

# Prevalence of Chronic Diseases among Elderly in Maraimalai Nagar, Kancheepuram District

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## Abstract

**Introduction:** Chronic disease constitute a major cause of mortality in the world representing 35 million deaths in 2005 & over 60% of all deaths. **Objective:** The objective of the study was to assess the Prevalence of Chronic diseases among elders in Maraimalai nagar. **Methodology:** The research approach selected for the present study was Quantitative approach and descriptive research design. The study was conducted in Maraimalainagar, Kancheepuram District. The study was conducted among 50 Elders. Non probability purposive sampling technique was adopted for the study. The data was collected by assessing the basic biological variables and using structured questionnaire which consists of 30 questions. **Results:** 50 Elders, 28% have Hypertension, 16% have Diabetes mellitus, 48% having Asthma, 6% have Cardio vascular disease, 28% of Osteoporosis, 10% of clients have other problems and 4% don't have any clinical conditions. **Conclusion:** The study conclude that, awareness among chronic disease among general public is very poor. Hence education among people is needed.

**Keywords:** Chronic Diseases; Cardio Vascular Disease; Diabetes Mellitus; Asthma; Hypertension; Osteoporosis.

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## Introduction

The World Health Organization (WHO) estimated that 36 million people die each year due to chronic diseases, and three-fourth of these deaths are among people aged 60 years and above[1]. According to "Towards Enriching Years" during the process of ageing, physical functions of the body slowly deteriorate demanding greater coping skills on the part of the ageing person to adjust to the environment. Ageing of population is an end product of demographic transition: the number of older adults aged 65years and above is increasing and

they are becoming larger percentage of all overall population: they are the second largest population[2]. It was estimated that in 21<sup>st</sup> century the world population was 6.1 billion and is likely to become 9.3 billion in 2050 (UN2004). Global aged population will increase from 595 million to 2 billion, a fourfold rise by 2050[3].

Chronic disease constitute a major cause of mortality and the world health organization (WHO) reports chronic for communicable conditions to be for the leading cause of mortality in the world representing 35 million deaths in 2005 & over 60% of all deaths. Chronic illness cause about 70% of death and in 2002 chronic conditions (heart diseases, cancers, stroke, chronic respiratory disease, diabetes, alzheimer's diseases and kidney disease)[4]. Were 6 of the top ten cause of mortality in the general Indian population. 90% of seniors have at least one chronic condition and 77% have two or more chronic conditions. For most people medical conditions do not impair normal activities [5].

The most recent data on prevalence of chronic disease reported that on self reported illness and

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Received on 03.09.2017, Accepted on 13.10.2017

involve in 937 estimated that over these age group avail of medical cord scheme cardiovascular disease was most common at 72% this was followed by central nervous system condition at 37% musculoskeletal condition 28% upper gastrointestinal at 24% respiratory at 14% diabetes thyroid disease and glaucoma occurred in 5.8% of this population [6].

During the period from 1995 through 2030 the percentage of world population that is 65years of age older than 85 years age increase by 10.7% and 133% respectively. The physiologic changes that occur in the skilful muscle as a result of agency will be also increase. In a scandrivan study approximately 50% of people older than 65 have osteoporosis characterized by decrease in bone mass [7].

Kiely at 2000 studied on geriatric problem of more than 900 residents of old age home in America. The study suggested that maximum numbers those who did not reeve social interaction were 2.3 a study conducted by national health and nutrition examination survey (1999-2004) on estimated 11.4 million elderly people were affected with chronic disease 15.5% of the 38.2 million with hypertension and 16.6% of 8.5 million with diabetes [8].

Since the geriatric care is not given more importance in many parts of the country, Community involvement to assess the prevalence of chronic diseases among elderly population is done in this study, so that the family members will be aware of the problems of the elderly people and concentrate on the treatment of these chronic diseases.

## Research Methodology

The research approach selected for the present study was Quantitative approach and descriptive research design. The study Variable was the prevalence of chronic diseases among elderly and

demographic variables comprises of Age, sex, spouse, financial support, educational status, occupation and type of family. The study was conducted in Maraimalainagar, Kancheepuram District. The study was conducted among 50 elderly people. Non probability purposive sampling technique was adapted for the study. The tool used for the study comprises 3 sections, Section A it consist of demographic variables including age, sex, spouse, financial support, educational status, occupation and type of family, Section B was the assessment of the biological variable such as Pulse, Respiration, Blood pressure, Body built and Visual acuity, Section C consists of a structured questionnaire which consists of 30 questions related to physiological and psychological problems. Content validity was obtained from 2 nursing Experts. Reliability was assessed by using test-retest method, the r- value was 0.8. Regarding Ethical Considerations, the research proposal was approved by the Research committee, S.R.M College of Nursing, S.R.M University. Informed consent was obtained from the study participants, after explaining about nature and duration of the study . The researcher have explained benefits of the study to the participants, Assurance was given to the individuals that each individual report will maintained confidentially and any point of time they can withdraw from the study. The investigator introduced herself to the samples and the purpose of the study was explained to ensure better cooperation during the data collection period. By assessing the basic biological variables and Using structured questionnaire data collection was completed. The collected data was analyzed using descriptive and inferential statistics.

## Results

Table 2 reveals that 14 (28%) of clients have Hypertension, 8 (16%) have Diabetes mellitus, 4 (8%) of clients having Asthma, 4 (6%) have Cardio vascular disease, 14 (28%) of Osteoporosis and 5

**Table 1:** Frequency and percentage distribution of demographic variables the participants

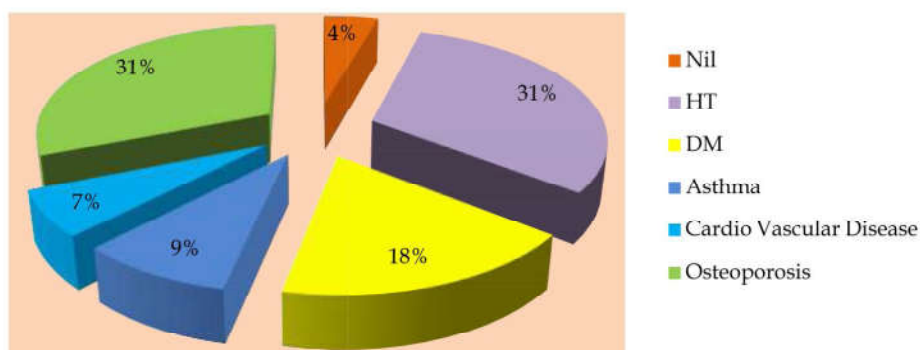
Demographic Variables		Frequency	Percentage
Age	Age 60 to 65	23	46%
	Age > 65	27	54%
Sex	Male	20	40%
	Female	30	60%
Spouse	Living	30	60%
	Nil	20	40%
Finance Support	Son/daughter	25	50%
	Self	25	50%

Clinical Condition	HT	14	28%
	DM	8	16%
	Asthma	4	8%
	Cardio Vascular Disease	3	6%
	Osteoporosis	14	28%
	Nil	2	4%
	Others	5	10%

**Table 2:** Frequency and percentage distribution of Chronic diseases N = 50

Clinical Condition	Frequency	Percentage
Nil	2	4%
Hypertension	14	28%
Diabetes mellitus	8	16%
Asthma	4	8%
Cardio Vascular Disease	3	6%
Osteoporosis	14	28%
Others	5	10%
Total	50	100%

**Distribution of chronic diseases**



**Fig. 1:** Percentage distribution of chronic diseases

**Table 3:** Association between the level of knowledge on chronic diseases among elders with their demographic variables N = 50

Demographic Variables		Adequate	Inadequate	Total	Chi Square Value	Significance Level
Age	Age 60 to 65	21	2	23	0.028	0.867
	Age > 65	25	2	27		NS
Sex	Male	19	1	20	0.408	0.523
	Female	27	3	30		NS
Spouse	Living	28	2	30	0.181	0.670
	Nil	18	2	20		NS
Finance Support	Son/daughter	22	3	25	1.087	0.297
	Self	24	1	25		NS
Clinical Condition	HT	11	3	14	5.357	0.499 NS
	DM	8	0	8		
	Asthma	4	0	4		
	Cardio Vascular Disease	3	0	3		
	Osteoporosis	13	1	14		
	Nil	2	0	2		
	Others	5	0	5		

(10%) of clients have other problems. Among these 2 (4%) don't have any clinical conditions.

## Discussion

Ageing is the process of growing old and is the gradual biological impairment of normal function. It affects all the systemic functions of the body. So all the physiological changes is occurring with ageing, so that many chronic diseases are prone to occur.

The present study findings revealed that 50 elders, 28% have Hypertension, 16% have Diabetes mellitus, 48% having Asthma, 6% have Cardio vascular disease, 28% of Osteoporosis, 10% of clients have other problems and 4% don't have any clinical conditions. Association of the variables concluded that there is no significant relationship between prevalence of disease and age, sex, spouse and financial support.

The present study findings was supported study done by G.K.Mini among 9,852 older individuals collected from seven states (Himachal Pradesh, Kerala, Maharashtra, Orissa, Punjab, Tamil Nadu and West Bengal). The result shows that overall 63% of older adults were having at least one NCD. The more prevalent chronic NCDs were arthritis, high blood pressure, cataract and diabetes. Twenty-eight percent of men reported current tobacco use and eight percent reported current alcohol use. Older adults in higher economic group were three times (OR 3.20, 95% CI 2.71-3.78) more likely to report an NCD compared to the lowest economic group. Higher age group (OR 1.78, CI 1.62-1.95), women (OR 1.35, CI 1.21-1.50), tobacco users (OR 1.35, CI: 1.22-1.48) alcohol users (OR 1.33, CI 1.11-1.58), forward castes (OR 1.33, CI 1.18-1.49), rural residents (OR 1.32, CI 1.19-1.47) and people having no formal education (OR 1.18, CI 1.07-1.30) were more likely to have at least one NCD compared to their counterparts[3]. Similar study was done by Orantes CM (2011) conducted a study on chronic disease and associated risk factors in the bajo lempa region of el Salvador. A cross sectional analytical epidemiological study was carried out using active screening for chronic disease and associated risk factors in individuals aged Ten 18 years in eh bajo lempa region a rural coastal area in E1 Salvador door to door visits and clinical examinations were conducted. A total of 375 families and 775 individual 343 men, 432 women were studied 88.3% of the total resident population in the region Elevated prevalence of risk factors was observed diabetic mellitus 10.3% hypertension 16.9% family history of clinic kidney

disease 21.6% over weight 34% obesity 22.4% metabolic syndrome 28.8% elevated prevalence of chronic kidney disease chronic risk factors was found compared to international reports.

## Conclusion

Adequate knowledge regarding prevention of chronic disease among elderly people can prevent many of the chronic diseases. The study conclude that, awareness among chronic disease among general public is very poor. Hence education among people is needed.

"Prevention is better than cure". Health education regarding prevention of chronic diseases among elderly is a primary prevention activity which will help the people to gain knowledge and protect themselves from the chronic diseases.

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