Morbidity pattern and social interaction amongst elderly living in old age homes

S.K. LIKHAR¹, A. RANA¹, V. NARKHEDE⁵, S.K.CHOUDHARY³, K.S.LIKHAR⁴ and M.K. MISHRA⁶

¹Surveillance Medical Officer, NPSP, Sitamarhi, Bihar (India).
 ²⁻³Comm. Medical PCMS and RC, Bhopal (India).
 ⁴Pathology PCMS and RC, Bhopal (India).
 ⁵Mahatma Gandhi Medical College, Pondicherry (India).
 ⁶Comm. Medical PS Medical College, Karamsad (India).

(Received: July 14, 2009; Accepted: September 15, 2009)

ABSTRACT

In India life expectancy has gone up from 20 years in beginning of 20th century to 62 years today; better medical care & low fertility have made the elderly the fastest growing section of society. The aim is to determine the prevalence of morbidity and social interaction amongst elderly living in Old Age Homes.

A cross sectional study was conducted on 314 elderly living in 11 Old Age Homes of central Gujarat from Oct 2004 to Sept 2005. A proforma was administered to subject's data collected which is then analyzed with the help of statistical package for social sciences software & chi-square statistical test was applied to find out association between variables.

The study revealed that majority inmates were of 60 –69 years (53.8%) female (70%). 86.4% of inmates were not working at all. $2/3^{cd}$ inmates (66.4%) were staying for < 3years in Old Age Homes. 30.8% of inmates were living in OAH due to conflict with other family members, 19.6% because of financial problem, 24.2% because nobody cares about them at home while 25.2% had other problems. Morbidity due to chronic disease, sleeping problem was highest in inmates (79.7%) followed by visual problem in (70.7%) inmates. As age increased number of chronic diseases increased.

Urbanization & industrialization leads to outward migration of younger peoples away from parents. Hence more number of Old Age Homes are required in future to accommodate them. Majority of Old Age Persons do not have income so Government has to build OAH's which admit the needy persons free of charge. By maintaining healthy life style like exercise, balance diet many diseases & disabilities in older age are prevented of delayed.

Key words: Old age homes, elderly, morbidity, chronic diseases.

INTRODUCTION

A silent revolution has occurred in the last 100 years – unseen, unheard and yet so close. The biggest achievement of the century is longevity. All over the world life expectancy has risen; leading to a sharp rise in the number of Older Persons.¹ There is the expression, "growing old gracefully". And we need God's grace for the same."²

While the numbers have gone up, quality of life has gone down. Industrialization, migration,

urbanization and westernization have severely affected value systems. The erstwhile joint family, the natural support system, has crumbled. The fastchanging pace of life has added to the woes of the older person¹.

In recognition of challenge of health and independent functioning in old age, the World Health Organization convened and expert panel in 1974 on "Planning and Organization of Geriatric Services." This body recommended that countries develop suitable integrated health services for older persons, including elements of medical and social prevention, multi-disciplinary assessment, home and institutional curative treatment, rehabilitation, long-term care and supportive social welfare.³

Scenario of Old age population Indian scenario

Older people in India constitute the fastest growing age group in the population. India contains the second largest number of older persons in any country worldwide⁴. Although the proportion of India's elderly population is small compared with that of any developed country because of the large size of India's population base, the elderly population is very large in absolute numbers⁵.

According to 2001 census, 7.7% of total populations were above the age of 60 years.⁶ The growth rates of total population and old population from 1951 to 2001 in India according to Government of India is:⁷

Period	Total Population increase (%)	Population of age 60 years and above increase (%)
1951 – 1961	21.51	22.40
1961 – 1971	24.80	32.30
1971 – 1981	24.75	31.60
1981 – 1991	23.50	29.00
1991 – 2001	21.69	37.25

In India during 1901, life expectancy at the age of 65 years was 7,3 years for males and 7.6 years for females which rise to 14.6 years and 16.7 years for males and females respectively in 1991.

The life expectancy at the age of 65 years in 1990 in USA was 15 years for males and 19.4 years for females⁸.

On this background present study was undertaken to determine degree of disability & Activity of Daily Living in old age people (>60 years) living in Old Age Home.

MATERIAL AND METHODS

Study area

This study titled was conducted amongst the inmates of the geriatric homes located in two district of central Gujarat. List of OAH of

Study design

Cross sectional study.

Period of study

This study was conducted from October 2004 to September 2005.

Study population and Sampling method

314 inmates residing in 11 Old Age Homes. Selection of subjects was done according to inclusion & exclusion criteria

Selection criteria for subject

People more than 60 years of age living in old age homes.

Exclusion criteria for subject

Too ill., have a terminal disease, severely demented.

Statistical Methods

The data collected was entered on the master chart .Chi square statistics was applied to find out association between different variables with the help of "Statistical Package for Social Sciences" software.

Current Income

- Pension: Old age pension and retirement pension from previous occupation.
- From current occupation: Income generated from current occupation.
 - Other sources: Rent of assets like home or shop, selling of crop by farmer or interest on

bank deposits or by doing routine work at old homes like preparing meal or washing utensils and they were given money for it. No income.

Data collection

Written permission was taken from the managers of old age homes for conducting study, after explaining purpose and method of study to them. Information is recorded in a proforma by visiting old age homes at least twice in a week.

RESULTS

The study conducted on 314 inmates residing in 11 Old Age Homes revealed that highest

number of inmates were of 60–69 years (53.8%) ,majority of them were female (70%) and majority of inmates (86.4%) were not working. 2/3rd inmates (66.4%) were staying for < 3years in Old Age Homes, only (6.3%) were staying for more than 5 years & all of them were females. 93 inmates (30.8%) of inmates were living in OAH due to conflict with other family members, 19.6% because of financial problem, 24.2% because nobody cares about them at home while 25.2% had other problems like to attain mental peace, feel lonely at home & don't want to reveal.

Examination of inmates reveals that only 50 inmates (16.6%) had no chronic disease at all rest of the inmates had one or more chronic

Table 1: Age sex distribution & duration of stay of inmates in	i old age homes
--	-----------------

Age(Year)			Sex			Total	
	F	Female		Male			
	No.	%	No.	%	No.	%	
60 - 69	103	63.6	59	36.4	162	53.8	
70 – 79	84	84.0	16	16.0	100	33.2	
≥ 80	24	61.5	15	38.5	39	13.0	
Total	211	70.0	90	30.0	301	100	

Table 2: Duration of stay of inmates in old age homes

Duration of	Female		Ма	le	Total		
stay (year)	No.	%	No.	%	No.	%	
< 3	61	30.5	139	69.5	200	66.4	
3 - 5	29	35.3	53	64.7	82	27.2	
> 5	-	-	19	100.0	19	6.3	
Total	90	30.0	211	70.0	301	100	

Table 3: Distribution of inmates according to present occupation

Present	F	emale	Ма	le	Total		
Occupation	No.	%	No.	%	No.	%	
Working Not Working Total	25 65 90	60.9 25.0 30.0	16 195 211	39.1 75.0 70.0	41 260 301	13.6 86.4 100.0	

diseases. In morbidity due to chronic disease, sleeping problem was highest in inmates (79.7%) followed by visual problem in (70.7%) inmates & hypertension in 49.5% inmates,(16.6%) of inmates do not have any chronic disease, only one inmate had pulmonary tuberculosis. As age increased number of chronic diseases increased. sleeping problems (79.7%) in our study was significantly associated with recent admission (<3 yrs) into old age homes because inmates admitted recently were more apprehensive & they require time to adjust to newer environment of old age homes.

Comparatively more prevalence of interaction v

Majority of inmates (93.7%) had social interaction with other inmates of OAH's. Half of

Current	Female		Ма	le	Total		
Income	No.	%	No.	%	No.	%	
Pension	25	67.5	12	32.5	37	12.3	
Current Occupation	17	41.4	24	58.6	41	13.6	
Other sources	26	16.6	130	83.4	156	51.8	
No income	22	32.8	45	67.2	67	22.3	
Total	90	30.0	211	70.0	301	100	

Table 4: Distribution of inmates according to present occupation

Table 5. Distribution of minates according to chronic diseases
--

Chronic diseases	Male		Female		Total	
	No.	%	No.	%	No.	%
Sleeping Problem	63	26.3	177	73.7	240	79.7
Visual Problem	52	24.4	161	75.6	213	70.7
Hypertension	33	22.1	116	77.9	149	49.5
Arthritis	12	14.6	70	85.4	82	27.2
Breathlessness	21	31.3	46	68.7	67	25.2
Hearing Problem	12	20.0	48	80.0	60	19.9
Chronic cough	10	26.3	28	73.7	38	12.6
Diabetes	16	53.3	14	46.7	30	10.0
Tuberculosis (pulmonary)	-		1	100.0	1	0.3
Others	-		22	100.0	22	7.3

Reason for staying	Male		Female		Total	
	No.	%	No.	%	No.	%
Conflict with family members	32	34.4	61	65.5	93	30.8
Financial problem	21	35.5	38	64.5	59	19.6
Nobody take care at home	16	21.9	57	78.1	73	24.2
Other Problems	21	27.6	55	72.4	76	25.4
Total	90	30.0	211	70.0	301	100.0

330

Social Interaction	Male		Female		Total	
	No.	%	No.	%	No.	%
With other inmates of geriatric home						
Yes	76	26.9	206	73.1	282	93.7
No	14	73.6	5	26.4	19	6.3
Total	90	30.0	211	70.0	301	100.0
Chi square 18.54, p=0.00						
With family members						
Yes	55	37.2	93	62.8	148	49.2
No	35	22.9	118	77.1	153	50.8
Total	90	30.0	211	70.0	301	100.0
Chi square 7.32, p=0.00						

Table 7: Distribution of inmates according to social interaction amongst them & with family members and friends

inmates (49.2 %) have good social interaction with their family members and visit by family members is seen in around 59.8% of inmates Desire to go back home was not significantly associated with social interaction with inmates or with family members.

DISCUSSION

The sociodemographic profile of inmates revealed that highest number of inmates was of 60– 69 years 53.8% followed by 33.2% in 70-74 yrs and only 13.0% in age of 80 yrs & above. Mean, median & mode of age was 70.0yrs, 69.0yrs & 68.0yrs respectively. Mann E and Koller M⁹ in their study in Austria found that the mean age was 77.9 yrs.

Out of 301 majority of them were female (n=211,70%) as compared to males (n=90,30%) & this difference was statistically significant (p<0.001). This correlates well with the finding of Yuonne Da Silva Pereira et al $(2002)^{10}$, in which 61.7 % were females & 38.3% were males.

Majority of inmates (n=260,86.4%) were not working & only 41 inmates (13.6%) were currently working. This correlates well with the finding of Niranjan G V et al (1996)¹¹ from urban slum area of Banglore, in which 61.3 % aged were unemployed. Half of the inmates (n=156,51.8%) had income from other sources, 41 inmates (13.6%)had income from current occupation ,37 inmates (12.3%) had pension and 67 inmates (22.3%) had no income at all.

Two third of inmates (n=200, 66.4%) were staying for < 3years in Old Age Homes, only 19 inmates (6.3%) were staying for more than 5 years & all of them were females. Mean, median & mode of duration of stay in OAH's was 2.5 yrs, 2yrs, 2yrs respectively. This indicates that staying in Old Age Homes is a recent trend. This correlates well with Bagga (1997)¹².

In our study, we found that 93 inmates (30.8%) were living in OAH due to conflict with other family members, 59 inmates (19.6%) because of financial problem, 73 inmates (24.2%) because nobody cares about them at home while 67 inmates (25.2%) had other problems like to attain mental peace, feel lonely at home & don't want to reveal. This correlates well with other studies by Mishra (2003)¹³.

In our study only 50 inmates (16.6%) had no chronic disease at all. In rest of them sleeping problem was highest in inmates (79.7%) followed by visual problem in (70.7%) inmates & hypertension in 49.5% inmates, only one had pulmonary tuberculosis. As age increased number of chronic diseases increased. The proportion found in our study is slightly higher than as compared to Indrani Gupta & Deepa Sankar¹⁴ study by ICMR at Madurai.& study at Geriatric clinic of AIIMS hospital. Majority of inmates (n= 282,93.7%) had social interaction with other inmates of OAH's. Half of inmates (49.2%) have good social interaction with their family members and visit by family members is seen in around 59.8% of inmates.This correlates well with study by Mishra (2003)¹³ in OAH's of Kanpur.

CONCLUSION

Urbanization & industrialization leads to outward migration of younger peoples away from parents. Hence more number of Old Age Homes are required in future to accommodate them. Majority of Old Age Persons do not have income so Government has to build OAH's which admit the needy persons free of charge. By maintaining healthy life style like exercise, balance diet many diseases & disabilities in older age are prevented of delayed. Further there is growing need for intervention to ensure the health of elderly & to create a policy to meet care & needs of disabled elderly.

REFERENCES

- 1. www://www.helpageindia.org/ageing scenario.php
- MPK Kutty. So you think You Are Old? website:http://spirituality.indiatimes.com/ articleshow/947945.cms
- 3 World health Organization: Planning and organization of Geriatric services World Health Organization Technical Report Series No.548.Geneva: WHO (1974).
- Situation & Voices: The Older poor and excluded in South Africa & India; Population and development strategies series. number 2 United Nations Population Fund (2002).
- Chanana H and Talwar P.Aging in India:Its socioeconomic and Health Implications. Asia-Pacific Population Journal, 2 (3)
- Park K Preventive Medicine and Geriatrics. Parks Textbook of preventive & Social medicine.18 th edition.M/S Banarsidas Bhanot ,Jabalpur ,India
- Dandekar K. The elderly in India. Sage publications India Pvt. Ltd. New Delhi :25-165 (1996).
- 8. Jarvik L F ,Small G W.Geriatric Psychiatry : Introduction and overview. In Kaplan H I and

Sadok B I Comprehensive Textbook of Psychiatry VI edition .Willioms and Wilkins, Baltimore 2507 (1995).

- 9. Comprehensive geriatric assessement.The Merck ManualofGeriatrics.ww.merck.com/ mrsharedmm_geriatrics/sec1/ch1.jsp
- Younne Da Sillva Pereira et al .Geriatrics patients attending Tertiary care psychiatric hospital.*Indian Journal of Psychiatry*, 44(4): 326-331 (2002).
- Niranjan G V *et al.* A study of health status of aged persons in slum of urban field practice area. Banglore. *Indian Journal of Community medicine*, XXI(1-4): 37-40 (1996)
- Bagga A, 1997. A study of women in old age homes of Pune. In;CHAKRAVARTY Indrani (ed.) 1997. Life twilight years. Calcutta: Kwality Book Company, 171-175 (1997).
- Mishra A. Study of Loneliess in an Old Age Home in India: A case of Kanpur. Indian Journal of Gerontology, Volume
- Indrani Gupta: Deepa Sankar. Health of the Elderly in India: A Multivarite analysite http:/ /wwwieg.nic.in/dis ind 46. pdf.