International Journal of Science and Research (IJSR) ISSN: 2319-7064

Impact Factor 2024: 7.101

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Practice of Life Style Modifications among Hypertensive Patients Attending in Selected Rural PHC

Dr. Gigi P John

Professor, Sree Gokulam Nursing College Trivandrum

Abstract: This study examines the level of knowledge and practice related to lifestyle modification among hypertensive patients attending a rural primary health center and evaluates the effectiveness of a structured teaching programme designed for this population. A pre-test and post-test approach was adopted to measure changes in knowledge and practice following the intervention, while also exploring the relationship between these two components and their association with selected demographic variables. The findings reveal that, prior to the teaching programme, most participants demonstrated poor knowledge and inadequate practice related to lifestyle modification for hypertension control. After the intervention, substantial improvements were observed in both knowledge and practice scores, with statistically significant differences between pre-test and post-test results, indicating the effectiveness of the structured teaching programme. Although pre-test knowledge and practice showed a weak negative correlation, post-intervention outcomes reflected meaningful behavioral improvement. Certain demographic variables, particularly age, occupation, and income, showed associations with baseline knowledge and practice levels, while others did not demonstrate a significant relationship. Overall, the results highlight the importance of structured educational interventions in enhancing awareness and encouraging healthier lifestyle practices among hypertensive patients in rural settings.

Keywords: Hypertension management, lifestyle modification, structured teaching programme, rural health care, patient education

Effectiveness:

In this study effectiveness refers to determine the extent to which the structured Teaching Program has achieved the desired effect as expressed by gain in post-test knowledge scores.

Structured Teaching Program:

In this study Structured Teaching Program refers to a systematically structured teaching strategy designed to provide information on lifestyle modification on hypertension.

Knowledge

In this study, it refers to the correct response given by the hypertensive patients to the knowledge items in the structured knowledge questionnaire on lifestyle modification of hypertension and it is expressed in terms of knowledge scores.

Practice

In this study, it refers to the activities or health behaviour change that is actually accepted and followed by hypertensive patients as a part of life as measured by self structured practice questionnaire.

Hypertensive Patients.

In this study, hypertensive patient refers to those who are diagnosed as hypertension by the treating physician and are on treatment.

Rural PHC

In this study, it refers to the public health care services provided to the patients those who are living in village areas

Objectives of the study

The objectives of the study are to:

- To assess the knowledge of lifestyle modification among hypertensive patients attending in rural PHC.
- To assess the practice of lifestyle modification among hypertensive patients attending in rural PHC.
- To evaluate the effectiveness of structured teaching programme.
- To find out the relationship between knowledge and practice of lifestyle modification on hypertension among hypertensive patients attending in rural PHC.
- To find out the association between knowledge and practice of hypertensive patients on life style modification with selected demographic variables.

Major Findings of the Study

Demographic data

- Majority of subjects (40%) were in the age group of 41-50 years and (17.5%)above 51-60 years, males (65%), married (60%), (42.5%) belonged to nuclear families, Hindus (60%), (40%) had primary school education, (67.5%) monthly income of Rs below 5000 (40%) were coolies, (50%) were non vegetarian, (45%) had history of hypertension since 1 to 5 years, (60%) and (57.5%) did not have history of smoking and alcoholism.
- Most of the samples (65%) were male.

Volume 14 Issue 12, December 2025
Fully Refereed | Open Access | Double Blind Peer Reviewed Journal
www.ijsr.net

International Journal of Science and Research (IJSR) ISSN: 2319-7064

Impact Factor 2024: 7.101

- Maximum numbers of samples (60%) were Hindus.
- Maximum number of the sample (42.5%) belonged to nuclear family and 40% belonged to the joint family.
- Most of the samples (40%) had primary education, 27.5% had high schooling, 2.5% of them were graduates and post graduates, 25% had no formal schooling.
- Majority of the sample (40%) were coolies and 25% were self employees.
- 67.5% reported that income below 5000 per month 25% had income of 15000 -10000 per month.
- Most of the sample 50% of them were non-vegeterians and 32.5% were on mixed diet and 17.5% were vegetarians.
- Maximum no of sample 57.5% were between 51 70 kgs.
- 45% of them were known cases of hypertension since 1-5 years and 37.5% were diagnosed case of less than 1 year.
- Most of the sample 60% were nonsmokers and 40% were smokers.
- Maximum numbers of sample 52.5% of them were nonalcoholic and 47.5% of them were alcoholics.

Knowledge of hypertensive patients regarding lifestyle modification of hypertension

- In pre-test majority of the hypertensive patients (90%) had poor knowledge, 10% had moderate knowledge and none of them had good knowledge.
- In post test most of the hypertensive patients had good knowledge (80%), 12.5% had very good knowledge, 7.5% had moderate knowledge and none of them had poor knowledge.
- The mean percentage of pre-test knowledge score of hypertensive patients was 33.13%.
- The mean percentage of post test knowledge score of hypertensive patients was 71.63%.

Practice of hypertensive patients regarding lifestyle modification of hypertension

- In pre-test majority of the hypertensive patients (60%) had poor knowledge, 40% had moderate knowledge and none of them had good knowledge.
- In post test most of the hypertensive patients had good knowledge (87.5%), 12.5% had moderate practice, none of them had poor knowledge and very good knowledge.
- The mean percentage of pre-test practice score of hypertensive patients was 24.13%.
- The mean percentage of post test practice score of adolescents was 59.13%.

Effectiveness of structured teaching programme on lifestyle modification of hypertension.

- The difference between mean pre test and post test knowledge scores were found to be statistically significant (t₍₃₉₎=25.49, table value t₍₃₉₎=1.68, p<0.05) which shows that the structured teaching programme was effective in increasing the knowledge score of hypertensive patients.
- The difference between mean pre test and post test practice scores were found to be statistically significant (t₍₃₉₎=24.04, table value t₍₃₉₎=1.68, p<0.05) which shows that the structured teaching programme was effective in increasing the practice score of hypertensive patients.

Relationship of knowledge and practice on lifestyle modification of hypertension

• The correlation between pretest knowledge and practice is calculated by Karl Pearson coefficient r value is less than the table value (r=.056 < t =.312), hence there is a negative correlation between pre-test knowledge and practice.

Association between pretest knowledge scores and selected demographic variables

- There is association between pre test knowledge score of hypertensive patients with demographic variables such as age (χ2cal=.001) and income (χ2cal=0.010)
- There is no association between pre test knowledge score
 of hypertensive patients with demographic variables such
 as Sex marital status, religion, type of family, education,
 occupation, dietary pattern, weight, duration of diagnosis,
 history of smoking and history of alcoholism.

Association between pre test practice scores and selected demographic variables

- There is association between pre test practice score of hypertensive patients with demographic variables such as occupation (χ2cal=0.012) and income (χ2cal=.008).
- There is no association between pre test practice score of hypertensive patients with demographic variables such as age, sex, marital status, religion, type of family, education, dietary pattern, weight, duration of diagnosis, history of smoking, history of alcoholism

References

- [1] Rajiv Gupta. Definition of blood pressure. South Asian Journal of Preventive Cardiology. Available from: http://www.hypertension-bloodpressure-definition-html.
- [2] Basic health information on cardiovascular diseases. World Health organization Regional statistics, 2008. Available from: URL: http://www.wpro.who.int/sites/ncd/overview.
- [3] Yusuf S et al. Global Burden of Cardiovascular diseases. Part 1: General considerations, the epidemiologic transition, risk factors, and impact of urbanization. Circulation 2001; 104-2743-2753; Available from: URL:http://www.pubmed.com
- [4] Gupta R et al. Hypertension epidemiology in /India: Meta analysis of 50 years prevalence rates and blood pressure trends, Journal of human Hypertens 1996; 10: 465.
- [5] Gupta et al., Major coronary risk factors and coronary heart disease epidemic in India, South Asian journal of prevalence cardio 2003; 7:11-40.
- [6] Deedwania P. The changing face of hypertension: Is systolic blood pressure the final answer Arch Intern Med 2002; 162:506-508.
- [7] Rodgers A et al. Reducing the global burden of blood pressure-related cardiovascular disease, Journal of Hypertens 2000; 18: S₃-S₆.
- [8] R Gupta. Trends in Hypertension epidemiology in India: Meta analysis of 50 years prevalence rates and

Volume 14 Issue 12, December 2025
Fully Refereed | Open Access | Double Blind Peer Reviewed Journal
www.ijsr.net

International Journal of Science and Research (IJSR) ISSN: 2319-7064

Impact Factor 2024: 7.101

- blood pressure trends. Journal of human Hypertens 1996; 10: 467.
- [9] Gupta R, Sharma AK, Kapoor A et.al. Epidemiological studies and treatment of hypertension, Journal of Assoc Physicians Ind 1997; 45:863-864.
- [10] Aram, George, Herny. R. et. al. JNC seventh report on prevention, diagnosis, evaluation and treatment of high blood pressure. Journal of American heart association, 2003; 42: 1206, 1252. Avilable from: www.hyper.ahajournals.org/cgi/content/full/42/6/120
- [11] Patnaik L et al. A study to assess the knowledge and practice on lifestyle modification and role in controlling hypertension in urban slum of Brahamapur, Orissa, Journal of community medicine. 2005; 9:682. Available from:
- [12] www.JcmOrissa.org/index/page682files/htm
- [13] Howteerakul N, Suwannapong N, Sittilerd R et.al.. Health risk behaviours, awareness, treatment and control of hypertension among rural community people in Thailand. Asia Pac J Public Health. 2006; 18(1):3-9. Available from :npp92432@yahoo.com
- [14] AK Sharma, VP Gupta, H Prakash.et.al. Prevalence of hypertension in rural population of Rajasthan, South Asian journal of preventive cardiology. Avilable fromhttp://www.sajpc.org/vol7/vol7_2/highprevalence.htm
- [15] Umberto Solimene. Epidemiological aspects of Hypertension in the World. World Health Organization. Collaborating Centre for Traditional Medicine [online] 2008 September 4; Available from; URL: http://www.wpro.who.htm
- [16] Richard E. Cardiovascular physiologic concepts. Available from: htttp://www.cv physiology .com/Blood pressure/BP001.htm. Accessed on November 3, 2007.
- [17] Primary prevention of essential hypertension. Technical report series, A Guide; WHO. Geneva; 1984
- [18] Ike SO, Aniebue PN et.al. Department of medicine University of Nigeria Teaching Hospital. Medicine;2010 Jan;104(1):55-60. Available from sobiajuluike@gmail.com. Acessed on Sep 4 2010
- [19] Luna, Chang et.al. Oxford journal of health promotion international, Behavioural change for blood pressure control among rural and urban adult in Taiwan, 2005 September 18(3):219-228.
- [20] Wright SC, Ramukumba TS.et.al. Lifestyle risk factors in an urban South African community2008 Mar; 31(1):68-76.
- [21] Nielsen TI, Holmen TL, Vik T et.al. Life style related to blood pressure and body weight in adolescence: cross sectional data from the Young-HUNT study, Norway. Journal of public health. 2008 April 9; 8:111.
- [22] Uzun S, Kara B, Yokuşoğlu M, Arslan Fet.al. The assessment of adherence of hypertensive individuals to treatment and lifestyle change recommendations 2009 Apr;9(2):102-9. Available from senuzun@yahoo.com
- [23] Ahmed N, Abdul Khaliq M, Shah SH et.al.

 Compliance to antihypertensive drugs, salt restriction, exercise and control of systemic hypertension in hypertensive patientsatAbbottabad.2008Apr-

- Jun;20(2):66-9. Available from dr_nazir_ahmed_malik@yahoo.com
- [24] Oganov. RG, Pogosova GN, Koltunov et.al. Hypertensives in Russia are interested in a healthier lifestyle: results of the RELIF multicenter study, National Research Center for Preventive Medicine. Available from: http://cpr.sagepub.com/content/18/2/224.abstract Accessed on July 16, 2010.
- [25] Syed, Nabel Zafar et.al. Awareness, risk factor, presting features and complication of hypertension among Hypertensive's and normotensives. Journal of Pakistan, Medical Association, 2010 December;6:2-5. Available from: http://www.pame.org.pkl emnji 5.
- [26] Treece EW, Treece JW. Elements of research in nursing. London: CV Mosby Co; 1995.22