

"A descriptive study to assess knowledge regarding hypertension among senior citizen in elderly residing in Najafgarh, New Delhi"

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INTRODUCTION

Sometimes ago, an aged man called as an old man. Nowadays to avoid offense, he is called a senior citizen. In most developed societies, adult are declared to be "old" when they reach the age of 60-65yrs. Older people have limited generative abilities and are more prone to disease, syndromes and sickness than other adult.

Number of elderly is also increasing and it is coinciding with increased risk of hypertension. Hypertension is a major worldwide public health problem because of its high prevalence with vascular disease, premature death, stroke, renal diseases and retinopathy. Hypertension is defined as a medical condition in which the blood pressure in the arteries is elevated exceeding 140 over 90 mmHg. This elevation makes the heart work harder than usual to circulate blood through the blood vessels. Various risk factors have been associated with hypertension including. Age where majority of cases of uncontrolled hypertension are amongst elderly people, sex, race, decrease physical activity, obesity, smoking, dietary, hormonal changes which play a key role in the development of hypertension. Identifying these risk factors may help in create strategizing modalities for reducing preventable risk factors such as weight, excess salt intake, cigarette smoking and alcohol use.

A study conducted in **Seychelles island (Indian oceans) 1998**, on knowledge of hypertensive patients had shown that 50 percent patient were aware of their condition, 34 percent were treated and 10 percent had controlled blood pressure.

Vijaylaxmi at 1996, shows low knowledge mean score among 50 hypertensive client that is 17.1, 0.08 with maximum score of 55 thus, high knowledge defect among hypertensive patients indicate a low awareness and all hypertensive patients expressed a desire to know about their disease condition.

Vergara at 2004 conducted a study to assess the awareness about factor affecting the management of hypertension and found that limited awareness of hypertension emerges as great barrier to blood pressure control.

The goal of hypertension management is to prevent short and long term complications by achieving and maintaining the blood pressure at 140/90mmhg or lower.

These patients need to be aware of various aspect of hypertension; especially of risk factors which may be modified. This will assist for bringing necessary modifications in lifestyle behaviour.

Lifestyle behaviour modifications are the first line of intervention for all patients with hypertension, in combination with pharmacological treatment which also Important for the disease management to control its progress and prevent short and long term complication. Therefore, lifestyle modifications should be actively performed not only before but also after starting of antihypertensive medications to improve patients controlling outcomes.

Lifestyle modifications help to control hypertension disease for hypertensive patients and prevent high blood pressure from developing in non- hypertensive people. Also they are instrument which is important to improve effective risk reduction for hypertension complications through controlling of some modifiable risk factors as, smoking raised cholesterol level, obesity, decrease physical activity, and diet. Lifestyle modifications were including weight control, limitation of alcohol consumption, increased physical activity, increased fruits and vegetable consumption, reduced total fat and saturated fat intake, and smoking cessation.

Also dietary approach to control hypertension, (DASH) eating plan which are effectively lower hypertension should be encouraged for these patients. It emphasizes fruits, vegetable, and low fat dairy product and reduces in fat and cholesterol, other dietary factors, such as a greater intake of protein or monounsaturated fatty acids, may also reduce blood pressure.

Because hypertensive patients are facing many health care issues and challenges such as less awareness and health education which increase difficulties to change their lifestyle behaviour such as modification of diet, stop smoking, increase physical activity and decrease weight.

Therefore these patients should be targeted for specific assessment and intervention to overcome any challenges and obtained adequate a health awareness about hypertension and understanding of lifestyle behaviour modifications which play an important role in the ability to successfully control of disease, its symptoms and prevent short and long term complications. So the aim of this study was to assess level of knowledge related to hypertension among senior citizen people.¹

Need of the study

A study by Doris, Samuel and Stephen (2007) studied the relation between knowledge about hypertension and life modification in 591 hypertensive patients.

Hypertension is an iceberg disease. It is continually disturbed variable in population. W.H.O survey (2005) showed that in India the knowledge was 59.9 and 69.9 per 1000 in males and females in urban area and 35.5 and 35.9 per 1000 in males and females in rural area.

Hypertension is an important risk factor for cardio vascular and renal diseases including stroke coronary heart disease, heart failure and kidney failure, it has been estimated that almost a third of B.P – related deaths occur from coronary heart disease.

Lifestyle can be modified only by individual's own decision, this can be achieved through adequate knowledge about hypertension

As per above studies it shows knowledge about of hypertension among elderly people, hence researcher selected the study to assess the knowledge of hypertension.¹⁶

Problem statement

A Descriptive Study to assess knowledge regarding hypertension among senior citizen residing in Degupur village under RHTC New Delhi.

Aims of study

The main purpose of study is to detect knowledge of Hypertension among senior citizen people.

Objectives

1. To assess the knowledge regarding hypertension among senior citizen residing in Degupur village under RHTC, New Delhi
2. To find association of hypertension with socio demographic profile of senior citizen residing in Degupur village under RHTC, New Delhi.

Operational definition

Elderly: A person in the age group of sixty years and above

Hypertension: Blood pressure is the force exerted by the blood against the walls of the blood vessels. The pressure depends on the work being done by the heart and the resistance of the blood vessels. It define hypertension as a blood pressure higher than 140 over 90 mmHg.

Knowledge: Knowledge is a familiarity, awareness, or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning.

Assumption

The senior citizen residing in Degupur village under RHTC, New Delhi may have knowledge regarding hypertension.

Delimitation

- The study is limited to assess knowledge of hypertension among senior citizen people residing in Degupur village under RHTC, New Delhi.
- Study period is limited to 1 week.
- The sample size is limited to 30, to assess knowledge regarding hypertension in senior citizen people.

REVIEW OF LITERATURE

Review of literature play an important role in the development of research project. An extensive review of literature provides the investigator a deeper insight into the problem. It is the key step in research process.

Basavanthappa BT (2007) stated that review of literature is a broad, comprehensive, in depth systematic and critical review of scholarly publications, unpublished scholarly print material, audio-visual material and personal communication. a review of literature in done keeping in view the problem under study and the objectives to develop the research design, selection of the tool and analysis of data.

The review related to hypertension is as follow:

Kaur G et.al, (2015) conducted a quasi-experimental study was conducted to assess and evaluate the effectiveness technique on blood pressure in elderly people in selected rural area in Haryana. The purposive sampling technique was used gather data by using Glazer life style questionnaire and blood pressure record sheet for elderly people (30 in experimental and 30 in comparison group).Pre-test was conducted on day -1 in both groups and guided imagery technique was administered with CD in experimental group for 1 hour daily a week and elderly people were motivated for self practising after that. Post-test was taken on 10th day of pre-test .Findings revealed/ result that there were significant differences in pre-test ,post-test -1 and post-tests-2 of systolic and diastolic blood pressure was 34.39 and 19.53 was found statistically at 0.05 level of significant in experimental group whereas 0.89 and 0.60 not significant in comparison group and pre-test ,post-test -1 and post-test 2 of value score was 217.14 to be statistically significant at 0.05 level of significance in an experimental group whereas 1.055 level not significant in a comparison group .The study conclude that imagery technique had significant effect on blood pressure among elderly people.⁵

Kanageswari M.R, Pushpakala K.J, (2014) conducted the study to assess the effect of Reiki Therapy in reducing the blood pressure the among younger people in selected village at Thiruvallur district. The sample size was 30.The sampling technique used for selecting participants was simple random sampling technique. Structured questionnaire and standard sphygmomanometer was used as tool for this study. There was a statistical significant change in blood pressure among young adults and with post-test value of 17.47 at p more than 0.0001. The result revealed that changes in blood pressure among young adult with pre hypertension.⁶

Doshi D R, Yogesh A J, (2013) a descriptive study to assess knowledge of hypertension and depression between adult aged groups. The total 60 samples were taken out of which 30 were adult (20-59 yrs) male and females and 30 were aged (60 years and above). The research tool for depression, Beck depression inventory was used .Result reveals that significant difference in depression and hypertension reveals -0.70 negative correlations and lack of knowledge about hypertension.⁷

Anita R M et.al (2012) conducted a cross sectional study was to assess the morbidity profile of elders in rural area at Chennai. The sample size was 210 elders in which 132 were females and 78 were males from 9 old age homes selected using simple random sampling technique. The data was collected by interviewing them using pre designed and pretested questionnaire as well as by clinical examination (monitoring blood pressure through sphygmomanometer). The study revealed that overall (96.7 percent) of elderly people was suffering from disease hypertension.⁸

Aruna B et.al (2011) A descriptive study was conducted by Govt. College for women ,Jammu to understand the feelings of elderly living in rural area and home within the family setup at Jammu. The sample size was 60 in which 30 from old age home and 30 selected from living in the family and the sampling technique was purposive sampling technique. The data was collected using interview schedule and observation technique. Majority (63.3 percent)of the elderly women living in the family set up felt that it is a period of dependency (16.6 percent) felt economically insecure, (20 percent) perceived home as a period of loneliness. The researcher concluded that feelings of elderly women living in family and institution are differed.⁹

Vishal J et.al (2010) conducted a cross sectional study to assess knowledge of hypertension among aged people in Surat city. By using probability sampling a total of 105 elderly people were selected and interviewed comprising of 35 people each from the elderly living in the old age home. Out of 105 samples in which 43 were males and 62

were females. The interview was done by using designed questionnaire. The knowledge of hypertension was moderately high (39.04 percent) among elderly.²

Dwala A K (2010) conducted a cross sectional study to assess the morbidity pattern in inmates in urban area of Nagpur. The study was carried out among all 221 inmates of rural area. The methodology comprised of interview, clinical examination and laboratory investigation. Percentage and chi-square test were use for data analysis. 179 (81 percent) were dependent economically. The reason for admission to old age home was loneliness in (34.84 percent). The most common morbidities were found in hypertension 83 (37.56 percent), cataract in 69 (31.22 percent), diabetic mellitus in 28 (12.67 percent) inmates. The results of study showed that measure portion of elderly were dependent economically, neglected, living alone and suffering from various health problems.³

Radwan (2010) A cross sectional study was carried out among cancer patients at to Malaysian referral hospitals. A total number of 200 cancer patients participated in this research study. The majority of the patients was in the second stage of cancer and diagnosed with cancer 2 years ago (47.55, 37.5 percent respectively). The prevalence of CAM (complimentary /alternative therapy) used among study participant was found to be 14 percent. The majority of cancer patients reported that CAM is beneficial for them. There is no side effect of CAM and they were satisfied with CAM (65.5 percent, 92 percent and 80 percent respectively).¹⁰

Jayapouri (2009) conducted a study to assess psychological stressor and burden of medical conditions in older adults in Iran. A convenient study sample of 120 elderly subjects was recruited for the study. Data were collected by a trained research assistant using perceived stress scale, cumulative illness rating scale, geriatric demographic questionnaire. Participants perceived more level of stress than the average for their age. In the current study, the burden of medical condition was significantly correlated with the level of perceived stress ($r=.197$, $p=.044$). The result of the study suggested that the psychological stressor contribute to poor health outcome in older adult.¹¹

Sreevani R (2007) conducted the descriptive study to assess the hypertension problem among elderly people in selected rural area at kolar. A purposive sampling technique was use to select 50 elderly people as a sample. Socio demographic data and general health questionnaire were used as tools. The results revealed that (38 percent) of the subject suffering from hypertension problem, (16 percent) of them were having minor health problems, (46 percent) were healthy.¹²

METHODOLOGY

The research methodology is the most important part of research as it is the framework for conducting a study. It indicates the general pattern for organising the procedures together valid & reliable data for an investigation .This chapter deals with the methodology adopted for “**A Descriptive study to assess knowledge regarding hypertension in elderly people residing in Degupur village under RHTC, New Delhi**”.

Research Approach

For the present study the Non – experimental approach was considered appropriate as it aimed to assess the knowledge regarding hypertension among senior citizen residing in Degupur village under RHTC, New Delhi.

Research Design

For the present study descriptive research design utilized to achieve the objectives of the study.

Research setting

The present study was conducted in Degupur village under RHTC, New Delhi.

Targeted population

Target population was senior citizen in Degupur village under RHTC, New Delhi.

Sample and sampling technique

In this study convenient sampling technique was used to select the sample. Total sample of 30 elderly people was selected for present study.

Variables

Dependent: knowledge regarding hypertension

Independent: socio demographic variables

Inclusion criteria

- Senior citizens were taken to participate in the study.
- Those senior citizens who were willing to participate in the study.

Selection and Development of Tool

Part 1 – Socio Demographic Data

- a. Age, b. Gender, c. Occupation, d. Marital status, e. Educational status, f. Type of family, g. Religion, h. Dietary habit, i. Income, Other habit.

Part 2 – knowledge related to hypertension

Structured questionnaire was prepared to assess knowledge regarding hypertension among senior citizen. It consisted of total 30 MCQ. Each correct answer carries one mark and wrong answer carry zero marks. So, maximum knowledge scores were 20 and minimum knowledge score is 0.

SCORING

Poor knowledge 0-10

Fair knowledge 10-20

20 above good knowledge

Criterion Measure

Knowledge regarding hypertension.

Validity of tools

The content validity of tool was done.

Collection Procedure

Data collection was conducted from 6-7 November 2017. The sample consist of 30 subjects. Convenient sampling was used to select samples from the population. Prior to the data collection procedure formal permission was obtain from RHTC, Najafgarh. The structured tool was used to collect data. Before the data collection, the investigator gave self introduction to the subjects and explained the purpose of gathering information; a good rapport was established with the subjects. They were assured that their responses will be kept confidential and information will be used usually for research purposes. Written consent was taken from the senior citizens. The time given to each respondent was average 15-30 minutes

Ethical Consideration

- Written permission was taken from vice principal of school of Nursing.
- Written consent was taken from the senior citizens who were willing to participate in the study. To gain their confidence, they were told that their responses will be kept confidential and the information will be used only for research purpose. They were also informed about their right to refuse from participating in the study.

Plan for data analysis

Analysis of the data was done in accordance with the objectives. It was done by using descriptive and inferential statistics such as mean, percentage, standard deviation. Pie and bar diagrams were used to depict the finding of the study.

Summary

This chapter dealt with research approach, research design, research setting, sampling method, sample size, development and description of tool, validity of the tool, criterion measurements, ethical approval permission taken for the study, procedure for data collection, and investigator plan for data analysis.

ANALYSIS AND INTREPRETATION OF DATA

This chapter present presents the analysis and interpretation of data collected from the 30 senior citizen residing in Degupur village, New Delhi, in order to assess knowledge of hypertension among senior citizen. According to **Polit & Hungler (1995)**, data analysis is the systemic organization and synthesis of research hypothesis using those data. The purpose of analysis is to reduce the data to an intelligible and interpretable form so that research problem can be studies and tested. **Kerlinger (1979)** defined analysis as categorizing, ordering, manipulating and summarizing of data obtain answer to research question.

It is pertinent to recall the objectives and assumptions of the study as analysis and interpretation are based on them.

Objectives

- 1) To assess the knowledge regarding hypertension among senior citizen residing in Degupur village under RHTC, New Delhi.
- 2) To find association of hypertension with socio demographic profile of senior citizen residing in Degupur village under RHTC, New Delhi.

Assumptions

The senior citizen residing in Degupur village under RHTC, New Delhi may have may knowledge regarding hypertension.

Data Related To Sample Characteristics

This section describes the characteristics of sample subjects. The sample consisted of 30 senior citizens residing in Degupur village under RHTC, New Delhi. Percentage was computed for describing the sample characteristics, which is presented in Table 1

Table 1 Frequency and percentage distribution of socio demographic

S.N O	VARIABLES	NO.OF SUBJECTS	PERCENTAGE
1.	Age a. 60-69 years b. 70-79 years c. 80 above	16 11 03	53.33 36.66 10.00
2.	Sex a. Male b. Female	12 18	40.00 60.00
3.	Occupation a. Retired b. Business c. Farmer	08 03 19	26.66 10.00 63.33
4.	Marital status a. Unmarried b. Married c. Widow d. Divorce	02 23 04 01	6.66 76.66 13.33 03.33
5.	Education a. Illiterate b. Primary c. Middle d. Secondary e. Higher	05 05 08 02 10	16.66 16.66 26.66 06.66 33.33
6.	Type Of Family a. Nuclear b. Joint c. Extended d. Living alone	08 16 04 02	26.66 53.33 13.33 6.66
7.	Religion a. Hindu	30	100
8.	Dietary Pattern a. Vegetarian b. Non-Vegetarian	28 02	93.33 06.66
9.	Other Habit a. Tobacco b. Smoking c. Alcohol d. None of the above	02 09 03 16	6.66 30.00 10.00 53.33
10.	Monthly Income a. 10,000-15,000 b. 15,000-25,000 c. 25,000 above	21 07 02	70.00 23.33 06.66

Table 1: depicts that out of 30 senior citizens residing in Degupur village were in age group of 60-69 years, 36.6% were in age group 70-79 years and remaining 10% of senior citizen were in age group of 80 & above. Out of them 60% of senior citizen were females and 40% were males .Majority i.e. 63.3% of senior citizen were farmers , 26.6% of senior citizen were retired , remaining 10% of senior citizens were in business . Majority i.e. 76.6% of senior citizen were married, 13.3 % were widow.. Majority i.e. 33.3 % of senior citizen was in higher class, 26.6% of senior citizen was in middle class, 16.6% were in primary class, 16.6% were in category of illiterate, 6.6% of senior

citizens were in secondary class. It was found that 53.3% were in joint family, 26.6% of senior citizens were in nuclear family, 13.3% were in extended family, 6.6% were alone. Majority i.e. 100% of senior citizen belonged to Hindu religion. It was found that 93.3% were vegetarian, 6.6% were non-vegetarian, Majority i.e.53.3% senior citizens were not having any other habit, 30% were in smoking habit, 10% of senior citizen was in alcohol habit, and 6.6% were having habit of Tobacco. It was found that 70% were having monthly income Rs. 10,000-15,000 23.3% were in Rs. 15,000- 25,000, 6.6% were having Rs 25,000 above monthly income .

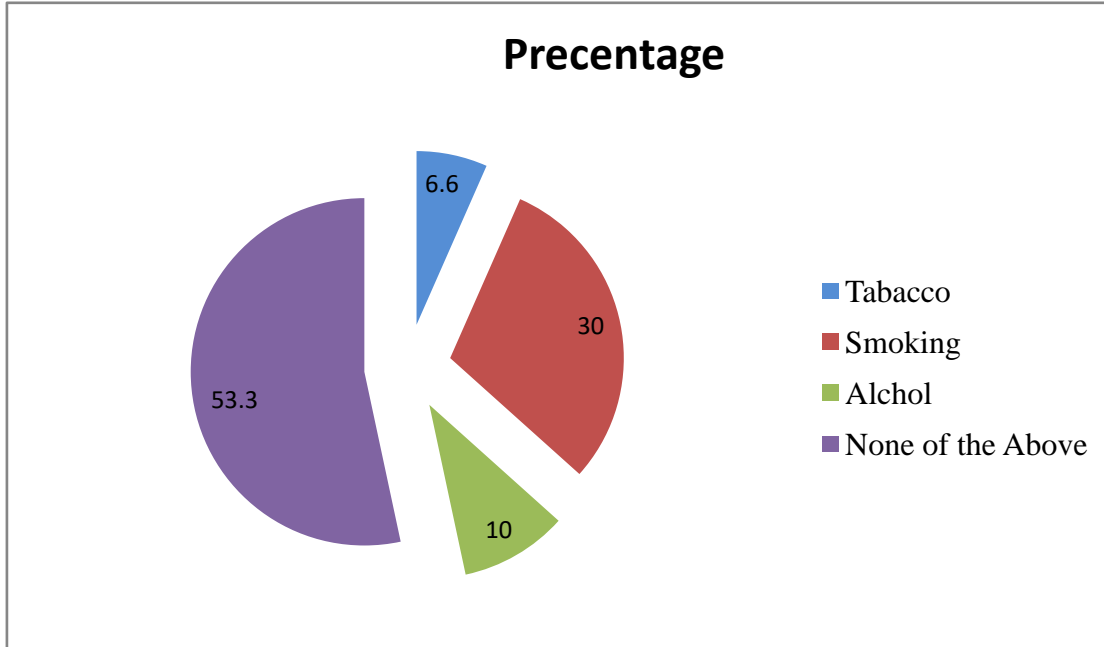


Figure 1: Distribution of senior citizen as per their Habits

Figure 1.depicts that nearly half i.e. 53.3% of none of the above, 30 % were in smoking, 10% were in alcohol, 6.6% were in tobacco.

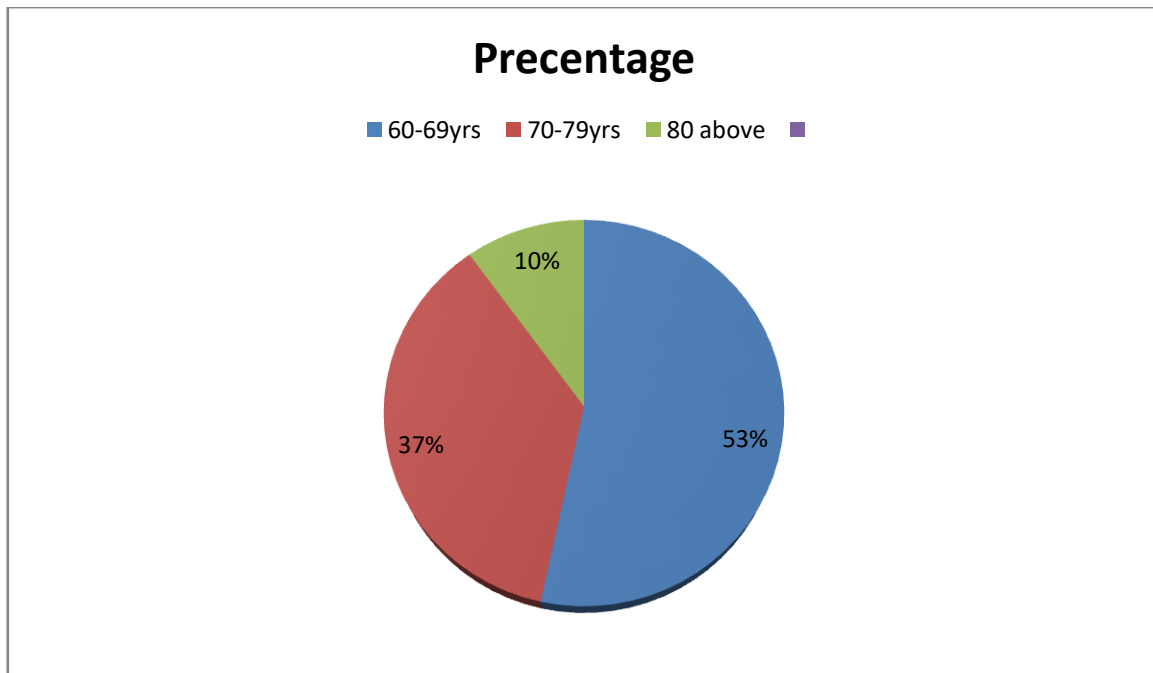


Figure 2: Distribution of senior citizen as per their age (in years)

Figure 2 Depicts that nearly half i.e.53.3% were in age group of 60-69 yr, 36.6%were in age group of 70-79 yr, 10% were in the age group of 80 above.

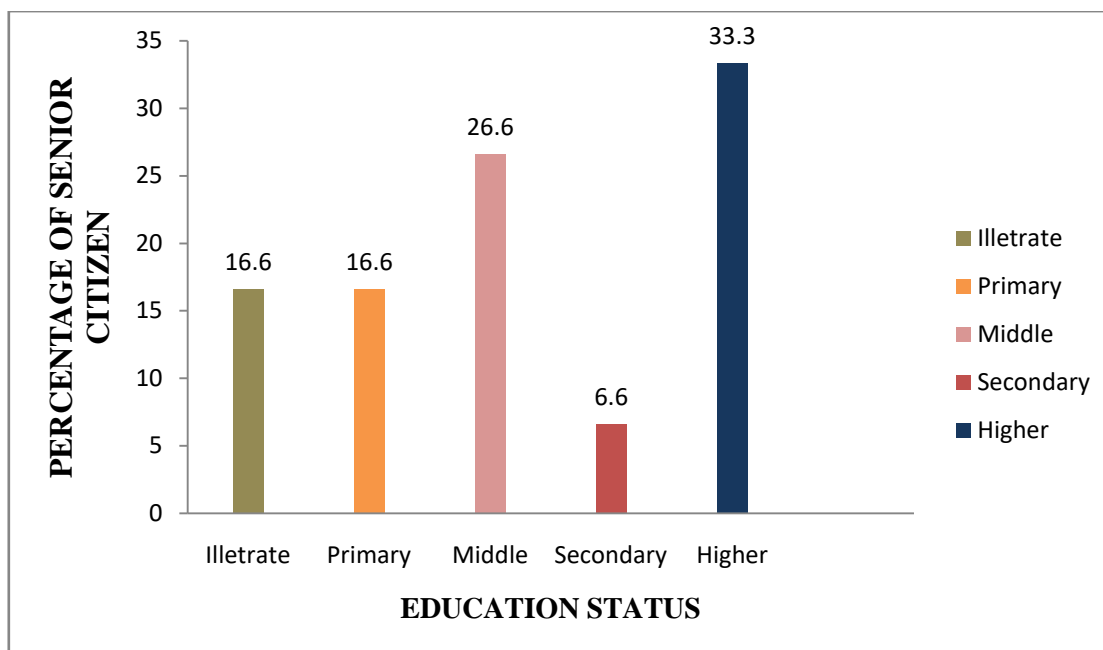


Figure 3: Distribution of senior citizen as per their education

Figure 3: Depicts that i.e.; in higher 33.3%, 26.6% were in middle, 16.6% were in primary, 16.6% were in illiterate, 6.6 % were in secondary.

Table: 2 Mean, Mode, Median and standard deviation of pre test knowledge score on structured questionnaire

Mean	Mode	Median	Standard Deviation
19.4	14	20	51.1

Table 2: Depicts that overall mean is 19.4, mode is 14, median is 20 and overall standard deviation is 51.1.

DISCUSSION

A descriptive study was undertaken to assess the knowledge regarding hypertension among senior citizen residing in Degupur, Najafgarh New Delhi.

The analysis of socio demographic profile of senior citizen revealed that most of 53.3% of senior citizen belongs to age group 60-69 years, 26.6% of senior citizen are middle educated, 53.3% senior citizen are living in joint family, 100% senior citizen are Hindu, 63.3% senior citizen are farmer, 76.6% senior citizen are married, 60% senior citizen are female, 93.3% senior citizen are vegetarian, 53.3% senior citizen are not having other habit, 70% monthly income are Rs .10,000-15,000.

Similar findings had been reported by study conducted in **Katoch M.L (2006)** that 50.3% of senior citizen belongs to age group 60-69 years , 54.6% were females .

Objective 1: To assess the knowledge regarding hypertension among senior citizen residing in Degupur village under RHTC, New Delhi.

Analysis revealed that senior citizen has (53.3%) very good knowledge regarding hypertension. Almost similar findings of knowledge had been reported by study conducted in **Vishal J (2010)** that (39.4%) senior citizen having knowledge regarding hypertension.

Objective 2: To find association of hypertension with socio demographic profile of senior citizen regarding in Degupur village under RHTC, New Delhi.

In present study association of hypertension with gender indicates that female perceived more knowledge (60%) as compare to males (40%). Almost similar findings with gender indicates by study conducted in **Sao Paulo brazil (2003)** that in female (51.5%), as compare to male (37.9%) .

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter deals with summary, conclusion, recommendations and limitations of the study. Further it includes implications for nursing practice, nursing education, nursing administration, and recommendation for further nursing research.

The objectives of the study were:

- To assess the knowledge regarding hypertension among senior citizen residing in Degupur village under RHTC, New Delhi.
- To find association of hypertension with socio demographic profile of senior citizen residing in Degupur village under RHTC, New Delhi.

A Descriptive research design was used for this study. Total 30 subjects were selected for the study through convenient sampling technique. The tool used was divided in two parts.

The two main parts of tool were:

Part A. Socio Demographic profile of the elderly

Part B. Knowledge related to Hypertension.

Major Findings of Study

The findings of the present study revealed that:

- Majority i.e. 53.3% of senior citizen belongs to age group 60-69 years, 26.6% of senior citizen are middle educated, 53.3% senior citizen are living in joint family, 100% senior citizen are Hindu, 63.3% senior citizen are farmer, 76.6% senior citizen are married, 60% senior citizen are female, 93.3% senior citizen are vegetarian, 53.3% senior citizen are not having other habit, 70% monthly income are Rs .10,000-15,000.
- Majority of senior citizen have very good knowledge i.e. 46.6%, among 40% of good knowledge, and 13.33% of poor knowledge.

CONCLUSION

Overall study brought out the observations on perceived knowledge of hypertension among senior citizen. The study concluded that majority of senior citizen who having good knowledge regarding hypertension. Knowledge regarding hypertension was very good among senior citizen.

Implication of the study

This section of the research report focuses on nursing implication, it includes the specific suggestions for nursing practice, nursing education, nursing administration and nursing research.

Nursing Practice

- Education on hypertension provides unique opportunities for effective prevention because elimination of the exposure may prevent the hypertension.
- Nurses, have the opportunities to effect primary prevention efforts in the family by collecting basic hypertension history, inspection of family and knowledge tests for prevention of hypertension.
- The nurse can also conduct home visits to the family to recognize any other factor leading for hypertension.
- Assessment of family knowledge on prevention of hypertension helps the nurses to provide counselling services to protect their health.
- The study findings simply that there is need for health education programmed to be carried out by nurses to create awareness among the family regarding hypertension and risk involved in their family.

Nursing Education

- Nursing education curricula should lay emphasis on developing various assessment of knowledge of hypertension among senior citizen. So, that senior citizen can gain knowledge regarding hypertension.
- Nurse educators should have responsibility in upgrading the knowledge of senior citizen on hypertension.

Nursing Administration

- Nursing has become a complex and highly varied practice discipline with the rapidly growing well developed and well documented scientific and humanistic knowledge base.
- The nurse administrator can organize a screening programme to screen the cases for hypertension.
- The nurse administrator can organize in service education for ANM regarding, early detection, knowledge of hypertension, its complication & its prevention.

- Administration should motivate nursing personal to develop leadership skill and long-lasting collaborations with community resources.

Nursing Research

- In Indian, set up very few studies have been conducted among senior citizen. Therefore Indian nurses should take interest in conducting research studies on knowledge regarding hypertension among senior citizen. The research methodology, tools and findings of the study can be added to nursing literature that can be served as referral for further studies.

Limitations of the Study

The study limited to:-

- Small sample size i.e. 30 senior citizen.
- Sample was studied from conveniently selected senior citizen who restricts the generalization of the study.
- Investigator relies on information provided by senior citizen.

Recommendations of the Study

- A correlation study can be conducted among senior citizen with hypertension with various life- style modifications.
- A comparative study can be done in urban and rural areas to assess differences in their knowledge with larger samples.
- A similar study can be conducted to identify knowledge of hypertension among senior citizen.

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