

ASSESSMENT OF GERIATRIC MORBIDITY PATTERN AT TERTIARY CARE CENTER

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Received: 10/07/2017

Revised: 20/11/2017

Accepted: 05/12/2017

ABSTRACT

Background: In the scenario of India the proportion of the elderly population tends to rise day by day. The health status of the geriatric group depends on several direct and indirect factors, for example, socio-economic status, personal health status, standards of healthcare, psycho-social well-being and other associated factors. **Material & Methods:** All the patients who were more than 60 years of age attending the outpatient department were considered for this analysis. A total of 200 patients were enrolled for study by simple random sampling. **Results:** The most common morbidity was anemia in 74% of patients followed by ophthalmic disorders which were found in 71% of patients. CVS disorders including hypertension were found in 64% patients, 59% of patients had complications of GIT and musculoskeletal system. 48% of patients had disorders of the respiratory system, 46% had dental problems, 32% of patients had skin disorders and ENT diseases found in 26% patients. Female genitourinary disease seen in 19% of patients followed by psychiatric disorders in 18%, diseases of male genitourinary diseases found in 14% of patients, endocrine diseases saw in 13% and 11% CNS diseases. **Conclusion:** There was a higher prevalence found of morbidities and multi-morbidities among the geriatric population; hence elderly health care should be emphasized in health programs, planning, and policy-making and implemented through health care services.

Keywords: geriatric diseases, morbidity, health care.

INTRODUCTION

In the scenario of India, the proportion of the elderly population tends to rise day by day. The health status of the geriatric group depends on several direct and indirect factors, for example, socio-economic status, personal health status, standards of healthcare, psycho-social well-being and other associated factors (1). In other words, the geriatric group is vulnerable to long to several diseases, but increasing age is not a

disease. Many diseases found to be prevalent in this age group such as endocrine disorders like diabetes, cardiovascular illness, hypertension, psychological illness, musculoskeletal disorders and cancers (2). In the recent census of India, the geriatric population was approximately 100 million which was near about 76 million in the previous census of 2001 (3). There was a rising trend in the geriatric population and still, it tends

to follow the same path. The growth rate of the elderly people in the census of 1991 was 6.8%, and it was reported 8.6% in the census of 2011. It was estimated that if this trend tends to continue, then the expected growth rate in 2050 will be 19% (4).

This demographic transition leads to several other indirect risk factors such as social and economic constrictions to alter the health and well-being of this age group and make them vulnerable to harmful external conditions (5). Other factors are industrialization, education status urbanization and western life culture which are amending the social values and lifestyle (6). Social and environmental factors like lesser living space due to urbanization with expensive rents, migrations for job and family, nuclear family and being alone in old age, or living in old age homes. Sometimes factors like changing expectations and responsibilities and not adequate privacy and space lead to poor social and mental health (7). The Indian government currently running many health programs and schemes to enhance the overall health status of the geriatric age group and also to combat comorbidities and morbidities (8). The present study was conducted to know the overall health condition of elderly age at our tertiary care center.

MATERIALS AND METHODS

The present observational study was conducted at our tertiary care hospital in the department of urban health training center of community medicine department. All the patients who were more than 60 years of age attending the outpatient department were considered for this analysis. A total of 200 patients were enrolled for study by simple random sampling. Clearance from Institutional Ethics Committee was taken before the start of the study and written informed

consent for the study purpose was obtained from all the enrolled participants. All the patients were subjected to a pretested proforma and socio-demographic data were recorded along with detailed general physical and clinical examination. All the morbidities of the study participants were recorded and used for data analysis. The data were analyzed by using software's MS Excel 2010, Epi Info v7 and SPSS v22.

RESULTS

In the present study, 200 study participant of age more than 60 years were enrolled. The mean age of these elderly patients was 67.1 ± 7.1 years. Out of these 200 geriatric participants, 132 (66%) were males, and 68 (34%) were females. Literacy status of the study population was 136 (68%). The numbers of participants below the poverty line were 158 (76%), and they had BPL cards with them. In the study populations, there were 8 (4%) widows and 2 (1%) widowers. In the study populations, there were 8 (4%) widows and 2 (1%) widowers. In the present study 162 (81%) participants were unemployed and 170 (85%) were living in a joint family. In the present study, 92 (46%) of the population did not use tobacco in any form. In the present study, 31% of the elderly population was suffering from only one kind of morbidity. Maximum of them were suffering from 2 morbidities 48% and 11% had three type morbidities, 4% had four type of morbidities, and only 1% had 5 or more types of morbidities (Table 1).

In the present study, the most common morbidity was anemia in 74% of patients followed by ophthalmic disorders which were found in 71% of patients. CVS disorders including hypertension were found in 64% patients, 59% of patients had complications of GIT and musculoskeletal system. 48% of patients had

complexities of the respiratory system, 46% had dental problems, 32% of patients had skin disorders and ENT diseases found in 26% patients. Female genitourinary disease seen in 19% of patients followed by psychiatric disorders in 18%, diseases of male genitourinary diseases found in 14% of patients, endocrine diseases saw in 13% and 11% CNS diseases. (Table 2)

Table 1: Distribution of the geriatric population according to the number of morbidities

Number of morbidities	No. of cases
1	62(31%)
2	96(48%)
3	22(11%)
4	08(4%)
5 or more	02(1%)

Table 2: Morbidity distribution among study participants.

Morbidity distribution	Number of cases
Anemia	148(74%)
Ophthalmic disorders	142 (71%)
Cardiovascular system (CVS)	128 (64%)
Gastrointestinal system (GIT)	118 (59%)
Musculoskeletal system (MSS)	118 (59%)
Respiratory system (RS)	96 (48%)
Dental problems (Dental)	92 (46%)
Dermatological disorders (SKIN)	64 (32%)
Eye nose and throat problems (ENT)	52 (26%)
Female genitourinary	38 (19%)
Psychiatric problems (PSY)	36 (18%)
Male genitourinary system	34 (14%)
Endocrine system (ENDO)	26 (13%)
Central nervous system (CNS)	18 (09%)

DISCUSSION

In the present study, 200 study participants were enrolled for the assessment of morbidity pattern, and patients from the outpatient department were selected for the study. The mean age of these elderly patients was 67.1 ± 7.1 years. Out of these 200 geriatric participants, 132 (66%) were males, and 68 (34%) were females. The most common morbidity reported was anemia in 74% of patients which was followed by ophthalmic disorders which were found in 71% of patients. A study conducted by Chandrashekhar et al. found that maximum number of study participants 35% were in the age group of 60-65 years. (9) They enrolled 185 participants for an urban area with female predominance of 60%. They enrolled 185 participants for rural area with 42 % females, and 58% were males. The most common morbidity found was a psychosocial problem seen among 38%, of participants, which was followed by ophthalmic disorders 35.40%, and ocular disorders among 23% of patients and cardiovascular diseases found in 18% of the study population (9).

In the present study, 31% of the elderly population was suffering from only one form of morbidity. Maximum of them were suffering from 2 morbidities 48% and 11% had three type morbidities, 4% had four type of morbidities, and only 1% had 5 or more types of morbidities. Similar findings were obtained in a study conducted by Singh et al. among the geriatric population for the morbidity assessment, and they reported that among the study population out of total only 3% of study participants were not suffering from any form of diseases. Maximum numbers of study participants (26%) were suffering from three morbidities and out of the total 13% of study participants had 5 and more morbidities at the time of assessment (10).

In the present study other common morbidities reported were cardiovascular disorders including hypertension was found in 64% patients, 59% of patients had complications of GIT, and 59% of patients had diseases of the musculoskeletal system. A study conducted by Bardhan et al. among geriatric population reported that musculoskeletal conditions were the most common and found in 59% of study participants followed by a dental problem in 58% and ophthalmic disorders come than and found in 55% of patients. CVS and endocrine diseases were found in only 10% patients respectively. Psycho-social illness was found among 23% of the study population (11).

In the present study other common morbidities reported among 48% of patients who had disorders of the respiratory system, 46% of study participants had dental problems, 32% of study participants had skin disorders and ENT diseases found in 26% study participants. A study conducted by Ghosh et al. among geriatric population reported that most common morbidities found was gastro-intestinal disorders in 51% of cases which were followed by Osteoarthritis seen in 49% of patients. Cardiovascular diseases reported among 41% patients. Respiratory infections (Asthma, ARI, and COPD) were found in 41% of cases. CNS disorders were found in 2.5% of the study population. Diabetes mellitus was reported in 9.5% of the study population (12).

In the present study, other common morbidities reported were female genitourinary disease seen in 19% of patients which were followed by psychiatric disorders in 18%, diseases of male genitourinary diseases were found in 14% of patients, endocrine diseases are seen in 13% patients, and 11% patients had CNS diseases. A study conducted by Kumar et al. among geriatric population reported that most common

morbidities found was Respiratory diseases seen in 45.6% of patients, which was followed by cataract seen in 36.8% of patients, cardiovascular disorders are seen in 34.4% of patients and hearing impairment was found in 33.2% of patients. Osteoarthritis was reported among 31.2% of cases, and anemia was relatively less, in contrast, to present study and found in only 20.8% of cases. Morbidities show statistically significant association with age and increases with age (13).

CONCLUSION

We concluded from the present study that there was higher prevalence found of morbidities and multi-morbidities among the geriatric population; hence elderly health care should be emphasized in health programs, planning, and policy-making and implemented through health care services. There is also a need to generate awareness among the elderly age group by IEC methods and activities which can add the improvement in their overall health status.

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