

## A Study of Socio Demographic Profile of Geriatric Population in the Field Practice Area of Kurnool Medical College

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### Abstract:

**Background:** In India, the majority of the population, including the elderly, is poor. However, one positive feature concerning the elderly population is that most of those 60 or more years old are economically active, presumably because they are engaged in sectors for which there is no specific age of retirement. **Objective:** To study the socio-demographic profile of the geriatric population in the field practice area of Kurnool Medical College. **Materials and Methods:** A community based cross sectional study was conducted from May 2008 to April 2009.

A total of 490 subjects aged 60 years and above were selected by randomly from both rural and urban areas for this study. The data was analyzed by means and proportions. The data was analyzed by means, proportions. **Results:** The proportion of subjects falling in the age group of 60 – 69 years was 56.33% in urban areas and 55.10% in rural area. While 10.09% males and 19.05% of females of the subjects from rural area falling in 80 – 89 year age group compared to 6.84% males and 7.81% females in urban area.

**Key Words:** Geriatrics, Kurnool, Socio Demographic,

### Introduction:

Ageing is a natural process. In the words of Seneca “old age is an incurable disease”, but more recently Sir James Sterling Ross commented, “**you do not heal old age you protect it; you promote it; you extend it**” [1]. The geriatric population is defined as population age 60 years and above [2]. In order to make world familiar with the old age problems world health organization celebrated WORLD HEALTH DAY (WHO) with “Active aging makes the difference” as slogan and declared the year 1999 as international year for older persons [3].

Expectation of life at birth for males and females has increased more in recent years. In India the expectation of life at birth for males has shown an increase from “42 years in 1951-1960” to “58 years in 1986-1990” and it is projected to “67 years by 2011 –2016 for males and 69 years for females”. This shows that an increase of about “9 years” for males and “11 years” for females in 25 years period [4]. Projection

beyond 2016 made by United Nations has indicated that 21% of the Indian population will be 60 + by 2050 which was 6.8% in 1991 [5].

The rapid increase in the number of old age people in the population raises various social, economic and health issues. Many studies all over the world have shown that ill health is one of the most important factors that causes fear in the minds of old age people.

### Objective:

To study the socio-demographic profile of geriatric population in field practice area of Kurnool Medical College.

### Material and Methods:

The present study was carried out at the field practice area of Kurnool Government Medical College. One ward of

urban area and one village of rural area were randomly selected based on random number table. Sriram nagar area of Urban Health Centre Kurnool which is urban field practice area of department of Community Medicine, Kurnool Medical College, Kurnool and Peddapadu village, which is rural subcentre of Primary Health Centre, Kallur was selected. The present study was conducted for a period of one year from May 2008 to April 2009. Ethical approval was taken from Institutional Ethical Committee.

**Study Design:** This study was done as a Cross-sectional Descriptive study. **Computation of Sample Size:** The sample size for the present study was calculated using the following formula at 95% confidence interval, with an allowable error of 10%. Various earlier studies revealed that the prevalence of hypertension among the old age people was in between 45% to 55% in urban and rural areas. Hence a

prevalence of 45% was assumed for the purpose of computing the size of the sample required for the present study. Thus, the sample size of 490 elderly subjects aged 60 years and above was found to be sufficient for this study. Among 490 subjects, 245 samples were selected randomly from urban area and 245 samples were selected randomly from rural area by using random number table. Enlisting of the study subjects was done by random sampling by using Loksabha electoral list of 2005.

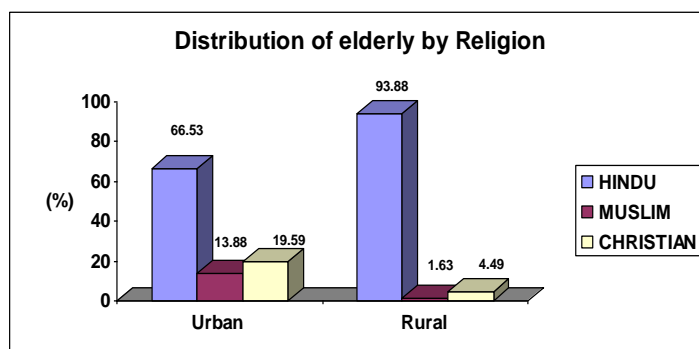
**Results:**

In table 1, many study subjects were falling in the age group of 60 – 69 years, 56.33% in urban areas and 55.10% in rural area. 10.09% male and 19.05% of female study subjects in rural area falling in 80 – 89 age group compared to 6.84% males and 7.81% females in urban area falls in same age group.

**Table- 1: Distribution of geriatric subjects by age & sex**

URBAN AREA						
Age groups	Male		Female		Total	
	No.	%	No.	%	No.	%
60 – 69	58	49.57	80	62.50	138	56.33
70 – 79	47	40.17	35	27.35	82	33.47
80 – 89	8	6.84	10	7.81	18	7.35
90 & Above	4	3.4	3	2.34	7	2.85
Total	117	100.00	128	100.00	245	100.00
RURAL AREA						
60 – 69	69	57.98	66	52.38	135	55.10
70 – 79	36	30.25	32	25.40	68	27.76
80 – 89	12	10.09	24	19.05	36	14.69
90 & Above	2	1.68	4	3.17	6	2.45
Total	119	100.00	126	100.00	245	100.00

**Graph 1: Distribution of study subjects by Religion**



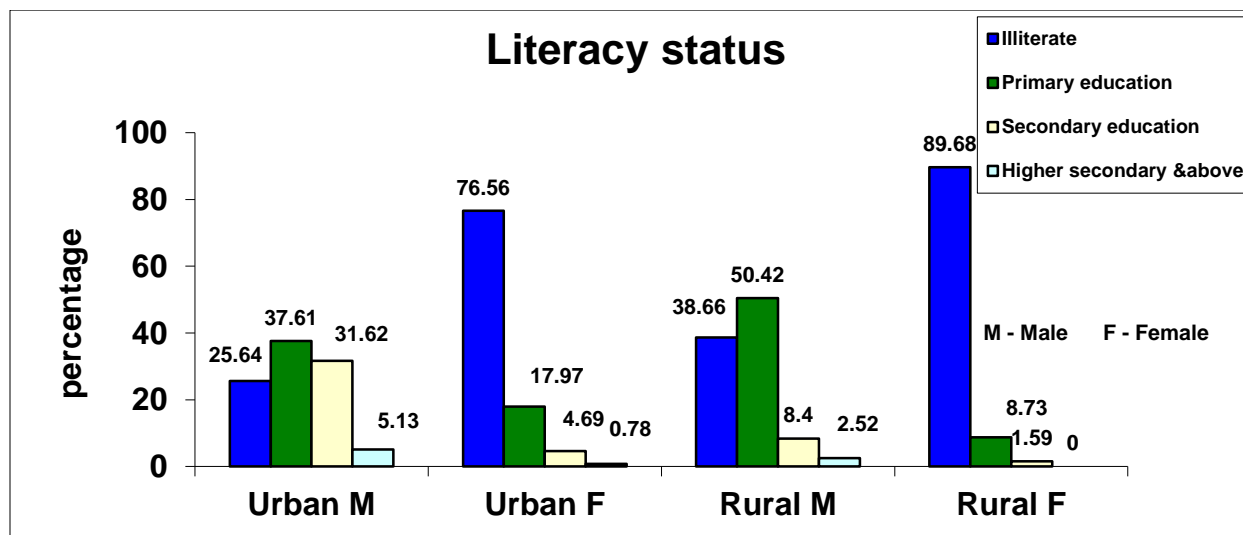
Majority of study subjects belong to Hindu religion, 93.88% in rural area and 66.53% in urban area. Illiterates were more in the study subjects in both urban (52.25%) and rural areas (64.90%), and the females are more illiterate to the extent of 89.68% in rural area, compare to 76.56% in urban area. About 18% of urban study population has literacy status of secondary education compared to only 4.90% in rural area.

**Table 2: Distribution of study subjects by Caste**

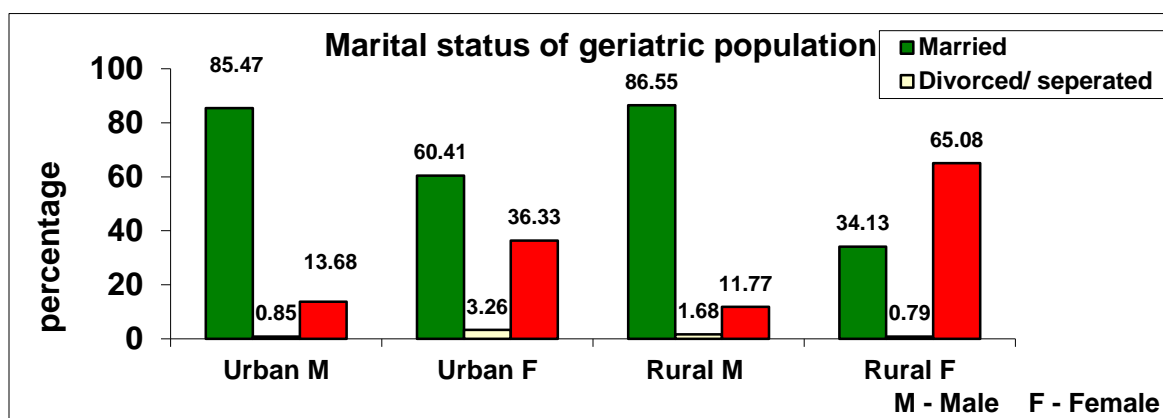
Caste	URBAN AREA		RURAL AREA	
	No. of subjects	%	No. of subjects	%
OC	36	14.69	31	12.65
SC	119	48.57	58	23.67
ST	2	0.82	156	63.68
BC	88	35.92	0	0.00
TOTAL	245	100.00	245	100.00

Majority of study subjects belong to backward classes in rural area (63.68%) and schedule caste in urban area (48.57%).

**Graph 2: Distribution of study subjects based on literacy status**



**Graph 3: Distribution of elderly subjects based on marital status**



In urban study subjects, 36.33% were widowed compared to 39.18% in rural study population. Among the females, 65.08% were widowed in rural area compare to 57.03% in urban area.

**Table 3: Distribution of elderly population based on occupation**

Occupation	URBAN AREA					
	Male		Female		Total	
	No.	%	No.	%	No.	%
Unskilled	20	17.09	29	22.66	49	20.00
Skilled	9	7.70	12	9.37	21	8.57
Self employment	17	14.53	6	4.69	23	9.39
House wife	-	-	66	51.56	66	26.94
Not doing any work	30	25.64	13	10.16	43	17.55
Retired employee	41	35.04	2	1.56	43	17.55
Total	117	100.00	128	100.00	245	100.00
Occupation	RURAL AREA					
	Male		Female		Total	
	No.	%	No.	%	No.	%
Unskilled	43	36.14	31	24.60	74	30.20
Skilled	12	10.08	5	3.97	17	6.94
Self employment	12	10.08	3	2.38	15	6.12
House wife	--	--	33	26.19	33	13.47
Not doing any work	45	37.82	54	42.86	99	40.41
Retired employee	7	5.88	0	0.00	7	2.86
Total	119	100.00	126	100.00	245	100.00

Majority of rural study subjects (40.41%) were not engaged in any occupation, while 51.56% of females from urban area were house wives compared to only 26.19% in rural area.

**Table 4: Distribution of elderly subjects based on living arrangements**

Living arrangements	URBAN AREA					
	Male		Female		Total	
	No.	%	No.	%	No.	%
Alone	1	0.85	21	16.41	22	8.98
With spouse	32	27.35	16	12.50	48	19.59
With spouse + children	67	57.27	27	21.09	94	38.37
With children	13	11.11	56	43.75	69	28.16
With others	4	3.42	8	6.25	12	4.90
Total	117	100.00	128	100.00	245	100.00
Living arrangements	RURAL AREA					
	Male		Female		Total	
	No.	%	No.	%	No.	%

Alone	3	2.52	16	12.70	19	7.76
With spouse	21	17.65	9	7.14	30	12.24
With spouse + children	80	67.23	35	27.78	115	46.94
With children	12	10.08	64	50.79	76	31.02
With others	3	2.52	2	1.59	5	2.04
Total	119	100.00	126	100.00	245	100.00

Majority of rural study subjects (46.94%) were living with their spouse and children compare to 38.37% in urban study population. An important observation found in the study was, 16.41% of study female subjects were in urban area and 12.70% of study female subjects in rural area “living alone”.

**Table 5: Distribution of elderly population based on Socio economic status**

URBAN AREA (Kuppuswamy classification)			RURAL AREA (Uday pareek scale)		
Socioeconomic status	Number of subjects		Socioeconomic status	Number of subjects	
	No.	%		No.	%
Social class I	21	8.57	Upper	11	4.49
Social class II	51	20.82	Higher middle	34	13.88
Social class III	58	23.67	Middle	64	26.12
Social class IV	75	30.61	Lower middle	51	20.81
Social class V	40	16.33	Lower	67	27.35
			Below poverty line	18	7.35
Total	245	100.00	Total	245	100.00

Among the urban study population, 30.61% belonged to social class IV, while, the corresponding figure in rural area was 27.35%. About 16% of urban study subjects belonged to social class V, while 7.35% of rural study subjects belong to below poverty line.

### Discussion:

In the present study majority of study subjects in urban (56.33%) and rural (55.10%) areas were in the age group of “60 – 69 years”, while 33.47% and 27.76% from urban and rural areas, respectively in the age group of “70 – 79 years”. Among the rural study subjects, 14.69% were fall in

age group of “80 – 89 years compared to 7.81% in urban study subjects.

In the study reported by Singh et al (2005) [6] more number of study subjects fall into 65 – 69 years age group, (52.8% subjects in rural area and 51.6% subjects in urban areas). The results were similar to the present study with little variation. Research done by ICMR in its geriatric clinics in India has also produced the similar findings. In the study done by Elango (1998) [2] it was found that male subjects were more in the age groups 60 – 69 (51.2% males and 48.8% females) in rural areas. Similar to this in the present study

more number of male subjects fall into 60 – 69 age groups (57.98% males and 52.38% females) in rural areas.

Majority of study subjects in urban area (66.53%) and rural area (93.88%) belong to Hindu religion. Majority of study population belong to scheduled caste in urban area (48.57%) and back ward caste in rural area (63.68%). In the study done by Anil Jacob purty et al (2006) [7] majority of study population (98.7%) belong to Hindu religion.

Several studies revealed that there was much difference in the literacy rates of geriatric males and females. Gurav et al in urban area (2002) [8] showed 56.44% of illiterates and among which 77.14% female illiterates in his study. Anil Jacob purty et al (2006) in his study in rural area of Tamil Nadu revealed 78.7% of illiterates [7]. Anil Goswami et al (2005) [9] in rural area found that overall illiteracy rate was 81.6% and among which 99% of illiterate females and 63.9% of illiterate males in the geriatric age.

Bhatia et al in urban area [10], observed high percentage of widows (49.3%) and widowers (25.7%). Anil Jacob purty et al in rural area (2002) [7] found 32.3% widows/widowers. Venkato Rao et al in rural area (2005) [11] found more number of widows (67.0%) than widowers (23.3%) in his study which is very similar to the present study.

In the present study it was observed that 62.04% of study subjects in urban area and 56.74% of study subjects in the rural area (including house lives) were not involved in any sort of economically productive work. Among the rural study subjects 30.20% were participated in unskilled occupation, which is very higher value compares to urban study subjects (20%). In the study done by Kishore et al (1997) [12] in rural

areas it was found that 28.0% of the male and 21.0% of the females were not engaged in economically productive life. In the study conducted by Anil Jacob purty (2006) [7] in rural area it was observed that 28.3% of subjects were not engaged any occupation. Gurav et al in urban area (2002) [8] found that 38.6% of elderly subjects were not involved in any sort of economically productive life in their study.

In the present study, regarding living arrangements it was observed that more number of study subjects in urban area (38.37) and rural area (46.94%) were living along with “spouse and children” followed by “with children only” in urban (28.16%) and in rural (31.02%) areas. 8.98% of study subjects in urban area and 7.76% of study subjects in rural area were living alone. Female subjects living alone were more in number in urban area (16.41%) than in rural area (12.70%).

Bhatia et al in urban area (2007) [10] found that 3.7% of geriatric subjects were living alone and 49.85 were living with spouse and children. Kishore et al in rural area (1997) [12] found that 6.5% of the study subjects were living alone, 68.3% with spouse and 20% were living with their children. In the present study majority of study subjects in urban area belong to social class IV based on modified Kuppu Swamy classification [13]. 16.33% of subjects belong to class V and 8.57% of subjects to social class I in urban area. In rural area based on Uday Pareek classification [14] majority of study population belong to lower class (27.35%) followed by middle class (26.12%).

Anil Jacob purty et al (2006) [7] observed 87.5% of the study subjects were belong to low socio economic status

and among which 62.8% were living below poverty line in rural area. Elingo et al (1998) [2] found that 49% of study subjects belong to lower socio economic status.

### Conclusion:

Joint family system being the backbone of Indian society should be promoted. There should be separate geriatric clinics in both private as well as government hospitals to deal with the problems faced by the elderly. Further studies are needed to explore the possibility of starting Mobile geriatric clinics to reduce the problem of accessibility for underserved and remote areas.

### Recommendations:

- 1) Along with medical treatment, economic and social support should also be provided by Government.
- 2) Strengthening of primary health care services and establishment of geriatric care units for elderly urgently needed.
- 3) Efforts should be made for income generation to support themselves and their families.

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