

## Research Article

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## Study of Sociodemographic and Morbidity Pattern among Geriatric Population

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### ABSTRACT

**Background:** This study was carried out to know the sociodemographic and morbidity pattern of geriatric population. As there is increase in the proportion of aged population, there would be increase in the burden of chronic diseases and disabilities in older age group. Thus it was decided to do a cross-sectional study of the geriatric morbidity in a rural population.

**Method:** The detailed information of geriatric population regarding study variables like age, sex, occupation, education and morbidity pattern collected. Predesigned and pretested proforma was used to collect data. Data was analyzed by using suitable statistical method.

**Result:** Among 100 elderly, 56% were men and 44% were women. 41% belonged to age group 61-65yrs. 85% are agricultural workers. Nearly half of them were illiterate. A majority of them had health problems. Most common health problem which were found were arthritis 58%, cataract 42%, URTI and other respiratory problems 36%.

**Conclusion:** It is necessary to put attention over health of geriatric population by community participation.

**Key-words:** Morbidity pattern, Geriatric population, Rural area.

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## Introduction

"You do not heal old age, you protect it, you promote it, you extend it". Old age should be regarded as normal biological phenomena. Cultural and geographical diversity of our country reflects heterogeneity of elderly population. Majority of them is rural population and large percentage below poverty line. The challenge ahead for health care in coming years is to ensure the quality of life to large group of elderly population. With improving life expectancy and thereby increase in the proportion of aged population, there would be worldwide increase in the burden of chronic diseases and disabilities. They have multiple symptoms due to decline in the functioning of various body organs. Knowledge of age related changes and morbidity profile of elderly population is essential for planning of health services.

Elderly are vulnerable to long term diseases of insidious onset such as cardiovascular illness, CVA, cancers, diabetes, musculoskeletal and mental illnesses. Geriatric people have special health problems that are different from those of young. Usually the disease process in the elderly is multiple and the duration and severity of both acute and chronic conditions are longer for the aged than the young.

The elderly are one of the most vulnerable and high -risk groups in terms of health status in any society. In order to improve the quality of life of the elderly, it is essential that the burden of diseases among them to be reduced. Primary health care is the mainstay of health care delivery in India. The efforts therefore should primarily be focused on the diseases and conditions that could be effectively treated at the primary health care level. Depending upon the pattern and the magnitude of the morbidity, one could focus primary health care services to suit the local condition.

Keeping in view of all these facts, it was decided to study health status of elderly population in field practice area of Department of Preventive and Social Medicine, Rural Government Medical College.

## Aims and Objective-

To study sociodemographic profile of geriatric population.

To assess the morbidity pattern of geriatric population.

## Material and Methods

- Type of study: Cross sectional study.
- Setting: Field practice area of SRTR Medical College & Hospital, Ambajogai (Maharashtra).
- Study period: 3 months
- Study population: people above 60 years.
- Total 100 elderly studied by house to house survey.
- Predesigned and pretested proforma was used to collect data. The detailed information of geriatric population regarding study variables like age, sex, occupation, education and morbidity pattern collected.
- Statistical Analysis: Percentages and Chi-square test.

## Criteria for Diagnosis:

- Each participant underwent a personal interview along with a thorough clinical examination.
- Diagnosis were made with the help of clinical expertise, also necessary investigations were done to prove the same.

## Results and Discussion:

**Table No. 1: Distribution according to Age and Sex**

AGE (Yrs.)	MALE (n=56)		FEMALE (n=44)		Total (n=100)	
	No.	(%)	No.	(%)	No.	(%)
61-65	13	23.21	28	63.63	41	41.00
66-70	24	42.85	11	25.00	35	35.00
71-75	11	19.64	03	06.81	14	14.00
76-80	06	10.71	02	04.54	08	08.00
>80	02	03.57	00	00.00	02	02.00
Total	56	100.00	44	100.00	100	100.00

Above table shows the ratio of male to female was 1:0.78.

A. S. Padda et.al. (1998)<sup>2</sup> in their study observed M: F as 1.53: 1. 56.3% of elderly population was observed to be in the age group of 60-65 yrs.

While a study done by S. Kishore(1997)<sup>1</sup> showed M:F as 1: 1.22.

**Table No. 2: Distribution of elderly according to religion**

Religion	Male (n=56)		Female (n=44)		Total (n= 100)	
	No.	(%)	No.	(%)	No.	(%)
Hindu	38	67.85	36	81.81	74	74.00
Buddhist	14	25.00	04	09.09	18	18.00
Muslim	04	07.14	04	09.09	08	08.00
Total	56	100.00	44	100.00	100	100.00

Distribution of elderly according to religion , among 100 elderly studied majority were Hindus i.e. 74% followed by Buddhist 18% and Muslim 8%.

**Table No.3 : Distribution of elderly according to literacy status and occupational status**

Sociodemographic Factors		Male (n= 56)		Female(n=44)		Total(n=100)	
		No.	%	No.	(%)	No.	(%)
Education	Illiterate	20	35.71	28	63.63	48	48.00
	Primary	16	28.57	11	25.00	27	27.00
	Middle school	14	25.00	04	09.09	18	18.00
	Higher secondary	05	08.92	01	02.27	06	06.00
	Graduate	01	01.78	00	00.00	01	01.00
Occupation	Agricultural labourer	42	75.00	36	81.81	78	78.00
	Farmer	07	12.50	00	00.00	07	07.00
	Non Agricultural labourer	01	01.78	00	00.00	01	01.00
	Unemployed	06	10.71	08	18.18	14	14.00
	Total	56	100.00	44	100.00	100	100.00

S. Kishore et.al. (1997)<sup>1</sup> in their study noticed that 66.6% elderly were Illiterate, 27.26% were educated up to primary level, while 5% up to middle school, also it was observed that 39.6% elderly were agricultural worker . A. S. Padda et.al. (1998)<sup>2</sup> observed that 61.37% elderly were Literate, while 38.63% were illiterate. S. G. Gupta et.al. (1994)<sup>5</sup> observed that 50.93% elderly were agricultural worker.

**Table No.4 : Distribution of elderly according to Type of Family, Marital status and Living Arrangement.**

Sociodemographic Factor		Male (n=56)		Female(n=44)		Total(n=100)	
		No.	(%)	No.	(%)	No.	(%)
Type of family	Nuclear	31	55.35	20	45.45	51	51.00
	Joint	05	08.92	04	09.09	09	09.00
	Three generation	20	35.71	20	45.45	40	40.00
Marital status	Married and living with spouse	49	87.50	33	75.00	82	82.00
	Married but widowed	07	12.50	10	22.72	17	17.00
	Separated	00	00.00	01	02.27	01	01.00
Living arrangement	Alone	06	10.71	02	04.54	08	08.00

	With spouse and children	27	48.21	15	34.09	42	42.00
	With spouse only	22	39.28	18	40.90	40	40.00
	With children only	01	01.78	09	20.45	10	10.00

Natarajan V. S. et.al.(1992)<sup>6</sup> reported that 37% elderly were living in joint family, 24% in nuclear family, 11.6% were living alone and 20.5% were living with spouse , 6.7% with other. P. Swain (2007)<sup>7</sup> reported that 2.2% elderly were living alone , 3.3% with spouse only while 45.7% with spouse & other member, 55.9% with children.

**Table no.5: Distribution of elderly according to socioeconomic status**

Socioeconomic status by B.G.Prasad	Male (n=56)		Female (n=44)		Total (n= 100)	
	No.	(%)	No.	(%)	No.	(%)
Class I	01	01.78	00	00.00	1	01.00
Class II	04	07.14	01	02.27	05	05.00
Class III	07	12.50	04	09.09	11	11.00
Class IV	21	37.50	11	25.00	32	32.00
Class V	23	41.07	28	63.63	51	51.00
Total	56	100.00	44	100.00	100	100.00

When socioeconomic status of 100 elderly studied it was observed that maximum 51% elderly from class V , followed by 32%,11%,05%.and 01% elderly from socioeconomic class IV,III,II,I respectively. There were more female i.e.28 (63.63%) than male 23 (41.07%) in class V.

While Natarajan V. S. et.al.found 87% elderly belonged to socio economic class V

**Table no.6: Distribution of elderly according to type of addiction**

Addiction	Male (n=56)		Female (n=44)		Total (n=100)	
	No.	(%)	No.	(%)	No.	(%)
Smoking	05	08.92	00	00.00	05	05.00
Tobacco chewing	28	50.00	18	40.90	46	46.00
Nus inhalation	01	01.78	02	04.54	03	03.00
Alcohol	10	17.85	00	00.00	10	10.00
No addiction	18	32.14	24	54.54	42	42.00

Natarajan et.al. (1992) observed that 52.2% elderly were addicted to Tobacco chewing and 14% elderly male were addicted to smoking.

**Table no. 7: Distribution of elderly according to morbidity pattern.**

SYSTEM	Male (n=56)		Female (n=44)		TOTAL (n=100)	
	No.	(%)	No.	(%)	No.	(%)
Musculoskeletal	40	71.42	29	65.90	69	69.00
EYE	44	78.57	30	68.18	74	74.00
RS	13	23.21	23	52.27	36	36.00
EAR	13	23.21	07	15.90	20	20.00
Dental	08	14.28	07	15.90	15	15.00
GU	06	10.71	08	18.18	14	14.00
skin	01	01.78	03	06.81	04	04.00
GIT	02	3.57	01	02.27	03	03.00

System	Disorder	Male (n=56)		Female(n=44)		Total (n= 100)	
		No.	(%)	No.	(%)	No.	(%)
Musculoskeletal	Arthritis	35	62.50	23	52.27	58	58.00
	Spondylitis	05	08.92	06	13.63	11	11.00
	Total	40	71.42	29	65.90	69	69.00
Eye	Cataract	24	42.85	18	40.90	42	42.00
	Refractive error	17	30.35	09	20.45	26	26.00
	Corneal opacity	01	01.78	00	00.00	01	01.00
	Conjunctivitis	02	03.57	03	06.81	05	05.00
	Total	44	78.57	30	68.18	74	74.00
Respiratory System	Coryza	04	07.14	04	09.09	08	08.00
	URI	04	07.14	08	18.18	12	12.00
	Asthma	03	05.35	07	15.90	10	10.00
	Chronic bronchitis	02	03.57	04	09.09	06	06.00
	Total	13	23.21	23	52.27	36	36.00
Ear	Deafness	08	14.28	04	09.09	12	12.00
	Ear discharge	05	08.92	03	06.81	08	08.00
	Total	13	23.21	07	15.90	20	20.00
Dental	Caries Teeth	05	08.92	04	09.09	09	09.00
	Chewing problem	03	05.35	03	06.81	06	06.00
	Total	08	14.28	07	15.90	15	15.00
GU	UTI	06	10.71	08	18.18	14	14.00
Skin	Scabies	01	01.78	03	06.81	04	04.00
GIT	Piles	01	01.78	01	02.27	02	02.00
	Hernia	01	01.78	00	00.00	01	01.00
	Total	02	03.57	01	02.27	03	03.00

A. S. Padda et.al. (1998)<sup>2</sup>in their study observed that 60.69% were having Arthritis, 54.01% were having Cataract.Rahul Prakash et.al. (2004)<sup>3</sup> observed that 44% had Cataract, 14% were asthmatic, 24% had ear disorder, 14% had GIT problems, 6% had GU and 2% had skin problem, & 2% had Hernia .Sitaram Gupta (2009)<sup>4</sup> observed that 40.83% had dental problems, 29.05% had diminished visual acuity, 24.60% had Arthritis and disorder of Muscle and joint, 19.63% had hearing impairment, while 14.65% had GIT problems.

**Table no 8:- Distribution of elderly according to sex and hypertension.**

BLOOD PRESSURE	MALE (n=56)		FEMALE (n=44)		TOTAL (n=100)	
	No.	(%)	No.	(%)	No.	(%)
NORMOTENSIVE	43	76.78	39	88.63	82	82.00
HYPERTENSIVE	13	23.21	05	11.36	18	18.00
TOTAL	56	100.00	44	100.00	100	100.00

Above table shows distribution of elderly according to sex and hypertension .The percentage of hypertension in this study was 18%.chi- square test was applied & found to be insignificant i.e.in older age group hypertension is common in both male and female.

A.S. Padda et.al. (1998)<sup>2</sup> found 16.62% were having Hypertension

**Conclusion:-**

The present cross sectional study was carried out in the rural field practice area of Department of Preventive and Social Medicine to assess sociodemographic profile, morbidity pattern in elderly population.

- Majority of elderly were in the age group 61-65 years i.e.41%.
- Among 100 elderly studied majority were Hindus i.e. 74% followed by Buddhist 18% and Muslim 8%.
- 63.63% female were illiterate whereas 35.71% male were illiterate. the literacy rate was observed to be more in male elderly than that in female i.e. 64.27% in male and 36.36 in female.
- Out of 100 elderly 85% were engaged in agricultural work.
- Out of 100 elderly studied 51% belonged to nuclear family, 82% were married and living with spouse, 42% were living with spouse & children and 40% With spouse only.
- When socioeconomic status of 100 elderly studied it was observed that maximum 51% elderly from class V.
- Smoking 05 (8.92%) & alcohol 10 (17.85%) addiction seen only in elderly male revealing the high percentage of addiction among male elderly.
- This study showed higher rate of Arthritis 58%, followed by cataract 42% it is more observed in male ie 42.85%.
- Problem with other system ie Respiratory 36%, problem with ear 20%, dental problem 15%. In respiratory URI was more common 12%, in ear, deafness was more common ie 12%, Dental caries were 9%.
- Among 100 participant 14% had urinary tract problem. Skin problem were 4% and GIT problem were 3% .
- The of percentage hypertension in this study was 18%.Chi-square test was applied & found to be insignificant i.e.in older age group hypertension is common in both male and female.

#### Recommendations:-

- Elderly person should be involved in family function and cultural and religious activities in their homes and communities.
- Education among female elderly should be raised.
- Through in rural area smoking and tobacco chewing are socially accepted habits they should be discouraged from accepting these habits.
- Lack of sufficient care is the major problem in the elderly. Many people accept health problem as part of ageing process . They should be motivated to make use of the available health services for minimizing or getting rid of the old age problems.

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