

## HEALTH STATUS OF GERIATRIC POPULATION IN SLUMS OF ROURKELA

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### ARTICLE INFO

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DOI: <http://dx.doi.org/10.15520/ijmhs.2015.vol5.iss3.67.92-94>

### ABSTRACT

**Introduction-** Projections beyond 2016 made by UN have indicated that 21% of the Indian population will be more than 60 years by 2050 in comparison to 6.8% in 1991. Health of elderly in the slum areas is a neglected arena. Hence this study was carried out with the objective of knowing the socio-demographic status and morbidity pattern among the elderly in these areas. **Materials & Methods-** This was a Cross sectional Study where males and females who had completed 60 years of age, willing to participate and also share their medical record were included in the study. 24 slums of Rourkela were selected by random selection technique. This study was carried on for a period of 6 months where 224 subjects were interviewed, a detailed clinical history was taken, medical records verified and blood pressure was measured. Data was collected in a predesigned pretested questionnaire containing both open and close ended questions. Chi square test was used for analysis. **Results-** The number of females above 80 years of age were 34.8% compared to males who were 9.1%. Apart from systemic morbidities 91% of the elderly also complained of fragility i.e. complex physiological deterioration, unexplained weight loss, poor grasping strength, self reported exhaustion, slow walking speed and low physical activity. All of them suffered from at least one of the morbidities included in the study. **Conclusion-** There is a growing need of interventions to ensure the health of this vulnerable geriatric population and to create a policy to meet the care and needs of the disabled elderly.

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### INTRODUCTION

The average length of human life has increased over the countries as living conditions have improved and aging population is on the rise. Projections beyond 2016 made by UN have indicated that 21% of the Indian population will be more than 60 years by 2050 in comparison to 6.8% in 1991. According to 2011 census, the elderly comprised 7.8% of the population. Aging an integral part of living, typically is accompanied by gradual but progressive physiological changes and an increased prevalence of acute and chronic illness. Although neither a disease nor a curse, aging nonetheless is associated with a high incidence of physical impairment and functional disability.

In India life expectancy at 60 years for the year 1995-96 was 14.6 yrs for males and 17 for females. But, the gain in survival may be accompanied by increased morbidity due to age related chronic diseases, falls accidents etc. Thus disability among the elders will emerge as a problem in near future. Among the several concerns of humankind the one leading to a life free of illness disability and poor health during old age has been a dominant one. Slums are unserved and underserved areas of urban towns and cities. It has been projected that half of the Indian population will live in urban areas by 2020 and nearly one

third of them will be slum dwellers and because of economic reasons the health of the elderly would still remain a neglected arena.

Since Gerontological research in India is of recent origin it is marked by absence of longitudinal as well as cross sectional studies on several aspects concerning the elderly. Besides no handy and concrete data are available regarding problems of the aged in the slums of Orissa. Hence this study has been taken up to know the health status of the aged in the slums of Rourkela. This study was carried out with the objectives of knowing the socio-demographic profile of the study population and to assess their morbidity patterns

### MATERIALS AND METHODS

This was a Cross sectional Study where males and females who had completed 60 years of age, willing to participate and also share their medical record were included in the study. Those who were acutely ill and bedridden were excluded from the study.

24 slums of Rourkela were selected by random selection technique. This study was carried on for a period of 6 months where 224 subjects were interviewed, a detailed clinical history was taken, medical records verified and blood pressure was measured. Data was

collected in a predesigned pretested questionnaire containing both open and close ended questions.

Instruments used were Spymomanometer, Weighing machine, Snellens chart, torch, Sociodemographic characteristics were noted and used for analysis.

.For subjects not diagnosed of hypertension earlier Systolic BP of >140 mmof hg and diastolic BP of >90mof hg was taken as hypertensive.

Arthritis, pain and swelling in the big joints fibrositis, myositis ,spondilytis either by history or by medical records was taken as diseases of the Musculoskeletal system.

For presence of chronic disease clinical history and examinations , physicians diagnosis and medical records was taken into consideration. Bergen Insomnia Scale containing six items pertaining to sleep onset, maintenance and early morning awakening was used to measure insomnia. Results were expressed as percentages and chi square test was used for analysis.

**RESULTS**

The study population was divided as per the WHO criteria of elderly and table I shows the details. Mean age of the study population was 70.57 =-2.3 years. Most of the elderly 164[73.2%] were either widows or widowers.

**Table I Age and Sex Distribution of the Study Population**

Age Group	Males	Females	Total
60-69 Young old	88(66.7) (66.7)	44(33.3) (47.8)	132 (58.9)
70-79 Old old	32(66.7) (24.2)	16(33.3) (17.4)	48 (21.4)
80 & above Very old	12(27.3) (9.1)	32(72.7) (34.8)	44 (19.6)
Total	132.(58.9)	92(41.1)	224

Figures in parenthesis shows percentages

The second table shows the details of the sociodemographic status of the elderly. Majority 79.9% both males and females were illiterate.82.1% belonged to the lower socioeconomic tatus as per B G Prasad classification. Though most of them were occupied with some means of earning in their younger days only a small proportion12 (6.03%) of them are busy with their occupation now and all of them belonging to the young old group.

**Table II Sociodemographic Profile of the Study Population.**

Variable	Males n 132		Females n=92		Total n 224
	number	%	number	%	
Literacy					
Illiterate	102	77.3	77	83.7	179 [79.9]
Just literate	14	10.6	12	13.0	26 [11.6]
Literate	16	12.1	3	3.2	19 [8.4]
SES					
Lower	101	76.5	83	90.2	184 [82.1]
Middle	21	15.9	6	6.5	27 [3.1]
Upper	10	7.6	3	3.3	13 [5.8]
Occupation (Present or Previous)					
Daily Labourers	78	59.1	61	66.3	139 [62.1]
Vendors	19	14.4	8	8.7	27 [12.1]
Rickshaw pullers	22	16.7	0	0	22 [9.8]
Auto drivers	10	7.6	1	1.1	11 [4.9]
No job	3	2.3	22	23.9	25 [11.1]

Habituations and addictions are difficult to part with even in elderly population but frequency of substance abuse was definitely reduced with age mostly due to loss of financial independence in the study population. Alcohol used by the respondents was mostly the local fermented drink prepared with rice. Paan and betel chewing was more common in females than males.71.4% of the females had no habituations or addictions.

**Table III Habituations & Addictions of the study population**

Habituation & addiction	Males N=132	Females N=92	Total N=224	Chi square	P value
Alcohol	76[86.4] [57.6]	12[13.6] [13.0]	88 [39.2]	45.08	0(s)
Smoking & tobacco	91[62.3] [68.9]	55[37.7] [59.8]	146 [65.1]	2.00	0.16(ns)
Betel	62[56.4] [46.9]	48[43.6] [52.2]	110 [49.1]	0.59	0.44(ns)
None	12[28.6] [9.1]	30[71.4] [32.6]	42 [18.75]	19.68	9E-06(s)

Table IV shows the distribution of various morbidities among the elderly and their significance level. The morbidities among elderly that were found to be significant were hypertension, decreased visual acuity, urinary problems and insomnia.

**Table IV Morbidity Pattern of the Study Population**

Morbidity	Males	Females	Total	Chi square	P value
Hypertension	62[57.4] [47]	46[43] [50]	108 [48.2]	.199	.655 (s)
Diabetes	51[62.2] [38.6]	31[37.8] [33.7]	82 [36.6]	.570	.450(ns)
Musculoskeletal	107[56.9] [81]	81[43.1] [88]	188 [83.9]	1.96	.162(ns)
Visual acuity	83[65.9] [62.9]	43[34.1] [46.7]	126 [56.3]	5.74	.016(s)
Hearing loss	91[57.9] [68.9]	66[42.1] [50]	157 [70.1]	.203	.653(ns)
Urinary problems	63[50.8] [47.7]	61[49.2] [66.3]	124 [55.4]	7.57	.006(s)
GI disturbance	72[58.1] [54.5]	52[41.9] [56.5]	124 [55.4]	.086	.769(ns)
Insomnia	61[44.5] [46.2]	76[[55.5] [82.6]	137 [61.2]	30.2	0(s)
Cardiorespirato ry	41[64.1] [31]	23[35.9] [25]	64 [28.6]	.976	.323(ns)
Dental	102[62.6] [53]	61[37.4] [66.3]	163 [72.7]	3.29	.069(ns)
Sensorineural	41[56.2] [31]	32[43.8] [34.8]	73 [32.6]	.342	.559(ns)

Apart from systemic morbidities 91 % of the elderly also complained of fragility ie complex physiological deterioration, unexplained weight loss,poor grasping strength,self reported exhaustion, slow walking speed and low physical activity.

**DISCUSSION**

The findings of this study has been compared with various other community based studies of geriatric age group .The number of females above 80years of age were 34.8% compared to males who were 9.1%.

Study conducted by Jai Prakash Singh et al[1] reported 65.5% of the population in 60-69 years age group, 28.55 in 70- 79 years age group and only 6% above 80 years

79.9% of the elderly in these slum areas were illiterate 83.7% being females and 77.3% being males.

Khadervalli et al [2]in their study reported only 27 % as illiterate and 31% as primary school literates.

82.1% belonged to low socioeconomic status, 62.1% of them being daily labourers when they were young.11.1% of the respondents had no jobs ever out of which 23.9% were females. However 8% of them were still working and they all belonged to young old group.

Present study concluded alcohol and tobacco use as 39.2% and 65% respectively. This is similar to the findings of Sanjiv Kumar Burman et al[3] who reported 30% and 47.5% respectively, whereas Jai prakash et al[4] reported alcohol use as 8% and tobacco 23.75%

In the present study none of the elderly were completely healthy in the entire study population

In a study conducted by Garg BS[5] et al it was reported that 72.90% of elderly were sick.

Taneja D K et al[6] reported of 20% of their study population as healthy and 80% of them being unwell in their study in Delhi.

Mehrotra et al[7] in their study found out that only 47.70% were sick. Venkoba Rao et al[8] also reported of only 54% being sick.

All the respondents were suffering from some or the other form of morbidity. Majority of them suffering from multiple ones which is comparable to that of previous study conducted by Venkoba Rao.[8].

48.2% of the respondents were found to have been suffering from hypertension in the present study.

Hypertension was detected for 1<sup>st</sup> time in 15% of the slum dwellers who were not aware of the disease. They were advised to visit the nearest Government hospital with the reference slip provided by the authors. Padda S et al[9] in their study of elderly reported the prevalence of hypertension as 16.6%. Niranjana GV and Vasundhara MK [10] reported hypertension in 5.1% of the elderly.

36.6% were reported to have diabetes as per their medical records in the present study whereas Sanjiv Kumar Burman et al [3] and Jaiprakash et al [1] reported Diabetes in 15% and 13.75% of their study population respectively.

Sushma Tiwari et al [11] reported musculoskeletal problems to be 53.15%, respiratory as 10.98%. Khadervalli et al[2] found musculoskeletal problems as 64%. These are different from the present study which reported musculoskeletal problems as 83.9% and cardio respiratory as 28.6%.

Digestive problems were present in 55.4% of the elderly in the present study, the most common one being constipation.

Khadervalli et al [2] reported digestive problems among 46% of the elderly. The present study differed from the one conducted by Niranjana GV and Vasundhara MK[10] in which only 4.2% had GI morbidity and Kapil U et al[12] who showed only 22.09%.

In a health study of tribal old in North India by Goyal et al[13] dental problems were reported in 12.50% of the elderly. In the present study dental problems were found in 72.7% of the respondents.

Kapil U et al[12] reported of 12.6% of the elderly suffering from accidental injuries. The present study

reported a higher percentage of 33% having accidental injuries including minor ones.

## CONCLUSION

Morbidity increases with age and with associated social factors. There is a growing need of interventions to ensure the health of this vulnerable geriatric population and to create a policy to meet the care and needs of the disabled elderly.

## REFERENCES

1. Jai Prakash Singh et al Epidemiological study of Diabetes among Geriatric Population in an urban slum of Nagpur. National Journal of Community Medicine. Vol 2 Issue 2 July Sept 2011
2. Khadervalli Nagoor et al Comparative study of health status among slum and non slum elderly population in Kadappa region South India Journal of Evolution of Medical and Dental Sciences 2014 Vol3 issue 5 Feb 03 pg 1298-1307
3. Sanjiv Kumar Burman et al A study of morbidity profile of geriatric population in an urban community of Kishnabagh Bihar. India Global Journal of Medicine and Public Health. Vol 3 No 1 2014
4. Jai Prakash Singh et al. Geriatric life style profiles in urban slums Central India Scholars Journal of applied Medical Sciences Issn 2320-6691
5. Garg BS, Gupta VN, Mishra SC A geriatric study in an urban area; Indian Journal of Public Health 1989 Vol 27 (2) pg 77-85
6. Taneja DK, Nalwa AS Physical health of pensioners; Journal of association of Physicians of India 1985; Vol 33 (1) pg 119
7. Mehrotra SK, Pandey DN, Dabral SB Urban aged population a social study Indian journal of public health 1979 vol 23 (2) p 71-72
8. Venkoba Rao A. Psychiatry of old age in India. Int Rev Psychiatry 1993; 5: 165-170.
9. Padda AS, Mohan V, Singh SS Health profile of aged persons in urban and rural fields of Amritsar Indian journal of community medicine 1998 Vol 23 (2) pg 72-76
10. Niranjana GV, Vasundhara MK A study of health status of aged persons in slums of Bangalore Indian journal of community medicine 1996 vol 31 (1-4) pg 37-40
11. Sushma Tiwari et al Prevalence of health problems among elderly A study in rural population in Varanasi. Indian Journal of preventive and social medicine Vol 41 No 3 & 4 2011
12. Kapil U, Sood AK morbidity pattern in aged population in Haryana Journal of Public Health 1989 Vol 33 (190)
13. Goyal S, Goyal N, Health of the tribal old Social welfare 1999 vol 40(10) pg 28-29
14. H M Swami, Bhatia V, Dutt R, Bhatia SPS A community based study of the morbidity profile among elderly in Chandigarh India Bahrain Medical Bulletin 2002 24 (1)

**How to cite this article:** K VS PRASAD, Sofia Noor G Krishnababu. Health Status of Geriatric Population in Slums of Rourkela. *Innovative Journal of Medical and Health Science*, [S.l.], v. 5, n. 3, p. 92-94, may. 2015. ISSN 2277-4939. Available at: <<http://innovativejournal.in/ijmhs/index.php/ijmhs/article/view/67>>. Date accessed: 23 May. 2015. doi:10.15520/ijmhs.2015.vol5.iss3.67.92-94.