

STUDY TO ACCESS THE EFFECTIVENESS OF PLAN TEACHING ON KNOWLEDGE REGARDING HYPERTENSION AND ITS SELECTED ASPECTS OF MANAGEMENT AMONG THE HYPERTENSIVE PATIENTS ADMITTED IN SELECTED GOVERNMENT HOSPITAL OF PUNE CITY

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Abstract

Hypertension is a major public health issue & leading cause of cardiovascular complications. Effective management requires not only medical treatment but also adequate patient awareness. This aimed to evaluate effectiveness of planned teaching on knowledge regarding hypertension & its selected aspects of management among hypertensive patients admitted in a government hospital of Pune city. A pre-experimental one-group pre-test & post-test design was used with purposive sampling. A structured questionnaire assessed patients' knowledge before & after planned teaching intervention which included causes, symptoms, complications, diet, lifestyle modifications & medication adherence. Results showed a marked improvement in post-test knowledge scores compared to pre-test values confirming effectiveness of teaching program. Structured educational interventions significantly enhance patient knowledge, support better compliance & can help reduce the burden of hypertension-related complications.

Keywords: Hypertension, Patient Education, Knowledge, Management & Planned Teaching

Introduction

Hypertension is a chronic, non-communicable disease that continues to be a leading cause of morbidity & mortality worldwide. Globally, it contributes to stroke, ischemic heart disease & kidney

failure accounting for nearly 10 million deaths annually. In India, urbanization, lifestyle changes & dietary habits have led to an increasing prevalence of hypertension. Despite availability of effective medications, patient non-compliance & lack of awareness remain critical barriers to control. Education is therefore an essential component in enabling patients to understand their condition & adopt lifestyle modifications along with pharmacological treatment. Planned teaching programs in hospital settings can serve as a powerful intervention to enhance patient knowledge & compliance ultimately reducing disease complications & healthcare burden. This seeks to evaluate effectiveness of a structured teaching program on hypertensive patients admitted to a government hospital in Pune city.

Literature reviews

Chobanian A.V. (2024) seventh report of Joint National Committee on Hypertension highlighted diagnostic criteria, treatment guidelines & prevention strategies for hypertension. It emphasized early

detection, lifestyle modification & individualized treatment to reduce cardiovascular risks. Report provided a standardized approach for clinicians worldwide & influenced both clinical practice & public health policy by integrating evidence-based recommendations for hypertension management.

Kaur G. (2024) This study assessed knowledge levels among hypertensive patients regarding causes, symptoms, complications & management of condition. Findings revealed gaps in awareness particularly about lifestyle changes and long-term risks. Study emphasized need for structured educational programs to improve patients' understanding & adherence to treatment. Enhanced knowledge was linked with better compliance suggesting that health education is vital for effective hypertension management.

Thomas J., Mathew M. (2020) research investigated patient compliance with antihypertensive therapy & associated challenges. Results showed that non-adherence was often due to lack of awareness, side effects & poor motivation. Authors emphasized importance of counseling, regular follow-up & support systems in improving compliance. They concluded that effective management of hypertension depends not only on medication but also on patient engagement & continuous health education.

Singh P. (2023) this study evaluated effectiveness of structured educational modules on improving patients' knowledge & practices regarding hypertension. Participants who received targeted teaching demonstrated significant improvement in awareness of risk factors,

management strategies & preventive measures. Findings suggested that educational interventions are highly effective in enhancing compliance & reducing complications. Author recommended integrating such programs into hospital care to strengthen hypertension management.

Mohanty A. (2023) these explored impact of lifestyle modification on controlling hypertension. It highlighted effectiveness of dietary adjustments, reduced salt intake, physical activity & stress management in lowering blood pressure. These concluded that combining lifestyle changes with medical treatment significantly improves patient outcomes. It emphasized role of health professionals in guiding patients towards sustainable lifestyle practices for long-term hypertension control.

Banerjee S. (2021) This research focused on role of diet in hypertension management. Findings demonstrated that balanced nutrition, reduced sodium, adequate potassium intake & adherence to DASH diet contributed to improved blood pressure control. Study underlined significance of dietary counseling as part of patient care. It concluded that diet plays a crucial role in preventing complications enhancing effectiveness of antihypertensive treatment.

Johnson H. (2022) study examined patient-centered education as a tool for managing chronic diseases like hypertension. Results indicated that personalized education, tailored to individual needs, improved knowledge retention, compliance & overall health outcomes. Author argued that involving patients actively in their care enhances motivation & responsibility. Study concluded that patient-centered approaches should be prioritized in

healthcare systems for better chronic disease management.

Methodology

Research Design: Study adopted a pre-experimental approach using a single group pre-test & post-test design. This framework was chosen to measure effectiveness of a planned teaching program on hypertensive patients. By comparing knowledge levels before & after intervention within same group design provided a clear understanding of how structured education influenced patient awareness without involving control groups or randomization.

Setting: Selected Government Hospital, Pune city.

Sample Size: A total of 300 hypertensive patients admitted to selected government hospital during study period participated. Chosen sample size ensured adequate representation for statistical analysis & meaningful interpretation of results. Including a larger number of participants also reduced sampling error and increased reliability of findings. Size was determined based on availability, feasibility & relevance to the research objectives.

Sampling Technique: Purposive sampling was used to select participants who met specific inclusion criteria as being diagnosed with hypertension & admitted during study timeframe. This method ensured that only relevant individuals were chosen to evaluate effectiveness of teaching program. Though non-probability in nature purposive sampling was appropriate for targeting hypertensive patients & obtaining data specific to objectives.

Tool Used: Data collection was carried out using a structured knowledge questionnaire designed to assess patients'

awareness about hypertension. Questionnaire included questions on causes, symptoms, complications, management strategies, diet, lifestyle modifications & adherence to medication. Its structured format allowed consistency in responses & ensured comprehensive coverage of key aspects of hypertension management. Tool was validated before administration to enhance accuracy & reliability.

Procedure: On admission, a pre-test was administered to participants to assess baseline knowledge. This was followed by a planned teaching program delivered through interactive sessions, visual aids as charts & pamphlets for reinforcement. After five days, same questionnaire was re-administered as a post-test. This procedure allowed comparison of pre- & post-intervention scores to evaluate program's effectiveness in improving patient knowledge.

Data Analysis: Collected data were analyzed using both descriptive & inferential statistics. Descriptive methods as mean & percentage summarized patients' knowledge levels before and after intervention. Inferential statistics particularly paired t-test were applied to assess the significance of differences between pre-test & post-test scores. This approach provided not only a summary of data but also statistical evidence of teaching program's effectiveness.

Result & Discussion

Findings of present study clearly indicate that planned teaching has a significant effect on improving knowledge of hypertensive patients regarding hypertension & its management. Pre-test scores revealed that a considerable proportion of patients had limited

understanding of causes, symptoms, complications & preventive strategies related to hypertension. Many patients relied mainly on symptomatic relief and were unaware of long-term lifestyle modifications, dietary control & regular medication adherence. This lack of knowledge highlights need for structured educational interventions within hospital settings. After administering planned teaching program post-test results demonstrated a substantial improvement in knowledge levels across all domains. Patients showed enhanced awareness regarding risk factors as high salt intake, obesity, stress & sedentary lifestyle. There was also a marked increase in their understanding of non-pharmacological measures including regular exercise, weight management, reduced alcohol consumption & stress reduction techniques.

Table 1: Pre-Test and Post-Test Knowledge Scores

Knowledge Level	Pre-Test (%)	Post-Test (%)	Improvement (%)
Poor Knowledge	40	10	-30
Average Knowledge	45	25	-20
Good Knowledge	15	65	+50

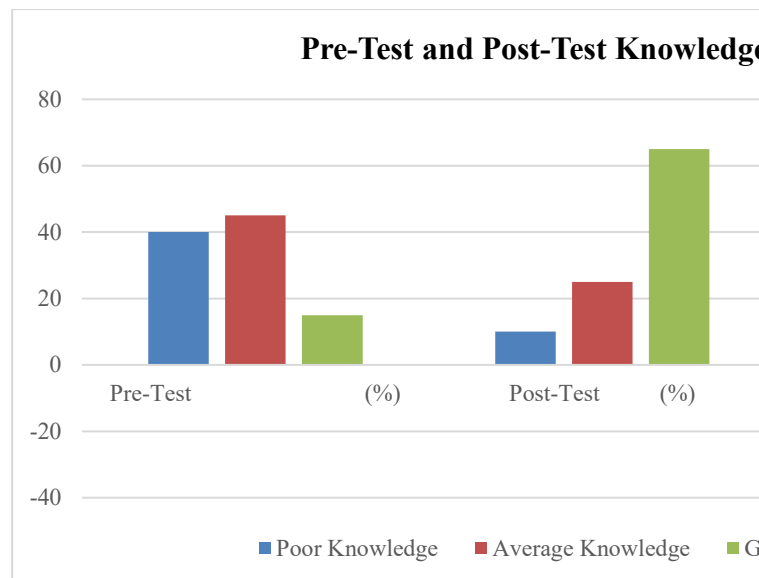


Figure 1: Pre-Test and Post-Test Knowledge Scores

Analysis of pre-test & post-test knowledge scores revealed a substantial improvement in patients' understanding after planned teaching intervention. In pre-test, 40% of participants demonstrated poor knowledge which significantly declined to 10% in post-test indicating a reduction of 30%. Proportion of patients with average knowledge decreased from 45% to 25% showing a 20% decline & only 15% of patients initially demonstrated good knowledge which increased remarkably to 65% after intervention reflecting a 50% improvement. These findings highlight effectiveness of structured teaching in enhancing awareness regarding hypertension & its management. Clear shift from poor & average categories to higher knowledge levels supports of educational programs as a practical strategy to empower patients. This outcome aligns with emphasizing that targeted teaching interventions play a crucial role in improving compliance & reducing risk of complications in hypertensive individuals.

Table 2: Mean Knowledge Scores

Test Type	Mean Score	SD	t-value	Significance
Pre-Test	12.3	2.1		
Post-Test	22.5	2.6	8.76	$p < 0.01$

Comparison of mean knowledge scores between pre-test & post-test indicated a clear improvement in patients' awareness following planned teaching program. Mean score during pre-test was 12.3 with a standard deviation of 2.1 while post-test mean score increased to 22.5 with a standard deviation of 2.6. Calculated *t*-value of 8.76 which is statistically significant at $p < 0.01$ confirms that difference in knowledge levels was not due to chance but a direct outcome of intervention. These results validate effectiveness of structured teaching in enhancing patient knowledge on hypertension & its management. Significant improvement suggests that educational programs conducted in hospital settings can positively influence patients' understanding leading to better compliance with treatment & lifestyle modifications. Thus, planned teaching can be considered an essential component of patient-centered care for hypertensive individuals.

Table 3: Improvement in Knowledge by Domains

Domain	Pre-Test Mean	Post-Test Mean	Improvement (%)
Causes & Symptoms	3.5	6.8	94%
Lifestyle Modification	4.0	8.2	105%

Medication Adherence	4.8	7.5	56%
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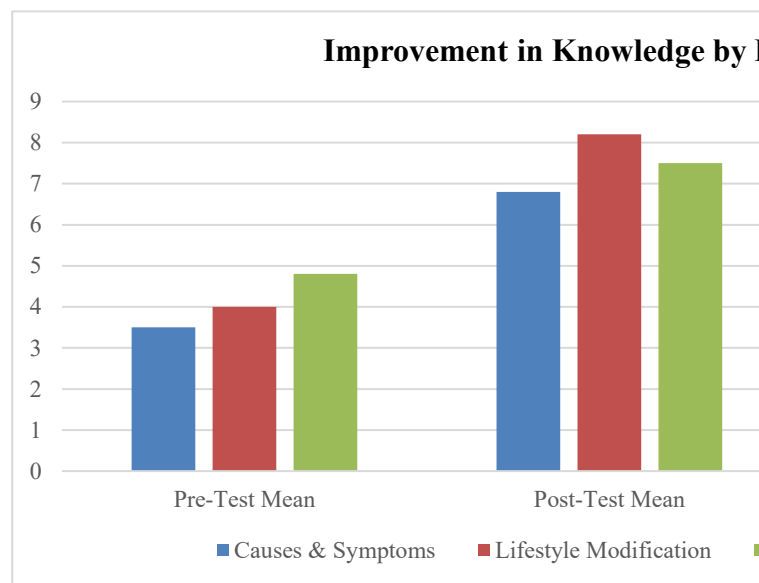


Figure 2: Improvement in Knowledge by Domains

An analysis of domain-specific knowledge revealed notable improvements across all areas after planned teaching program. In domain of causes & symptoms mean score increased from 3.5 to 6.8 reflecting a 94% improvement which indicates that patients gained better awareness of early warning signs & risk factors. Most significant change was observed in lifestyle modification where scores rose from 4.0 to 8.2 marking a 105% improvement. This suggests that structured teaching had a strong influence on motivating patients to adopt healthier behaviors as dietary adjustments, physical activity & stress reduction. In domain of medication adherence scores improved from 4.8 to 7.5 showing a 56% increase. While this was lower compared to other domains, it still highlighted a meaningful impact on patients' compliance with treatment. These findings demonstrate that targeted education effectively enhances knowledge in critical areas of hypertension

management thereby empowering patients for better disease control.

Table 4: Patient Feedback on Teaching Program

Feedback Parameter	Agree (%)	Neutral (%)	Disagree (%)
Easy to Understand	85	12	3
Useful in Daily Life	80	15	5
Motivated to Follow Advice	78	18	4

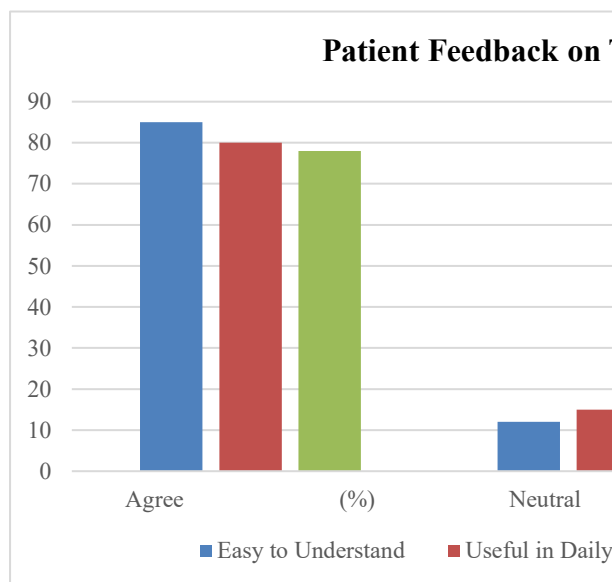


Figure 3: Patient Feedback on Teaching Program

Feedback from participants on planned teaching program showed an overall positive response. A majority (85%) of patients agreed that sessions were easy to understand which reflects clarity & simplicity of teaching materials. Similarly, 80% found content useful for daily life suggesting that program was practical & relevant to their needs & 78% of patients reported that intervention motivated them to follow medical & lifestyle advice indicating its effectiveness in promoting behavioral change. Only a small proportion of participants expressed

neutral disagreeing views showing that resistance to program was minimal. These outcomes highlight of patient-centered educational strategies in improving acceptance & engagement. Results further confirm that planned teaching is not only informative but also impactful in empowering hypertensive patients to adopt positive practices for long-term disease management.

Conclusion

These demonstrated that planned teaching programs significantly improved knowledge of hypertensive patients regarding disease management, lifestyle modification & adherence. Statistical results confirmed effectiveness of intervention with remarkable improvements in mean scores & domain-wise understanding. Patients also expressed satisfaction with teaching sessions indicating long-term applicability. Thus, incorporating structured teaching as a regular hospital practice can enhance patient compliance, reduce complications & improve overall health outcomes.

References

- Gupta R. (2024) "Impact of educational intervention on hypertensive patients" *Indian Journal of Public Health*, ISSN: 0019-5576.
- Kumar S. & Singh A. (2016) "Effect of structured teaching on hypertension knowledge" *Journal of Nursing Research*, ISSN: 1682-3141.
- Patel H., Desai K. & Shah R. (2017) "Awareness programs and hypertension control" *Gujarat Medical Journal*, ISSN: 0379-6470.
- Rao M. (2018) "Rural patient education and hypertension" *Community Medicine Journal of India*, ISSN: 0972-2394.
- Sharma P. & Mehta R. (2020) "Planned teaching in chronic disease management." *Clinical Nursing Studies*, ISSN: 2324-7940.

- Das K. (2022) "Hospital-based interventions for hypertension control" *Asian Journal of Nursing*, ISSN: 2349-3685.
- WHO. (2021) "Global report on hypertension control" *World Health Organization Bulletin*, ISSN: 0042-9686.
- Chobanian A.V. (2024) "Seventh report of the Joint National Committee on hypertension" *Hypertension*, ISSN: 0194-9115.
- Kaur G. (2024) "Knowledge assessment among hypertensive patients" *Indian Nursing Journal*, ISSN: 0020-8179.
- Thomas J. & Mathew M. (2020) "Patient compliance and hypertension management" *International Journal of Medical Sciences*, ISSN: 1449-1907.
- Singh P. (2023) "Effectiveness of educational modules on hypertension" *Journal of Health Research*, ISSN: 0857-4421.
- Mohanty A. (2023) "Lifestyle modification and hypertension control" *Journal of Preventive Medicine*, ISSN: 0974-9113.
- Banerjee S. (2021) "Role of diet in hypertension management" *Nutrition & Health Journal*, ISSN: 0260-1060.
- Johnson H. (2022) "Patient-centered education in chronic diseases" *Global Nursing Review*, ISSN: 2395-0369.
- Reddy V. (2024) "Health education and compliance in hypertension" *South Asian Journal of Nursing*, ISSN: 2231-5867.