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STUDY TO ASSESS KNOWLEDGE ON LIFESTYLE MODIFICATIONS PERTAINING TO HYPERTENSION AMONG ADULT PERSONS AT SELECTED HOSPITALS, KOLKATA, WEST BENGAL

Nursing

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ABSTRACT

A descriptive study was conducted by B.Sc. Nursing part III, group –B students of Ramakrishna Mission Seva Pratishthan ,Ma Sarada College of Nursing to assess the knowledge about lifestyle modifications pertaining to Hypertension among adults at selected hospital, Kolkata.The objectives of the study were to assess the knowledge about lifestule modifications pertaining to Hypertension and selected demographic variables .Setting was Medicine OPD of Ramakrishna Mission Seva Pratishthan.Samples were adults attending Medicine OPD of Ramakrishna Mission Seva Pratishthan and sampling technique was Purposive sampling technique.The tool used for generating the necessary data was semi-structured knowledge questionnaires on lifestyle modifications pertaining to hypertension.The study findings revealed some adults(76.67%) have good knowledge and some adults (23.33%) have moderate knowledge. There was no significant relation of knowledge score with other selected demographic variables.

KEYWORDS

Knowledge, Assess, Life style, Hypertension, Adult person

Introduction:
Hypertension is a global health challenge. Appropriate lifestyle changes and medications can lower blood pressure and decrease risk of health complications. This involves the heart to work harder than normal and circulate blood through the vessels. There are two types of Hypertension:- "Primary" and "Secondary". Lifestyle changes are recommended to lower blood pressure, before starting medications.

Background:
Hypertension or high blood pressure is one of the most important modifiable risk factor that can lead to the development of cardiovascular disease. As blood pressure increases, so does the risk of myocardial infraction (MI), heart failure, stroke, and renal disease increases. Hypertension is the attribute cause for 57% of stroke and 24.5% of coronary heart disease in India. Hypertension is present in 25-30% urban and 10-20% of rural population. Approximately 100-110 million persons have high blood pressure in the country.

According to World Health Organization (WHO) hypertension accounts for 71% of all deaths globally and 77% of these deaths occur in low and middle income country. Several factors like aging of the population, rapid urbanization along with lifestyle factors those favour sedentary habits, obesity, alcohol consumption, and increased salt intake have been incriminated for the emergence of hypertension and other coronary vascular disease. [2]

In a study conducted by Longitudinal Aging Survey of India (LASI), 2017-2020 carried out a study across all state in India except Sikkim. They Considered 72000 older adults age over 45 years and above. The results indicate prevalence of about 16% in Chhattisgarh, Nagaland, Dadra and Nagar Haveli and 41% in Panjab, Goa, Uttar Pradesh 19.5%, Odisha & other states 19.2%. [3]

There are two types of Hypertension:
1) Primary Hypertension
2) Secondary Hypertension

- Primary hypertension is elevated BP without an identified cause that accounts for 90-95% of all cases.
- Secondary hypertension as a cause that can often be identified and correct 5-10% of the cases constitute in this group.
- The risk factor of hypertension are age, alcohol consumption, tobacco use, diabetes mellitus, elevated serum lipid, excess dietary sodium, gender, family history, obesity, sedentary lifestyle, socioeconomic status, stress.
- A community based study conducted among adults of a rural population in the Rishi Valley, India on knowledge of risk factor that showed only 31% of participants knew that hypertension adversely affects and individual's health and 7% knew the benefits of treating hypertension. [4]
- Hypertension is a major risk factor and silent killer because it progressively and permanently damages organs before occurrence of any diagnosable external presentation.

Need of the study:
Hypertension is a common condition in which the long term force of blood against artery wall is high enough that it may eventually cause health problems such as heart diseases. Lifestyle modifications helps to control blood pressure by reducing alcohol intake, reduce sodium chloride intake.

- This modification help to control the blood pressure and keep it in the normal range.
- This notification help to minimise the possible risk of heart attack and stroke.
- This modification help to improve the quality of life of hypertensive patients.

1. In a cross sectional study that is "Knowledge and practice of lifestyle modification among males with hypertension" was conducted by Sri Ramachandra Medical College Chennai in November 2015 using interview schedule. Here we can see that 84% had knowledge about influence of smoking and alcohol on hypertension and 82% had knowledge about at least three dietary factors which control hypertension. 70% of males were aware that more than 30 minutes of physical exercise for day is needed to control hypertension.[5]

2. Another cross sectional study was conducted from May to June, 2018 in the slums area of Kolkata in collaboration with Kolkata Municipal Corporation. The result indicated the overall prevalence of hypertension was 42%(newly detected in 19% of population) , 54% of the hypertensive subjects were aware of their hypertensive status, 38% was on antihypertensive treatment and 12% had their blood pressure controlled to target level.[9]

- In this study setting the knowledge about lifestyle modification pertaining to hypertension has not been done.

Therefore we endeavour in conducting the study on the knowledge of lifestyle modification pertaining to hypertension among adult persons.

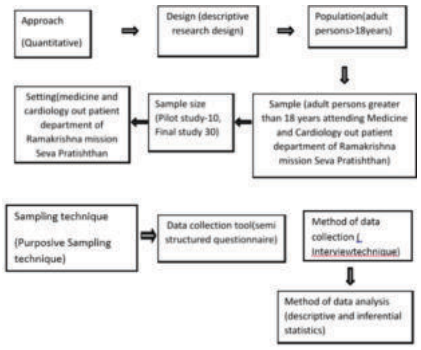

Fig 1: Schematic diagram of Research Design

Research Approach: In view of nature of the problem selected and objective to be accomplished, Quantitative Research Approach is considered appropriate for recent study.
Research Design: The Research Design is the overall plan or blue print of the study,under investigation and data collection. The Descriptive Research Design is taken for this nursing research which aims to obtain accurate and meaningful phenomenon under the study.

Variables Under Study:
Research Variables: Knowledge regarding lifestyle modification pertaining to hypertension among adult person.
Demographic variables:

- Age
- Sex
- Education
- Occupation
- Residence
- Marital status
- Monthly income
- Source of knowledge
- Blood pressure
- Body mass index

Population: In this stydy, the population was adult person who belong to age group of greater than 18 years.

Sample and Sample Size of study : In this study, sample means Adults persons who are attending Medicine and Cardiology out patient department of Ramakrishna Mission Seva Pratishthan.

For Pilot study sample size was 10 adult person attending Medicine out patient department.

For Final study sample size was 30 adult person attending Medicine out patient department.

Setting of the study: Medicine Out Patient Department of Ramakrishna Mission Seva Pratishthan.

Sampling technique: In this study, Purposive Sampling Technique has been used for selecting sample.

Sampling criteria:
(i) Inclusion criteria –
- Adults whose age is greater than 18 years
- Literate people (who can understand either Bengali or English)
- Who are willing to participate

(I) Exclusion criteria
- Those who are less than 18 years of age
- Who are not willing
- Who cannot understand English or Bengali'
- Reason for Selecting the Setting:
- Easy availability of study sample and also minimise time and cost.
- Familiarity with the setting.

The most important crucial aspect of any investigation is the collection of appropriate information, which provide necessary data for the study. Tool had been developed for the present study according to stated objectives.

DESCRIPTION OF TOOL
- Tool I: Multiple Choice Questionnaire on the demographic proforma of adults attending Medicine OPD. Tool was designed to collect participants age, sex, occupation, residence, marital status, monthly per capita income, source of knowledge, blood pressure, BMI.
- Tool II: Dichotomous questionnaire regarding assessment of the knowledge on lifestyle modification pertaining to hypertension among adult persons attending Medicine OPD.

Grading based on marks obtained in semi structured knowledge questionnaire

Score	Grading
13-18	Good
7-12	Moderate
0-6	Poor

Validity & Reliability of tools:
The validity was obtained by 5 experts and reliability was compiled using spilt half technique and the computed reliability coefficient (r) is 0.81.

Analysis & Interpretation
TABLE-1 showing the distribution of study population in percentage according to education N = 30

Education	Frequency	Percentage
Illiterate	6	20%
Primary Education	5	16.67%
High School	13	43.33%
Above HS	6	20%

Interpretation: Table-3 titled frequency and percentage distribution of study population according to education showing among the total sample of 30 (100%) that 6 (20%) are illiterate, 5(16.67%) are primary education, 13(43.33%) are high school,, 6(20%) are above HS.

TABLE-2: showing the distribution of study population in percentage according to sources of knowledge about hypertension N=30

Sources of knowledge about hypertension	Frequency	Percentage
Health professionals	18	60%
Different Medias	1	3.33%
Family and Friends	11	36.67%

Interpretation: Table-3 titled frequency and percentage distribution of study population according to education showing among the total sample of 30 (100%) that 18 (60%) are Health Professionals, 1(3.33%) are different medias,11(36.67%) are Family and Friends.

TABLE-3: Range, Mean, Median and Standard deviation of knowledge score regarding lifestyle modification pertaining to Hypertension. N=30

Variable	Range	Mean	Median	Standard deviation
Knowledge scores	10-17	14.06	14	1.847

Frequency and percentage distribution of study population according to marks obtained in semi structured knowledge questionnaire

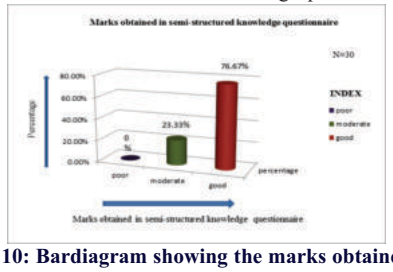

Figure no. 10: Bardiagram showing the marks obtained in semi-structured knowledge questionnaire wise distribution of the study population

Interpretation: Figure no. 10 bar diagram titled as Marks obtained in semi-structured knowledge questionnaire wise distribution , among the study population of all samples 30 (100%) that 7 persons(23.33%) have moderate knowledge, 23 remaining persons(76.67%) have good

knowledge. No persons have poor knowledge.

RESULTS:

- Majority of the participants are between 40-60 years which is 17 persons (56.67%).
- Majority of the participants are 16 females (53.33%)
- Majority of the participants are 13 (43.33%) persons who have completed High School Education.
- Majority of the participants are 16 (53.33%) persons who are unemployed
- Majority of the participants are 19 (63.33%) persons residing in urban area.
- Majority of the participants are 30 (100%) persons who are married.
- Majority of the participants are 16 (53.33%) persons having monthly income between 10,000-20,000 rupees.
- Majority of the participants are 20 (66.67%) persons suffering from chronic disease.
- Majority of the participants are 26 (86.67%) persons who are aware of hypertension.
- Majority of the participants are 24 (80%) persons who are aware about lifestyle modifications for hypertension.
- Majority of the participants are 18 (60%) persons who have gained about hypertension from health professionals.

CONCLUSION

According to the result among the study population of all samples 30 (100%), 23 persons (76.67%) have good knowledge, 7 persons (23.33%) have moderate knowledge and 0 persons (0%) have poor knowledge.

So the study suggest that to gain excellent knowledge there is a need to improve the education by conducting planned teaching , demonstration. So then we can expect the change in the results.

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