

Health and social problems of the elderly: A cross-sectional study in Gujarat

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Abstract

Introduction: Higher prevalence of social and health problems observed among geriatric population like visual impairment, tobacco use, hearing problems, urinary complain, weight loss/gain, hypertension, diabetes, ischemic heart disease, dental problems, depression, memory loss, loneliness, family pressure. Geriatric population covered 7% of the global population and it will almost double means 14% in year 2040.

Objectives: To study the socio-demographic condition and health problems among elder people in urban population.

Materials and Method: This cross-sectional study was carried out in UHTC which is the field practice area of GMERS Medical College, Himmatnagar, Gujarat during January 2016 to September 2016. By simple random technique, 500 houses were selected for house to house survey and all the elderly people present in house at the time of visit were included in the study and primary data collected by pre-tested and pre-design questionnaire.

Result: Around 86.9% participants belonged to 60-70 years group, 30.2% were widow or widower, 64.6% were illiterate, 8% residing alone and 55.4% were dependent population. Almost 64.6% participants were illiterate, 8.0% were residing alone, 32.6% had restricted mobility, 38.3% had inadequate sleep problems, 27.4% was overweight, higher blood pressure among 37.71% and mean BMI was 22.9 ± 12.82 & 23.59 ± 4.68 in urban area respectively. Almost 36.0% participants were operated for cataract and 4.0% have night blindness problem.

Conclusion: higher prevalence of loneliness, dependency ratio, restricted mobility, inadequate sleep, appetite problem, joint pain, impaired vision & hearing, dental problems, obesity (in urban) and high blood pressure. There is also required larger study with larger sample size to explore the problems among elder population.

Keywords: Dependency Ratio, Elderly, Obesity, Urban Area.

Introduction

A major emerging demographic issue of the 21st century is the ageing of population as an inevitable consequence of the demographic transition experienced by most countries.⁽¹⁾

In comparison to western countries, India will have typical type of a issue of large number of aged population with speedy and consistent economic growth. In India, persons who are working in organized sector get pension and other retirement benefits after certain age like more than 60-65 years.^(1,2)

Elder population covers more than 7% of the total population which is a big challenge for the policy makers. Elder Female community deal with more problem compare to male due to low literacy rate, customary ownership of property by men and majority of women being not in labour force during their working age specially in the organized sector.⁽²⁾

Population aged more than 80 years is the speedy expanding part in various countries. In 2008, almost 506 million population age above 65 years was present in all over the world which was 7% of the global population and it will almost double means 14% in year 2040.⁽²⁾ In India, the older population covered around 7% of the total population, out of which 66% live in rural area with more than 50% of them living in poor conditions.⁽³⁾

Several similar studies found higher prevalence of social and health problems among elder population like visual impairment, tobacco use, hearing problems, urinary complain, weight loss/gain, hypertension, diabetes, ischemic heart disease, dental problems, depression, memory loss, loneliness, family pressure, helplessness, inactivity etc.^(3,4,5,6,7)

Today, due to urbanization, nuclearisation of family, migration, and dual career, responsibility of old age people is becomes a big social problem.⁽³⁾ Although some studies say that from 2001 to 2026, elder population in India will be double in size. This will covered 12.17% of whole population in 2026, and India may deal the different problem in rural and urban area. Almost 66% of elderly men and more than 23% of elder females were engage in economic activity, while in urban areas 39% of aged male and about 7% of aged female were active in economical activities. Prevalence of heart diseases among elderly population was more in urban population than in rural population. Almost 55 per thousand in urban areas suffer from one or more disabilities.⁽²⁾ Objective of our study to study the socio-demographic condition and health problems among elder people in urban population.

Materials and Method

The survey was carried out in Urban Health Training center (UHTC) which is the field practice area

of GMERS Medical College, Himmatnagar in Gujarat State. This cross sectional study was carried during First January 2016 to 30 September 2016 after ethical permission from Institutional Ethical Committee (IEC) of GMERS Medical College, Himmatnagar.

Sampling Method:

1st Phase: By simple random sampling technique, 500 houses were selected for the house to house survey and primary data collected by pre-design pretested Performa. Study population included the entire old age population age above >60 years from the selected houses of the field practice area of UHTC.

2nd Phase: Out of total study population, study included all the elderly people present in house at the time of visit were included in the study of more than 60 years. Investigator found such 175 elder populations and collected the data.

Data was collected by medical social workers. Training was given before starting study. Pilot study was done before study was started. Periodic cross checking was done by investigator. Consent was taken before starting interview of house. Exclusion criteria were who refuse to give consent. Data entry, cleaning and analysis was done in Microsoft excel 7.

Results

Table 1: Socio-demographic information of participants (N=175)

Variable	Number (%)
Age (in years)	
60-70	152 (86.9)
70-80	21 (12.0)
>80	2 (1.1)
Mean Age (Mean \pm SD)	65.6 \pm 5.81
Gender	
Male	82 (46.9)
Female	93 (53.1)
Male: Female ratio	1:1.13
Religion	
Hindu	170 (97.1)
Muslim	5 (2.9)
Marital Status	
Married	93 (53.1)
Widow/widower	81 (46.3)
Divorcee	1 (0.6)
Occupation	
Profession	0 (0.0)
Semi-profession	7 (4.0)
Clerical, shop-owner, farmer	51 (29.1)
Skilled worker	6 (3.4)
Semi-skilled worker	13 (7.4)
Unskilled worker	14 (8.0)
Unemployed	84 (48.0)
Income Source	

Pension	11 (6.3)
Private Property	41 (23.4)
Relatives	18 (10.3)
Son	97 (55.4)
No Source	8 (4.6)
Substance Abuse	
Chikhani	21 (12.0)
Cigarette / Bidi	19 (10.9)
Tobacco Chewing	40 (22.9)
Drinking	4 (2.3)
None	91 (52.0)
Education	
Profession or Honours	0 (0.0)
Graduate or postgraduate	113 (64.6)
Post high school diploma	0 (0.0)
High school certificate	0 (0.0)
Middle school certificate	4 (2.3)
Primary school certificate	17 (9.7)
Illiterate	41 (23.4)
Family History of illness (chronic non-communicable like HT. DM. Asthama etc.)	
Present	161 (92.0)
Absent	14 (8.0)
Family Member	
Present	161 (92.0)
Alone	14 (8.0)
Loss of spouse	
Yes	81 (46.3)
No	94 (53.7)

Table 1 shows that 86.9% participants were belonged to age group 60 to 70 years. Study included 47.0% male participants and 97.1% Hindu participants. Almost 46.3% participants were widow or widower. Around 29.1% participants engaged with agriculture field & shop owners and 7.4% worked as construction worker and 55.4% participants were depended on their son's income. Almost 48.0% participants have any type of addiction. Around 9.7% participants got education up to primary level & 64.6% were graduate & above. Almost 8.0% were residing alone in study setting area.

Table 2: Morbidity pattern among study participants (N=175)

Variable	Number (%)
Sleep	
Inadequate	67 (38.3)
Adequate	108 (61.7)
Appetite	
Decreased	38 (21.7)
Increased	13 (7.4)
Normal	124 (70.9)
Number of using Aids (like Spectacles, Denture, Walker, Knee caps etc.)	
One	95 (54.3)
More than one	32 (18.3)

None	48 (27.4)
Physical Complain	
Bodyache	76 (43.4)
Joint pain	59 (33.7)
Weakness	49 (28.0)
Breathlessness	38 (21.7)
Headache	12 (6.9)
Constipation	19 (10.9)
Impaired Hearing	3 (1.7)
Edema	8 (4.6)
Dental Problems	16 (9.1)
Impaired Vision	48 (27.4)

Table 2 shows comparison of physical fitness of geriatric population. Almost 32.6% participants had restricted mobility and 38.3% participants had inadequate sleep problems and 29.1% participants had appetite problems. Almost 18.3% participants were

using more than one aids and 54.3% were using one aids. Most common physical complain observed by study was Bodyache (43.4%), Joint pain (33.7%), Weakness (28.0%), Impaired vision (27.4%). More than one physical health complains has been observed among 94% population.

Fig. 1 show that 14.3% population was belonged to underweight, 7.4% was overweight, 7.3% was class 1 obesity and 1.8 in class 2 obesity. Mean BMI of participants was 23.59 ± 4.68 . Study found higher blood pressure among 37.71% participants. Around 26.9% have normal hair, 48.0% normal teeth, 54.3% have normal tongue appearance, 70.3% normal nail, 28.6% have wasting of muscle, 66.9% had no joints related deformities. Study observed skin related disease among 16.0% participants. Around 4.0% had night blindness problem and 16.0% had hearing problem. Almost 36.0% participants were operated for cataract surgery.

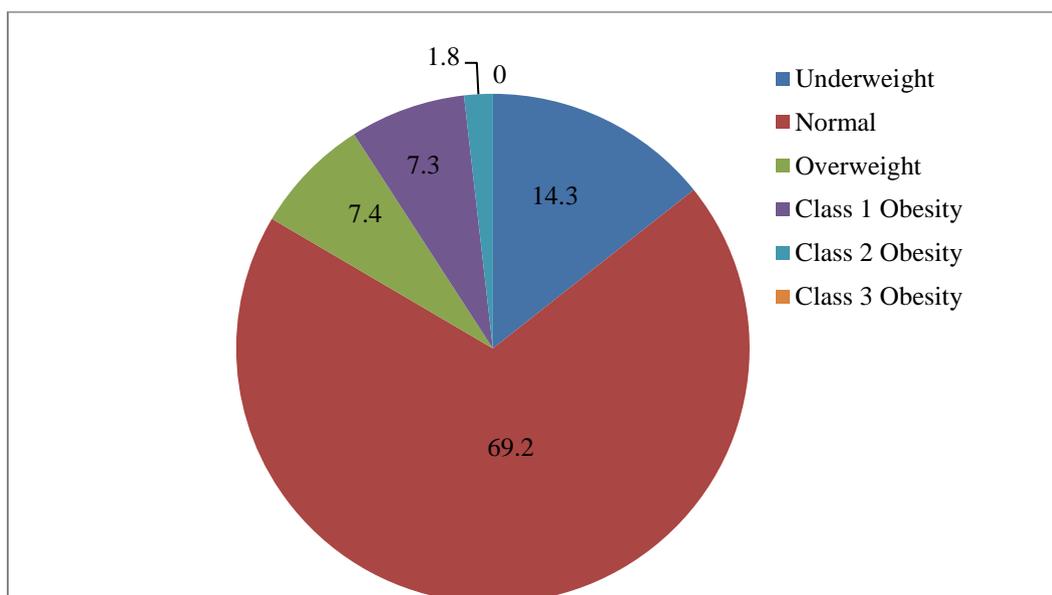


Fig. 1: Distribution of participants according to BMI classification of WHO

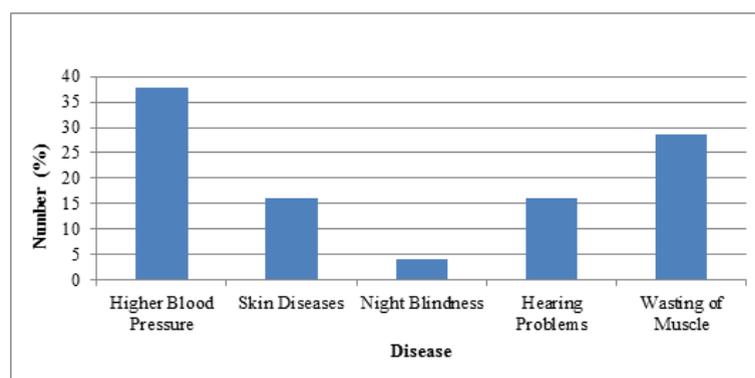


Fig. 2: Distribution of participants according to presence of diseases

Discussion

Highest population (86.9%) was belonged to age group 60 to 70 years age group which is followed by 70-80 years and more than 80 years age group in urban area. This finding is correlate with the similar study done by Wardha PA et al,⁽⁸⁾ Gaash B et al,⁽⁹⁾ Kumar R et al⁽¹⁰⁾ and Leena A et al.⁽³⁾

According to central statistics office report⁽¹¹⁾ 2011 on situation analysis of elderly population in India and it said that life expectancy of urban population is higher than the rural population. Study observed 46.3% widow/widowers among study population. This finding is not correlate with the findings of similar study done by Leena A et al,⁽³⁾ Singh C et al,⁽¹²⁾ Shah B et al⁽¹³⁾ and Wardha PA et al.⁽⁸⁾ It is true that marital status indicate ones position within the family and society.⁽³⁾

Present study observed that almost 27.4% working in agriculture field area, 14.3% in construction area and half of participants were at home (housewife, retirement, unemployed etc). This observation quit similar with the study done by Singh C et al⁽¹²⁾ but not correlate with Leena A et al⁽³⁾ and Elango S et al.⁽¹⁴⁾ According to National Sample Survey Organization (NSSO)⁽⁸⁾ only 50% of elderly men and 20% of women aged 60 years or more were literate. Present study observed that more than 1/3rd population was got education up to primary and below it. This finding is correlate with similar study done by Padda AS et al⁽¹⁵⁾ but this findings are not compete with study done by Leena A et al⁽³⁾, Elango S et al⁽¹⁴⁾ and Singh C et al⁽¹²⁾. Present study observed that only 8% urban population living alone and this findings are correlate the similar study done by Thakur RP et al⁽¹⁶⁾, Padda AS et al⁽¹⁵⁾, Singh C et al,⁽¹²⁾ Leena A et al⁽³⁾ & report⁽¹⁷⁾ "Elderly in India "of 2016 of central statistics office of government of India. Present study found more than one physical complains among 94.0% participants which is quite similar with similar study findings done by Polisetty S et al⁽¹⁸⁾ and Niranjan GC et al.⁽¹⁹⁾ This higher prevalence of physical problems among participants may be due to their negligence in utilizing health services, incorrect treatment and inadequate treatment of problems.

Present study observed problem of arthritis among 33.7% participants which is not correlate with similar study done by Polisetty S et al⁽¹⁸⁾ where 66.6% participants were suffering from arthritis. Present study observed higher prevalence of overweight & obesity among urban participants which is correlate with similar study done by Thakur RP et al⁽¹⁶⁾ but not correlate with the study done by Polisetty S et al.⁽¹⁸⁾ Present study observed higher blood pressure among 2/5th participants which near to similar with study done by Polisetty S et al,⁽¹⁸⁾ Chaddha SV et al⁽²⁰⁾ and Garg BS at.⁽²¹⁾ Present study observed 36.0% participants were operated for cataract surgery which is correlate with similar study done by Agrawal AP et al,⁽²²⁾ Purohit CK et al⁽²³⁾ and Mishra VN et al.⁽²⁴⁾ Population Census

2011⁽²⁵⁾ data reveal that Locomotor disability and visual disability are the most prevalent disabilities among elderly persons. Present study observed joint repalted deformities and weakness more prevalent among study participants. Similarly other health problems like Bodyache, breathlessness, headache, constipations, hearing & visual problems and dental problems observed more among study population.

Limitation of study

Sample size: Sample number was selected by purposive sampling. Similar study should be done with larger sample size to explore association between different variables which were not done by present study.

Study Setting: Present study choose the sample among slum community from the closest to the health facility (UHTC) which may leads to selection bias in the sample.

Measurement errors in detection of morbidity:

Present study was a house to house survey and most morbidity was bring out by simple questions, self-reporting and clinical examination, without diagnosed by ideal laboratory tests. So may be study was found the cases from the tip of iceberg and could not found sub-clinical or carrier cases.

Conclusion

Present study observed higher prevalence of loneliness, restricted mobility, inadequate sleep, appetite problem, joint pain, impaired vision & hearing,, dental problems, obesity (in urban) and high blood pressure. The results of this study showed that a major proportion of the elderly were out of the work force, partially or totally dependent on others, and suffering from health problems with a sense of neglect by their family members. Government policy should make this age group on priority which ensure the health of this vulnerable group and satisfy the needs of the disabled elderly. Further study, which reach to the bottom of the issues of the elderly. There is also required larger study with larger sample size to explore the problems among elder population.

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