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Original Research Article

**Health profile of elderly in urban slums of Cuttack city, Odisha****Abhisek Mishra \****Department of ENT & HNS, All India Institute of Medical Sciences (AIIMS), Raipur, CG, India*

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**\*Article History:****Received:** 23/04/2017**Revised:** 28/04/2017**Accepted:** 02/06/2017**DOI:** <https://doi.org/10.7439/ijbar.v8i5.4128>**Abstract**

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”. The global share of older people (aged 60 years or over) 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 India, though percentage wise graying is not very rapid, but due to its mammoth size planning for the elderly is a huge challenge for the policy makers. This study is a prospective cross sectional study design conducted in slums of Cuttack city for 6 months. The sampled population (384) is divided in to three categories as per division of age i.e., 60-64 yrs, 65-74 yrs and  $\geq 75$  yrs. Medical problems, psychological problems and other problems are being assessed through administered study questions. 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.

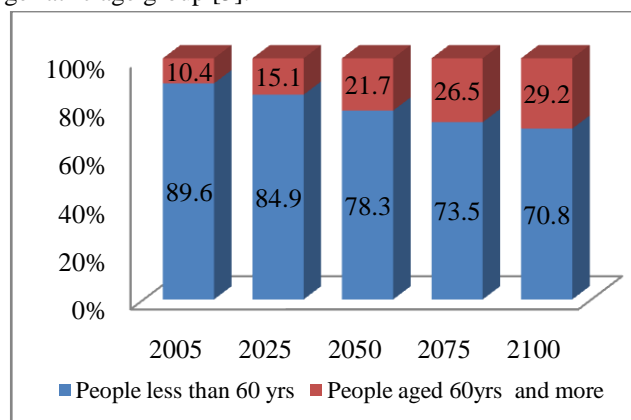
**Keywords:** Ageing, Geriatric, Dependancy, Anxiety, Elder Abuse.**1. Introduction**

Ageing is an inevitable phenomenon. It is indeed a difficult task to say when we got old. UN defines older people as any person more than equal to 60 yrs of age [1]. As per National Policy For Older People (NPOP-1999), GOI ‘senior citizen’ as a person who is 60 years old or above [2, 3]. 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” [4]. The boundary of old age cannot be defined exactly because it does not have the same meaning in all societies. A population is said to be ageing, in demographic terms, which the proportion of the older people increases and the proportion of youth and children decreases.

**1.1 Global profile**

The global share of older people (aged 60 years or over) 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 [5].

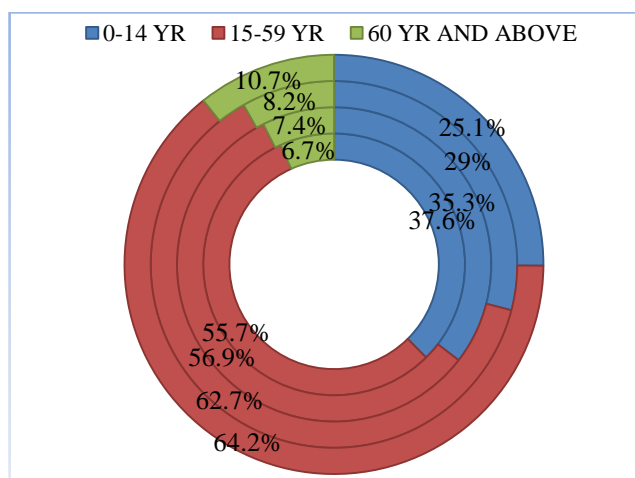
**Figure No 01- Projected geriatric population from 2005 to 2050**

Globally, the number of older persons (aged 60 years or over) is expected to more than double, from 841

million people in 2013 to more than 2 billion in 2050. Older persons are projected to exceed the number of children for the first time in 2047.

### 1.2 Indian Scenario

As per Census 2011, the proportion of older people is 8.14% which if projected will increase to 10.7% in 2021 and 12.4% in 2026 [6,7]. 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 is expected to increase its share to more than 10% by the year 2021 [7].



**Figure 2: Comparison in different age groups as per four Census 1991, 2001, 2011 & 2021**

Also old people have limited regenerative abilities and are more prone to disease, syndromes, and sickness as compared to other adults [8]. However, with the rapid changes in the social scenario and the emerging prevalence of nuclear family set-ups in India in recent years the elderly people are likely to be exposed to emotional, physical and financial insecurity in the years to come. Thus in India, though percentage wise graying is not very rapid, but due to its mammoth size planning for the elderly is a huge 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 labor force during their prime age with only very few in the organized sector [9, 10]. To develop requisite policy programmes 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. But there is a serious dearth of datasets and analyses to identify the emerging areas of key concern and immediate intervention [11, 12].

Clearly, the health issues of the ageing are not restricted to a set of diseases caused at times by free radicals.

Abnormalities of motor function, audio-visual degeneration and so on; they also include functional incapacitation due to senescent changes in human organs and frailties. The nuclearisation of families, erosion in 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 [12,13]. There is an emerging need to pay greater attention to ageing-related issues and to promote holistic policies and programmes for dealing with the ageing society.

### 1.3 Objective

1. To study health profile of elderly population
2. To describe the various forms of morbidity in the same with the advancing age

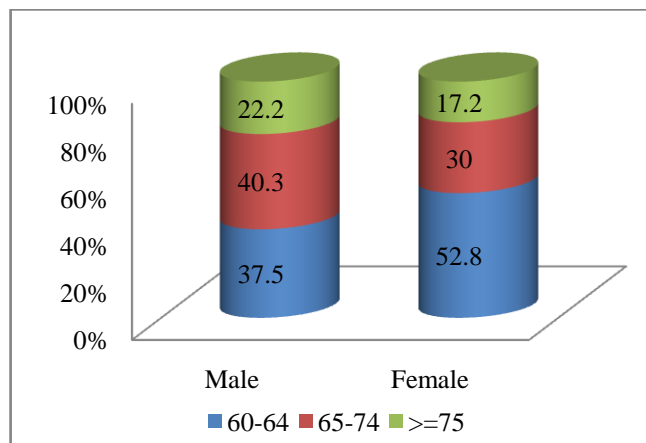
## 2. Methods

This is a Cross sectional study being conducted in urban slums of Cuttack city around Urban Health and Training Center, SCB Medical College, Odisha. Duration of the study is for 6 month from January 2013 to June 2013. The Study instruments used under this research are the Questionnaire, Sphygmomanometer, weight machine, measuring tape and torch. Pretesting was done for necessary corrections.

Sampling-Taking a default prevalence of morbidity of 50% with worst possible estimate and 95% confidence limit the sample size is found to be 384 (N). The sampled population is divided in to three categories as per division of age i.e, 60-64 yrs, 65-74 yrs and  $\geq 75$  yrs. Medical problems, psychological problems and other problems are being assessed through administered study questions. Data collection is done by House to house survey by the researcher. In case of absence of any study subject on three consecutive visit, he/she is being enrolled in to non respondent category. Informed consent was taken first after explaining the procedure and utility of study. Presence of morbidity was elicited by self reporting, supplemented by history, clinical examination and scrutiny of medical document, if present.

## 3. Results and Discussion

Out of total 384 (N) study respondents 211(60%) are Male and 177 (39%) are female. In male category majority belong to the age group 65-74 yrs where as in Female category majority belong to the age group 60-64 yrs. This is in accordance with another study which shows that a higher number of males, as compared with females in urban areas [14].



**Figure 3: Distribution of the study respondents as per Gender and Age**

**Table 1: Medical problems reported in respective age group**

Medical Problem	60-64 YRS (%) N=171	65-74YRS (%) N=137	≥75YRS (%) N=76
1. Pain in Joints	58(34%)	72 (52.5%)	56 (73.6%)
2. Hypertension	87(51%)	66(18.1%)	59(77.6%)
3. Inadequate oral health	49(28.6%)	42(30.6%)	39 (55.1.3%)
4. Injury/Fall	28 (28.6%)	36 (26.2%)	40(52.6%)
5. Diabetes	82 (48%)	74(54%)	43(56.5%)
6. Heart burn	34 (19.8%)	38(27.7%)	23(30.2%)
7. Low vision	58(34%)	87(63.5%)	58(76.3%)
8. Urinary Problem	47 (27.4%)	65(47.4%)	48(64.8%)
9. STDs	12(7%)	08(5.8%)	11(11.4%)
10. Hearing Difficulty	26(15.2%)	49(35.7%)	36(47.3%)

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. STDs are present only in 12 (7%) study subjects. In the age group of 65-74 yrs Low vision (63.5%) is the most common medical problem where as STDs (5.8%) constitute 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 STDs 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: Psychological problems reported in respective age group**

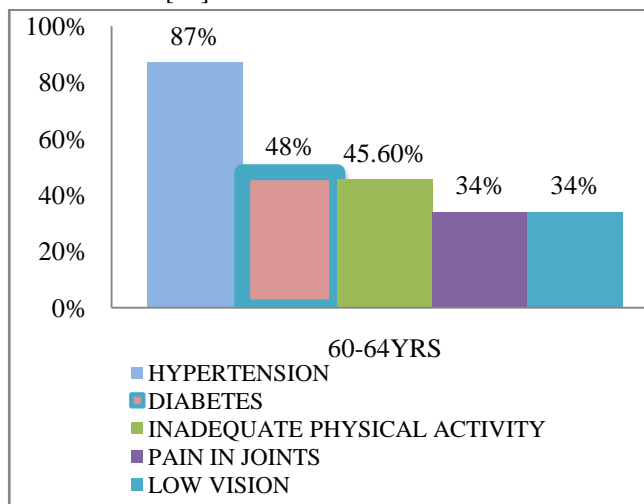
Psychological Problem	60 -64 YRS (%) N=171	65-74 YRS (%) N=137	≥75 YRS (%) N=76
1. Unexplained weakness/ Fatigue	56(32.7%)	52 (37.9%)	39(51.3%)
2. Lack of Sleep	32(18.7%)	38(27.7%)	45(59.2%)
3. Anxiety	67(39.1%)	46(33.5%)	34(44.7%)
4. Depression	32(18.7%)	25(18.2%)	44(57.8%)
5. Lonliness	48(28%)	52(37.9%)	61(80.2%)
6. Restlessness	42(24.5%)	49(35.7%)	39(51.3%)

Anxiety is the major psychological problem present in 67 (39%) respondents. Next to anxiety Fatigue is found in 56 (32.7%) in the age group of 60-64yrs. Depression and Lack of adequate sleep are the least found psychological problem in study subjects. In the age group of 65-74 yrs Loneliness and Fatigue (37.9%) is the most common psychological problem where as Depression (18.2%) constitute the least found problem. Loneliness is the chief complaint found in 61(80.2%) respondents in the age group more than 75 yrs. This problem is much higher than a study which shows the extent and correlation of elder depression among 400 community-dwelling older adults aged 65 years and above in Chennai found the prevalence rate of depression and lonliness to be 14% [15].

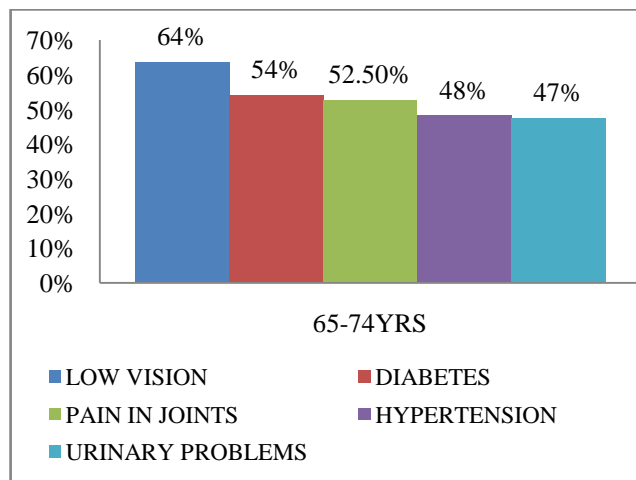
**Table 3: Other problems reported in respective age group**

Others	60 -64 YRS (%) N=171	65-74 YRS (%) N=137	≥75 YRS (%) N=76
1. Malnutrition	45(26.3%)	58(42.3)	51(67.1%)
2. Physical Activity	78(45.6%)	62(45.2%)	48(63.1%)
3. Sedentary behaviour	49(28.6%)	41(29.9%)	38(50%)
4. Tobacco Use	39(22.8%)	42(30.6%)	28(36.8%)
5. Alcohol Use	41(23.9%)	39(28.4%)	21(27.6)
6. Relaxation Exercises	28(16.3%)	31(22.6%)	25(32.8%)

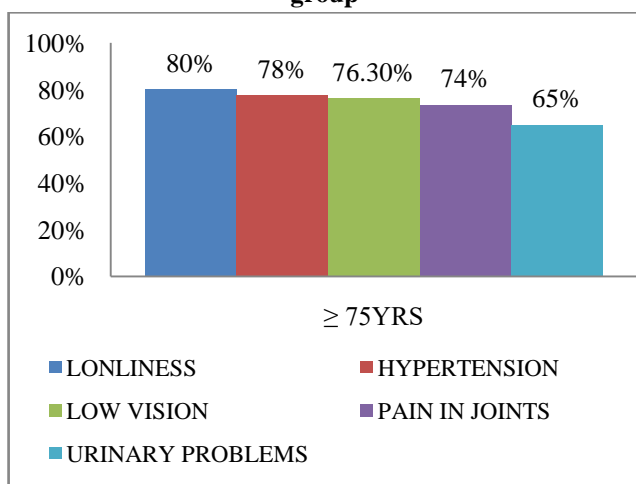
Malnutrition is found in 51 (67.1%) subjects in the age group more than 75 yrs. Less Physical activity is found in mostly older age group where as sedentary behavior is mostly found in 49(28.6%) respondents in the age group 60-74 yrs. Relaxation exercise is being done by 25(32.8%) respondents in the age group more than 75 yrs. Tobacco and Alcohol 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 [16].



**Figure 4: Other problems reported in respective age group**



**Figure 5: Other problems reported in respective age group**



**Figure 6: Other problems reported in respective age group**

In the Age group of 60-64 yrs Hypertension is the chief medical problem followed by Diabetes and Inadequate Physical activity. In the 65-74 yrs category Low vision is the main medical problem in the age group 65-74 yrs followed by Diabetes and Pain in joints. A study on ocular morbidities among the elderly population in the district of Wardha found that refractive errors accounted for the highest number (40.8%) of ocular morbidities, closely followed by cataract (40.4%) while other morbidities included aphakia (11.1%), pterygium (5.2%), and glaucoma (3.1%) [17]. In a community based study conducted in Delhi among 10,000 elderly people, it was found that problems related to vision and hearing topped the list, closely followed by backache and arthritis [18]. In the category of more than 75yrs Lonliness and Hypertension are the primary medical problems and Urinary Problems is the least found medical problem.

Majority of the respondents reported current medical problems (85%). Among these diabetes and hypertension are equally prevalent in both age groups (65-74 yrs), while loneliness is significantly more common among people more than 75yrs.

About 49 per cent of the respondents made < 3 physician visits and 13 per cent were hospitalized for health related problems during the past one year. It is shown that among the population over 60 years of age, 10% suffer from impaired physical mobility and 10% are hospitalized at any given time, both proportions rising with increasing age. Another study by Reddy et al shows that the population over 70 years of age, 50% suffer from one or more chronic conditions [19].

#### 4. Conclusion

Hypertension is the most common non communicable health problem found in all age groups. Other problems found in this study are Diabetes, Low vision, Pain in joints and urinary tract problems in all age groups. In higher age groups psychological problems like Lonliness, Anxiety are found to be more important than medical problems in all most all higher age group members. Sedentary behavior, Tobacco use and Alcohol use is also seen in all age groups uniformly and in higher proportion in males than females. People 75 yrs and above need special attention as they suffer from psychosocial problems. It is difficult to generalize the findings from the present study to other populations in other area, as sample size is small. Other factors like family support, financial autonomy and dependency need to be evaluated.

#### Way forward:

At present, most of the geriatric outpatient department (OPD) services are available at tertiary care hospitals only. Also, most of the government facilities such as day care centers, old age residential homes, and counseling and recreational facilities are urban based. The peripheral health workers and community health volunteers should also be trained to identify and refer elderly patients for timely and proper treatment. An ICMR task force project, which was known as .Health Care of the Rural Aged., conducted in the Primary Health Center area near Madurai found this strategy to be beneficial [20]. An ideal preventive health package should include various components such as knowledge and awareness about disease conditions and steps for their prevention and management, good nutrition and balanced diet, and physical exercise. For the promotion of a positive mindset and to create a feeling of well being, meditation, prayer, and strategies for motivation should also be included [21].

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