Disease in Bangladesh.

Introduction

Hypertension is defined as a condition in which Systolic blood pressure (SBP) is equal to or greater than 140 mmHg and/ or diastolic blood pressure (DBP) equal to or greater than 90 mmHg. Globally, the overall prevalence of hypertension in adults aged 25 years & over was around 40% in 2008. The number of people with hypertension rose from 600 million in 1980 to 1 billion in 2008. The increasing prevalence of hypertension is attributed to population growth, ageing and behavioral risk factors, such as unhealthy diet, harmful use of alcohol, lack of physical activity, excess weight and exposure to persistent stress. Hypertension is a major risk factor for NCDs like stroke, cardiovascular disease and chronic kidney disease. Complications of hypertension account for 9.4 million deaths worldwide every year. Hypertension is responsible for 45% of deaths

due to heart disease and 51% of deaths due to stroke [1].

Hypertension, the silent killer which remains asymptomatic until the damage effect of it can be seen. Hypertension .an important and common risk factor for considerable morbidity and mortality not only in the industrialized world but also in developing countries. Thus, the problem of hypertension can be truly considered as pandemic [2].

The factors contributing to the increased prevalence of hypertension is mainly based on environmental factors, genetic factors and factors like alcohol intake, high fat intake, body mass index and hormonal problems; hypertensive when compared to normotensives, develops twice as much as coronary heart disease, four times as much congestive heart failure and seven times as much stroke. These risk factors can be conquered through lifestyle modification [3].

Life style modifications are universally accepted, not only as the first step in the management of hypertension but also as a way to prevent hypertension. In addition to lowering blood pressure, these measures can also reduce other cardio vascular risk factors. This cost involved is minimal and there are hardly any risks. Hypertensive patients irrespective of this stage or grade should be motivated to adopt these measures [4].

In 2008, worldwide, approximately 40% of adults aged 25 and above had been diagnosed with hypertension; the number of people with the condition rose from 600 million in 1980 to 1 billion in 2008. The prevalence of hypertension is highest in the African Region at 46% of adults aged 25 and above, while the lowest prevalence at 35% is found in the Americas. Overall, high-income countries have a lower prevalence of hypertension - 35% - than other groups at 40%. Nearly 80% of deaths due to cardiovascular disease occur in low- and middle-income countries. They are the countries that can least afford the social and economic consequences of ill health. Current age standardized mortality rates of low-income countries are higher than those of developed countries. Early detection and treatment of hypertension and other risk factors, as well as public health policies that reduce exposure to behavioral risk factors, have contributed to the gradual decline in mortality due to heart disease and stroke in high-income countries over the last three decades [5].

In order to reduce the high incident rate now the health system is giving more emphasis on life style modifications along with other measures. Life style is important because how we live determine our choices and this choice decide how healthy we are. Our daily routine may lead us to many risk factors. Habits like eating out at restaurant and eating fast foods drinking alcohol, smoking staying up late and not get in enough sleep spending more time in front of TV, computer and more use of vehicles rather than walking. A study revealed that in lifestyle group mean net reduction in 24 hrs ambulatory systolic and diastolic blood pressure were 9.5mm Hg and 5.3mm Hg respectively [6]. Now a day it is agreed upon that, among over weight adult already on antihypertensive medications, a comprehensive lifestyle intervention can substantially lower BP and improve BP control.

Methodology

It was descriptive type of cross-sectional study. This study was designed to grab more data in a short time, so that it can be used for assessing the level of awareness of the respondents. Data were collected from conveniently selected places of Dhaka. This study was conducted for a period of six months. All hypertensive patients and willing to participate in the study. Not willing to participate in the study Non probability convenient sampling technique was applied. A semi-structured pre-tested & self-administered questionnaire was used to collect data. Data were collected by pre tested structured questionnaires and in face to face interview. Information about socio-demographic characteristics was also obtained. Life style modification includes smoking, physical activity and dietary habit was obtained. The respondents were selected consecutively who met the inclusion and exclusion criteria. After data collection, data were sent to the researcher, which was sorted, scrutinized by the researcher himself by the selection criteria and then data were analyzed by personal computer by SPSS version 20.0 program. The open ended questions were grouped and categorized. Data were analyzed by descriptive statistics. Initial ethical clearance was sought from the ethical review committee for conducting the study. Consent was taken from every

individual. Confidentiality of the person and the information was maintained, observed and unauthorized persons did not access to the data. Each subject was assigned an identification number and these subject identifiers did not release outside the authorized person.

Results

The result of the study was presented in tabular and graphical form there by interpretation of the result in the chapter under the following headings.

Table No 1: Distribution of respondents by age group (n=100)

Age group (yrs)	Number	Percentage
≤25	19	19
26-50	68	68
51-75	13	13
Total	100	100
Mean±SD	36.96±13.04	

Average age of the patients was 36.96±13.04. Most of the patients (68%) belonged to 26-50 years age group followed by ≤25 years 19% and 51-75 years 13%.

Male and female distribution was 73% and 27%.

More than half of the respondents (56%) passed SSC level of education followed by graduate 31%, primary 8% and post graduate 5%. Housewife, shopkeeper, business, service and other type of jobs were 16%, 1%, 24%, 28% and 31%. Nuclear family was quite double than joint family. Distribution of small and large family was 61% and 39%.

Table No 2: Monthly family income (n=100)

Income	Number	Percentage
≤10000	10	10
10001-20000	73	73
20001-30000	13	13
>30000	4	4
Total	100	100

About 73% of the study subjects had monthly income 10001-20000 BDT followed by 13% family had 20001-30000 BDT, 10% family had ≤10000 BDT and 4% family had >30000 BDT.

Table No 3: Knowledge on smoking (n=100)

Knowledge	Number	Percentage
Is there any association between smoking and hypertension?		
Yes	99	99
No	1	1
If yes, what type of association?		
Cancer	58	58
Hypertension	1	1
Lung cancer	19	19
Tuberculosis	14	14
Stroke	8	8
Total	100	100

Almost 99% of the study subjects knew that smoking is associated with hypertension. More than half of the respondents told cancer is the effect of smoking followed by lung cancer 19%, tuberculosis 14%, stroke 8% and hypertension 1%.

Table No 4: Practice of smoking (n=100)

Practice	Number	Percentage
Do you smoke?		
Yes	23	23
No	77	77
If yes, how long in years?		
Mean±SD	11.74±11.96	
How many sticks every week?		
Mean±SD	21.91±14.26	
Total	100	100

About 77% respondents did not smoke and 23% study subjects smoked. Among smokers average years of smoking was 11.74 years and average sticks 21.91 consumed per week.

Table No 5: Knowledge and practice on salt intake (n=100)

Knowledge	Number	Percentage
Excessive salt intake is good or bad for health?		
Bad	94	94
Good	6	6
Effect of excessive salt intake		
Hypertension	100	100
Average amount of salt intake every day (tsf)		
Mean±SD	2.44±1.68	
Total	100	100

About 94% respondent told excessive salt intake is bad for health. Almost all of them knew that excessive salt intake results high blood pressure. Average amount of salt intake was 2.44 tsf every day.

Table No 6: Knowledge and practice on physical activity (n=100)

Knowledge	Number	Percentage
Is there any effect of physical exercise on blood pressure?		
Yes	93	93
No	7	7
If yes, what are those?		
Fitness	26	26
Decrease cholesterol	74	74
Do you take part physical exercise regularly?		
Yes	40	40
No	60	60
If yes, how long in minute?		
Mean±SD	66.22±34.50	
Total	100	100

About 93% told that physical exercise has effect on blood pressure. Three-fourth of the study subjects told that physical exercise decrease cholesterol. About 40% took part physical exercise regularly. Average physical exercise per day was 66.20 minute. Normal, overweight, underweight and obese were 60%, 30%, 7% and 3%.

Table No 7: Food item consumed last seven days (n=100)

Food item	Number	Percentage
Meat		
Yes	89	89
No	11	11
Egg		
Yes	96	96
No	4	4
Milk		
Yes	70	70
No	30	30
Fish		
Yes	98	98
No	2	2
Fruits		
Yes	63	63
No	37	37
Total	100	100

Meat, egg, milk, fish and fruits were taken by 89%, 96%, 70%, 98% and 63% respondents.

Conclusion

Knowledge regarding hypertension is an important measure used for decreasing the prevalence of hypertension. Life style modification is the easiest way to prevent or control high pressure. The increase level of knowledge on life style changes will help to have desired intervention goal in people who are most motivated. This study was an attempt to assess knowledge, attitude and practice of life style modification in the management of hypertension [7-15].

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