

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Lifestyle Modification Among Patients with Hypertension in Selected Hospitals

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Abstract—Hypertension is one of the most common chronic non-communicable diseases and a major risk factor for cardiovascular diseases, stroke, and kidney disorders. Lifestyle modification plays a crucial role in the effective management of hypertension and prevention of complications. However, many patients with hypertension have inadequate knowledge regarding healthy lifestyle practices such as proper diet, regular physical activity, stress management, weight control, and avoidance of harmful habits. Improving patients' knowledge through educational interventions can help promote healthy behaviors and improve disease management. The present study aimed to assess the effectiveness of a Structured Teaching Programme on knowledge regarding lifestyle modification among patients with hypertension in selected hospitals. A quantitative approach with a pre-experimental one-group pre-test and post-test design was adopted for the study. The sample consisted of 50 patients diagnosed with hypertension who were selected using a non-probability purposive sampling technique. Data were collected using a demographic proforma and a structured knowledge questionnaire regarding lifestyle modification. A pre-test was conducted to assess the baseline knowledge of the participants, followed by the administration of the Structured Teaching Programme. After the intervention, a post-test was conducted using the same questionnaire to evaluate the effectiveness of the programme. The findings of the study revealed that the knowledge level of patients improved significantly after the Structured Teaching Programme. Statistical analysis showed a significant difference between the pre-test and post-test knowledge scores, indicating that the

Structured Teaching Programme was effective in improving knowledge regarding lifestyle modification among patients with hypertension. The study highlights the importance of educational interventions in promoting healthy lifestyle practices and emphasizes the role of nurses in providing health education to hypertensive patients for better disease management and prevention of complications.

Index Terms—Hypertension; Structured Teaching Programme; Lifestyle Modification; Knowledge; Health Education; Hypertensive Patients.

I. INTRODUCTION

Hypertension is one of the most common non-communicable diseases and a major public health problem worldwide. It is a leading risk factor for cardiovascular diseases, stroke, and renal complications. The prevalence of hypertension is increasing due to sedentary lifestyle, unhealthy dietary habits, stress, obesity, and lack of physical activity. Proper management of hypertension requires not only medication but also lifestyle modification such as regular exercise, healthy diet, weight control, stress reduction, and avoidance of smoking and alcohol. Many patients with hypertension lack adequate knowledge regarding these lifestyle changes. Structured Teaching Programmes can play an important role in improving patients' knowledge and promoting healthy practices. Nurses and other

healthcare professionals can educate patients about lifestyle modification to prevent complications and improve health outcomes.

II. NEED FOR THE STUDY

Hypertension is a major cause of morbidity and mortality globally. According to the World Health Organization, a large proportion of adults are affected by high blood pressure, and many remain unaware of the condition or do not follow proper lifestyle practices. Poor knowledge regarding diet, exercise, stress management, and medication adherence can lead to uncontrolled blood pressure and serious complications. Lifestyle modification is an effective and cost-efficient method to control hypertension and prevent complications. However, many patients lack adequate knowledge regarding these preventive measures. Structured Teaching Programmes can help improve patients' understanding of hypertension and encourage healthy lifestyle practices. Therefore, the investigator felt the need to conduct a study to assess the effectiveness of a Structured Teaching Programme on knowledge regarding lifestyle modification among patients with hypertension.

OBJECTIVES OF THE STUDY

- To assess the pre-test level of knowledge regarding lifestyle modification among patients with hypertension.
- To evaluate the effectiveness of the Structured Teaching Programme on knowledge regarding lifestyle modification among patients with hypertension.
- To find the association between knowledge scores and selected demographic variables.

HYPOTHESES

- H1: There will be a significant difference between the pre-test and post-test knowledge scores regarding lifestyle modification among patients with hypertension.
- H2: There will be a significant association between knowledge scores and selected demographic variables.

ASSUMPTION

- Patients with hypertension may have inadequate knowledge regarding lifestyle modification.
- Structured Teaching Programme may improve knowledge regarding lifestyle modification.

DELIMITATION

- The study is limited to patients with hypertension attending selected hospitals.
- The study is limited to patients who are available during the data collection period.
- The sample size is limited to selected participants.

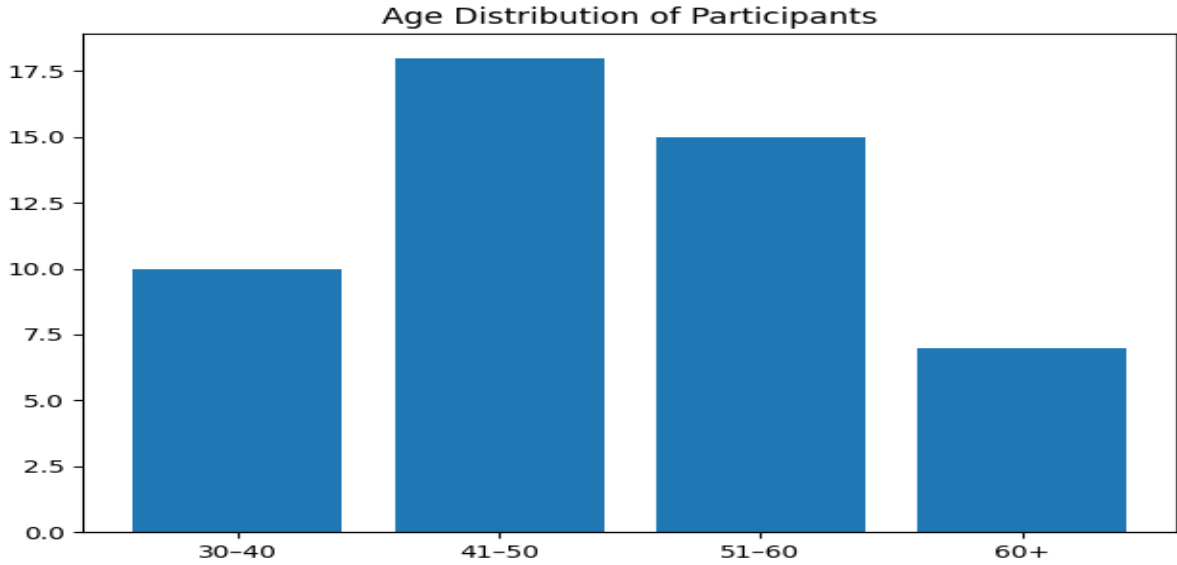
ANALYSIS / INTERPRETATION:

The data collected from 50 hypertensive patients were analyzed using descriptive and inferential statistics. The findings are presented under the following sections: demographic characteristics, level of knowledge regarding lifestyle modification, effectiveness of structured teaching programme, and association between knowledge scores and demographic variables.

SECTION I: DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

Variable	Category	Frequency (f)	Percentage (%)
Age	30-40 years	10	20
Age	41-50 years	18	36
Age	51-60 years	15	30
Age	Above 60 years	7	14
Gender	Male	28	56
Gender	Female	22	44
Education	Primary	12	24
Education	Secondary	20	40
Education	Higher	18	36

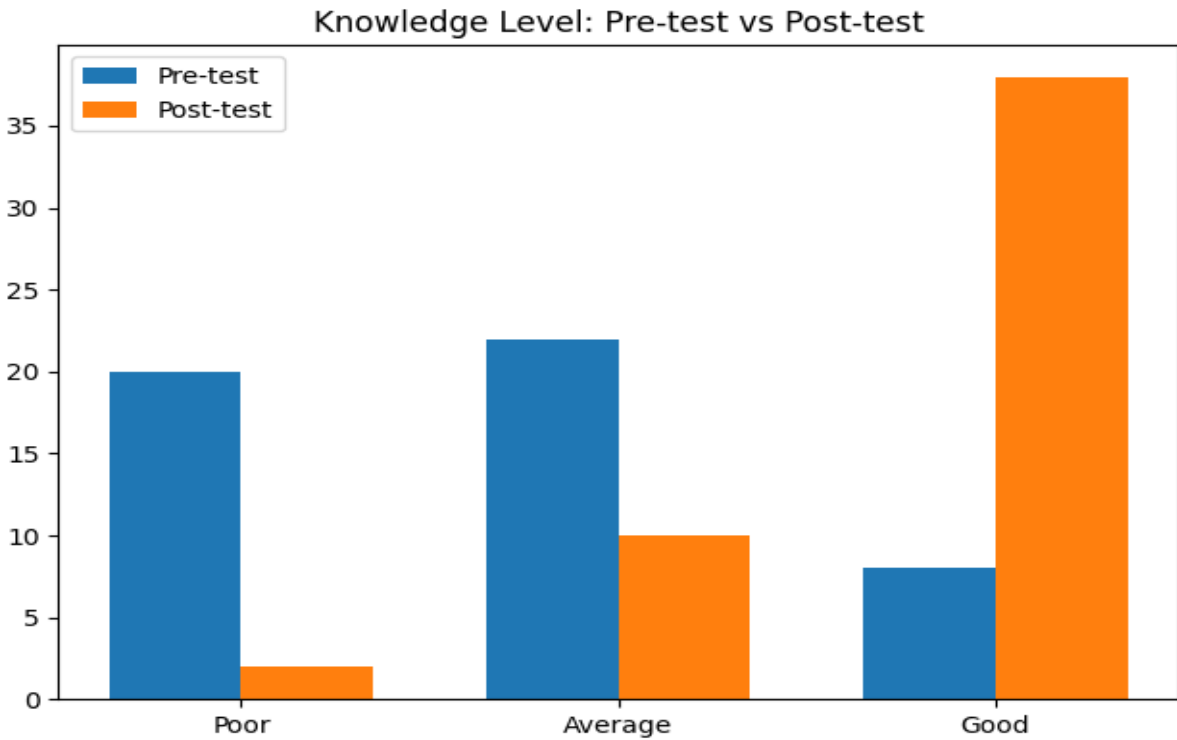
Interpretation: The majority of participants were aged 41-50 years (36%). Most participants were males (56%). A higher proportion had secondary level education (40%).



SECTION II: KNOWLEDGE LEVEL REGARDING LIFESTYLE MODIFICATION

Knowledge Level	Pre-test f	Pre-test %	Post-test f	Post-test %
Poor	20	40	2	4
Average	22	44	10	20
Good	8	16	38	76

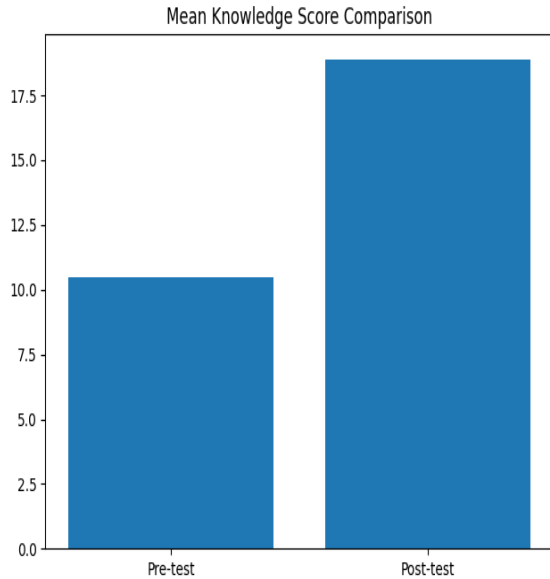
Interpretation: During the pre-test, most participants had poor and average knowledge. After the structured teaching programme, the majority (76%) had good knowledge.



SECTION III: EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME

Test	Mean	Standard Deviation
Pre-test	10.5	3.2
Post-test	18.9	2.4

The mean post-test score was higher than the pre-test score indicating improvement in knowledge after the structured teaching programme.



SECTION IV: ASSOCIATION BETWEEN KNOWLEDGE AND DEMOGRAPHIC VARIABLES

Variable	Chi-square	p-value	Inference
Age	2.34	0.31	Not Significant
Gender	3.11	0.21	Not Significant
Education	8.45	0.03	Significant

There was a significant association between knowledge and education level, while other variables showed no significant association.

III. RESULTS

The study was conducted among 50 patients with hypertension to assess the effectiveness of a Structured Teaching Programme (STP) on knowledge regarding lifestyle modification. The findings revealed that the majority of participants belonged to the 41–50 years

age group (36%), and most of them were male (56%). In the pre-test assessment, 40% of participants had poor knowledge, 44% had average knowledge, and only 16% had good knowledge regarding lifestyle modification. After the administration of the Structured Teaching Programme, there was a considerable improvement in knowledge levels, where 76% of participants had good knowledge, 20% had average knowledge, and only 4% had poor knowledge in the post-test. The mean knowledge score increased from 10.5 in the pre-test to 18.9 in the post-test, indicating a significant improvement in knowledge. The paired t test analysis showed a statistically significant difference between pre-test and post-test knowledge scores ($t = 12.4, p < 0.05$), demonstrating that the Structured Teaching Programme was effective in improving knowledge regarding lifestyle modification among patients with hypertension. Additionally, there was a significant association between knowledge scores and the education level of participants, while other demographic variables did not show significant association. The results of the study indicate that educational interventions such as structured teaching programmes are effective in enhancing patients' knowledge and promoting healthy lifestyle practices for better management of hypertension.

IV. CONCLUSION

The present study concluded that the Structured Teaching Programme (STP) was effective in improving the knowledge regarding lifestyle modification among patients with hypertension in selected hospitals. The findings showed a significant increase in the post-test knowledge scores compared to the pre-test scores, indicating that the educational intervention had a positive impact on the participants' understanding of lifestyle practices such as healthy diet, regular exercise, stress management, weight control, and avoidance of harmful habits. The study highlights the importance of providing structured health education to hypertensive patients to enhance their knowledge and promote healthy lifestyle behaviors. It also emphasizes the vital role of nurses and healthcare professionals in educating patients about lifestyle modification to prevent complications and improve the overall management of hypertension. Through proper education and awareness, patients can

adopt healthier lifestyles, which ultimately contributes to better health outcomes and improved quality of life.

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