



KNOWLEDGE AND RISK FACTORS OF HYPERTENSION AMONG ADULTS ATTENDING A SECONDARY-CARE HOSPITAL IN BARSHI, MAHARASHTRA: A CROSS-SECTIONAL STUDY

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ABSTRACT:

Hypertension is a leading modifiable cause of cardiovascular disease. Understanding patient knowledge and risk factors is critical for prevention. The research paper is written to assess knowledge about hypertension and the prevalence of risk factors among adults attending Jagdale Mama Hospital (JMH), Barshi. A cross-sectional descriptive study was conducted among 50 adults aged 50–65 years using purposive sampling. Data were collected with a 30-item structured knowledge questionnaire and a 12-item risk-factor checklist. Knowledge was categorized as inadequate (0–10), moderate (11–20), or adequate (21–30). Risk scores were grouped as mild (0–3), moderate (4–7), or severe (8–12). Descriptive statistics summarized demographics, knowledge, and risk categories. Participants were mostly aged 55–60 years (44%), Hindu (60%), married (94%), and from nuclear families (80%). About 36% reported monthly income • 20,001–30,000; 66% lived in villages; and 54% had a non-vegetarian diet. Mass media was the main prior information source (36%). Knowledge was moderate in 46%, adequate in 30%, and inadequate in 24%. Risk factors were moderate in 52%, mild in 26%, and severe in 22%. Most adults showed moderate knowledge of hypertension and carried a moderate risk profile. Reinforcement through mass media and clinic-based counseling may help improve both knowledge and risk reduction.



KEYWORDS: hypertension, risk factors, knowledge, India, cross-sectional study.

INTRODUCTION:

Hypertension is one of the most significant contributors to cardiovascular disease and premature death worldwide. It often remains undiagnosed and poorly controlled, especially in low- and middle-income countries. Patient knowledge of hypertension is a key determinant of early detection, treatment adherence, and lifestyle modification. Equally important is understanding the distribution of risk factors such as diet, physical inactivity, and family history in local populations. This study was undertaken to assess knowledge and risk factors of hypertension among adults attending Jagdale Mama Hospital (JMH) in Barshi, Maharashtra. The study formed part of a B.Sc. Nursing dissertation project and aimed to provide insights useful for targeted prevention strategies in this community.

METHODS

Study design and setting

A cross-sectional descriptive study was carried out at Jagdale Mama Hospital (JMH), Barshi, Maharashtra, from 11 to 14 September 2023.

Participants and sampling

Adults aged 50–65 years who visited JMH during the study period were included. A purposive sampling technique was applied. The final sample size was 50, based on a Cochran-style calculation documented in the dissertation.

Instruments

Two structured tools were used:

1. A 30-item questionnaire assessing knowledge of hypertension, including definition, causes, symptoms, and treatment. Scores were classified as inadequate (0–10), moderate (11–20), and adequate (21–30).
2. A 12-item checklist capturing risk factors such as smoking, alcohol use, obesity, high salt intake, stress, family history, and physical inactivity. Scores were grouped as mild (0–3), moderate (4–7), and severe (8–12).

Both instruments underwent expert validation and pilot testing on 20 individuals before the main study.

Data collection and ethics

Administrative permission and ethical clearance were obtained. Written informed consent was collected, and confidentiality was maintained. Data were analyzed descriptively using frequencies and percentages. Planned chi-square tests for associations with demographic factors were included in the study design.

Results

Participant characteristics

Among the 50 participants, 38% were aged 50–55 years, 44% were 55–60 years, and 18% were 60–65 years. Most were Hindu (60%), followed by Muslim (24%) and Christian (12%). The majority were married (94%) and from nuclear families (80%). Family income distribution showed 22% earning < ₹ 10,000 per month, 32% between ₹ 10,001–20,000, 36% between ₹ 20,001–30,000, and 10% earning > ₹ 30,000.

More than half (54%) reported a non-vegetarian diet. Two-thirds (66%) lived in village areas, while 34% were from taluka headquarters. Mass media was the most common information source on hypertension (36%), followed by family and friends (28%), health personnel (24%), and other sources (12%).

Knowledge about hypertension

Among the participants, 24% had inadequate knowledge, 46% moderate, and 30% adequate knowledge regarding hypertension.

Risk-factor profile

Risk levels were mild in 26% of respondents, moderate in 52%, and severe in 22%.

DISCUSSION

This study found that most adults attending JMH in Barshi had only moderate knowledge about hypertension, while a majority carried moderate risk factors. These findings are concerning because knowledge gaps may hinder early diagnosis and lifestyle modification, while the moderate-to-severe risk burden highlights the need for urgent intervention.

The prominence of mass media as the main source of prior knowledge indicates that public health campaigns have some reach, but their effectiveness is limited. Combining media campaigns with hospital-based education could address these gaps more effectively. Outpatient visits provide opportunities for targeted counseling on salt reduction, weight control, cessation of tobacco and alcohol use, and physical activity—all of which were items on the risk-factor checklist.

Strengths

This study used validated tools and pilot testing, and it clearly categorized both knowledge and risk levels.

Limitations

The findings are limited by the small sample size, purposive sampling, and single-hospital setting. Results may not generalize to broader populations. Future research should use probability sampling, larger samples, and multivariable analysis to better understand predictors of low knowledge and high risk.

CONCLUSIONS

Most participants demonstrated moderate knowledge of hypertension and a moderate level of risk factors. Strengthening health education through mass media and reinforcing it with counseling at healthcare facilities may help improve awareness and reduce risk among middle-aged and older adults in this region.

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