



CROSS SECTIONAL STUDY ON PERCEPTION OF DISABILITIES FROM OLD AGEING IN RURAL COMMUNITY OF PUDUCHERRY

Prasad KN^{1*}, Kannan M², Karthikeyan A², Kaviyarasi R², Kamali M², Kanimozhi S²,
Kanmani G²

¹Professor, ²Interns, Department of Community Medicine, Shri Lakshmi Narayana Institute of Medical Science, Kudapakkam, Pondicherry, India.

Corresponding Author:- **Dr. K N Prasad**
E-mail: drknprasad2@gmail.com

Article Info	ABSTRACT
<p>Received 15/03/2015 Revised 27/04/2015 Accepted 27/05/2015</p> <p>Key words: Ageing changes, Common elderly disease, Visual impairment, Perception.</p>	<p>Food intake is diminished among old age people due to ill health, disability, co- morbid condition. Hence the quality of life of elderly affects nutrition & protein deficiency contributes to high percentage of DALY. The objective of the study the prevalence of perception about normal ageing changes and common diseases. This is a cross sectional and descriptive study was done on 300 elderly people in rural area of Puducherry for a period of two month during March and April 2015 to analyse the nutritional status and normal ageing changes seen among them using questionnaire, anthropometric measurement and clinical examination at their residence. The total population of 41% had cataract, 46.2% people were operated for cataract. 28.8% had perceived impairment in memory and 42.2% as having impaired hearing. Almost 80% of people were feeling giddiness, syncope and joint stiffness bothering daily. Age related changes are normal but when people have already disease then it becomes difficult to maintain a normal healthy life style, hence it is important to maintain regular physical activity and exercise if possible. It is also important to maintain a healthy mental status and rehabilitation service for old age population is strongly recommended in order to have quality of life.</p>

INTRODUCTION

Food intake is severely diminished in people most of whom are physically disabled and other older studies had already suggested that the age related fall in energy intake is associated with decreasing physical activity as described by Cavalli-Sforza et al. [1] and Bauduer F et al.[2] Normally as age increases people have decrease in ability to walk for a long distance without taking rest becomes difficult, this contributes also to various illness. Age related stiffness and joint pains are the main cause for the decrease in walking distance and lack of physical exercise which is explained by Park.[3]

Ageing is a process that begins at conception & continuous till death. At any given time throughout our life span the body reflects genetic and environmental experiences as described by experts of the France

institution. [4] In other words our bodies reflect our genetic capacity to adapt for repair, as well as the cumulative damage from disease process with advancing age; all of the body system eventually demonstrates reduced efficiency and slowed building for replacement for actual loss of tissue. Exactly what constitute normal ageing is not always clear changes that occur with normal ageing male people more likely to develop certain disorder. However people can sometime take actions to compensate for these changes by developed nations Ferreries J [5], Corder R et al [6], Mahalynuk et al [7] and Gariballa SE at al. [8]

The physical exam does not usually aid in the detection of early malnutrition in the elderly, as some of the loss of muscle bulk may be similar to age-related processes Gariballa S E at al. [8] and Kane RL et al. [9]



However, in specific nutrient deficiencies, changes in nail, hair, tongue, and angle of the mouth can be seen. The study was conducted with an objective to know the prevalence of perception about normal ageing changes and common diseases.

METHODOLOGY

This is a cross sectional study done on 300 elderly people among 17079 in rural village Katterikuppam, Puducherry for a period of 2 month during March and April 2015 to analyse the nutritional status, normal ageing changes and perception about disabilities are seen among them. The subjects were selected randomly with only criteria of age 60 years and above. Data are collected by three parts by pre tested structured questionnaire, basic anthropometry measurement and clinical examination at their residency.

The data collected includes:

- **Basic information** such as name, age, sex, occupation and health status.
- **Ecological factors** such as family size, income, pension from government or private, BPL card are recorded because they play a major role in all aspects of physical and mental health of the individual especially the nutritional status.
- **Normal ageing changes:** As the age advances lot of changes occurs in body as a natural part of ageing process. Normal ageing changes is seen in almost all the organs of body which affect the elderly health and lifestyle. (These changes are believed to be due to loss of regenerative capacity of each cell). Some disease and conditions become more prominent in elderly. So the more common changes are noted such as giddiness, syncope, impaired –

vision, hearing, memory, joint stiffness and movement restriction, distance able to cover without taking rest.

- **Anthropometry:** Height and weight were measured using inch tape and weighing machine, from that BMI is calculated using the formula $wt \text{ in Kg}/Ht^2$.
- **Clinical examination** is done for nutritional assessment that is by palpating the thyroid gland and lymph nodes, eliciting the knee jerk using knee hammer, looking opacity in lens area for cataract and looking for any missing, decay or filling of tooth.

RESULTS AND DISCUSSION

The study had almost equal number of males and females which is a coincidental finding. Many were dependent economically on their children and less than ten percent were receiving pension or government assistance.

Table 1 show that Cataract seems to be the most common old age changes in eyes. In this population female have been affected 20% more than male population. 41% of total population has cataract not operated while 46% have been operated for cataract. Rests of the population are corrected with spectacles.

Table 2 shows that memory usually decreases as age increases. Recalling incidents can be done to find the memory status of elderly people. Male are affected 1% more than female. Hearing impairment occurs very early nowadays due to the noise pollution we are exposed too. Data shows males above age of 70years are more affected (15-25%) than females in respective age group. This may be because of effect of chronic use of alcohol and tobacco. Hence males are overall affected 5% more than female. Hearing aids are not used by most of the people in this age group.

Table 1. Distribution of perception about visual impairment due to cataract and correction

Age group	Total No	With Cataract			Cataract Operated		
		Male (%)	Female (%)	Total (%)	Male (%)	Female (%)	Total (%)
60-65	109	13 (11.9)	24(22.0)	37 (33.9)	7(6.4)	19(17.4)	26(23.8)
66-70	73	11 (15.1)	28(38.3)	39 (53.4)	11 (15.1)	24(32.9)	35(47.9)
71-75	71	19 (26.8)	13(18.3)	32 (45.1)	29 (40.8)	14(19.7)	43(60.6)
76-80	28	7(25.0)	5(17.8)	12 (42.8)	12 (42.8)	7(25.0)	19(67.8)
>80	20	2(10.0)	2(10.0)	4(20.0)	10 (50.0)	6(30.0)	16(80.0)
Total	301	52 (17.3)	72(23.9)	124(41.2)	69 (22.9)	70(23.2)	139 (46.2)

Table 2. Distribution of perception of impairments of various systems

Health status	Total	Impaired memory (%)	Impaired hearing (%)	Visual Impairment (%)	Giddiness (%)	Syncope (%)	Stiffness (%)	BMI >25(%)
Hypertension	97	29(29.8)	49(50.5)	79(81.4)	44(45.3)	5(5.1)	55(56.7)	34(35)
Diabetes Mellitus	40	12(30)	12(30)	30(75)	6(15)	2(5)	22(55)	16(40)
Hypertension and Diabetes mellitus	52	10(19.2)	20(38.4)	35(67.3)	38(73)	4(7.6)	34(65.3)	24(46.)
Osteoarthritis	16	1(6.2)	5(31.2)	14(87.5)	9(56.2)	1(6.2)	13(81.2)	10(62.)
Bronchial Asthma	13	10(76.9)	8(61.5)	10(76.9)	6(46.1)	2(15.3)	10(76.9)	3(23)



Table 3 shows the analysis of health status hypertension is more common(32.2%) and they suffer various impairments such as impaired memory(29.8%),

impaired hearing(50.5%), visual impairment(81.4%), giddiness(45.3%), syncope (5.1%), stiffness(56.7%) and 62.5% people with BMI >25 suffering from Osteoarthritis.

Table 3. Distribution of Health Status & Perception on Various Impairments

Age group In years	Imp. Memory		Imp. Hearing		
	Total Num.	Male (%)	Female (%)	Male (%)	Female (%)
60-65	109	5 (4.6)	12 (11.0)	9 (8.2)	16 (14.7)
66-70	73	10 (13.7)	18 (24.6)	13 (17.8)	15 (20.5)
71-75	71	19 (26.8)	6 (8.4)	29 (40.8)	12 (16.9)
76-80	28	4 (14.3)	4 (14.3)	10 (35.7)	6 (21.4)
>80	20	7 (35.0)	1 (5.0)	10 (50.0)	7 (35.0)
Total	301	45 (14.9)	41 (13.6)	71 (23.6)	56 (18.6)

CONCLUSION

Perception about disabilities resulting from old age was felt as large problem in this study and which will influence in their quality of life. Some may be reversed

using the external aids assistance and possible to maintain for longtime. The service rehabilitation services of old age population in this area are strongly recommended in order to improve their quality of life.

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