

EFFECTS OF AN INFORMATION BOOKLET ON KNOWLEDGE REGARDING MANAGEMENT OF MODIFIABLE RISK FACTORS OF HYPERTENSION AMONG PATIENTS ATTENDING HYPERTENSION OUTPATIENT DEPARTMENT OF PRIMARY HEALTH CENTRE, BAHOUR, PUDUCHERRY.

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ABSTRACT

Background: Hypertension is a major public health problem and a leading cause of cardiovascular diseases. Inadequate knowledge regarding modifiable risk factors often contributes to poor disease management. This study evaluated the effectiveness of an information booklet on knowledge regarding the management of modifiable risk factors of hypertension among patients attending the Hypertension Outpatient Department of Primary Health Centre, Bahour, Puducherry. **Methods:** A quantitative pre-experimental one-group pre-test and post-test design was conducted among 62 hypertensive patients selected through convenience sampling. Knowledge was assessed using a structured questionnaire before and two weeks after administering an information booklet. Data were analysed using descriptive and inferential statistics, including the paired t-test and Chi-square test. **Results:** Before the intervention, 79.0% of participants had inadequate knowledge and 21.0% had moderately adequate knowledge. After the intervention, 72.6% had moderately adequate knowledge and 27.4% had adequate knowledge. The mean knowledge score increased significantly from 12.74 ± 4.34 to 20.71 ± 2.92 ($t = 11.79$, $p < 0.001$). A significant association was found between Body Mass Index (BMI) and pre-test knowledge, while no significant association was observed with other variables. **Conclusion:** The information booklet was effective in improving knowledge regarding the management of modifiable risk factors of hypertension. It can be used as a simple, cost-effective educational strategy to promote healthy lifestyle practices and improve hypertension management.

Keywords: Hypertension, Information Booklet, Modifiable Risk Factors, Knowledge, Health Education, Hypertensive Patients, Primary Health Centre, Nursing.

INTRODUCTION

Hypertension is a chronic non-communicable disease characterized by persistently elevated blood pressure and is a major cause of cardiovascular diseases, stroke, kidney disease, and premature death. According to the World Health Organization, about 1.28 billion adults worldwide have hypertension, with many remaining unaware of their condition. In India, the prevalence of hypertension is increasing due to

unhealthy lifestyle habits such as physical inactivity, high salt intake, obesity, tobacco and alcohol use, and stress.

Effective management of hypertension largely depends on controlling these modifiable risk factors through lifestyle changes, regular medication, and patient awareness. However, many patients have inadequate knowledge regarding hypertension management, resulting in poor blood pressure control and increased complications.

Health education is an important nursing intervention to improve patients' knowledge and promote healthy behaviours. Information booklets are simple, cost-effective, and effective educational tools that reinforce learning and encourage self-care. Therefore, the present study was undertaken to assess the effectiveness of an information booklet on knowledge regarding the management of modifiable risk factors of hypertension among patients attending the Hypertension Outpatient Department of the Primary Health Centre, Bahour, Puducherry.

NEED FOR THE STUDY:

Hypertension is a major public health problem and a leading cause of cardiovascular diseases, stroke, and premature death worldwide (Zhou B., 2021). In India, the prevalence of hypertension is increasing due to unhealthy lifestyle practices such as poor diet, physical inactivity, obesity, tobacco use, alcohol consumption, and stress (Sam J.V., 2023). Although these modifiable risk factors can be effectively managed through lifestyle changes, many patients have inadequate knowledge regarding their prevention and management (Ojangba T., 2023). In rural and semi-urban areas like Bahour, limited health education and low awareness often result in poor blood pressure control, with many patients relying only on medication while neglecting lifestyle modification (Modupi P.M., 2022). Information booklets are simple, cost-effective, and effective educational tools that improve knowledge, reinforce learning, and encourage healthy behaviours (Lachman, 2022). Therefore, the present study was undertaken to evaluate the effectiveness of an information booklet on knowledge regarding the management of modifiable risk factors of hypertension among patients attending the Hypertension Outpatient Department of PHC, Bahour, Puducherry.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of information booklet on knowledge regarding management of modifiable risk factors of hypertension among patients attending hypertension outpatient department of Primary Health Centre, Bahour, Puducherry.

OBJECTIVES

- To assess the knowledge regarding management of modifiable risk factors of hypertension among patients attending hypertension OPD of PHC, Bahour, Puducherry.
- To evaluate the effectiveness of information booklet on knowledge regarding management modifiable risk factors of hypertension among patients attending hypertension OPD of PHC, Bahour, Puducherry.
- To find out the association between pre-test level of knowledge regarding management of modifiable risk factors of hypertension among patients and their selected demographic variables.

HYPOTHESES

H₁: There will be a significant difference between the pre-test and post-test knowledge scores regarding the management of modifiable risk factors of hypertension among patients attending hypertension OPD of PHC, Bahour, Puducherry.

H₂: There will be a significant association between pre-test knowledge scores and their selected demographic variables of patients attending hypertension OPD of PHC, Bahour, Puducherry.

MATERIALS AND METHODS

Research approach: Quantitative research design approach

Research design: Pre- experimental research design (One group pre-test and post-test design.)

Setting of the study: The setting for the study was conducted in Primary Health Centre (PHC) at Bahour, Puducherry.

Target population: Target population of the study was patients who were residing in Bahour, Puducherry.

Accessible population: Hypertension patients who were attending the OPD of PHC at Bahour during the study period.

Sample size : The total sample size of the study was 62

Sampling technique : Non-probability convenience sampling technique.

Inclusion criteria : The patients who were diagnosed with hypertension, were willing to participate in the study, who were able to understand Tamil or English, were included in this study.

Exclusion criteria : The patients were not available during the time of data collection were excluded.

Data Collection Procedure:

The data was collected for the period of one week. The study population were identified according to inclusion criteria. Samples were selected using a non-probability sampling technique. Demographic data were collected. Pre-test assessment was done by using a structured questionnaire. The information booklet was given on knowledge regarding management of modifiable risk factors of hypertension among patients attending hypertension OPD of PHC, Bahour. The post test was conducted after two weeks by using the same structured questionnaire.

RESULTS

The data were organized, tabulated, and analysed according to the objectives. The data analysis begins with a description that applies to the study in which the data are numerical with some concepts.

Demographic variables: Most participants were above 30 years of age (91.9%), female (64.5%), married (96.8%), and from rural areas (80.6%). Nearly one-third had primary education (29.0%), over half were housewives (51.6%). Clinically, 41.9% had a family history of hypertension, 87.1% were taking antihypertensive medication, and 53.2% had been diagnosed with hypertension for 5–10 years. Smoking (14.5%), alcohol consumption (25.8%), and other health problems (8.1%) were reported by a minority of participants.

Pre-test knowledge: In the pre-test, many of the participants had inadequate knowledge 79.0%, 21.0% had moderately adequate knowledge.

Post-test knowledge: After STP, most of the participants had moderately adequate knowledge 72.6% and adequate knowledge 27.4%. No participant had inadequate knowledge in the post-test (Table 1 and Fig.1).

Table 1. Comparison of Pre-test and Post-test Knowledge Scores (N = 62)

Knowledge Score	Mean	SD
Pre- test	12.74	4.34
Post- test	20.71	2.92

Statistically significant at $p < 0.05$

The paired t-test revealed a highly statistically significant difference between the pre-test and post-test knowledge scores ($t = 11.79$, $p < 0.001$), indicating that the information booklet was effective. The mean

pre-test knowledge score was 12.74 ± 4.34 , which increased to 20.71 ± 2.92 in the post-test. The mean difference in knowledge scores was 7.97, demonstrating that the information booklet significantly improved knowledge regarding the management of modifiable risk factors of hypertension among patients attending the Hypertension OPD of PHC, Bahour, Puducherry.

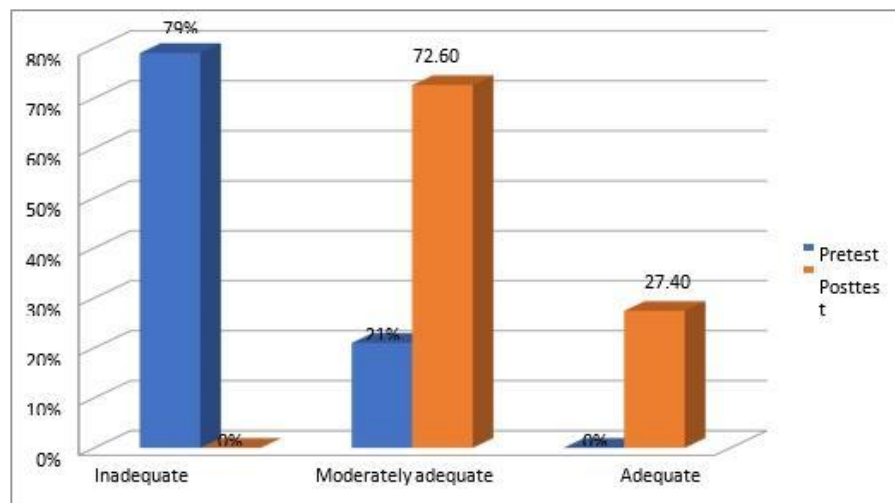


Fig.1: Comparison of pre- test and post-test level of knowledge regarding management of modifiable risk factors of hypertension.

DISCUSSION

The study findings revealed that most patients had inadequate knowledge regarding the management of modifiable risk factors of hypertension before the intervention. Following the administration of the information booklet, a significant improvement in knowledge was observed. The mean post-test knowledge score was significantly higher than the mean pre-test score, confirming the effectiveness of the information booklet. A statistically significant association was found between pre-test knowledge and Body Mass Index (BMI), whereas no significant association was observed with the other selected demographic variables. Hence, the research hypotheses H_1 and H_2 were partially accepted. The findings are consistent with previous studies by Elaheh Foroumandi et al. (2020), Ama G.A. et al. (2020), and Danesh Soltani et al. (2023), which reported that educational interventions significantly improved knowledge, self-management, health literacy, and adherence among patients with hypertension. The study highlights the importance of structured health education through information booklets in improving patients' knowledge and promoting healthy lifestyle practices for effective hypertension management.

CONCLUSION

The study concluded that the information booklet was effective in improving the knowledge of patients regarding the management of modifiable risk factors of hypertension. After the intervention, participants showed a significant improvement in knowledge level, indicating that structured health education helps to promote better hypertension management and lifestyle modifications.

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