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A Study to Assess the Knowledge, Attitude and Practice of Life Style Modification among Hypertensive Patient at the Selected Hospital of Kamrup Metro Assam

Payel Choudhury[1], Anjali Gogoi[2], Dr. Bibi Bordoloi[3]

[1]M. Sc Nursing (Medical Surgical Nursing), Regional College Of Nursing, Guwahati, India

[2]Rerired Associate Professor, (Medical Surgical Nursing) B. sc Nursing College, Dibrugarh, India

[3]Professor Cum Principal (Community Health Nursing), Regional College Of Nursing, Guwahati, India

Corresponding Author Email: *payelchoudhary07[at]gmail.com*

Abstract: ***Introduction: Hypertension is a major public health problem due to its high prevalence all around the globe. Life style modifications are universally accepted, not only as the first step in management of hypertension but also as a way to prevent hypertension. The aim of the study is assess the knowledge, attitude, practice and correlation between knowledge-attitude, knowledge-practice, attitude-practice, association between knowledge, attitude, practice of hypertensive patient with selected demographic variables. Methods: Quantitative descriptive correlation design, non-probability purposive sampling technique, structured questionnaire was used. Data was collected from GMCH and NEMCARE Hospital, analysed in SPSS. Results: Finding showed subjects knowledge 65.6%, attitude 58.9%, practice 78.9%, Moderately positive correlation (r=0.526) between knowledge-attitude, knowledge-practice (r= 0.555), attitude-practice (r=0.498). Education, occupation and monthly income of hypertensive patient influences knowledge and attitude. Education of hypertensive patients has significant association with practice. Conclusion: Therefore awareness programme, strategies could be generated improve their knowledge, attitude and practice.***

Keyword: Hypertension, Lifestyle modification, Knowledge, Attitude, Practice

1. Introduction

"We cannot change our genes or sex, but we can definitely modify our lifestyle thereby protecting our self from hypertension"-Robert C Schlant

Hypertension is a major public health problem due to its high prevalence all around the globe. Analysis of the global burden of hypertension revealed that over 25% of the world's adult population had hypertension in 2000, and the proportion is expected to increase to 29% by 2025[1]. According to some estimates, the larger proportion of the world's hypertensive population will be in economically developing countries by the year 2025 owing to their larger population proportion, a change in life style and sedentary life[2].

Hypertension is one of the leading causes of death and disability among adults. An estimated 1.13 billion people worldwide have hypertension, most (two-third) living in low and middle –income country. Elevated blood pressure accounts for 50% of all deaths in developed countries, and in developing countries, it is nearly 16%.35% were not diagnosed, 51% are not receiving therapy and 28% are receiving adequate therapy[3]. Increasing hypertension in India and other developing countries has been related to sedentary lifestyle, excess dietary salt, calorie and alcohol intake, increasing generalized and central obesity, and stress of migration and urbanization[4].

An uneven prevalence of hypertension has been reported in various population groups in north-east India. While Mizos have less prevalence of hypertension, it is very high in tea garden population[5].

The study conducted by Hazarika NC, Narain K, Biswas D, Kalita HC, Mahanta J (2004) present a distributing fact. The study result shows that the overall prevalence of hypertension among native rural population of Assam was 33.3% that is comparatively higher than national prevalence (prevalence of hypertension in India is urban 30% and rural 10%). Above that among the patients with hypertension, 21.6% were unaware about their disease[6].

In 2012, Jorhat had the highest number of cases of hypertension, among all the districts of Assam, both urban and rural put together[7].

Lifestyle modification also known as non-pharmacological therapy is the corner stone of helping out hypertensive patients to attain lifestyle behavior that are healthy. In order to reduce the high incidence rate now the health system is giving more emphasis on life style modifications along with other measures. Life style is important because how we live determine our choices and this choice decide how healthy we are.

1.1. Objectives of the study

- To assess the knowledge of hypertensive patients regarding life style modification.
- To assess the attitude of hypertensive patients regarding life style modification.
- To assess the practice of hypertensive patients regarding life style modification.
- To find out the correlation between knowledge and attitude of hypertensive patient.
- To find out the correlation between knowledge and practice of hypertensive patient.
- To find out the correlation between attitude and practice of hypertensive patient. .
- To find out the association between knowledge of hypertensive patient with selected demographic variables.
- To find out the association between attitude of hypertensive patient with selected demographic variables.
- To find out the association between the practices of lifestyle modification among hypertensive patient with selected demographic variables.

2. Review of Literature

1) **Kaur G, Kaur S, Kaur Amninder** (2019) conducted a descriptive study on knowledge and practices regarding life style modification among 300 hypertensive patients. The study revealed that two third 254 (84.7%) hypertensive patients had average level of knowledge regarding life style modifications and 232 (77.3%) hypertensive patients had satisfactory level of practices regarding lifestyle modifications.
2) **Hadiza S, Ahmad MY, Jamila AY, Adamu FI, Muhammad SM** (2017) conducted a cross sectional study on the factor analysis of knowledge, attitude, practice of life style modification measures among 104 hypertensive patients. The study result shows that Overall, 33 (31.7%) of the patients had good knowledge, 40 (38.5%) average knowledge and 31 (30%) poor knowledge.99% of the participants had positive attitude towards life style modification measures. About practice patterns, 59 (56.7%) of the participants had good adherence and 45 (43.3%) had bad adherence.
3) **Nair SMK (2018)** conducted a cross sectional descriptive study on knowledge attitude and practice regarding lifestyle modifications of hypertensive patients at selected primary health care centre. The study revealed that inadequate knowledge among patients with hypertension and there is a poor level of awareness about lifestyle behavior modifications which is needed in the control of hypertension.

3. Methodology

In order to accomplish the objectives of the study, 'quantitative descriptive approach', descriptive correlational design was adopted by the investigator**.** Study was conducted in Guwahati Medical College & Hospital, Nemcare Hospital Guwahati in 90 hypertensive patient admitted in the cardiology, medicine and nephrology wards GMCH and Nemcare Hospital Guwahati

Variables

Socio-demographic Variables: The characteristics and attributes of the study subjects are considered as the demographic variables. The demographic variables selected in this study are age, sex, education, occupation, monthly income, family history of hypertension, food habits.

Research Variables: Research variables are the qualities, properties or characteristics which are observed or measured in a natural setting without manipulating. In this study research variables are knowledge, attitude and practice regarding lifestyle modification among the

Criteria for sampling selection

Inclusion criteria

The patients who are:

- Conscious patient
- Willing to participate in the study.

Exclusion criteria

The patients who are

- Terminally ill patients (stroke patients, respiratory distress patients, shock patients etc)
- Not able to follow the instruction.

4. Analysis and Interpretation

The data are analysed and interpreted under 4 sections

Section I: Description of subject characteristics.

In the present study out of 90 hypertensive patients, female were 32.2 percent and male were 67.8 percent, majority were doing service i. e., 34.4 percent, 31.1 percent were unemployed including house maker, 18.9 percent were farmer, 15.6 percent engaged in business. majority of the patients income were<Rs 3, 908 i. e.32.2 percent, followed by 21.1 percent income Rs.19, 516-29, 199, 16.7 percent income were Rs.11, 708-19, 515, 14.4 percent income Rs.29, 200-39, 032, 10.0 percent income Rs.3, 908-11, 707 and only 5.6 percent income Rs.39033-78062. Regarding family history of hypertension maximum number of patients had history of hypertension in their family i. e.52.2 percent and only 47.8 percent of patients were not had any history of hypertension in their family. maximum number of hypertensive patients 66.7 percent preferred non-vegetarian food, only less patients 33.3 percent preferred vegetarian food.

Section II: Assessment of knowledge, attitude, practice of the hypertensive patient regarding lifestyle modification.

The overall mean knowledge score of the samples was found to be 12.07 with SD 4.250. The finding of the present study

showed that majority, i.e., 59 (65.6%) patients had moderately adequate knowledge, 16 (17.8%) had inadequate knowledge and only 15 (16.17%) patients had adequate knowledge on hypertension about lifestyle modification.

Mean attitude score of the samples was found to be 13.23 with SD 5.41. The finding of the present study showed that majority, i. e, 53 (58.9%) patients had average attitude, 21 (23.3%) had poor attitude and only 16 (17.8%) patients had good attitude on hypertension about lifestyle modification.

Mean practice score of the samples was found to be 6.87 with SD 2.105. The finding of the present study showed that majority, i. e., 71 (78.9%) patients had moderately adequate practice, 10 (11.1%) had inadequate practice and only 9 (10.0%) patients had adequate practice on hypertension about lifestyle modification.

Section III: Correlation between knowledge, attitude and practice of hypertensive patient regarding life style modification

Table 1

Variables	Mean	SD	Correlation Coefficient (r)	Probability (p)
Knowledge	12.07	4.25	0.526 **	<.001**
Attitude	13.23	5.41		
Knowledge	12.07	4.25	0.556**	<.001**
Practice	6.87	2, 11		
Attitude	13.23	5.41	0.498	<.001**
Practice	6.87	2.11		

Highly Significant at p<.001

The finding of the present study showed that there is a significant moderate positive correlation (r=0.526**: p<.001**) between knowledge and attitude of hypertensive patient regarding lifestyle modification, significant moderate positive correlation (r=0.556**: p<.001) between knowledge and practice of hypertensive patient regarding lifestyle modification, significant moderate positive correlation (r=0.556**: p<.001) between knowledge and practice of hypertensive patient regarding lifestyle modification.

Section IV: Association between knowledge, attitude and practice of hypertensive patient with selected demographic variables.

The study revealed that education (χ^2=34.97: p=<.001), occupation (χ^2=17.45: p=<0.01) and income (χ^2=28.50: p=<0.01) has strong significant association with knowledge of the hypertensive patient. Significant association is present between attitude and education (χ^2=28.45: p=<.001), occupation (χ^2=14.45: p=<0.05) and income (χ^2=20.28: p=<0.05) of the hypertensive patient. Significant association is present between practice and education (χ^2=19.04: p=<0.05) of the hypertensive patient.

5. Conclusion

The conclusion drawn from the findings of the study is that the maximum hypertensive patients were had moderately adequate knowledge, average attitude and moderately adequate practice of lifestyle modification. It inferred that due to lack of adequate knowledge on lifestyle modification the patient had average attitude thus it affect the practice. Study findings also revealed significant moderate positive correlation between knowledge, attitude and practice of life style modification among hypertensive patient. It inferred that increased knowledge leads to good attitude and if knowledge increased practice also suppose to be increase and if attitude increased practice also suppose to be increase regarding lifestyle modification. Study finding also revealed significant association between knowledge and attitude with demographic variables like education, occupation and monthly income. And practice with education. It inferred knowledge attitude was depended on education, occupation and monthly income and practice depend on education. Findings of the present study indicated that there is a need of more awareness and educational program which could be conduct in hospital or in community level periodically, regular health checkups, guidance and consultation with doctors is compulsory for the patients and they should be motivated on the aspects of the lifestyle modification. Which helped the patient for improved the knowledge, attitude and practice about the subject matter.

6. Recommendation

Recommendations from this study offered for future research are:

- Similar study can be done by using a large number of sample, from other hospitals in Assam it increase the validity and generalization of the findings.
- In present study structured interview schedule was used as a tool, hence the response was limited. It can be corrected by using non-structured interview schedule to gain in-depth information about patient's knowledge, attitude and practice.
- Similar study can be done to compare the knowledge, attitude and practice of lifestyle modification on hypertension of patient's between rural and urban population.
- Further research can be done on this topic with implementation of teaching program to improve the hypertensive patient's knowledge, attitude and practice.
- An experimental study can be conducted to develop instruction module or other educational media like pamphlet, leaflet, TV program, banner etc on benefits and ways to overcome hypertension by using healthy lifestyle modification.

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Author Profile

Payel Choudhury (Corresponding Author), M. Sc Nursing (Medical Surgical Nursing), Regional College Of Nursing, Guwahati, India, Email Id: payelchoudhary07[at]gmail.com

Anjali Gogoi (Co-author), Guide, Rerired Associate Professor, (Medical Surgical Nursing) B. sc Nursing College, Dibrugarh, India

Dr. Bibi Bordoloi (Co-author), Co-guide, Professor cum Principal (Community Health Nursing), Regional College of Nursing, Guwahati, India