JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A descriptive study to assess the knowledge and practice of hypertensive clients regarding control & prevention of hypertension in J.A.H Hospital Gwalior M.P

Author: Mohammad Sohil
Associate Professor,Pushpanjali College Of Nursing, Agra
Email:mdsohil01610@gmail.com
Mob. No.:9368034477

Abstract:

Background:
Hypertension is one of the most common chronic lifestyle diseases and a major cause of morbidity and mortality worldwide. It is often called a "silent killer" because it may remain asymptomatic while causing serious damage to vital organs. Effective prevention and control depend largely on patients' knowledge and adherence to healthy practices.

Objectives:

1. To assess the knowledge of hypertension clients regarding the control and prevention of hypertension.
2. To assess the practice of hypertension clients regarding the control and prevention of hypertension.

Methodology:
A descriptive research design was adopted for this study. A total of 100 hypertensive clients were selected from J.A.H. Hospital, Gwalior, Madhya Pradesh, using a purposive sampling technique. Data were collected through a structured knowledge questionnaire and a practice checklist. The collected data were analyzed using descriptive and inferential statistics.

Results:
The results revealed that the majority of clients had average knowledge regarding the control and prevention of hypertension, while only a small proportion demonstrated good practice in terms of dietary management, physical activity, and medication adherence. A positive correlation was observed between knowledge and practice scores. Significant associations were found between knowledge and selected demographic variables such as education level and duration of illness.

Conclusion:
The study concluded that although most hypertensive clients were aware of the disease, their preventive and control practices were not satisfactory. Continuous health education and counseling programs are essential to

improve the clients' knowledge and encourage healthy lifestyle modifications for better control of hypertension.

Keywords:

Hypertension, Knowledge, Practice, Control, Prevention, Lifestyle, Clients, Health Education, J.A.H. Hospital, Gwalior

Introduction

Despite being preventable and manageable, many patients lack knowledge and fail to follow preventive practices. This study focuses on assessing the knowledge and practices of hypertensive patients in J.A.H. Hospital, Gwalior to help design better education programs.

Hypertension remains a major health issue worldwide and is one of the commonest diseases affecting our society. Its incidence is increasing day by day and is rapidly emerging as a major health problem in developing countries. In India the prevalence of hypertension in adult population varies from 3 to 10% and the average figure is 4.8%. High blood pressure is a major risk factor for cardiac, cerebral & renal diseases (Hanker 1987, Paul 1998.)

Back ground of the study

Hypertension is one of the major public health problems worldwide, contributing to heart attacks, strokes, and renal failure.

Blood is carried from the heart to all parts of our body in vessels called arteries. Blood pressure is the force of the pushing against the walls of the arteries. Each time the heart beats (about 60–70 times a minute at rest), it pumps out blood into the arteries. Our blood pressure is at its highest when **the heart beats, pumping the blood. This is called systolic pressure.** When the heart is at rest between beats, blood pressure falls. This is the diastolic pressure. Blood pressure changes during the day. It is lowest as sleep and rises when you get up. It also can rise when you are excited, nervous, or active.

Hypertension is silent killer and an invisible disorder in the community at least half the number of cases remain undiagnosed and ultimately report for the first time with some vascular complication cardiovascular diseases especially coronary heart diseases is the leading cause of death and disability in India. **(1988–1999 by third national health.**

nutrition examination survey done byBURT-V.L. WHELTON P.K. ROCCELA E.J. et al.).
In India increasing life expectancy of life more will survive to age at with cardiovascular diseases manifest. (**1998 Dodu S.R.A.**)

Hypertension has become a significant problem in many developing countries experiencing epidemiological transition from communicable to non-communicable chronic diseases (**Nissinen A. Bothings Granroth H. Lopez A.D. 1998, W.H.O. 1993, Omran A.R. 1988**)
The emergence of hypertension and other cardiovascular diseases as a public health problem in developing countries is strongly related to the aging of the population urbanization and socio-economic changes favoring sedentary habits, obesity alcohol conjunction and salt intake among other. (**Omran A.R. 1971, Aimikugbe 00 be 1987**)

In India data to well-planned study (**1977 Guptas S.P. et al, 1985 Amery A***et al*) suggested that prevalence of hypertension was 59.9%, 69.9% / 1000 in Male and Female in Urban population in 35.5% and 35.9%/1000 in Male and Female in Rural population respectively.

A number randomized controlled trials in developed country have established that treatment of high blood pressure reduced morbidity and mortality from cardio vascular diseases and stroke (**1985 Amery A., 1998 Donlof B.***et al.*)

A blood pressure reading 120/80 is considered normal in general blood pressure. Blood pressure below 120/80 mm/Hg can sometimes be a cause for concern and should be checked out by a doctor.

"Pre hypertension" is blood pressure between 120 and 139 for the top number, or between 80 and 89 for the bottom number. For example, blood pressure readings of 138/82 mm/Hg, 128/82 mm/Hg, or 130/86 mm/Hg are all in the "pre hypertension" range.

High Blood pressure is a blood pressure reading of 140/90 mm/Hg or higher. Both numbers are important. If one or both numbers are usually high, you have high blood pressure. If you are being treated for high blood pressure, you still have high blood pressure even if you have repeated readings in the normal range.

In many people with high blood pressure, when a single specific cause is not known this is called essential or primary high blood pressure.

The only way to find out if you have high blood pressure is to have your blood pressure measured, *using a blood pressure cuff* and stethoscope or electronic sensor, your doctor or nurse can take your blood pressure and tell you if it is high.

Even though high blood pressure usually has no sign and symptoms, it is dangerous if it continues over time. It is important to find out if you have high blood pressure, and if so, to keep it under control.

Classification of Hypertension:

1. Primary Hypertension
2. Secondary Hypertension

The factors influencing the development of essential hypertension are as follows:

Genetic and familiar, socio-economic related to social deprivation.

Dietary factor – obesity, high salt intake, high alcohol and caffeine, and hormonal factors.

Hypertension present a major area of intervention because it is a frequent condition and is amenable to control through both non pharmacological lifestyle factor and pharmacological treatment (**1998 Aubert, Benel P, Gervasoni, J.P., Ruelogora C.A.**)

NEED FOR THE STUDY

- As per WHO ,1 IN 4 men and 1 in 5 women had hypertension globally in 2016. In India, due to increasing urbanization, stress, unhealthy diet, lack of physical activity, and obesity, the number of hypertensives individual is rising, especially in urban areas like Gwalior.
- Early detection, awareness, and daily lifestyle practices. This study in J.A.H hospital will help in identifying the knowledge gap and inappropriate practices among clients and guide future nursing interventions.

Hypertension is one of the leading causes of death and disability among adults. In most of the industrial countries the prevalence of hypertension in adult population has been reported from 10–20% with 70% are of this being mild hypertension (Moser 1983).

According to Gupta (1978) in India the prevalence of hypertension in adult population varies from 3%–10% and the average figure is 4.8%.

The population at risk in India (more than 20 years) of age is 330 million according to 1981 population.

Hypertension is latent disorder in many people as it has a long symptomatic phase. The problem itself has no clinical sign and symptom until organ damage has taken place. High blood pressure is a major risk factor for cardiac, cerebral and renal diseases.

The mortality figures due to the potential problem are as follows: –

Cardiac Complication: - 60 to 75%.

Cerebral thrombosis 15 to 20%

Uraemia 15–10% and the remainder from dissecting aneurysm of the aorta of inter current diseases such a carcinoma, pulmonary, embolism or infection (**Fried 1976**)

Patient understanding of their diseases condition and lifelong care will enable them to fall problem when meeting new situation outside of the hospital, this will result in increased independence and better corporation with the therapeutic region. This understanding can be developed with the help of patient teaching programme facilitated the individual adoptive response to diseases and care studies in the past (**Knowles 1970 and Palm 1971**) have indicated.

Hypertension is an important health problem in the developed world because of its high prevalence. There is increasing risk of cardio vascular & renal disease.

Large majority of hypertension in developing countries are aware of their status and about 2/3 of them are on treatment but only half of those on treatment are well controlled.

So, the investigation developed special interest to conduct study to find out hypertensive cases and their knowledge and practices towards control and prevention of disease.

Emotional disturbances, obesity, excessive alcohol intake and over stimulation with coffee, tobacco and stimulation drug play a role but the disease is strongly familiar.

STATEMENT OF THE PROBLEM

A descriptive study to assess the knowledge and practice of hypertensive clients regarding control & prevention of hypertension in J.A.H Hospital Gwalior M.P

Objective of the study

3. To assess the knowledge of hypertension clients regarding the control and prevention of hypertension.
4. To assess the practice of hypertension clients regarding the control and prevention of hypertension.

Hypothesis

1. **H_0(Null Hypothesis):**
   There is no significant relationship between the level of knowledge and the practice of hypertensive clients regarding the control and prevention of hypertension.
2. **H_1 (Research Hypothesis):**
   There is a significant relationship between the level of knowledge and the practice of hypertensive clients regarding the control and prevention of hypertension.

ASSUMPTION OF THE STUDY

1. The study assumes that present knowledge and practice towards control and prevention of hypertension may not be adequate among the hypertension clients.
2. The clients adopt irreverent ways to solve problem of hypertension accurate knowledge and practice of individuals help to know how much awareness of hypertension is there in clients.

Limitations of the study

1. This study is limited to J.A, H Hospital Gwalior medical OPDs and other special OPDs in department of medicine. As well as outdoor cases.
2. The study is limited to hypertensive clients who were willing to participate in the study.
3. Study period limited to 07/01/2016 -21/01/2016.

Operational definitions

1. **Hypertension** – can be defined arbitrary as persistent level of blood pressure in which systolic pressure is above 140mm of hg & diastolic pressure is above 90 mm /hg.
2. **Knowledge** - adequate understanding about the predisposing causes which are responsible for hypertension.
3. **Practice** - it denotes the behavioural attitude towards control of hypertension by the clients for healthy life.
4. **Control** – control refers to the planned restriction in factors responsible for prevention of hypertension.
5. **Prevention**- prevention refers to the prevention or methods adopted to control the pre-disposing factors of hypertension.

Conceptual framework

The conceptual frame work of the present studies based on halls care, core, care model which provides the basis of care.
The halls model consists of we interlock system widen the core circle, care circle and cure circle.

The core circle refers to the knowledge of clients regarding hypertension, sign symptoms which helps them to prevent themselves of control from the threatening problems. Diet control also helps to reduce the complications. Knowledge regarding stress, obesity also helps to reduce hypertension.

CARE CIRCLE

Refers to the practices which Hypertensive patient's uses to reduce the problem as yoga, medication, low salt, low fat and high Fiber diet. The practice of regular check-up helps to reduce blood pressure.

CURE CIRCLE

Refers to the control and preventive aspects of Hypertensive the relaxation, diet control and avoidance of alcohol and caffeine and regular follow up treatment and avoidance of over exertion and obesity helps to prevent hypertension.

Diagrammatic Representation-

Core → KnowledgeCare → Practice

⇨

Cure → Prevention & Long-term Management

MODULE SUMMARY

Circle Type	Focus Area	ExampleComponents
Core	Client Knowledge	Causes, Symptoms, Risk factors
Care	Daily Management Practices	Diet, Exercise, Medication
Cure	Long-Term Control & Prevention	Check-ups, Stress control, Lifestyle change

SUMMARY

This chapter deals with the back ground of the study, need of the study, statement of the problem, objective, Assumption, limitations of the study operational definition and conceptual framework.

Chapter-II

Review of literature

Review of related literature is a vital aspect of Scientific Research. Review of literature is an important step for any research project from beginning to the end. The review involves the systematic identification, location, scrutiny and summary written material that contains information on a research problem. Reviewing literature is important in broadening the understanding and gaining an insight necessary for development of board conceptual context into which a problem fits. (Polit and Hungler 1999).

The literature review for the present study helped the researcher to gain a deeper insight of the problem, methodology, plan of data, analysis and to become familiar with the findings of research. The investigator did an extensive review of research and non-research literature related to present study and medlar Medline research was also done. Literature review was done and presented under the following heading:

1. Literature related to magnitude of problem in world & in India.
2. Literature related to cause, risk factor and complication of hypertension.
3. Literature related to prevention and treatment of hypertension.
4. Literature related to knowledge awareness and practice of hypertensive clients regarding prevention and control of hypertension.

In 1896, Alburt distinguished hypertension from Bright's disease and pointed out that it was a separate entity. Almost simultaneously, Riva-Rocci developed the prototype of the modern Sphygmomanometer and in 1905 the auscultatory technique of indirect B.P. measurement was described by Korotkoff.

An elevated arterial pressure is probably the most important health problem in developed as well as in developing countries. It is a common, asymptomatic, readily detectable, usually easily treatable and often leads to lethal complications if left untreated.

The term "Hypertension" signifies raised systemic blood pressure. The definition of raised BP using any cut off point is arbitrary and there has been multiple proposed cut off points for the definition of raised BP. Hypertension is a complex syndrome comprising many abnormalities including obesity, abnormal lipid metabolism, insulin resistance, altered glucose metabolism, arterial stiffness and renal disease.
The sixth joint national committee on prevention, detection, evaluation and treatment of High BP (JNC VI) has published a revised classification and stratification system for hypertension based on levels of SBP and DBP, presence or absence of other risk factors and presence or absence of target organ damage or clinical cardiovascular disease.

Gupta et al studied the levels of awareness and characteristic of aware and unaware hypertensives, 7630 employees in Shimla town were screened for hypertension. Hypertension was detected in 2535 cases of which 22.05% were aware. The aware hypertensives were predominately overweight. This low level of awareness highlights the need for comprehensive hypertension education programme to be taken up at the national level.

Kalavathy et al performed a cross-sectional survey of random sample of 357 community dwelling elderly individuals in Kerala and assessed and compared the variations in prevalence, awareness, treatment and control of hypertension according to age, sex and place of residence of the subjects. The overall prevalence was 51.8% and fewer than half of hypertensive subjects were aware of their condition or were on treatment and only a quarter of the treated hypertensives achieved adequate control of B.P. They concluded that a National Hypertension programme targeted to meet the imminent public health challenge posed by hypertension seems warranted.

Rwhjyik Sl et al studied cardiovascular epidemiology of hypertension in the community, prevalence, awareness, treatment and control of hypertension in the Pol-MONICA project in rural and urban areas in Poland and the US.
About 9000 white persons aged 45–64 was selected from selected areas. Hypertension awareness, treatment and control were better in US than in Polish samples. In US more than 80% of subjects with hypertension were controlled whereas in Polish samples ≤ 17% of men and 16% of women were controlled. They concluded that hypertension control programmes in the US are almost certainly responsible for much of the observed differences.

Pham TM et al studied the awareness and understanding of hypertension and cardiovascular disease in the US Vietnamese community. Data collected from focus groups, family interviews and individual interviews of community members and health care providers during 1996 and 1997. Awareness of hypertension was higher than expected but low for heart disease. Understanding the cause and primary prevention of these illnesses was low as was health care utilization.

Nothwehr F et al studied in Minnesota Heart Health Programme,
the prevalence of health behaviours related to hypertension in three blood pressure treatment groups. Data were collected from men and women aged 25–74 over a period of about 10 years (1980–1990). Significant differences were found between groups for knowledge about and control of hypertension, for body mass index, intent to lose weight, physical activity, sodium and fat intake and total serum cholesterol level.

Burt VL et al studied the secular trends in the distribution of blood pressure and prevalence of hypertension in the US adults and chances in rates of awareness, treatment and control of hypertension. A cross-sectional survey with both an *in-person interview* and a medical examination was conducted between 6530 and 13645 adults aged 18 through 74 years in each of four separate national surveys during 1960–62, 1971–74, 1976–80 and 1988–91. They concluded that hypertension prevalence in the US has declined progressively since 1971. Hypertension awareness, treatment and control also have improved tremendously during the same period.

Steven et al surveyed south Austria general practitioners to investigate and report management of patient with hypertension. Survey showed substantial differences between general partitions
In their knowledge about hypertension and in there reported practices for diagnostic levels.

Wang Z et al (2001) studied the differences in KAB among cardiologists, neurologist and other physicians, 7222 potential participants were selected by random sampling. Result showed that respect to knowledge and attitude regarding hypertension, 15.3% of cardiologist, 15.2% of neurologist and 7.2% of other internals selected the correct answer of all question. Cardiologist showed the highest and other internals the lowest percentage of correct responses

Schnieder et al (2002) reviewed the knowledge of internist and GPs about diagnosis and treatment of hypertension in Germany, the level of awareness about diagnosis and treatment of arterial hypertension is in sufficient among internists and GPs.

Sans S et al (1986-96) the MONICA – Catalonia study.
This health survey was done among general population aged 25-64 in 1986-88. 1990-92. and 1994-96 regarding awareness treatment and control of arterial hypertension. Between 1986 & 1996. the awareness, treatment and control had substantiality improved.

Jo et al(2000). The ANSAN study was done to determine prevalence, and treatment and controlled of hypertension and its risk factors in an urban Korean population. The rates of awareness and controlled are relatively low, suggesting nationwide Demond for preventing & controlling high BP.

Chapter -III
Methodology

Research approach –
Quantitative research approach.

Research design- Descriptiveresearch design.
Niev viablomy M.R (1993) ‘said- the research design is the plan for how the study will be conducted.

Variable of the study
Independent variable-
It is outcome variables the pre-assume effect caused by dependant variable. The independent variable in these studies to assess the knowledge and practice of hypertensive clients.

Dependant variable–
It is outcome variable the pre assume effect cause by independent variable
The dependant variable in this hypertensive client of age between 25-45 years.

Setting of the study
This study was conducted in medical OPDs and other speciality OPDs of department of medicine in J.A.H hospital Gwalior (M.P).

Population

All hypertensive clients visiting or admitted in J.A.H hospital, Gwalior

Sample & sampling technique

Sample size-

Sample Size: 100 (can be adjusted based on feasibility)

Sampling criteria-

The study sample were selected using the following criteria.

1. Hypertension client those who are attending medical OPDs.
   And other specialities OPDs of the department of the medicine
   J.A.H hospital Gwalior M.P. state during the month of 10/01/2016.
2. patients who were willing to participate in the study were included in the sample.

Sampling technique

Non-probability purposive sampling

Tools for data collection

- **Section -A Demographic profile**
  Age Gender
  Education Occupational
  Duration of illness
- **Section-B**
  Structured knowledge questionnaire on hypertension
- **Section-C**
  Structured practice checklist (Diet, Exercise, medication, lifestyle habits).

Data collection procedure

- Written permission will be taken from the hospital authority.
- Informed consent will be obtained from participants.
- Data will be collected by interview method or self-administered questionnaire.
- Each session will take 20-30 minute per participants.

Data analysis

- **Descriptive statistics:**

Frequency, percentage, mean, SD

- **Inferential statistics:**

Chi-square test, person correlation co-efficient.

Ethical consideration

- Ethical clearance from institutional ethics committee.
- Informed written consent from participants.
- Confidentiality and anonymity maintained.
- Right to withdraw respected.

REFERENCES:

1. WHO. Hypertension fact sheet. 2023.
2. Gupta R. et al. Awareness, treatment, and control of hypertension in India. J Hum Hypertense. 2021.