



MORBIDITY PATTERN AMONG THE ELDERLY POPULATION HABITUATED IN URBAN AREA OF JHANSI CITY (U.P)

Community Medicine

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ABSTRACT

Introduction: Aging is an age-dependent or age-progressive decline in intrinsic physiological function, leading to an increase in age-specific mortality rate and a decrease in age-specific reproductive rate.

Aim: To know the morbidity pattern among the urban geriatric patients attending the urban Health Center.

Materials and Methods: The study was carried out in the urban field practice areas of a medical college in, India. The study population comprises of all geriatric population which was defined as 60 years and above in the study area, 250 study subjects were used for the study.

Results: out of 250 study subjects, 153 (61.2%) of the respondents were apparently free from health problems at the time of the study and 97 (38.8%) participants reported various health problems. The most common health problems were Arthritis (35.6%), followed by cataract (34.4%).

Conclusion: Recent study reveals the high morbidity load among elderly. Greater, targeted efforts are needed to identify at-risk elderly people living in the community and study also stresses for efforts to provide specialized healthcare to them, and thus ensure that they remain active members of our society.

KEYWORDS

Introduction:

Aging is an age-dependent or age-progressive decline in intrinsic physiological function, leading to an increase in age-specific mortality rate and a decrease in age-specific reproductive rate (1). In our society, there are some positive and negative views of aging. Some people believe being old is being sick and other people believe being old is having freedom, wisdom, and enjoyment. (2)

The United Nations Organization (UN) refers to elderly population as people of age 60 years and above (3). In India, life expectancy has increased from 24 years in 1900 to 65.4 years in 2004, and the elderly account for 7% of the total population, of which two-thirds live in villages and nearly half of them in poor conditions (4). There has been a sharp decline in the crude death rate from 28.5 during 1951–1961 to 8.4 in 1996; while the crude birth rate for the same time period fell from 47.3 to 22.8 in 1996 (5).

The current age of rapid urbanization and societal modernization has brought in its wake a breakdown in family values and the framework of family support, economic insecurity, social isolation and elderly abuse leading to a host of psychological illnesses. (6) Some health problems are accompanied by impaired functional capacity but the elderly is vulnerable to long term diseases of insidious onset such as cardiovascular illness, CVA, cancers, diabetes, musculoskeletal and mental illnesses. They have multiple symptoms due to decline in the functioning of various body functions. (7)

Until now, secondary prevention strategies in the form of screening and early management and tertiary care in the form of rehabilitation have been given more importance as compared with primary prevention by the geriatric health care services (8). Hence this study was conducted with the objective of understanding the morbidity pattern among the urban geriatric patients attending the Primary Health Center.

MATERIALS AND METHODS:

Study site

The study was carried out in the urban field practice areas of a medical college in, Jhansi. One ward of urban area was randomly selected based on random number table located at a distance of 3 km from the college. Data collection was done from May 2013 to December 2013.

Study design

This study was done as a Cross sectional Descriptive study.

Computation of Sample Size:

Sample size calculation was done by using formula $n = 4pq/L^2$, default prevalence of morbidity at 50% was taken with worst possible estimate

at 45% on one side and 95% confidence interval, with an allowable error of 10%. Using these inputs, the sample size calculated was 250 subjects.

Selection of study subjects:

The study population comprises of all geriatric population which was defined as 60 years and above in the study area, who have resided in the study area for at least one year.

Data collection:

The house-to-house approach was adopted since this would not affect the daily routine of the respondents, thus ensuring compliance. The study subjects were subjected for personal interview using a pre-tested and semi-structured interview schedule was used as study tool. Ethical approval was given.

Data entry and statistical analysis:

Data were entered in a Microsoft Excel file and statistical analysis was done using Epi Info 2017.

RESULTS:

1. Distribution of study population as per Age and Gender

Age group	Female (%)	Male (%)	Total (%)
60 – 64	57 (22.8%)	27 (10.8%)	84 (33.6%)
65 – 69	45 (18%)	28 (11.2%)	73 (29.2%)
70 – 74	26 (10.8%)	18 (7.2%)	44 (17.6%)
75+	27 (10.8%)	22 (8.8%)	49 (19.6%)
Total (%)	155 (62%)	95 (38%)	250 (100%)

According to table no. 1, out of 250 geriatric population 155 (62%) were females and 95 (38%) were males. 33.6% belonged to the age group of 60-64 years and comprised the majority. Majority of the elderly (62.8%) were in the age group of 60-69 years.

2. Literacy/Educational status:

Education	Males (%)	Females (%)	Total (%)
Illiterate	43 (17.2%)	89 (35.6%)	132 (52.8%)
Primary school	52 (20.8%)	33 (13.2%)	85 (34%)
Secondary school	25 (10.0%)	01 (0.4%)	26 (10.4%)
Higher secondary school	07 (2.8%)	00 (00%)	7 (2.8%)
Total (%)	97 (50.8%)	123 (49.2%)	250 (100%)

In the present study, none of the respondents was educated above the 12th standard level. In all of the respondents (33.6% males and 13.6% females), were literate as depicted in Table 2

3. Morbidity status:

I) Distribution of study population as per no. of morbidities :

Age	Single morbidity.(%)	Multiple Morbidity(%)	Total(%)
60 – 64	45 (16%)	57 (22.8%)	102 (40.8%)
65 – 69	33 (13.2%)	44 (17.6%)	77 (30.8%)
70 – 74	9 (3.6%)	27 (10.8%)	36 (14.4%)
75 – 79	3 (1.2%)	16 (6.4%)	19 (7.6%)
80 +	1 (0.4%)	15 (6.0%)	16 (6.4%)
Total (%)	91 (36.4%)	159 (63.6%)	250 (100%)

In table 3.1, it was observed that the load of single morbidity was more in age group of 60-64 years i.e. 45 (16%) and multiple morbidity increases with age and this was found to be statistically significant.

ii) Distribution of Leading causes of Morbidity:

S. No.	Morbidities	Total No. of People (%)
1.	Cataract	34 (13.6%)
2.	Hypertension	15 (6%)
3.	Diabetes	10 (4%)
4.	Psychiatric illness	6 (2.4%)
5.	BPH	2 (0.8%)
6.	Asthma	13 (5.2%)
7.	Bronchitis	12 (4.8%)
8.	Diarrhoea	5 (2%)

In table 3.2, 153 (61.2%) of the respondents were apparently free from health problems at the time of the study and 97 (38.8%) participants reported various health problems. The most common health problems were cataract (13.6%), followed by hypertension (6%).

iii) System wise classification of morbidities in study population:

S. No.	Diseases	No. of people (%)
1.	Musculoskeletal System	89 (35.6%)
2.	Visual Disorder	86 (34.4%)
3.	Gastrointestinal System	79 (31.6%)
4.	Cardiovascular System Diabetes	77 (30.8%)
5.	ENT	53 (21.2%)
6.	Dental problem	45 (18%)
7.	Respiratory System	39 (15.6%)
8.	Genitourinary System	21 (8.4%)
9.	Endocrine System	18 (7.2%)
10.	Injure(fall)	11 (4.4%)
11.	Central nervous System	2 (0.8%)

Table 3.3 shows system wise classification of the morbidities in the study population and the most common morbidity among geriatrics found was musculoskeletal system problems in 89 (35.6%), eye problem like diminished vision mostly due to cataract 86 (34.4%).

Discussion:

The total population of the study area was 3,857. Out of this population there was 250 (6.4%) geriatric population and majority (62%) were females. Out of 250, 201 (80.4%) respondents revealed that their status in their families was the same as it was earlier. However, 49 (19.6%) said that their status had deteriorated. As regards queries on satisfaction at this stage in life, 185 (74%) reported to be satisfied, 43 (17.2%) were partially satisfied and 22 (8.8%) were not at all satisfied. Nearly one-half of the respondents were economically dependent on their children. Study found that widows outnumbered widowers. These trends may be attributed to the fact that women live longer than males and tend to marry men who are older than themselves. Old age is the last phase of human life cycle and the duration of this period depends upon the lifestyle enjoyed so far. Old age should be regarded as normal, inevitable biological phenomenon (9) and ageing is an universal process. Arthritis was the major musculoskeletal problem contributing to 35.6% in the present study. Results were reported by K. Srivastava et al. (10) (22.2%) and Prakash R et al. (11) (14.8%). Females were affected more than males. The most common cause of diminished vision in India, cataract, contributed to 34.4% in the present study, which was almost similar as found by Gaurav et al. (12) as 32.8% and Parry S.H. et al. (13) as 39%. Modern science has shown the way to grow old with grace and good health and as a useful member of the society. (14) The elderly must remain active, promote and sustain friendships, have positive thinking, regular activities, take

balanced diet, have adequate rest and realize one's own limitations. (15)

Conclusion:

The study has established that overall morbidity was high among the study population, Arthritis and Cataract were high. The need for the hour is to set up special health services for geriatric population in accordance with the common existing problems. Providing screening services as well as curative and rehabilitative services and convalescent homes to provide long term care is also a priority.

Conflict of interest- none declared

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References

- Medawar P. B. (1955). "The definition and measurement of senescence," in Ciba Foundation Colloquia on Ageing, General Aspects, Vol. 1, eds Wolstenholme G. E. W., Cameron M. P., Etherington J., editors. (London: J&A Churchill);
- Carlsen, M. (1991). Creative aging: A meaning-making perspective. New York: W.W. Norton & Company.
- Available from: <http://www.who.int/healthinfo/survey/ageingdefolder/en/index.html>
- Jamuna D. Stress dimensions among caregivers of the elderly. Indian J med Res 1997; 106:381-8.
- 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.
- Reddy LK. The impact of age and length of widowhood on the self-concept of elderly widows. Indian J Gerontol. 1997;7:91-5.
- Rahul Prakash, S.K. Choudhary, Uday Shankar Singh, A STUDY OF MORBIDITY PATTERN AMONG GERIATRIC POPULATION IN AN URBAN AREA OF UDAIPUR RAJASTHAN, Indian Journal of Community Medicine Vol. XXIX, No.1, Jan.-Mar., 2004
- Gopal K Ingle and Anita Nath. Geriatric Health in India: Concerns and Solutions. Indian J Community Med. Oct 2008; 33(4): 214-218.
- Park K. Park's Text Book of Preventive and Social Medicine. 15th edition. Banarsidas Bhanot, Jabalpur. 1999; 388-90.
- Srivastava K, Gupta SC, Kaushal SK, Chaturvedi, M; Morbidity profile of elderly a cross sectional study of urban Agra. Indian Journal of Community Health, 2009-2010; 21(2)-22(1): 51-55. Prakash R, Choudhary SK, Singh US; A study of morbidity pattern among geriatric population in an urban area of Udaipur, Rajasthan. Indian J Community Med, 2004; 29(1): 35-40.
- Gurav RB, Kartikeyan S; Problems of geriatric population in an urban area. Bombay Hospital Journal, 2002; 44(1): 47-51.
- Parray SH, Ahmed D, Ahmed M, Gaash B; Morbidity profile of geriatric population in Kashmir (India). Indian Journal of Community Medicine, 2008, 4(6): 1-2.
- India. Multicentric study to establish epidemiological data on health problems in elderly. [Last cited on 2007].
- Pandve HT, Deshmukh P. Health survey among elderly population residing in an urban slum of Pune city. [Last accessed on 2012 Sep 07]; J Indian Acad Geriatr. 2010 6:5-8.