Assessment of Knowledge and Attitudes Regarding the Prevention of Hypertension Among Patients Attending the OPD of a Selected Hospital in Guwahati, Assam

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Abstract—Background Hypertension is a major public health concern globally, contributing significantly to cardiovascular morbidity and mortality. Inadequate knowledge and negative attitudes towards its prevention often result in poor health-seeking behaviors and suboptimal lifestyle choices among patients. Understanding the knowledge and attitudes of patients can help tailor educational interventions to reduce the burden of hypertension.

Objectives

The primary objective of the study was to assess the knowledge and attitudes regarding the prevention of hypertension among patients attending the outpatient department (OPD) of a selected hospital.

Methodology

A descriptive cross-sectional study design was employed. A total of 50 patients were selected through convenient sampling. A structured and validated questionnaire was used to collect data on demographic variables, knowledge, and attitudes related to hypertension prevention. Descriptive statistics were used to analyze the data, and associations between variables were tested using appropriate inferential statistical tools.

Results

The study revealed that 44% of participants had adequate knowledge regarding the prevention of hypertension, while 66% demonstrated a positive attitude. A significant association was found between knowledge levels and factors such as educational status and age (p < 0.05). Similarly, attitude scores were positively correlated with knowledge scores, indicating that better-informed individuals tended to hold more favourable attitudes toward hypertension prevention. Conclusion

The findings highlight a moderate level of knowledge and attitudes regarding hypertension prevention among the study population. The study underscores the need for targeted health education and awareness programs within hospital OPDs to enhance patients' understanding and promote proactive preventive behaviors.

Index Terms—Hypertension, Knowledge, Attitude, Prevention, OPD patients

1. INTRODUCTION

Hypertension, often referred to as the "silent killer," is a growing public health concern in India and globally. It significantly contributes to the development of cardiovascular diseases, stroke, and kidney failure. According to the World Health Organization (WHO), approximately 1.28 billion adults aged 30–79 years worldwide have hypertension, with two-thirds living in low- and middle-income countries. In India, the National Family Health Survey (NFHS-5) reports increasing prevalence rates, including in the northeastern region, where lifestyle transitions and lack of awareness have worsened the burden.

In Guwahati, Assam, the urban-rural health divide and socio-economic disparities further impact public knowledge and behaviour toward hypertension prevention. Despite the availability of effective preventive and therapeutic measures, its control remains a challenge in many populations, especially in low- and middle-income countries. One of the contributing factors is the inadequate knowledge and poor attitudes of individuals toward hypertension and prevention. Patients attending outpatient its departments (OPDs) represent a diverse group with varying levels of exposure to health information. This study was undertaken to assess the knowledge and attitudes of patients attending the outpatient department (OPD) of a selected hospital in Guwahati regarding hypertension prevention, with the aim of identifying knowledge gaps and informing patient education strategies.

Objectives

- 1. To assess the level of knowledge regarding the prevention of hypertension among patients attending OPD of a selected Hospital
- 2. To assess the attitudes regarding the prevention of hypertension among patients attending OPD of a selected Hospital
- 3. To identify the association between demographic variables and knowledge and attitude scores.

Operational Definitions

- Knowledge: Refers to the understanding of hypertension causes, risk factors, and preventive measures as assessed by a structured questionnaire.
- Attitude: Refers to patients' beliefs, perceptions, and willingness to adopt preventive practices for hypertension.
- Hypertension: Hypertension is systolic blood pressure greater than 140 mm of Hg and diastolic pressure greater than 90 mm of Hg.
- Prevention of Hypertension: Includes lifestyle and behavioural modifications such as reducing salt intake, regular physical activity, stress management, and regular health check-ups.
- OPD Patients: Individuals attending the outpatient department for consultation or treatment in the selected hospital.

2. MATERIALS AND METHODOLOGY

Study Design: Descriptive cross-sectional study. Study Setting: Outpatient Department of Health City Hospital, Guwahati, Assam.

Study Population: Patients aged 18 years and above attending the OPD during the study period.

Sample Size: 50

Sampling Technique: Convenient sampling.

Inclusion Criteria:

Patients who are willing to participate and are mentally and physically able to respond.

Exclusion Criteria:

Critically ill patients and those already diagnosed with cognitive impairments.

Data Collection Tool:

A structured questionnaire consisting of three sections: Section A: Socio-Demographic data.

Section B: 17 multiple-choice questions assessing knowledge

Section C: 5 points Likert scale for attitudes

Data Collection Procedure: Face-to-face interviews were conducted after obtaining informed consent.

Data Analysis: Data were analysed using descriptive statistics (mean, frequency, percentage) and inferential statistics (Chi-square test) using SPSS. A p-value <0.05 was considered statistically significant.

Ethical Considerations:

- ✓ Approval was obtained from the Institutional Ethics Committee.
- ✓ Informed consent was taken from each participant.

3. RESULTS

Out of the 50 participants, 20% were male and 30% were female. The mean age of participants was 31 to 40 years. Regarding knowledge, 44% had adequate knowledge, 36% had moderate knowledge, and 20% had poor knowledge. For attitudes, 66% of respondents **e**xhibited a positive attitude toward hypertension prevention.

Knowledge Level	Score Range	Frequency (n)	Percentage (%)
Poor Knowledge	0-8	10	20%
Moderate Knowledge	9–12	18	36%
Good Knowledge	13–16	22	44%

 Table 1: Frequency and Percentage Distribution of Knowledge Levels (N = 50)

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Attitude Level	Frequency (n)	Percentage (%)
Positive	33	66%
Neutral	15	30%
Negative	2	4%

Table 2: Frequency and Percentage Distribution of Attitudes level (N-50)

Positive Attitude: 60-75, Neutral Attitude: 45-59, Negative Attitude: 15-44

A significant association was found between knowledge scores and educational level (p < 0.05). Similarly, attitude scores were significantly associated with both knowledge levels and occupation (p < 0.05).

4. DISCUSSION

The findings indicate a adequate level of knowledge and a generally favorable attitude among participants regarding hypertension prevention. Education and occupation emerged as key influencing factors, which aligns with previous studies highlighting the role of socioeconomic variables in health literacy. The strong correlation between knowledge and attitude underscores the need for comprehensive patient education, which can effectively shape health behaviors. However, gaps still exist in certain knowledge areas such as dietary salt intake and the importance of regular blood pressure monitoring.

5. CONCLUSION

The study concludes that while most OPD patients have a basic understanding and positive attitude towards hypertension prevention, targeted educational efforts are essential to enhance awareness and encourage consistent preventive practices. Enhancing patient knowledge could lead to improved health behaviours and reduced hypertension prevalence over time.

RECOMMENDATIONS

Regular health talks and educational sessions in OPDs focusing on lifestyle modifications and hypertension prevention.

Distribute leaflets and posters in local languages with key information on blood pressure control.

Extend awareness activities to community settings for broader public engagement.

LIMITATIONS

- Small sample size and single center study may limit generalizability.

- Use of convenience sampling may introduce selection bias.

CONFLICT OF INTEREST

None declared.

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REFERENCES

- [1] American Heart Association. (2017). Understanding Blood Pressure Readings. Retrieved from https://www.heart.org
- Busingye, D., Arabshahi, S., Evans, R. G., et al. (2019). Knowledge of risk factors for hypertension in a rural Indian population. *Journal of Hypertension*, 32, e236–e23 doi:10.1136/heartasia-2018-011136
- [3] Das, A. K., Lahiri, G., Bose, A., et al. Assessment of patients' knowledge, attitude and practice regarding hypertension in a tertiary care hospital. *International Journal of Community Medicine and Public Health*, 7, 4967-4973
- [4] International Institute for Population Sciences. National Family Health Survey - 5, 2019-20: State Fact Sheet Assam. Ministry of Health and Family Welfare, Government of India. (National Family Health Survey - 5, 2019) I
- [5] International Institute for Population Sciences, & ICF. National Family Health Survey, India, 2019-21: Assam. Ministry of Health and Family Welfare, Government of India. ((IIPS) &,

2021)https://dhsprogram.com/pubs/pdf/FR374/F R374_Assam.pdf

- [6] International Institute for Population Sciences (IIPS) & ICF. (2021). National Family Health Survey (NFHS-5), 2019–21: India (Vol. I). IIPS.
- [7] Joseph, N., Nelliyanil, M., & Jayanthi, V. (2020). Awareness and attitude regarding hypertension among patients attending tertiary care hospital. *Journal of Preventive Medicine and Holistic Health*, 6(2), 81–86.
- [8] Kusumamardhika, R., Utami, A. P., & Darmawan, H.. Assessment of Knowledge, Attitude, and Practice towards Hypertension in the Elderlies. *Cermin Dunia Kedokteran*, 50, 351-355
- [9] Kushwaha, P., Shukla, D., Mahore, R. N., et al. (2023 February). A study to assess knowledge, attitude and practice for 'hypertension' in rural area of Gwalior, M.P. International Journal of Life Sciences Biotechnology and Pharma Research, 12(1), 315–315. (Kushwaha et al., 2023)
- [10] Kumar, S., Mittal, A., & Bishnoi, A. (2016 July). Study of knowledge, attitude and practice of general population of Ambala towards hypertension. International Journal of Health Sciences & Research, 6, 25-30.
- [11] Ravikumar, R., & Shankar, S. (2019). Assessment of knowledge regarding hypertension among adults in a rural area of Tamil Nadu. *International Journal of Community Medicine and Public Health*, 6(3), 1204–1208.
- [12] Sabouhi, F., Babaee, S., Naji, H., Zadeh, A. H., & Eghbali, B. (2011). Knowledge, attitudes and practice of patients with hypertension regarding prevention and control of high blood pressure. Iranian Journal of Nursing and Midwifery Research, 16(1), 34–40.
- [13] World Health Organization. (2021). Hypertension. https://www.who.int/newsroom/fact-sheets/detail/hypertension