

CLINICAL PROFILE OF MORBIDITY PATTERN AMONG ELDERLY POPULATION AT TERTIARY CARE CENTER

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ABSTRACT

Background: The burden of morbidity among elderly population is reported to very vast and especially non-communicable diseases found to be prevalent among elderly population such as cardiovascular illness and hypertension, endocrine disorders like diabetes and thyroid disorders, psychological diseases, musculoskeletal disorders and malignancies. **Material & Methods:** The present prospective study was conducted among 400 study participants who were more than 60 years of age were enrolled from outdoor department by simple random sampling. Written informed consent was taken from each study participant. **Results:** The most common morbidity was anemia, found among 264 (66%) of patients which was followed by ophthalmic disorders present in 216 (54%) of patients. 192 (48%) patients had disorders of Gastrointestinal system and 188 (47%) patients had disorders of musculoskeletal system. 168 (42%) of patients had diseases related to respiratory system, 156 (39%) patients had dental problems, 124 (31%) patients diagnosed with skin disorders and diseases related to ear, nose and throat were found in 88 (22%) patients. Diseases related to female genitourinary tract were found in 64 (16%) of patients, psychiatric disorders present among 60 (15%) patients, diseases of male genitourinary diseases found in 56 (14%) of patients. Diseases related to cardiovascular system was found in 56 (14%) patients, endocrine diseases found in 48 (12%) patients and 20 (05%) patients had diseases of central nervous system. **Conclusion:** We concluded from the present study that there was higher burden of morbidities reported among elderly population, hence geriatric health care should be given preference in health policy making and implementation.

Key words: elderly population, morbidity, health care.

INTRODUCTION

The burden of morbidity among elderly population is reported to very vast and specially non-communicable diseases found to be prevalent among elderly population such as cardiovascular illness and hypertension, endocrine disorders like diabetes and thyroid disorders, psychological diseases,

musculoskeletal disorders and malignancies (1). In previous studies it was reported that elderly population is more vulnerable to non-communicable diseases, however incidence of communicable diseases was also on higher side. Many health related factors were reported in various researches which

affects the morbidity profile of elderly population, among them some are direct and some are indirect factors, such as standards of health care, personal health status, socio-economic status, psycho-social wellbeing and other factors which can alter health (2).

The epidemiological and demographic transition leads to more influence of several other indirect health related risk factors to elderly population such as social and economic factors. These factors affect the health and wellbeing of elderly population and make them more susceptible to external harmful risk factors (3). The epidemiological and demographic transition of India reported that elderly population of country is increasing day by day. Demographic data reported that in the year 2001 the elderly population of India was 76 million which is increased to 100 million in recent census in year 2011(4). In various reports it was reported that this increasing trend in elderly population still continues and following the same path. Demographic data reported that growth rate of India follows an increasing trend in elderly population as, in the census 1991 growth rate of elderly population was 6.8% and in census 2011 growth rate of elderly population was reported 8.6% (5). It is postulated on the basis of demographic data that if this trend is continued then growth rate of elderly population in year 2050 will be near about 19% (6).

In previous studies it was reported that several other factors apart from age related morbidity also had impact on health status of elderly population such as industrialization, urbanization, education status and living style (7). These factors alter and modify the social and environmental factors such as smaller and congested living spaces, costly rents, financial status and being alone. These factors related to poor social and mental health (8). We conducted present study to assess the clinical profile of morbidity pattern of elderly population at our tertiary care center.

MATERIALS & METHODS

The present prospective study was conducted at department of general medicine of our tertiary care hospital. The study duration was of six months from March 2018 to September 2018. A sample size of 400 was calculated at 95% confidence interval at 10% acceptable margin of error by epi info software version 7.2. Study participants who were more than 60

years of age were enrolled from outdoor department by simple random sampling. Clearance from Institutional Ethics Committee was taken before start of study. Written informed consent was taken from each study participant.

The data were collected by detailed history, general physical and clinical examination from each patient after taking the written consent. All the patients were subjected to a pretested proforma and socio-demographic data. All the morbidities of the study participants were recorded. Data analysis was carried out using SPSS v22. All tests were done at alpha (level significance) of 5%; means a significant association present if p value was less than 0.05.

RESULTS

In the present study, we enrolled 400 study participants of more than 60years of age. The mean age of the study participants was 65.4 ± 3.7 years. Out of the total study participants, 256 (64%) were males and 144 (36%) were females. We reported literacy rate of 280 (70%) among study population. Out of the total study participants 164 (41%) patients were below poverty line and proofed by BPL cards. Out of the total study participants, among females 12 (3%) patients were widows and among males 8 (2%) patients were widowers. Out of the total study participants, 312 (78%) patients were unemployed and 304 (76%) patients were living in a joint family. Out of the total study participants, 232 (58%) patients use tobacco products as chewing and smoking form. In the present study, 41% patients were suffering from only one form of morbidity or disease, 52% patients were suffering from two morbidities, and 7% patients were suffering from 3 or more morbidities (Table 1).

Table 1: Distribution of the geriatric population according to study parameters

Study parameters	Findings
Mean age	65.4±3.7years
Males	256 (64%)
Females	144 (36%)
Literacy rate	280 (70%)
Patients below poverty line	164 (41%)
Married	380 (95%)
Unemployed	312 (78%)
Living in a joint family	304 (76%)
Tobacco users	232 (58%)

In the present study, the most common morbidity among study participants was anemia, found among 264 (66%) of patients which was followed by ophthalmic disorders present in 216 (54%) of patients. 192 (48%) patients had disorders of Gastrointestinal system and 188 (47%) patients had disorders of musculoskeletal system. 168 (42%) of patients had diseases related to respiratory system, 156 (39%) patients had dental problems, 124 (31%) patients diagnosed with skin disorders and diseases related to ear, nose and throat were found in 88 (22%) patients. Diseases related to female genitourinary tract were found in 64 (16%) of patients, psychiatric disorders present among 60 (15%) patients, diseases of male genitourinary tract found in 56 (14%) of patients. Diseases related to cardiovascular system was found in 56 (14%) patients, endocrine diseases found in 48 (12%) patients and 20 (05%) patients had diseases of central nervous system. (Table 2)

Table 2: Morbidity distribution among study participants.

Morbidity distribution	Number of cases
Anemia	264 (66%)
Ophthalmic disorders	216 (54%)
Gastrointestinal system (GIT)	192 (48%)
Musculoskeletal system (MSS)	188 (47%)
Respiratory system (RS)	168 (42%)
Dental problems (Dental)	156 (39%)
Dermatological disorders (SKIN)	124 (31%)
Eye nose and throat problems (ENT)	88 (22%)
Female genitourinary	64 (16%)
Psychiatric problems (PSY)	60 (15%)
Male genitourinary system	56 (14%)
Cardiovascular system (CVS)	56 (14%)
Endocrine system (ENDO)	48 (12%)
Central nervous system (CNS)	20 (05%)

DISCUSSION

In the present study, we enrolled 400 study participants of more than 60years of age. The mean age of the study participants was 65.4±3.7years. Out of the total study participants, 256 (64%) were males and 144 (36%) were females. We reported literacy rate of 280 (70%) among study population. Out of the

total study participants 164 (41%) patients were below poverty line and proofed by BPL cards. Out of the total study participants, among females 12 (3%) patients were widows and among males 8 (2%) patients were widowers. Out of the total study participants, 312 (78%) patients were unemployed and 304 (76%) patients were living in a joint family. Out of the total study participants, 232 (58%) patients use tobacco products as chewing and smoking form. Similar results were obtained in a study conducted by Chandrashekhar et al among elderly population and on morbidity assessment they found that most common type of morbidity found was mental and social health problems which was followed by ophthalmic diseases and hypertension (9).

In the present study, In the present study, 41% patients were suffering from only one form of morbidity or disease, 52% patients were suffering from two morbidities, and 7% patients were suffering from 3 or more morbidities. Similar results were obtained in a study conducted by Singh et al among elderly population and on morbidity assessment they found that most common type of morbidity found was mental and social health problems which was followed by ophthalmic diseases and hypertension. They reported that majority of study participants suffering from more than one diseases (10). Similar results were obtained in a study conducted by Bardhan et al among elderly population and on morbidity assessment they found that most common type of morbidity found was mental and social health problems which was followed by musculoskeletal diseases and dental problem. They reported that majority of study participants suffering from more than one diseases (11).

In the present study, the most common morbidity among study participants was anemia, found among 264 (66%) of patients which was followed by ophthalmic disorders present in 216 (54%) of patients. 192 (48%) patients had disorders of Gastrointestinal system and 188 (47%) patients had disorders of musculoskeletal system. 168 (42%) patients had diseases related to respiratory system, 156 (39%) patients had dental problems, 124 (31%) patients diagnosed with skin disorders and diseases related to ear, nose and throat were found in 88 (22%) patients.

Diseases related to female genitourinary tract were found in 64 (16%) of patients, psychiatric disorders present among 60 (15%) patients, diseases of male genitourinary diseases found in 56 (14%) of patients. Diseases related to cardiovascular system was found in 56 (14%) patients, endocrine diseases found in 48 (12%) patients and 20 (05%) patients had diseases of central nervous system. Similar results were obtained in a study conducted by Ghosh et al among elderly population and on morbidity assessment they found that most common type of morbidity found was gastro-intestinal disorders which was followed by musculoskeletal diseases and respiratory diseases (Asthma, ARI and COPD). They reported that majority of study participants suffering from more than one diseases (12). Similar results were obtained in a study conducted by Kumar et al among elderly population and on morbidity assessment they found that most common type of morbidity found was respiratory diseases which was followed by ophthalmic diseases and musculoskeletal diseases. They reported that majority of study participants suffering from more than one diseases (13).

CONCLUSION

We concluded from the present study that there was higher burden of morbidities was reported among elderly population, hence geriatric health care should be given preference in health policy making and implementation.

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