

Research Article

# A Study to Determine the Prevalence of Common Health Problems Among Senior Citizen Residing in a Selected Rural Area of Rohtak District

Lalita Grover

College of Nursing, PGIMS, Rohtak, India. **DOI:** https://doi.org/10.24321/2455.9318.202311

# INFO

#### E-mail Id:

groverlalita312@gmail.com

#### How to cite this article:

Grover L. A Study to Determine the Prevalence of Common Health Problems Among Senior Citizen Residing in a Selected Rural Area of Rohtak District. Int J Nurs Midwif Res. 2023; 10(3):6-10.

Date of Submission: 2023-10-09 Date of Acceptance: 2023-11-15

# ABSTRACT

Common health problems are widely prevalent in developing countries. It is estimated that In India the elderly population accounted for 8.2% of the total population in 2011 and the number is expected to increase dramatically over the next four decades (19% in 2050). According to census 2011 there was nearly 104 million elderly persons aged above 60 years or above. Aging is generally defined as a process of deterioration in the functional capacity of an individual that results from structural changes with advancement of age.<sup>1</sup>

**Objectives:** To determine the prevalence of common physical health problems among senior citizens (60 years & above) residing in a selected rural area of Rohtak district.

**Material & Methods:** A cross–sectional survey approach was adopted to collect the data & 150 senior citizens were finally included as per research criteria. Data was collected by interviewing the study subjects using structured interview schedule.

**Result:** Out of 150 study subjects, 14% were having Hypertension, 88% had joint pain, 92% with vision problems & 12% were having diabetes mellitus. The mean, median & standard deviation of checklist related to common health problems. Mean of Hypertension =1.81, Median=2.00, Standard deviation=1.073, Joint Pain Mean=1.71, median=2.00, S.D=1.328, Diarrehoea & Constipation Mean= 0.92, median=0, SD= 1.34, Diabetes Mellitus= Mean= 1.81, median= 1, standard deviation=1.400.

**Conclusion:** The study concluded that majority of the senior citizens were suffering from common health problems while only few reported to be completely healthy. There was a need to create awareness regarding the reasons for common physical health problems, to encourage a healthy lifestyle.

**Keywords:** Common Physical Health Problems, Prevalence, Senior Citizens & Determine



## Introduction

Aging is a universal process. Aging is generally defined as a process of deterioration in the functional capacity of an individual that results from structural changes with advancement of age. Population aging is a worldwide phenomenon and India is no exception. Demographic transition resulted in increase in life expectancy and increase in proportion of elderly population in India and other developing countries.

The Government of India adopted the National Policy on Older Persons in "January 1999"and this policy defines "senior citizen" or "elderly" as a person who is of age 60 years orabove. Aging is a normal, inevitable, biological and universal phenomenon and it affects every individual irrespective of caste, creed, rich and poor. The outcome of aging is certain structural and functional changes in the major parts of the body.<sup>2</sup>

Globally the population aged above 60 years is increasing due to better life expectancy and thereby some of the health problems among them are proportionally increased. To focus the attention of the elder persons the topic of world health day in the year 2012 is "aging and health" with the theme of "good health and life to years".<sup>3</sup>

Chronic illness and other health problems of elderly can be delayed and even prevented by following healthy lifestyles and Health promotion activities. The health promotion activities are balanced diet, exercise, no smoking and regular health checkup.

# **Need of the Study**

As the life expectancy is rising the population of the aged people is also increasing steadily, the world population prospectus released by united nation in 1998 reveals the population of the aged as global level is 9%, in under developed countries is 6.7% and 15% in developed countries. Though the proportion of elderly population is more in developed countries, majority of the old people live in developing countries in absolute numbers such of about 530 million people above 60 yrs living in the world, about 355 (61.2%) million people live in developing countries. By the year 2020 the world population of the people would be about 1000 million of which about 700 million (70%) would be living in developing countries resulting in increasing the burden of disease associated with old age.

The Indian aged population is currently the second largest in the world, the first being China with more than 150 million. In this study majority of the elderly were suffering from one or the other common health problems while only few reported to be completely healthy. There was a need to create awareness regarding the reasons for common physical health problems, to encourage practicing a healthy

lifestyle. In rural areas the proportion of elderly males who are fully dependent.

# **Research Methodology**

This part deals with the description of the research methodology adopted by the investigator. The methodology is the systematic way to solve research problems. It help the researcher to project a blueprint of the research under taken. The details are as follows:

# Research design

Research design is a plan that explains how, when and where data are to be collected and analyzed. an appropriate design must be chosen to meet the objectives of the study. The selection of a research design depends upon the purpose of experimental variable to be manipulated and conditions under which the experimental research design. To achieve the objectives of the study "Descriptive cross sectional research design" was used.

# **Population and Sample**

Senior citizens of age group 60 years & above . in a selected area of Rohtak district

#### **Data and Sources of Data**

For this study secondary data has been collected. From the website of KSE the monthly stock prices for the sample firms are obtained from Jan 2010 to Dec 2014. And from the website of SBP the data for the macroeconomic variables are collected for the period of five years. The time series monthly data is collected on stock prices for sample firmsand relative macroeconomic variables for the period of 5 years. The data collection period is ranging from January 2010 to Dec 2014. Monthly prices of KSE -100 Index is taken from yahoo finance.

## Sampling criteria

# **Inclusion Criteria**

- Senior citizens who werel in the age group of 60 years & above.
- 2. In both sex, senior citizens who were available at the time of data collection.
- Senior citizens who were willing to participate during the data collection,

#### **Exclusion criteria**

Severely ill individuals were excluded during the time of data collection.

#### **Conceptual Framework**

A concept is an abstract idea or mental image of phenomena or reality (Kozier 1989) .A conceptual framework is the processor of a theory. It provides broad perspectives for nursing practice, research and education. Conceptual Framework plays several interrelated roles in the progress of

ISSN: 2455-9318

science. Their overall purpose is to make scientific findings meaningful and generalizable. The conceptual framework of the study is based on the :A system consists of a set of interacting components within a boundary that filters the type and rate of exchange with the environment. All living systems are open in that there is a continual system of matter, energy and interaction. In open systems there are varying degrees of interaction with the environment from which the system receives input and gives back output in the form of matter, energy and information. The present study aim at assessing the existing knowledge ofclients between 60years and above regarding awareness about common preventable geriatric problems. According to polit and Hungler [1995].. The conceptual framework represents a less formal and less well-developed mechanism for organizing phenomena that theories. As the name implies conceptual framework deals with abstractions that are assembled by their relevance to a common theme. conceptual scheme use concept as buildings blocks.

Theory development conceptual models attempts to represent reality with minimal use ofwork.

COMMUNITY as a client models "Which is an adaptation of Betty Newman"s "Healthcare model" was adopted for this study.

# **Data Analysis**

This chapter deals with the analysis and interpretation of the data collected from 60 years and above senior citizens to determine the prevalence of common health problems among senior citizens 60 years and above in the rural area of District Rohtak. The collected data were tabulated, organized, analyzed and interpreted by using descriptive and inferential statistics based on the objectives of the study and the hypothesis to be tested. A cross –sectional survey approach was adopted to collect the data & 150 senior citizens were finally included as per research criteria. Data was collected by interviewing the study subjects using structured interview schedule. [checklist to screen the history of various common physical health problems, & other details (measurement of BP, joint pain, urine analysis for diabetes mellitus, vision test and Diarrhea & constipation ) to assess the prevalence of common physical health problems. Descriptive & inferential statistics used to analyze the data. out of 150 study subjects, 14% were having Hypertension, 88% had joint pain, 92% with vision problems & 12% were having diabetes mellitus. The mean, median & standard deviation of checklist related to common health problems. Mean of Hypertension = 1.81, Median = 2.00, Standard deviation = 1.073, Joint Pain Mean = 1.71, median = 2.00, S.D = 1.328, Diarrehoea & Constipation Mean = 0.92, median = 0, SD = 1.34, Diabetes Mellitus = Mean = 1.81, median = 1, standard deviation = 1.400

# Association of Prevalence of Joint Pain Among the Study Subjects in the Relation of Gender

| Gender            | Joint Pain | No Joint Pain         | Total      |
|-------------------|------------|-----------------------|------------|
| MALE              | 55 (37%)   | 9 (6%)                | 64 (43%)   |
| FEMALE            | 62 (41%)   | 24 (16%)              | 86 (57%)   |
| TOTAL             | 117 (78%)  | 33 (22%)              | 150 (100%) |
| $\chi^2 = 12.111$ | P = 0.007  | Table value=<br>7.815 | Df = 3     |

#### Level of significance= 0.05, S= Significant;

Data presented in the table depicts that total no of (57%) females were examined, out of which 37% found to be osteoarthritis, & 43% males were examined, out of which 16% found to be osteoarthritis

# Association of Prevalence of Joint Pain Among the Study Subjects in the Relation of Gender

| Gender            | Joint Pain | No Joint Pain         | Total      |
|-------------------|------------|-----------------------|------------|
| Male              | 55 (37%)   | 9 (6%)                | 64 (43%)   |
| Female            | 62 (41%)   | 24 (16%)              | 86 (57%)   |
| Total             | 117 (78%)  | 33 (22%)              | 150 (100%_ |
| $\chi^2 = 12.111$ | P = 0.007  | Table value=<br>7.815 | Df = 3     |

#### Level of significance= 0.05, S= Significant;

Data presented in the table depicts that total no of (57%) females were examined, out of which 37% found to be osteoarthritis, & 43% males were examined, out of which 16% found to be osteoarthritis

## Association of Joint Pain with Female"s Occupation

| Females"S Occupation | Joint Pain | No- Joint Pain        | Total      |
|----------------------|------------|-----------------------|------------|
| House Wife           | 53 (35 %)  | 9(6%)                 | 62 (41%)   |
| Loburer              | 61 (41 %)  | 23(15%)               | 84(56%)    |
| Private Job          | 1 ( 1%)    | 1(1 %)                | 2 (1%)     |
| GOVT. JOB            | 2 (1%)     | 0 (0%)                | 2 (1%)     |
| TOTAL                | 117 (78%)  | 33 (22 %)             | 150 (100%) |
| χ2 = 17.214          | P=.0454    | Table<br>value=16.919 | Df= 9      |

Level of significance= 0.05, S= Significant

shows that maximum 41% females were labourer and

ISSN: 2455-9318

DOI: https://doi.org/10.24321/2455.9318.202311

having joint pain, & minimum1% were govt. employee & private employee having joint pain. The chi sequare test ia applied to determine the association between the Female"s occupation and osteoarthritis.

# Association of Vision Problems with Female's Occupation

| Females"s Occupation | Vision<br>Problems | No- Vision<br>Problems | Total         |
|----------------------|--------------------|------------------------|---------------|
| House Wife           | 57 (36 %)          | 5 (3%)                 | 62 (41%)      |
| Loburer              | 78 (50 %)          | 6 (4%)                 | 84(56%)       |
| Private Job          | 1 ( 1%)            | 1(1 %)                 | 2 (1%)        |
| Govt. Job            | 2 (1%)             | 0 (0%)                 | 2 (1%)        |
| Total                | 138 (92%)          | 12 (8 %)               | 150<br>(100%) |
| χ2 = 21.881          | P=0.3887           | Table<br>value=21.026  | Df= 12        |

Level of significance = 0.05, S= Significant

This table shows that maximum 50% females were labourer and having vision problems, & minimum 1% were private employee having vision problems. The chi square test was applied to determine the association between the Female's occupation and vision problems.

#### **Discussion**

The following of study were based on its objectives and discussed and are followed under the following headings;

Section-A. Description of socio-demographic variables.

Section-B. Analysis of checklist related to common physical health problems.

Section-C. related to prevalence of common physical health problems among senior citizens60 years & above.

Section-D. To find out the association between prevalence of common physical health problems with selected socio demographic variables

In the present study the prevalence of hypertension and diabetes among senior citizens was found to be (14%,12% respectively) . study was carried out in various part of india have reported a prevalence of hypertension from (10.34% to 25.4%) of hypertension. And prevalence of diabetes from (6% to 12%).

**Kumar M.K et al., 2016** conducted a study on prevalence of hypertension was (10.34%). **Yadav S et al.2012** A cross sectional study was conducted on health problems in geriatric . i.e Hypertension and diabetes mellitus were found in (11.25%) and (6.67%).In the present study the prevalence of common health problems senior citizens was found to be ( oeteoarthritis 88%, vision problems 92%). a study was carried out in various part of india have reported

a prevalence of vision defect (56% to 89%), osteoarthritis (54% to 67%) sushma Tiwari et al,.2010 was conducted a study on prevalence of common problems among elderly: rural population of Varanasi. (osteoarthritis, cataract, gastrointestinal problems) was 54%, 24%, 6% respectively.

#### **Conclusion**

Majority of 43% study subjects were male and 57% were females.

14% study subjects had HT, 88% were joint pain, 92% with vision problems & 12% had diabetes mellitus

Hypertension Mean =1.81 , Median=2.00, Standard deviation=1.073

Joint Pain Mean=1.71, median=2.00, S.D= 1.328

Diarrehoea & Constipation Mean= 0.92, median=0, SD= 1.34

Diabetes Mellitus= Mean= 1.81, median= 1, standard deviation=1.400

54% of the study subjects were normotensive, 32% were pre-hypertensive, 14% werehypertensive.

The study concluded that majority of the senior citizens were suffering from common health problems while only few reported to be completely healthy. There was a need to create awareness regarding the reasons for common physical health problems, to encourage a healthy lifestyle.

# Limitation

This study only included senior citizen (60 years & above)

The study will be only carried out in rural area of Rohtak.

The data collection periods is limited.

#### Recommendation

- A formal education programme must be conducted in all rural and urban community regarding common health problems.
- The study can be replicated on a large sample, there by findings can be generalized to a large population.
- A concentrated efforts should be made to increase the awareness among the clients (60 years & above) of their responsible in today"s society.
- A comparative study can be conducted both rural and urban community regarding physical health problems of senior citizens.
- A study can be conducted both in a community setting and old age homes regarding physical health problems of senior citizens.
- Education in common health problems should be impated to students nurses and clients 60 years & above.
- Regular monitoring the problems, polices & capacity relating to common health problems.

 More emphasis on research & training to reduce the incidence of common health problems.

#### References

- 1. Tiwari S, SINHA AK. Prevalence of Health Problem among elderly A study in a Rural population of Varanasi . Indian j Prev social Med.2010;3(14).
- 2. Kumar D. Shankar H. Prevalence of chronic Disease and quality of life among elderly of people of Rural Varanasi . int j contemp Med Res2018;5(7)..
- 3. Raj D, Swain PK. A study on quality of lifesatisfaction & physical health of elderly people inVaranasi: an urban area of Uttar Pradesh. India Int JMed Sci Public Health. 2014;3(5).
- K. Park, text book of preventive and social medicine, 19th edition, M/s Banassiadas Bhanot publishers, 2007, 475. [1 screen]. Available from: URL: http://www.iucar.iu.edu.
- 5. Ingle GK, Nath A. Geriatric Health In India: Concerns and Solutions. 2008;33(4); [214-218]
- Prevalence of Dementia in The Developing World Under estimated [online]. 2008 July [cited 2008 Nov 5]; [2 screens]. Available from: URL: http://www.sciencedirect.com.
- 7. AH suryakantha, community medicine, 1st edition, Jaypee publication 2009, 688.
- 8. Prataph Singh, social welfare, issue 0037-8038, vol 57, No.7, Oct 2009,4-5.
- Dementia. World Health Organization, 2019. Available at: https://www.who.int/news-room/factsheets/detail/ dementia. Accessed 12 June 2019. 2. Risk reduction of cognitive decline and dementia: WHO guidelines. Geneva: World Health Organization; 2019. Available at: https://www.who.int/publications-detail/riskreductionof-cognitive-decline- and-dementia. Accessed 12 June 2019.
- 10. Balaraju ratna, Chandrasekhar vallepalli,k. Chandra sekhar, M.M.V. Prasad Sharma, T. Sushmita 2020, vol 7 page 2567.
- S. Kozier B, Erb Glenora and Blasis Kathleen, Fundamental of nursing. Conceptsand process practice. 5th ed. Philadelphia. Addition Wesley publishing company1995.
- 12. K. Park, text book of preventive and social medicine, 19th edition, M/s Banassiadas Bhanot publishers, 2007, 475.\
- 13. TN has most elderly living alone. Daily Ramblings [serial online] 2008 May [cited 2008 Oct 23];
- 14. Ingle GK, Nath A. Geriatric Health In India: Concerns and Solutions. 2008; 33(4); [214-218]

ISSN: 2455-9318

DOI: https://doi.org/10.24321/2455.9318.202311