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Clinical Profile of One Hundred Elderly Patients Admitted in Geriatric Care

A.P. Ambali¹, Sonam R², Mulimani MS³

Abstract

Background: India has acquired the label of ageing nation with 9% of its population being more than 60 years old. Both perceived health and chronic illness are major elements of health status in elderly and there is growing evidence that older people are at risk for manifold co-morbidities. The health problems associated with ageing are multiple and sparse data are available on health status of elderly from hospital source. Hence, this study has made an attempt to bring out hospital-based data, highlights dimensions of the health issues which helps in better understanding of disease patterns in elderly and data for policy makers.

Methods: A prospective clinical profile of one hundred elderly (>60 years) patients admitted under geriatric clinic care of BLDE (DU), Shri B M Patil Medical College Hospital and Research Centre, Vijayapura over a period of twelve months is studied. The patients admitted in emergency wards are excluded.

Results: Out of one hundred patients admitted, 60% were females. Majority (65%) were in age group of 60-74 years. The common symptom of presentation was breathlessness (30%). The commonest co morbid present was hypertension (21%). The final diagnosis was acute exacerbation of Chronic Obstructive Pulmonary Disease in 16%. The overall mortality was 5%.

Conclusion: Elderly people are occupying more number of beds and for prolonged duration. It makes a greater demand on health services. A multidimensional and holistic approach to multi comorbidity state in elderly can be best provided by a medical college hospital at affordable cost and adequate quality, which is need of the hour.

KEYWORDS - Elderly, Clinical profile, Geriatric care.

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Introduction

The elderly now constitutes 9% of the total population in India according to NSSO 2018.¹ The

challenge ahead for health care in coming years is to ensure the quality of life in the elderly population. The health and economic issues in the elderly population differ from other age groups of the population. Elderly are now occupying more beds in general wards as well as in paid wards of hospitals. The pattern of medical disorders, its mode of presentation, the presence of comorbidities and their outcome when treated in medical college hospital will help in knowing the health status of the older people of the region they reside and may help in framing the health policies. The availability of affordable multi-speciality services under one roof without much waiting time is the biggest

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advantage for senior citizens attending the medical college hospital. The community-based studies on the health of older people are plenty and while hospital-based studies are sparse, recognizing the need for reliable data on health problems in elderly.² However, each study has its own merits and demerits. The geriatric care unit in Shri B M Patil Medical College Hospital is serving the elderly population of this region from the year 2007. Our study has an advantage of bringing disease profile in detail from a medical college hospital geriatric wards where people come from all walks of life of the society.

MATERIALS AND METHODS:

The clinical profile was assessed prospectively, cross-sectional in one hundred patients admitted in medical wards through the geriatric clinic of Shri B M Patil Medical College Hospital and Research Centre over a period of twelve months, in the year 2017.

All the older patients above 60 years of age attending the geriatric clinic and getting admitted in the general medical wards of the hospital were included in the study. The demographic profile of the elderly patients, symptoms at presentation to the hospital, the presence of comorbid conditions, diagnosis, duration of stay and outcome were recorded in a prescribed format. Older patients admitted to emergency wards during the study period were excluded. The informed consent in a prescribed format was taken from all the participants.

All the characters are summarized descriptively. For continuous variables, the summary statistics of mean \pm Standard Deviation (SD) were used. For categorical data, the number and percentage were used in the data summaries and diagrammatic presentations. Data were analysed using SPSS software V.23.0 and Microsoft office 2007.

RESULTS

One hundred elderly patients were enrolled among which 40% were males, and 60% were females. The elderly in the age group of young old (60-74 years) were 65%, old (75-84 years) were (21%) and while very old (>85 years) were 14% (Table 1).

Regarding marital status, 64% were married, 34% were the widow, and 2% were widower.

The main presenting symptoms when analysed, it was found that the 30% of elderly presented with breathlessness as the main symptom, followed by pain abdomen in 17%, fever and loose stools in

10% each, chest pain and giddiness in 4% each. The other symptoms were seizures, hemiparesis, cough, joint pain, headache and lack of sleep (Table 2).

Table 1. Age and Sex distribution

Age group (in years)	Male	%	Female	%	TOTAL
60-74	25	25	40	40	65
75-84	08	08	13	13	21
Above 85	07	07	07	07	14
Total	40	40	60	60	100

Table 2. Presenting symptoms

Symptoms	Number	%
Breathlessness	30	30
Pain abdomen	17	17
Fever	10	10
Loose stool	10	10
Chest pain	04	04
Giddiness	04	04
Others	25	25
Total	100	100

The comorbid conditions either in single or multiple were noted in all the patients. The commonest comorbid was hypertension in 21%, followed by chronic obstructive pulmonary disease (17%), anemia (12%), coronary artery disease (10%), diabetes mellitus (9%), epilepsy (11%), frailty (1%), obesity (1%), benign prostatic hypertrophy, fractured spine, hypothyroidism (5%) and Human Immunodeficiency Virus infection (1%) (Table 3).

Table 3. Comorbid conditions

Comorbid condition	Number	%
Hypertension	21	21
Chronic Obstructive Pulmonary Disease	17	17
Anemia	12	12
Stroke	11	11
Seizures	11	11
Coronary artery disease	10	10
Diabetes mellitus	09	09
Hypothyroidism	05	05
Frailty	01	01
Benign Prostatic Hypertrophy	01	01
Obesity	01	01
HIV	01	01

Diagnosis

The final diagnosis was established after clinical examination along with basic and relevant investigations carried out during their stay in the hospital (Table 4).

Table 4. Diagnosis (n=100)

System involved	Diagnosis	Number	Total (%)
Cardio-vascular system	1. Ischemic heart disease	04	04
	2. Left ventricular failure	04	04
	3. Hypertension	01	01
Respirator System	1. Exacerbation of Chronic Obstructive Pulmonary Disease	16	16
	2. Pulmonary Tuberculosis	06	06
	3. Pneumonia	08	08
Per abdomen	1. Acute Gastroenteritis	10	10
	2. Colitis	04	04
Central nervous system	1. Stroke	09	09
	2. Epilepsy	01	01
	3. Depression	02	02
Infection	1. Febrile thrombocytopenia	02	02
	2. Malaria	05	05
	3. Dengue	05	05
Renal system	1. Chronic renal Failure	06	6
	2. Urinary tract infection	02	2
Hematology	Anemia	07	7
Carcinoma	1. Carcinoma lung	03	3
	2. Carcinoma colon	01	1
Endocrine	1. Newly detected Diabetes mellitus	02	2
	2. Newly detected Hypothyroidism	02	2
Musculo-skeletal	Osteoarthritis	01	1
ENT	Otosclerosis	01	1
TOTAL		100	100

The total duration of stay in the hospital

The duration of stay in the hospital when calculated it was found that 58% of patients stayed up to three days, while 20% up to five days and in 14% the stay was up to 10 days. Three patients were discharged against medical advice within 24 hours of admission. These three patients had a stroke and left the hospital to get treatment from a faith healer (Table 5).

Table 5. Duration of stay in hospital

Days	No of patients	%
0-1	08	08
1-3	58	58
4-5	20	20
6-10	14	14
Total	100	100

Outcome

Out of one hundred admissions, 92% had recovered and were discharged to home, while 5% succumbed and 3% discharged against medical advice (Table 6) Two patients each with chronic renal failure, and congestive heart failure and one patient with carcinoma lung succumbed during the study period.

Table 6. Outcome

Outcome	Number	%
Death	05	05
Recovered	92	92
Against medical advice	03	03
Total	100	100

DISCUSSION

Our study was aimed to know the clinical profile of elderly patients admitted in the general wards of the medical college hospital under geriatric unit care.

It is observed that elderly patients occupy more number beds in wards and for the prolonged duration. The elderly in the age group of 60-74 years (65%) constituted the major fraction of patients.

The sex distribution showed that females (60%) outnumbered the males (40%), similar to the

study done by Goel P K *et al.* (3). But in a study by Reddy A P K *et al.* (12) males were predominant.

The presenting symptom was breathlessness in 30% of the patients.

Comorbid conditions

The most common comorbid was Hypertension which was present in 21% of individuals, while it was 49% in a study by Reddy A PK *et al.* (12) and Polisetty S *et al.* (13). In contrast, Garg *et al.* (14) found the prevalence of hypertension in 16% of their study population especially in an urban setup. The next most common comorbid was the chronic obstructive pulmonary disease which was noted in 17% while it was 61% in a study done by Reddy A PK *et al.* (12)

Diseases and the system involved

The commonest system involved was respiratory system in 30%, which is comparable with the findings of Prakash *et al.* (11) who reported 36%, while Reddy A PK *et al.* (12) reported 36.1% and the most common respiratory disease was acute exacerbation of chronic obstructive pulmonary disease (16%) and pneumonia was diagnosed in 8% while it was 26% in study by Reddy APK *et al.* (12). The low incidence may be because we have excluded cases admitted in emergency wards.

The common diseases of cardiovascular system were old ischemic heart disease (4%), left ventricular failure (4%) and newly detected hypertension (1%) while the study done by Reddy A PK *et al.* (12) hypertension in 49%, ischemic heart disease in 10%, cardiomyopathy (3%) and valvular heart disease (3%). In, our study we have not come across elderly with valvular heart disease.

The commonest diseases of the Gastrointestinal system were acute gastroenteritis (10%) and colitis (4%), similar observations were made in a study by Reddy APK *et al.* (12) where gastroenteritis in 18% was noted.

The elderly admitted for fever had a diagnosis of dengue and malaria in 5% each while study by Reddy APK *et al.* (12) showed dengue (14%) and malaria (12%).

The common Hematological diagnosis was anaemia (07%) while it was 33% in a study by Swami *et al.* (15).

The newly detected diabetes and hypothyroidism were in 2 % each while a study by Polisetty S *et al.* (13) showed diabetes in 24% and thyroid disease in 4% of their study population.

The admission due to the neurological case was stroke (9%) and epilepsy (1%) while Reddy *et al.* (12) reported stroke in 65% (65%).

Duration of stay

As it is emphasised that elderly patients occupy beds for more number of days compared to young, our study noted that 58% of the patients stayed up to three days, 20% up to five days and 14% up to ten days. (Table. 6). The patients with frailty and having more than four comorbidities have stayed up to ten days for recovery of their presenting illness. There is sparse information in the literature about the duration of stay of older patients in the hospital.

Mortality

The overall mortality was 5% in this study. Most of the hospital-based studies have not mentioned the mortality rate. This study provides insight into morbidity and mortality profile.

Conclusion

Old age is usually associated with the increasing number of health problems. Elderly people are occupying more number of beds in general wards and for a prolonged duration. It makes a greater demand on health services for a clinician. In, our study patients were looked after by a team of specialist doctors under geriatric care under one roof. The general wards of the medical colleges are ideal for older people as all specialist treatment are available under one roof which is cost effective and saves appointment time. The older people spend quality time inwards and will have the company of other people to talk to, which in turn takes care of loneliness and additionally provides social support. The greatest advantage of the older person being admitted in general wards is to the caregivers wherein they can request neighbour patient attendees to keep a watch on the patient while they are away to bring drugs and food. The percentage of elderly requiring a long duration of stay is on the rise. This hospital-based study provides comprehensive information about the health status of the elderly. We are of opinion such studies involving a large number of patients will help the policymakers and hospital industry in making elderly friendly and prioritize health services and policies for elderly patients.

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