# The Knowledge, Attitude and Practice of Lifestyle Modification among Hypertensive Patients at Rajshahi Medical College Hospital 

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This research tool was a questionnaire developed by the researcher and based on the knowledge, attitude and practice of lifestyle modification among hypertensive patients. Though this was a cross-sectional type of descriptive study, it provided vivid information about knowledge, attitude and practice of lifestyle modification which is very much important to the patients. For this study fifty patients were selected, the age of which maximum respondents $48 \%$ were in the age group of 21 to 40 years and $52 \%$ were minimum age group of 41 to 80 years and $0 \%$ were 81 to above years. The weight of the respondents $10 \%$ were in the $41-50 \mathrm{~kg}, 28 \%$ were $51-60 \mathrm{~kg}, 285$ were $61-70 \mathrm{~kg}$ and $32 \%$ were 71 kg - above in total respondents. Among those patients $46 \%$ were male and $54 \%$ were female and no transgender. About the preventive measures of hypertension, $44 \%$ of respondents answered body weight, $40 \%$ answered avoid excess salt intake, and $78 \%$ regular exercise, $56 \%$ avoid smoking and $2 \%$ do not know. Know about extra salt intake is harmful to their health- agree $100 \%$ and $0 \%$ disagree; exessive alcohol intake is increasing their blood pressure levelagree $100 \%$ and disagree $0 \%$. The respondents' physical activity is currently do - aerobic workout $0 \%$, running or jogging $12 \%$, walking $68 \%$, and bicycling $22 \%$. Duration of the respondents physical activity- $36 \%$ were 15-30 minutes, $44 \%$ were $30-45$ minutes, $14 \%$ were $45-60$ minutes and $6 \%$ were above 1 hour. About what type of food is avoided $-46 \%$ of respondent answered beef, $52 \%$ were fatty diet, $46 \%$ were cholesterol and $2 \%$ were all of the above.
Keywords: Attitude and Practice Lifestyle Modification Hypertensive Patients.
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## Introduction

Hypertension the silent killer which remains asymptomatic until the damaging effect it can be seen. Hypertension is an important and common risk factor for considerable morbidity and mortality in industrialized and developing countries. Thus, the problem of hypertension can be truly considered as pandemic. (Robert C Schlant ) [1].

Hypertension (HTN) is an increasingly important medical and public health problem. In Bangladesh, approximately $20 \%$ of the adults and 40$65 \%$ of elderly people suffer from HTN [2].

## Study Variables

Two type of variables are used-

## Dependent Variables

The knowledge, attitude and practice of lifestyle modification among hypertensive patients at Rajshahi Medical College Hospital.

## Independent Variables

The independent variables of interest to the study were as following:
Age
Weight
Gender
Marital status.
Religion
Educational background
Occupational status
Monthly family income
Home location [3]

## Methodology

In this paper, the study design, setting and duration population and sample, instrumentation, translation of the instrument validity and reliability of the instrument, ethical consideration, data collection procedure and data analysis are described [5].

## Study design and study population

The descriptive cross-sectional study design was used to explore The knowledge, attitude and practice of lifestyle modification among hypertensive patients at Rajshahi Medical College Hospital.

The target population is the patients who attend Rajshahi Medical College Hospital.

## Place and duration of the study

This study's setting was Rajshahi Medical College Hospital, a 1200 beded specialized teaching hospital, which is located in Dhaka of Bangladesh. Approximately 450 patients per day are admitted to this hospital. The study was carried out.

## Sample size

50 hypertensive patients of both sex.

## The inclusion criteria of patients-

1. The patient suffering from hypertention.
2. Patient between the ages of 20-80 years
3. The study includes hypertensive patients attending the medicine ward at RMCH.
4. The study includes both sex.
5. The study includes patients who know Bangla and English.

## Sample technique

Purposive sampling will be used to select the sample of the study. 50 patients of the Rajshahi Medical College Hospital lwho were fulfilling the inclusion criteria selected by simple random sampling [6].

## Research Instruments

The instrument developed by the researcher was divided into 5 sections including 1) Demographic questionnaire on patients. 2) Patients knowledge on knowing about hypertension - yes/no questionnaire. 3) Patients knowledge on lifestyle modification of hypertension - MCQ questionnaire. 4) Patients attitude on lifestyle modification of hypertension - MCQ questionnaire. 5) Patients practice on lifestyle modification of hypertension - agree/disagree questionnaire [4]. The details of each section will be explained as follows:

## Demographic questionnaire on patients

The questionnaire consisted of 9 items to assess the subjects demographic data including age, weight, gender, marital status, religion, educational background, occupational status, monthly income and location.

Patients knowledge on knowing about hypertensionyes/no questionnaire.

This questionnaire was designed to assess the patients knowledge on knowing about hypertension patients, 1 items was selected.

## Patients knowledge on lifestyle modification of

 hypertension- MCQ questionnaireThis questionnaire was designed to assess the patients knowledge on lifestyle modification of hypertension patients, 6 items were selected.

Patients attitude on lifestyle modification of hypertension- agree/disagree questionnaire

This questionnaire was designed to assess the patients attitude on lifestyle modification of hypertension patients, 2 items were selected.

Patients practice on lifestyle modification of hypertension- MCQ questionnaire.

This questionnaire was designed to assess the patients practice on lifestyle modification of hypertension patients, 6 items were selected.

## Data collection procedure data analysis

The researcher asked for permission to collect data from the director and the nursing superintendent of nursing department of Rajshahi Medical College Hospital and asked for permission to collect data and explained the study objectives [7].

The researcher was then seek for verbal \& written informed consent from the subjects who agreed to participate in this study. Finally the researcher scored the responses and compiled them for data analysis. Data obtained was collected and transferred to a spread sheet for analysis. The information was then analyzed using percentages.

## Ethical consideration

The study was approved by the Research Ethics Committee of the Faculty of Medicine of the University of Rajshahi and permission was obtained from Rajshahi Medical College Hospital. The participants were free to ask any questions about the study. The confidentiality of the collected data was maintained throughout the study [8].

## Results

1.1. The results regarding patient's knowledge, attitude and practice of life style modification of hypertension have been presented in Tables.

Demographic information of the participated patients

Age : The age group of 21 to 40 were $48 \%$, $52 \%$ were in the age groups of 41 to 80 years, $0 \%$ were in the age group of 81 to above years in total respondents 50 .

Table-1: Age of the respondents
All respondent $=50$

| Variable | Range | $\mathrm{N}=50$ | Percentage |
| :--- | :--- | :--- | :--- |
| Age | $21-40 \mathrm{years}$ | 24 | $48 \%$ |
|  | $41-80$ years | 26 | $52 \%$ |
|  | 81 -above | 0 | $0 \%$ |



Fig-1: Distribution of the respondent by their age
Weight: The most of the respondents $10 \%$ belong to the weight $41-50 \mathrm{~kg}$, the respondent $28 \%$ belong to the weight $51-60 \mathrm{~kg}$, the respondents $28 \%$ belong to the weight $61-70 \mathrm{~kg}$, the respondents $32 \%$ belong to the weight 71- above years in total respondents 50 .

Tabl-2

| All respondent=50 |  |  |  |
| :--- | :--- | :--- | :--- |
| Variable | Range | $\mathrm{N}=50$ | Percentage |
| Weight | $41-50 \mathrm{~kg}$ | 5 | $10 \%$ |
|  | $51-60 \mathrm{~kg}$ | 14 | $28 \%$ |
|  | $61-70 \mathrm{~kg}$ | 14 | $28 \%$ |
|  | $71-$ above | 16 | $32 \%$ |



Fig-2: Distribution of the respondent by their weight
Gender: Among all the patients, $46 \%$ were male, and $54 \%$ were female and no transgender.

Table-3: Gender of the respondents

| All respondent=50 |  |  |  |
| :--- | :--- | :--- | :--- |
| Variable | Parameters | Number | Percentage |
| Gender | Male | 23 | $46 \%$ |
|  | Female | 27 | $54 \%$ |
|  | Transgender | 0 | $0 \%$ |

Marital status: The respondents' marital status was $4 \%$ single, $86 \%$ were married, and $10 \%$ were widow.

Table-4: Marital status of the respondent

| All respondent $\mathbf{5 0}$ |  |  |  |
| :--- | :--- | :--- | :--- |
| Variables | Parameters | $\mathbf{N}=\mathbf{5 0}$ | Percentage |
|  | Single | 2 | $4 \%$ |
|  | Married | 43 | $86 \%$ |
|  | Widow | 5 | $10 \%$ |

Table-5: Religion of the respondents

## All respondent $=50$

| Variables | Parameters | $\mathrm{N}=50$ | Percentage |
| :--- | :--- | :--- | :--- |
|  | Muslim | 41 | $82 \%$ |
|  | Hindu | 8 | $16 \%$ |
|  | Christian | 1 | $2 \%$ |
|  | Buddhist | 0 | $0 \%$ |



Fig-3: Distribution of the respondent by their religion

## Religion

Muslim patients were predominant and $82 \%$ of the total, $16 \%$ were Hindu, $2 \%$ were Christian and no Buddhist.

## Educational Background

Patients having educational background illiterate $22 \%$, primary $22 \%$, secondary $28 \%$, higher secondary $8 \%$ and university or above $20 \%$.

Table-6: Educational background of the respondents

| All respondent=50 |  |  |  |
| :--- | :--- | :--- | :--- |
| Variables | Range | N=50 | Percentage |
|  | Illiterate | 11 | $22 \%$ |
|  | Primary | 11 | $22 \%$ |
|  | Secondary | 14 | $28 \%$ |
|  | H. Secondary | 4 | $8 \%$ |
|  | University | 10 | $20 \%$ |
|  | Others | 0 | $0 \%$ |



Fig-4: Distribution of the respondent by their academic qualification

Occupational status: Patients having occupational status were service $26 \%$, business $20 \%$, farmer $8 \%$, day labour $16 \%$ and housewife $30 \%$ among those respondents.

Table-7: Occupational status of the respondents

|  | All <br> respondent=50 | Number | Percentage |
| :--- | :--- | :--- | :--- |
|  | Range | 13 | $26 \%$ |
|  | Service | 10 | $20 \%$ |
|  | Buisness | 4 | $8 \%$ |
| Variable | Farmer | 8 | $16 \%$ |
|  | Day labour | 15 | $30 \%$ |
|  | Housewife | 15 | $0 \%$ |
|  | Others | 0 |  |



Fig-5: Distribution of the respondent by their professional qualification

Monthly income: The monthly income of the respondents $4 \%$ belong to the range of 3001-5000 taka, $38 \%$ belong to the range of 5001-10000 taka and $58 \%$ belong to the range of 10001-150000 taka.

Table-8: Monthly income of the respondents

| All respond $=\mathbf{5 0}$ |  |  |  |
| :--- | :--- | :--- | :--- |
| Variables | Range | N <br> $=50$ | Parameters |
|  | $3001-5000$ taka | 2 | $4 \%$ |
|  | $5001-10000$ taka | 19 | $38 \%$ |
|  | $10001-$ <br> 150000 taka | 29 | $58 \%$ |

Home location: The most of the reapondents $78 \%$ lives in Rajshahi division and $22 \%$ lives in other division

Table-9: Home location of the respondents

| All <br> respondent=50 |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Parameters | Number | Percentage |
| Variable | Rajshahi <br> division | 39 | $78 \%$ |
|  | Other division | 11 | $22 \%$ |

Knowledge related question to the patients - Yes/No questionnaire

Majority of the questions of the nursing knowledge on management of hypertension interviewed patients responded positively. know about hypertension-yes $100 \%$ and no $0 \%$.

Table-10: Information regarding patient's knowledge on life style modification among hypertension

| No. | Questions | Answer |  |  | No |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
|  |  | Yes |  |  |  |  |  |
|  |  | $\mathrm{N}=50$ | \% | $\mathrm{N}=50$ | \% |  |  |
| 1. | Do you know about hypertension? | $\mathbf{5 0}$ | $\mathbf{1 0 0}$ | $\mathbf{0}$ | $\mathbf{0}$ |  |  |
| Total | Yes $=\mathbf{1 0 0 \%}$ | No=0\% |  |  |  |  |  |

Knowledge related question to the patients- MCQ questionnaire

Knowledge of respondents on how many times suffer from hypertension. At the level of knowledge of
respondents on the question. How many days suffer from hypertension? The respondents answered that, 1-2 years $34 \%, 2-3$ years $24 \%, 3-4$ years $18 \%$ and above 5 years $24 \%$.

Table-11: Distribution of respondents by their knowledge on how many days suffer from hypertension

| Variable | Parameters | $\mathbf{N}=\mathbf{5 0}$ | Percentage |
| :--- | :--- | :--- | :--- |
| How many days <br> suffer from <br> hypertension? | $1-2$ years | 17 | $34 \%$ |
|  | $2-3$ years | 12 | $24 \%$ |
|  | $3-4$ years | 9 | $18 \%$ |
|  | Above 5 years | 12 | $24 \%$ |

Knowledge of respondents on risk factors of hypertension.

The respondents had a good knowledge of hypertension's risk factors- heredity $22 \%$, smoking
$68 \%$, high intake of fatty diet $18 \%$, obesity $78 \%$, and do not know $0 \%$.

Table-12: Distribution of respondents by their knowledge on risk factors of hypertension

| Variable | Parameters | $\mathbf{N}=\mathbf{5 0}$ | Percentage |
| :--- | :--- | :--- | :--- |
| What are the underlying risk <br> factors of <br> hypertension? | Heredity | 11 | $22 \%$ |
|  | Smoking | 34 | $68 \%$ |
|  | High intake of fatty diet | 11 | $22 \%$ |
|  | Obesity | 39 | $78 \%$ |
|  | Do not know | 0 | $0 \%$ |

Knowledge of respondents about the symptom of high blood pressure

Knowledge of the patients about the symptom of high blood pressure. Most of the participants answered that- headache and dizziness $80 \%$, tense feeling in the chest $38 \%$, there is no symptom unless complication $2 \%$ and do not know $0 \%$.

Practice of respondents on what type of food is avoided

Practice of respondents on a question: What type of food is avoided?- beef $46 \%$, fatty diet $52 \%$, cholesterol $46 \%$ and all of the above $2 \%$.

Table-13: Distribution of respondents by their knowledge on management of hypertensive patient

| Variable | Parameters | $\mathbf{N}=50$ | Percentage |
| :--- | :--- | :--- | :--- |
| What type of food is avoided? | Beef | 23 | $46 \%$ |
|  | Fatty diet | 26 | $52 \%$ |
|  | Cholesterol | 23 | $46 \%$ |
|  | All of the above | 1 | $2 \%$ |

## Conclusion

This descriptive study aimed to identify the the knowledge, attitude and practice of lifestyle modification among hypertensive patients. Fifty patients were recruited from a specialized hospital in Rajshahi Medical College Hospital [9]. This study provided vivid information about the knowledge, attitude and practice of lifestyle modification among hypertensive patients. There are several effects as a result of hypertension. High blood pressure is a disease of the cardiovascular system and is a major modifiable risk factor for coronary heart disease, congestive heart failure, stroke, renal failure, renal dysfunction, and eye problems [10].

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