

ORIGINAL RESEARCH

Evaluation of Health Profile of Geriatric Population in Urban Slums of Rajahmundry, Andhra Pradesh

Saptarishi Bose¹, Paromita Roy²

¹Associate Professor, Department of Community Medicine, Great Eastern Medical School, Srikakulam, Andhra Pradesh, India

²Assistant Professor, Department of Dental, Great Eastern Medical School, Srikakulam, Andhra Pradesh, India

ABSTRACT

Background: Ageing is a normal process. There has been an expansion of geriatric age group due to increased longevity. In developing countries the prevailing socio-economic conditions of elderly, the process of ageing along with suffering from various health and social problems definitely affect the day to day of an individual's life during the old age. **Objectives:** To evaluate health profile of geriatric population, To describe the various types of morbidity with the advancing age.

Materials and This study is a prospective cross sectional study design conducted in slums of Rajahmundry city for 3 months. The sampled population (484) is divided in to three categories as per division of age i.e., 60-64 yrs, 65-74 yrs and ≥ 75 yrs. Medical problems, psychological problems and other problems are being assessed through administered study questions.

Results: In the age group of 60-64yrs Hypertension is the major health problem present in respondents. Next to hypertension individuals have reported to be suffering from Diabetes. Fatigue is the major psychological problem present in respondents. Next to Fatigue Lack of Sleep is found to be second major psychological problem. Tobacco consumption is found in all age group whereas lack of physical exercise followed next.

Conclusion: This study highlighted that majority of the elderly people are affected by medical and social problems, thus the focus should be on strengthening of geriatric health services along with social support so that the elderly people may be looked timely and regularly for their morbidity care so as to deal a happy daily life.

Keywords: Geriatric, Health, Rajahmundry, Urban Slums.

Corresponding Author: Dr. Saptarishi Bose, Associate Professor, Department of Community Medicine, Great Eastern Medical School, Srikakulam, Andhra Pradesh, India. Mail id: dr.sbose24@rediffmail.com

INTRODUCTION

The issue of elderly may vary not only in between nations but also within nations and between groups.^[1] UN defines older people as any person more than equal to 60 yrs of age.^[2] As per National Policy for Older People (NPOP-1999), GOI "senior citizen" as a person who is 60 years old or above.^[3,4] Older people are considered as a special group for following reasons: Icebergs of disease, multiple pathology, ;loss of adaptability, Costs of care.^[5] According to world health statistics 2014, globally around 11% of population is above 60 yrs of age, and 8% of population is above 60 yrs of age in South East Asian countries including India.^[6]

The share of older population (aged 60 years or over) worldwide have increased from 9.2 per cent in 1990 to 10.4 per cent in 2005 and will continue to grow as a proportion of the world population, reaching 21.7 per cent by 2050. In other words during 2050 every one individual in five will belong to geriatric age group,^[7] As per Census 2011, the proportion of older people is 8.14% which will increase to 10.7% in 2021 and 12.4% in 2026.^[8,9] Around 1/8th of world's elderly population lives in India. If the population of India is divided in to three major groups, i.e. 0-14 yrs, 15-59yrs and 60yrs & above we can make out that proportion of population more than 60 yrs increasing in a rapid rate. The grey population which accounted for 6.7% in 1991 might increase to more than 10% of its share by the year 2021.^[9]

Also old people have limited regenerative abilities and are more prone to disease, syndromes, and sickness as compared to other adults.^[10] However, due to rapid increasing trend of nuclear family set-ups in India in recent years the elderly people are tend to be exposed to emotional, physical and financial insecurity in the years to come. However in coming years in India geriatric population is expected to face physical, emotional and financial crisis because of the hasty change in the social scenario along with increase set up of nuclear families. That's why in India, percentage wise graying might not be very rapid, but due to its huge size planning for the elderly is a big challenge for the policy makers. The problems faced by the females are more critical compared to that of male due to low literacy rate, customary ownership of property by men and majority of women being not in labour force during their prime age with only very few in the organized sector.^[11,12] To develop requisite policy programme for the elderly population, there is a need for a study of elderly persons on various aspects and initiate social, economic and health policy debate about ageing in India. To develop requisite policy programmes for the geriatric population, there is a need for a study for the geriatric population on various aspects and initiate health, social and economical debate about ageing in India. But there is a serious dearth of datasets and analyses to identify the emerging areas of key concern and immediate intervention.^[13,14]

Abnormal motor function, audio-visual degeneration and so on; they also include functional incapacitation due to changes in human organs and frailties. The nuclearisation of families, depletion of intergenerational bonds and reversal in care-giving role played by families may be only a few examples with serious implications for the ageing and later life health.^[14,15]

Objectives

1. To evaluate health profile of geriatric population
2. To describe the various types of morbidity with the advancing age.

MATERIALS & METHODS

A community based, cross-sectional study was conducted for a period of three months (September 2019 to November 2019) in the urban slums of Rajahmundry, Andhra Pradesh. The study area included the slums in the field practice area of the Urban Health Training Centre (UHTC) attached to the Dept. of Community Medicine, GSL Medical College, Rajahmundry. The UHTC caters to a total population of 34,000 in 10 Slums. Among them 5 slum areas consisting a total population of about 18,000 were randomly selected.

Inclusion and exclusion criteria:

Elderly who were aged 60 and above at the time of study, residing in the study area during data collection and who gave consent on a voluntary basis to participate in the study were included. People who did not comply with the inclusion criteria were excluded. Further for confirmation of age and to avoid recall bias, only those people were selected who any kind of identity card had issued by any government body with details of the person.

Among the population of 18,000 there were 496 elderly people who fulfilled the inclusion criteria. Data was collected from 484 people, since the remaining people were not available despite three consecutive visits to their house.

Data Collection:

The list of geriatric people was taken from the records in the UHC register. With the help of ANM and MSW, every house of elderly was visited. After informing them about the complete details of the study and taking their verbal consent, they were interviewed and data was collected using a pre-designed and pre-tested proforma along with Sphygmomanometer, weight machine, measuring tape and torch and information was noted. The questionnaire used in the study was translated to vernacular language and validated by the experts. Confidentiality was assured throughout the study to the participants. Data was collected from 484 elderly people who were available during our visit and the sampled population was divided in to three categories as per age i.e., 60-64 yrs, 65-74 yrs and ≥ 75 yrs. Issues like medical problems, psychological problems and other problems are being assessed through administered study questions.

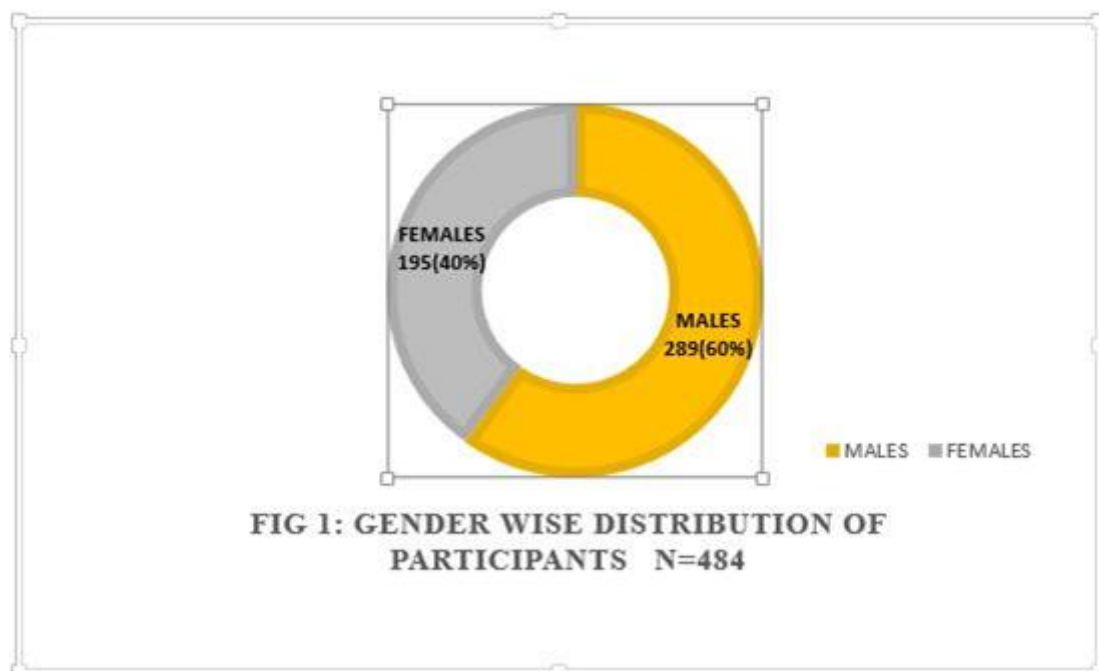
Statistical Analysis

The collected data was entered in Microsoft excel spreadsheet and double checked for errors. Data was analysed using SPSS software version 22.0. Descriptive statistics were expressed as percentage. Chi-square test was applied to find an association between two categorical variables. A P value of <0.05 was deemed statistically significant.

Ethics Statement

The study was approved by the Ethical Committee of the Institute. Informed consent was obtained from each patient.

RESULTS



[Table 1] Socio-demographic characteristics:

Out of 484 participants 289 (60%) were males and 195 (40%) were females. A major fraction 189 (65%) of male participants belonged in the age group of 65-74 years, whereas 113 (58%)

females were in 60-64 yrs age group. A joint family system was seen among the population interviewed to be the most common (66%), followed by the nuclear family (34%). Majority (68%) of the subjects were observed married, (27%) of the elderly men were widower while (26%) of the women were widow among the total subjects. Majority of male respondents had completed secondary education (48%) while most female had studied till primary education (42%).

TABLE -1 SOCIO DEMOGRAPHIC PROFILE OF PARTICIPANTS			
DEMOGRAPHIC FACTORS	MALE (N = 289) NO. %	FEMALE (N= 195) NO. %	TOTAL (N=484)NO. %
AGE IN YEARS			
60-64yr	66(23%)	113(58%)	179
65-74yr	189(65%)	66(34%)	255
>75Yr	34(12%)	16(8%)	50
TYPE OF FAMILY			
JOINT	198(69%)	122(63%)	320(66%)
NUCLEAR	91(31%)	73(37)	164(34%)
MARTIAL STATUS			
MARRIED	194(67%)	136(70%)	330(68%)
UNMARRIED	NIL	NIL	NIL
SEPERATED	17(6%)	08(4%)	25(5%)
WIDOW/WIDOWER	78(27%)	51(26%)	129(27%)
EDUCATIONAL STATUS			
ILLITERATE	73(25%)	67(34%)	140(29%)
LITERATE	NIL	NIL	NIL
PRIMARY	48(17%)	82(42%)	130(27%)
SECONDARY	138(48%)	41(21%)	179(37%)
GRADUATE	30(10%)	05(3%)	35(7%)
POST GRADUATE	NIL	NIL	NIL

[Table 2] Health Problems in various geriatric age group

In the age group of 60-64yrs Hypertension was the major health problem present in 124 (69%) respondents. Next to hypertension 107 (60%) individuals have reported to be suffering from Diabetes. Skin problems are present only in 18 (10%) study subjects. In the age group of 65-74 yrs Hypertension 184(72%) is the most common medical problem whereas skin problem 22(9%) constitute the least found medical problem. Hyper tension is the chief complaint found in 38(76%) respondents in the age group more than 75 yrs and Skin problems 03(6%) is the least medical compliant found in this study. Over all Hypertension and Diabetes constitute the major medical problems found in all age groups.

TABLE -2 MEDICAL PROBLEM REPORTED IN VARIOUS GERIATRIC AGE GROUP			
MEDICAL PROBLEMS	60-64YR (%) (N=179)	65-74 YR (%) (N=255)	>75 YR (%) (N=50)
HYPERTENSION	124(69%)	184(72%)	38(76%)
DIABETES	107(60%)	158(62%)	21(42%)
JOINT PAIN	89(50%)	117(46%)	20(40%)
VISION PROBLEM	106(59%)	142(57%)	29(38%)
PILES	45(25%)	88(35%)	11(22%)
SKIN PROBLEMS	18(10%)	22(9%)	03(6%)
HEARING PROBLEMS	37(21%)	71(28%)	18(36%)
GASTRIC PROBLEMS	21(12%)	39(15%)	20(40%)
URINARY PROBLEMS	27(15%)	34(13%)	07(14%)
ORAL HEALTH PROBLEMS	31(17%)	42(16%)	16(32%)

[Table 3] Psychological Problems in various geriatric age group

It was found that 58%, 56% and 62% of people suffered from fatigue followed by lack of sleep in the age group of 60-64 years, 65-74 years and >75 years respectively. That's why fatigue was seen as major psychological problem in our study followed by lack of sleep. Depression and Loneliness were the least found psychological problem in study subjects.

TABLE -3 PSYCHOLOGICAL PROBLEM REPORTED IN VARIOUS GERIATRIC AGE GROUP			
PSYCHOLOGICAL PROBLEM	60-64YR (%) (N=179)	65-74 YR (%) (N=255)	>75 YR (%) (N=50)
UNEXPAINED WEAKNESS/ FATIGUE	104(58%)	142(56%)	31(62%)
LACK OF SLEEP	82(46%)	114(45%)	24(48%)
ANXIETY	34(19%)	56(22%)	12(24%)
DEPRESSION	22(12%)	22(09%)	05(10%)
LONLINESS	27(15%)	31(12%)	07(14%)
RESTLESSNESS	24(13%)	29(11%)	07(14%)

[Table 4] Other Problems in various geriatric age group

Tobacco use was a major problem in all the three age group that is 65%, 71%, 84% and it was followed by reduced physical activity which was 60%, 58%, 78% in the age group 60-64, 65-74, >75 years respectively.

TABLE -4 OTHER PROBLEMS REPORTED IN VARIOUS GERIATRIC AGE GROUP			
OTHER PROBLEMS	60-64YR (%) (N=179)	65-74 YR (%) (N=255)	>75 YR (%) (N=50)
MALNUTRITION	51(28%)	74(29%)	12(24%)
LOW PHYSICAL ACTIVITY	107(60%)	149(58%)	39(78%)
SEDENTARY BEHAVIOUR	48(27%)	58(23%)	25(50%)
TOBACCO USE	116(65%)	181(71%)	42(84%)
ALCOHOL USE	77(43%)	41(16%)	03(6%)

DISCUSSION**[Table 1] Socio demographic characteristics:**

In our study, out of the three age categories, the majority (75.67 %) subjects were observed in age group 65-74 years when both male and female groups were combined together. Similar findings were observed (72.40 %) by Balamurugan J et al.^[16] and (72.30 %) by Lena A et al.^[17] Observations of gender distribution by Surekha Kishore et al.^[18] (62.10 %) male, (37.90 %) female and Mohammed Ubaidula et al.^[19] (55.94 %) male, (44.06%) female are quite similar to our study (60 %) male and (40 %) female. A joint family system was seen to be the most common (66 %) among the population interviewed, similar findings (75.74%) were observed by Mohammed Ubaidula et al.^[19] A majority of respondents were married (68 %) and (27%) widow/widower, similar findings (47.4 %) married, (43.8 %) widow/ widower were observed by Balamurugan J et al.^[16] and (47.4 %) married, (43.66 %) widow/widower by Lena A et al.^[17] Gupta I et al,^[20] reported (63.0%) illiterate observed in the data of 52nd round, National Sample Survey, India. In our study (39.33 %) observed illiterate, similar findings (45.0 %) were observed by Balamurugan J et al.^[16], (41.1 %) by Lena A et al,^[17] and (38.6 %) Manikanta P,^[21] whereas (80.2 %) observed by Singh C et al.^[22]

[Table 2] Health problems of the elderly:

In the age group of 60-64yrs Hypertension is the major health problem present in 87 (51%) respondents. Next to hypertension 76 (48%) individuals have reported to be suffering from Diabetes. skin problems are present only in 12 (7%) study subjects. In the age group of 65-74 yrs hypertension (63.5%) is the most common medical problem whereas (5.8%) constitute skin problems the least found medical problem. Hyper tension is the chief complaint found in 59(77.6%) respondents in the age group more than 75 yrs and skin problems is the least medical compliant found in this study. Over all Hypertension and Diabetes constitute the major medical problems found in all age groups. In the study by Jadhav V S et al,^[23] and A J Purty et al,^[24] the prevalence of hypertension was observed in elderly (21.6 %) and (21.59 %) respectively. These findings were comparable (25.0 %) with our study. In contrast, Chadda S L et al,^[25] reported prevalence rate of hypertension (58.8 %) male and (52.2 %) female.

Table 3. Psychological Problems

Fatigue is the major psychological problem present in respondents. Next to Fatigue Lack of Sleep is found to be second major psychological problem. Depression and loneliness are the least found psychological problem in study subjects. Our study findings were similar to a study that showed the extent and correlation of depression among 400 community-dwelling older adults aged 65 years and above in Chennai found the prevalence rate of depression and loneliness to be 14%.^[26]

[Table 4] Other Problems

Tobacco consumption is found in all age group whereas lack of physical exercise followed next Tobacco use is seen in all ages but most commonly in 65-74 yrs of age. A study of 100 elderly people in Himachal Pradesh found that most of the patients were also smokers and alcoholics.^[27] Majority of the respondents reported current medical problems (85%). Among these hypertension are equally prevalent in all age group.

CONCLUSION

The care of elderly is drawing more and more attention of the Government and public. It is already a major social and health problem in affluent countries. The study provides data to plan services and programme for betterment of aged hope this study yields valuable information required for the design of the service to be provided for this special group.

Acknowledgements:

We express our sincere gratitude to all the people who participated in the study spending their precious time. We are also thankful to the editor and publisher of this article in this journal.

REFERENCES

1. Gurav RB, Kartikeyan S. Problems of geriatric population in an urban area. *Bombay Hosp J.* 2002;44(1).
2. Senior citizen-UN Available at <http://www.un.org/en/index.html>; (accessed on 21/12/2014).
3. Mishra A, Code QR. Health profile of elderly in urban slums of Cuttack city, Odisha. *People.* 2005;2025(2050):2075.
4. Raj U, Galhotra A. The Maintenance and Welfare of Parents and Senior Citizens Act, 2007-Helping the conditions of the elderly in India. *Indian Journal of Community and Family Medicine.* 2019 Jul 1;5(2):157.
5. Detels R, Beaglehole R, Lansang MA, Gulliford M. *Oxford textbook of public health.* Oxford University Press; 2011.

6. WHO. World Health Statistics 2014. Available at http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf
7. State of world population-2013. Available at <http://www.unfpa.org/publications/state-world-population-2013> (accessed on 02/03/2014).
8. Operational guide lines for NPHSCE-Government of India. Available at <http://www.mohfw.nic.in/showfile.php> (Accessed on 04/03/2015).
9. Age care statistics. Available from: <http://www.helpageindia.com> (Accessed on 08/04/2015).
10. Irudaya Rajan S. Demography of ageing. In: Dey AB, editor. Ageing in India, Situational analysis and planning for the future. New Delhi: Rakmo Press; 2003.
11. Shah B, Prabhakar AK. Chronic morbidity problem among elderly. *Indian Journal of Respiratory Medicine* 1997; (106): 265-272.
12. Kartikeyan S, Pedhambkar BS, Jape MR. Social security the Global Scenario. *Indian J Occup Health*. 1999;42(2):91-8.
13. Reddy PH. The health of the aged in India. *Health Transition Review*. 1996 Jan 1:233-44.
14. Goel PK, Garg SK, Singh JV, Bhatnagar M, Chopra H, Bajpai SK. Unmet needs of the elderly in a rural population of Meerut. *Indian J Community Med*. 2003 Oct 1;28(4):165-6.
15. Alam M. Ageing in India: Socio-economic and health dimensions. Academic Foundation; 2006.
16. Balamurugan J, Ramathirtham G. Health problems of aged people, *IJRSS*, 2012 ; 2(3) : 139-150.
17. Lena A, Ashok K, Padma M, Kamath V, Kamath A. Health and social problems of the elderly: A cross-sectional study in Udupi Taluk, Karnataka. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*. 2009 Apr;34(2):131.
18. Manikanta PA. Study on the health status of the tribal elderly of Andhra Pradesh. *Indian Journal of Research*. 2013;2(10):188-90.
19. Kishore S, Juyal R, Semwal J, Chandra R. Morbidity profile of elderly persons. *Eye*. 2007;36(31):30-45.
20. Ubaidulla M, Inamdar IF, Aswar NR, Doibale MK, Narkhede MG. Medical and psychosocial profile of geriatric population in field practice area of Nanded, India. *J Dent Med Sci*. 2014;13(3):29-33.
21. Gupta I, Sankar D. Health of the elderly in India: a multivariate analysis. Institute of Economic Growth; 2002.
22. Singh C, Mathur JS, Mishra VN, Singh JV, Singh RB, Garg BS, Kumar A. Social Problems of Aged in a rural population. *Indian Journal of Community Medicine*. 1995 Jan 1;20(2):24.
23. Jadhav VS, Mundada VD, Gaikwad AV Doibale MK, Kulkani AP. *IOSR Journal of Pharmacy* 2012 Vol. 2(2) 184-88.
24. Purty AJ, Bazroy J, Kar M, Vasudevan K, Zacharia P, Panda P. Morbidity pattern among the elderly population in the rural area of Tamil Nadu, India. *Turkish Journal of Medical Sciences*. 2006 Feb 27;36(1):45-50.
25. Chadha SL, Radhakrishnan S, Ramachandran K, Kaul U, Gopinath N. Epidemiological study of coronary heart disease in urban population of Delhi. *The Indian journal of medical research*. 1990 Dec 1;92:424-30.
26. Arora VK, Bedi RS. Geriatric tuberculosis in Himachal Pradesh--a clinico-radiological profile. *The Journal of the Association of Physicians of India*. 1989 Mar 1;37(3):205-7.

27. Singh MM, Murthy GV, Venkatraman R, Rao SP, Nayar S. A study of ocular morbidity among elderly population in a rural area of central India. Indian journal of ophthalmology. 1997 Mar 1;45(1):61.