# Evaluation of Knowledge and Practice Regarding Lifestyle Modification among Hypertensive Patients Attending at A Private Chamber of Chattogram

Saeeda Risa<sup>1\*</sup> ABK Bashir Uddin Sayeem<sup>2</sup>

#### **ABSTRACT**

**Background:** Hypertension is a result of several factors, including unhealthy diet, fast food and avoiding fruits and vegetables. The motive of this study is to evaluate the knowledge and dietary practices regarding prevention and management of HTN.

**Materials and method:** In this cross sectional study, 100 patients were included in the study by purposive sampling. The information were collected from the hypertensive patients coming to private chamber.

**Results:** Out of 100 patients, 67% were males, 57% belonged to age group 40-50 years. 98% of the patients were married, 38% were service holder, 7% were graduates. Among the patients , 42% were aware about HTN, 36% knew normal blood pressure level and 42% had idea about risk factor of HTN. 36% of them believed that HTN is due to family history, 42% due to over weight and 32% due to smoking. To prevent HTN, 85% patients avoided beef consumption, 75% avoided smoking, 95% avoided fatty diet, 42% avoided extra salt intake and 74% adopted regular exercise.

**Conclusion:** This study reflects that the patients had knowledge about HTN and majority had adopted life style modification and self care practice. Educational interventions and awareness development should be focused to improve life style modification among patients.

**Key words:** Hypertension; Knowledge; Lifestyle modification; Practice.

## Introduction

Hypertensive patients usually have no symptoms and hence known as the "silent killer". It is high risk factor responsible for morbidity and mortality in industrialized and developing countries.1 In Bangladesh also HTN is an important public health problem. In recent studies it is seen that about 20% of adults and around 65% of senior citizens are hypertensive.<sup>2</sup> Only a few studies are available regarding hypertension, indicating that prevalence of hypertension is increasing. Most patients in Bangladesh are not willing to visit the doctors due to financial problems, lack of awareness and poor life style.<sup>3</sup> As a result, undetected and untreated hypertensive patients are more in number. Hypertension can be fatal and it is necessary that everyone is aware about normal blood pressure level. Hypertension if

diagnosed at earlier can prevent heart diseases, heart failure, stroke and kidney failure.<sup>4</sup> Awareness, self care, life style modification and availing medical treatment can prevent hypertension. This study can help the policy makers, physicians, medical students, donors, NGO workers and others to understand better about HTN.

# Materials and methods

This descriptive cross-sectional study design was used to explore the knowledge and practice of lifestyle modification among hypertensive patients attending at selective private chamber. This study setting was at private chamber at Popular Diagnostic Center in Chattogram. 100 hypertensive patients were included in the study during their visit to Doctors chamber. 100 hypertensive patients of both sex were included in the study. Non probability purposive sampling was used to select the sample of the study.

# Inclusion criteria

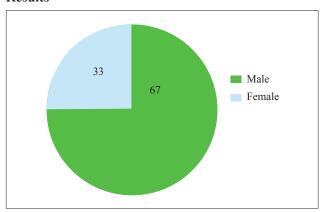
- Hypertensive patients those willing to participate in the study aged 40 years and above.
- The study includes both sex.

## Exclusion criteria

- Below 40 years of age.
- Unwilling to give time for research.

Data were collected using structured questionnaire and verbal consent was taken from the patients. Collected data were analyzed using scientific calculator and computer.

#### Results



**Figure 1** Gender of the study population (n=100)

From the above figure, majority 67% of the respondents were males.

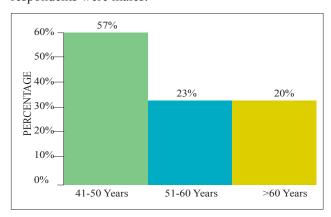


Figure 2 Age of the study population (n=100)

Among the respondents, 57% of the respondents belonged to age group 41-50 years, 23% belonged to age group 51-60 years and 20% were aged above 60 years.

**Table I** Socio demographic profile (n=100)

Variable □	Frequency   Percenta	age (%)
Occupation		
Service holder □	38 □	38
Daily labor □	11 □	11
Business man □	12 □	12
Small trader □	30 □	30
Rickshaw puller □	02 □	02
House wives $\square$	07 □	07
Educational status		
Graduate and above $\square$	07 □	07
Primary □	36 □	36
HSC □	12 □	12
$SSC \square$	45 □	45
Marital status □		
Married	98 □	98
Single	02 🗆	02

Considering the demographic ideas, majority 38% of the respondents were service holder, 07% were housewives, 07% were graduates, 45% passed SSC, 98% were married 55% came from nuclear family.

Table II Idea on HTN (n=100)

Knowledge about high blood pressure	Response [	Frequency	Percentage
Knowledge about HTN □	Yes 🗆	42 □	42
	No 🗆	58 □	58
Knowledge about normal blood			
pressure level □	Yes $\square$	36 □	36
	No 🗆	64 □	64
Knowledge about risk factor of HTN	Yes □	42 □	42
	No 🗆	58 □	58

From the above table, it is revealed that 42% had knowledge about HTN, 36% concerned about normal blood pressure level and 42% heard about risk factor for HTN.

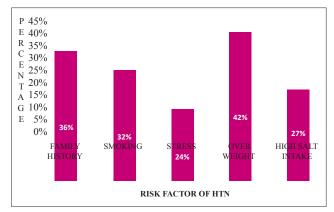
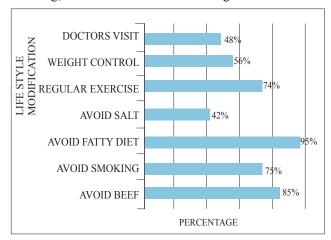


Figure 3 Risk factor of Hypertension (n=100)

The bar diagram depicts that 36% had expressed family history as a factor of HTN, 32% mentioned about smoking, 24% stress and 42% overweight.



**Figure 4** Expressed idea narrated by the respondents of life style modification (n=100)

From the study it is evident that for management of HTN 48% visited doctor regularly, 56% controlled weight, 74% did regular exercise, 42% avoided extra salt, 95% avoided fatty diet, 75% avoided smoking and 85(85%) avoided beef consumption.

**Table III** Relationship between socioeconomic status and types of work of the respondents (n=100)

Socioeconomic □ status □	Types of physical work $\square$ Sedentary work $\square$ Vigorous work		Total
Upper class □	17 □	06 □	23
Middle class □	35 □	14 □	49
Lower class □	08 □	20 □	28
Total □	60 □	40 □	100

Calculated value=16.03 TV=5.991 at 5% level significant.

Above Table reflects the association between social class and types of physical work. Chi square test denotes the significant influence of socioeconomic status on types of work of the responding persons. (P.05) (TV=5.991, calculated value=16.03). So there is significant relationship between SES and physical work.

#### **Discussion**

In this study 67% of the respondents were male and 33% were female, whereas in another similar study done in Pakistan revealed that 73% of the study respondents were female.<sup>5</sup> Regarding age in the current study, majority 57% of the study subjects belonged to age group 40-50 years and 20% were above 60 years of age. This findings almost correlates with findings of Md Nahian Rahman where 31.6% of respondents belonged to age group 31-50 years and 10.83% were above 65 years of age. Out of 100 respondents in this study 38% were service holder, 07% were housewives, 12% were businessman, 02% were Rikshaw Puller, 30% were small trader, whereas in another similar study, done by Sudipta showed that 20.8% were homemaker, 12.6% were service holder, 33.2% were students, 9.8% were businessman.<sup>7</sup> Most of the participants, 12% had passed HSC, 45% passed SSC, 36% had primary level of education and only 07% were graduated. Whereas in a study done in Nepal most of the patients (22.1%) were illiterate and only 8.1% of them had a bachelor and above level of education.8 Bulk (98%) of the participants in current study were married, whereas 69.9% were married, 6.6% were single, 2.9% were divorced and 20.6% were widow/widower in a similar study.8 Regarding knowledge, 42% had knowledge about HTN, 36% knew normal blood pressure level and 42% knew about risk factors of HTN. Mean while in the study of Rajshahi Medical College, the patients had 100%

knowledge about HTN.9 Regarding risk factor for HTN, 36% said it is due to genetic cause, 32% due to smoking, 42% due to overweight, 27% due to high salt intake and 24% due to stress. Whereas in another similar study, 22% said it is due to heredity, 68% due to smoking, 22% due to high fatty diet intake and 78% due to overweight.<sup>9</sup> For management of hypertension, life style modification has been implicated. In this study 85% said they avoided beef consumption, 75% discarded smoking, 95% avoided fatty diet, 42% avoided extra salt intake, 74% adopted regular exercise, 56% controlled weight and 48% visited their doctor on regular basis. This findings correlates with the study done by Lipilekha in Odisa, India. 10 This study shows significant association between social class and types of physical work. Chi square test denotes the significant influence of socioeconomic status on types of work of the responding persons. (P.05) (TV=5.991, calculated value=16.03)

#### Limitations

This study was done in a small community. It does not reflect the condition of whole country

#### Conclusion

Prevention in the form of lifestyle modification among hypertensive patients will be helpful to increase the awareness about modifiable risk factors. This will help them to adopt and practice a healthy lifestyle, which will be beneficial for them to control the blood pressure and prevent complications due to HTN.

# Recommendation

A broader survey is recommended to broadly portray the current situation and suggest possible ways for lasting improvements in blood pressure control and awareness.

#### Disclosure

All authors declared no conflict of interest

#### References

- **1.** Arif-Rahu M, Grap MJ. Facial expression and pain in the critically ill noncommunicative patient: State of science review. Intensive and critical care nursing. 2010;26(6):343-352.
- **2.** Mitwalli AH, Al Harthi A, Mitwalli H, Al Juwayed A, Al Turaif N, Mitwalli MA. Awareness, attitude and distribution of high blood pressure among health professionals. Journal of the Saudi Heart Association. 2013;25(1):19-24.
- **3.** Bennetts S, Campbell Brophy E, Huckson S, Doherty S, National Health and Medical Research Council's National Institute for Clinical Studies National Emergency Care Pain Management Initiative. Pain management in Australian emergency departments: current practice, enablers, barriers and future directions. Emergency Medicine Australasia. 2012;24(2):136-143.

# **Original Article**

- **4.** Kusuma YS, Gupta SK, Pandav CS. Knowledge and Perceptions about hypertension among Settled Migrants in Delhi, India. CVD Prev Control. 2009;14:119–129.
- **5.** Mahmood S, Hassan SZ, Tabraze M, Khan MO, Javed I, Ahmed A, Siddiqui OM, Narmeen M, Ahmed MJ, Tariq A, Patel MS. Prevalence and predictors of depression amongst hypertensive individuals in Karachi, Pakistan. Cureus. 2017;9(6).
- **6.** Rahman MN, Alam SS, Mia MA, et al. Knowledge, attitude and practice about hypertension among adult people of selected areas of Bangladesh. 2018;7(4):211-214.
- 7. Nath SD, Chowdhury AS, Pinky SD, Akter KM, Nourin NA, Chowdhury T, Fahid HA, Sharmin KS, Rana MM, Alam N, Ahsan MM. Covariates of Knowledge, Attitude, Practice, and Burdens among the Caregivers of Hypertensive Patients. International Journal of Hypertension. 2023;2023(1):8866231.

- **8.** Shrestha J, Marasine NR, Lamichhane R, Marasini NR, Sankhi S. Attitude and self-care practice on hypertension among antihypertensive medication users in a tertiary care hospital Nepal. SAGE Open Medicine. 2021;9: 1-9.
- **9.** Biswas D, Shanta FF. The Knowledge, Attitude and Practice of Lifestyle Modification among Hypertensive Patients at Rajshahi Medical College Hospital. Sch J Med Case Rep. 2021;1:96-100.
- **10.** Patnaik L, Paul KK, Pattnaik S, Sahu T. Lifestyle Pattern and Hypertension Related Knowledge, Attitude and Practices among Diagnosed Patients of Hypertension Attending a Tertiary Care Hospital. J Cardiovascular Disease Research. 2017;8(4):108-111.