ORIGINAL RESEARCH PAPER

Community Medicine

KAP STUDY ON HYPERTENSION IN ADULT POPULATION RESIDING IN FIELD PRACTICE AREA OF RURAL HEALTH AND TRAINING CENTRE, Hi-Tech MEDICAL COLLEGE AND HOSPITAL, BHUBANESWAR

KEY WORDS:

Dr. Annwesha Jena Postgraduate Resident, Department of Community Medicine, Hi-Tech Medical College & Hospital, Bhubaneswar.

Dr. Jyotiranjan Sahoo Postgraduate Resident, Department of Community Medicine, Kalinga Institute of Medical Sciences, Bhubaneswar.

Dr. Rasmi Ranjan Sahoo Postgraduate Resident, Department of Pathology, Hi-Tech Medical College & Hospital, Bhubaneswar.

Dr. Avinandan Sarkar Associate Professor, Department of Community Medicine, Kalinga Institute of Medical Sciences, Bhubaneswar

ABSTRACT

Hypertension is a major public health problem and a leading risk factor for cardiovascular diseases, stroke, and premature mortality worldwide. Adequate knowledge, positive attitude, and healthy practices play a crucial role in the prevention and effective control of hypertension, particularly in rural populations where awareness is often limited. A descriptive cross-sectional study was conducted among 60 adults aged 18 years and above residing in the field practice area of the Rural Health and Training Centre (RHTC), Hi-Tech Medical College and Hospital, Bhubaneswar, to assess the knowledge, attitude, and practices regarding hypertension and to determine their association with socio-demographic variables. Data were collected using a predesigned, pretested, structured questionnaire after obtaining informed consent and were analyzed using descriptive statistics and chi-square test, with a p value <0.05 considered statistically significant. The study revealed inadequate knowledge regarding symptoms, causes, and complications of hypertension among a majority of participants. Although attitude towards dietary modification was moderately positive, practices such as regular physical exercise were found to be poor. A statistically significant association was observed between age group and knowledge regarding hypertension. The findings highlight important gaps in awareness and lifestyle practices related to hypertension, emphasizing the need for strengthened community-based health education and lifestyle modification programs for effective prevention and control of hypertension in rural settings.

INTRODUCTION

Hypertension is a major public health challenge and one of the leading modifiable risk factors for cardiovascular diseases, stroke, chronic kidney disease, and premature mortality worldwide. The World Health Organization estimates that over one billion adults globally are affected by hypertension, with nearly two-thirds living in low- and middle-income countries. [1] Despite the availability of effective preventive and therapeutic strategies, hypertension remains poorly controlled, contributing substantially to the global burden of non-communicable diseases.

In India, the prevalence of hypertension has increased markedly over the past few decades due to rapid urbanization, changing dietary patterns, physical inactivity, stress, and increased life expectancy. National surveys indicate that a significant proportion of hypertensive individuals are unaware of their condition, and among those diagnosed, many do not follow recommended lifestyle modifications or adhere adequately to treatment. [2, 3] This situation is particularly concerning in rural areas, where limited access to healthcare services and lack of health awareness further exacerbate the problem.

Knowledge, attitude, and practices (KAP) related to hypertension play a crucial role in its prevention, early detection, and long-term management. Adequate knowledge regarding risk factors, symptoms, and complications can promote timely health-seeking behavior, while positive attitudes and healthy practices such as regular physical activity, dietary modification, and avoidance of tobacco and alcohol are essential for effective blood pressure control. However, several community-based studies conducted in rural populations have reported poor awareness regarding hypertension and its complications, along with unfavorable lifestyle practices. [4, 5]

Assessing the knowledge, attitude, and practices of adults residing in rural field practice areas is therefore essential to identify existing gaps and to design targeted health education and behavioral intervention programs. Such evidence is critical for strengthening primary healthcare services and for achieving better prevention and control of hypertension at the community level. [6]

AIMS AND OBJECTIVES

To assess the knowledge, attitude, and practices regarding hypertension among adults residing in the field practice area of the Rural Health and Training Centre (RHTC), Hi-Tech Medical College and Hospital, Bhubaneswar, and to determine the association between socio-demographic variables and knowledge levels.

METHODS AND METHODOLOGY

A descriptive cross-sectional study was conducted in the field practice area of the Rural Health and Training Centre (RHTC), Hi-Tech Medical College and Hospital, Bhubaneswar, over a period of 3 months. The study population comprised adults aged 18 years and above who had been residing in the study area for more than one year. A total of 60 participants were included in the study using convenience sampling after obtaining informed consent. Individuals who were seriously ill or unwilling to participate were excluded. Data were collected using a predesigned and pretested structured questionnaire that included socio-demographic details and questions assessing knowledge, attitude, and practices related to hypertension. The collected data were entered into Microsoft Excel and analyzed using descriptive statistics, with results expressed as frequencies and percentages. The association between socio-demographic variables and knowledge regarding hypertension was assessed using the chi-square test, and a p value of less than 0.05 was considered statistically significant. Ethical clearance was obtained from the Institutional Ethics Committee, and confidentiality of participant information was strictly maintained throughout

the study.

RESULTS

A total of 60 adults participated in the study. Assessment of knowledge regarding symptoms of hypertension showed that 28 participants (38.8%) identified headache as a symptom, while very few recognized paralysis (2.7%) or loss of appetite (5.55%) as symptoms. Insomnia was reported by 8.33% of participants, whereas a substantial proportion (44.4%) had no idea about the symptoms of hypertension, indicating poor awareness.

Table 1 depicts the participants' knowledge regarding common symptoms of hypertension. Headache was identified as a symptom by 28 participants (38.8%). Insomnia was reported by 6 participants (8.33%), while loss of appetite and paralysis were identified by only 4 (5.77%) and 2 participants (2.7%), respectively. Notably, 32 participants (44.4%) had no idea about the symptoms of hypertension, indicating poor overall awareness.

Table 1:- Knowledge Regarding Symptoms Of HTN

KNOWLEDGE	NUMBER	PERCENTAGE
Head Reeling	28	38.8%
Paralysis	2	2.7%
Loss of appetite	4	5.77%
Insomnia	6	8.33%
No Idea	32	44.4%

Table 2 shows regarding knowledge of complications of hypertension, only 12 participants (19.35%) identified paralysis and 4 participants (6.45%) identified heart attack as complications. The majority of participants (74.20%) were not sure about the complications, highlighting a significant gap in awareness. Knowledge about the causes of hypertension revealed that 28 participants (46.67%) had correct knowledge, 12 (20%) had partially correct knowledge, while 20 participants (33.33%) had incorrect knowledge. When asked whether hypertension is a lifelong disease, only 18 participants (30%) were aware of its chronic nature, whereas 42 participants (70%) did not know this fact.

Table 2 :- Knowledge Regarding HTN

Knowledge regarding complications of hypertension	**NUMBER**	**Percentage %**
Paralysis	12	19.35%
Heart attack	4	6.45%
Not sure	46	74.20%
Knowledge about cause of hypertension	**NUMBER**	**Percentage %**
Partially correct	12	20%
Incorrect	20	33.33%
Correct	28	46.67%
Knowledge regarding hypertension being a lifelong disease	**NUMBER**	**Percentage %**
Know	18	30%
Don't know	42	70%

In Table 3 and Figure 1, it shows assessment of practices showed that only 24 participants (40%) reported practicing regular physical exercise, while the remaining 36 participants (60%) followed irregular or no exercise routine. Attitude towards dietary habits revealed that most of them preferred oily foods (58%) followed by desserts (23%). Consumption of green vegetables was reported by only 10% of participants, and pulses and cereals by 9%, reflecting unhealthy dietary preferences.

Table 3 :- Practice Of Regularity Of Exercise

Practice Of Regularity Of Exercise	Number	Percentage %
Regular Exercise	24	40%
Irregular exercise	36	60%

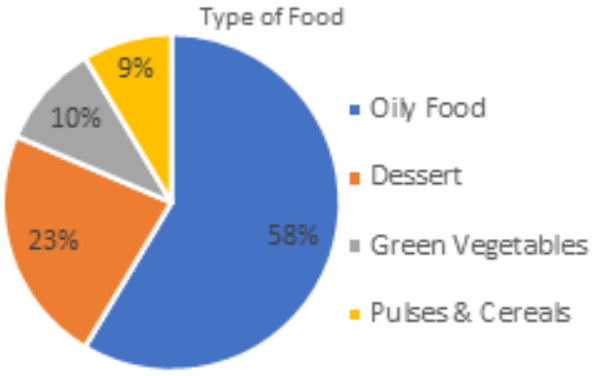

Figure 1:- Attitude Towards Food Items

In Table 4 Analysis of the association between age group and knowledge regarding hypertension showed that awareness varied across age groups. Among participants aged 18–35 years, 12 had knowledge and 8 did not. In the 36–53 years age group, all 16 participants had knowledge regarding hypertension. In contrast, in the 54–70 years age group, only 10 participants had knowledge while 14 lacked awareness. Overall, 38 participants had knowledge regarding hypertension, while 22 did not, indicating a statistically significant association between age and knowledge status.

Table 4 Chi square = 14.21, df = 2, P value < 0.05 (Statistical Significant)

AGE GROUP (in years)	YES (Frequency & Percentage)	NO (Frequency & Percentage)	TOTAL
18-35	12 31.57%	8 36.37%	20
36-53	16 42.1%	0 0	16
54-70	10 26.33%	14 63.63%	24
	38 100%	22 100%	60

These findings highlight inadequate knowledge, unfavorable attitudes, and poor lifestyle practices related to hypertension among adults in the rural field practice area, underscoring the need for focused community-based health education and behavior change interventions.

LIMITATIONS

The present study has certain limitations that should be considered while interpreting the findings. The cross-sectional design limits the ability to establish causal relationships between knowledge, attitude, and practices related to hypertension. The study employed convenience sampling with a relatively small sample size, which may limit the generalizability of the results to other rural populations. Information regarding knowledge, attitude, and practices was self-reported, making the study susceptible to recall bias and social desirability bias. Additionally, detailed assessment of dietary intake, physical activity levels, and blood pressure measurements was not carried out, which could have provided a more comprehensive understanding of hypertension-related behaviors. Despite these limitations, the study provides valuable insights into existing gaps in awareness and practices related to hypertension in the rural field practice area.

CONCLUSIONS

The present study concludes that knowledge regarding hypertension, its symptoms, causes, complications, and chronic nature is inadequate among a significant proportion of adults residing in the rural field practice area. Although some participants demonstrated partial awareness, misconceptions and lack of complete understanding were common. Attitudes towards healthy dietary practices were largely unfavorable, with a preference for oily foods and desserts, and the practice of regular physical exercise was poor among the majority of participants. Knowledge levels varied across age groups, indicating the need for age-

specific educational strategies. Overall, the findings highlight substantial gaps in knowledge, attitude, and practices related to hypertension, emphasizing the urgent need for strengthened community-based health education, lifestyle modification programs, and continuous awareness initiatives at the primary healthcare level to improve prevention and control of hypertension in rural settings.

REFERENCES

1. World Health Organization. Hypertension. Fact sheet. Geneva: WHO; 2023.
2. Gupta R, Xavier D. Hypertension: the most important non-communicable disease risk factor in India. Indian Heart J. 2018;70(4):565–72.
3. Anchala R, Kannuri NK, Pant H, et al. Hypertension in India: a systematic review and meta-analysis of prevalence, awareness, and control. J Hypertens. 2014;32(6):1170–7.
4. Hemant M, Yasmeen S. Knowledge, attitude and practice of hypertensive patients in South Indian population. Int J Community Med Public Health. 2020;7(2):6–14.
5. Kaur S, Sharma R, Jain R. Awareness and lifestyle practices regarding hypertension in rural population. Int J Community Med Public Health. 2019;6(3):1234–9.
6. Geldsetzer P, Manne-Goehler J, Marcus ME, et al. The state of hypertension care in 44 low-income and middle-income countries. Lancet. 2019;394(10199):652–62.