

Original Article

Common Medical Health Problems Among the Hospitalized Elderly Patient: A Cross Sectional Study

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Abstract:

Objective: To find out the common medical health problems among the hospitalized elderly patients

Methodology: This was a cross sectional study conducted in a tertiary care hospital located in old Dhaka. 100 male and 100 female elderly patients were selected purposively from Medicine ward and health problems were evaluated by preformed questionnaire, bed side examination and some available investigations.

Results: Anaemia, electrolyte imbalance, UTI, pneumonia, tuberculosis, malignancy, osteoarthritis, acute exacerbation of bronchial asthma and COPD, stroke, uncontrolled hypertension, DM were the common diagnosis of elderly hospitalized patient in medicine ward.

Conclusion: Proper care should be provided for elderly patient that can reduce the rate of hospitalization. Additionally, proper hospital facilities should be arranged for this group.

Introduction:

Age is defined as progressive deterioration of physiological functions with age including a decrease in productivity.¹ Aging is universal and it is inescapable thus in contrast to the chronological milestones that mark stages of life in the developed work in many developing countries, old age is seen to begin at the point when active contribution to the society is no longer possible.² By 2050 older people will outnumber children under the age of 14 years.³ The net increase of the older population worldwide is about one million every month, two thirds of them being from lower income countries.⁴ Bangladesh with one the highest population densities (985/sq km) in the world is projected to experience a dramatic growth in the absolute number of its population aged 60 years or older from current level of approximately seven million to fourteen million by 2020.⁵ The problem of the aged is not merely medical, it is physical, mental, economical and socio cultural. There are facilities for the aged in developed countries but in our countries it is insufficient. The present study focuses on to find out the common health problems among the elderly that leads them for hospitalization and to evaluate associated co-morbidities among the elderly hospitalized patient.

Materials and methods:

This cross sectional study was conducted from January to July 2018 in National Medical College Hospital. 100

male and 100 female elderly patient (age > 60 years) were selected purposively from medicine ward for this study. Critically ill elderly patient were excluded from the study. Consent was collected from each eligible participant for the study. After obtaining verbal consent, a face to face interview was conducted using a pretested questionnaire having both structured and open ended questions about socio-demographic variables like age, education, family size, dependency, occupation and monthly income. Some health problems were also included in the questionnaire. Causes of hospitalization was evaluated with necessary investigations and ultimate diagnosis were confirmed. Associated co-morbidity was confirmed by history necessary bed side examination and previous health documents.

Results:

Among the 100 elderly male patient highest number (33%) belongs to age group 60-64. Among the 100 elderly female patient highest number (26%) belong to age group 75-79 (Graph-1).

Maximum patient (72.5%) comes from urban area and rest from rural area (27.5%). Significant number of patients were hindus (34%) though the highest group was muslim patients (61%). 5% buddhists patients was also present in this study (Table-1).

Among the 100 male patients 10 % were independent and only 5% of the female patients was independent.

They are not working people but got money from house rent. For female patient 27% dependent on husband. Still maximum male (53%) and female (39%) dependent on the son for economical need. 33% of male and 23% of female was dependent on daughter for health issue. A small proportion 4% male and 6% of female was dependent on relatives for their health cost (Table-2).

During our study period maximum elderly patient where hospitalized due to symptoms of anemia. Second highest problem was electrolyte imbalance (11%). Among the infectious disease UTI (10%), Pneumonia (8.5%) and Tuberculosis (6.5%) patients where most common. Among non communicable diseases malignancy (7.5%), osteoarthritis (6%), acute exacerbation of bronchial asthma (6%), stroke (5.5%), acute exacerbation of COPD (5.5%), uncontrolled HTN (4.5%), uncontrolled DM (5%) where predominant disease. 5.5 % patient were hospitalized due to non specific symptoms (Table-3).

Among the participants 90% patients complaints about hyper acidity. 78% complains about non specific joint pain. Memory loss was a common problem which effects 53.5% of participants. 47.5% elderly hospitalized patients had various form of dental problem. Cataract (43%), hearing defect (29.5%) were the neglected symptoms which were evaluated by leading questions and bed side examinations. 28% patient had hypertension and 20% patients had diabetes mellitus with other symptoms. Among the 100 male patients 56 patients had symptoms suggestive of BEP and 15% female patient had various degree of uterine prolapse (Table-4).

Discussion:

This cross sectional study conducted in a tertiary care hospital situated in old Dhaka. A total of 200 respondents were interviewed among them 100 were male and 100 female. Among all the 80 and above age group a predominance of female patients were observed. The ratio among the group of 80 and above was 2:1 for female versus male patients. Maximum male patients 33% belongs to the age group 60-64 and 26% of female in the age group 75-79. As this study was conducted among hospitalized elderly patients, the observed age and sex distribution did not correlate with maximum studies those of which where community based.^{6,7} Majority, that is 72.5% patients comes from urban area as the hospital is located in an urban area. Only 27.5% patients come from rural area. A

significant number of non muslim population lives around the hospital which explains the higher number of hindu (34%) and buddhist (5%) patients observed in the study. This statistics is quite different from other studies.⁸ Maximum of elderly people where dependent on either son or daughter for their economical support. This coincides with other studies conducted in other hospital and rural areas of Bangladesh.^{9,10}

Among the study population anemia was a preeminent sign 11.5%. In a study conducted in India they found similar result in hospitalized elderly people.¹¹ Electrolyte imbalance (11%) was the second highest detectable problem for hospitalization. Among the infectious disease UTI, pneumonia, tuberculosis were most common which coincides with other studies.¹² A significant number of the patient (7.5%) diagnosed as a case of malignancy similar observation was made in other studies which found malignancy as an important health problem amongst elderly.¹³ Osteoarthritis was the common health problem among both male and female hospitalized elderly patient. In a study conducted in India osteoarthritis was highlighted as a major health problem among elderly people.¹⁴

Hyperacidity, non specific joint paint, memory loss, cataract, hearing defects, dental problems are the common comorbidities among studied population.¹⁵ 56% of elderly male patient had clinical feature suggestive of BEP and 15% of female patient had various degree of uterine prolapse. This conditions are mostly ignored by the patients which can led to various serious complications.

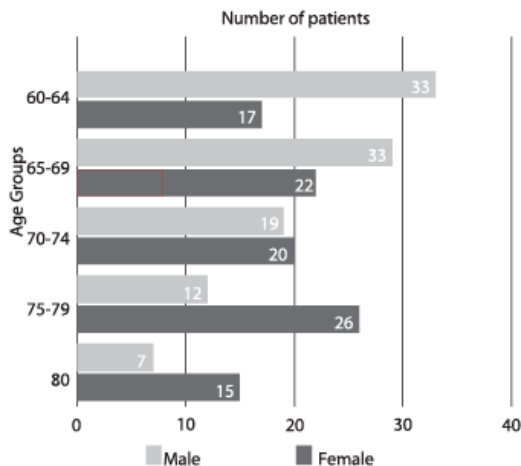
Limitation:

It was a hospital based study so it would not reflect the actual health problems among the geriatric group of people in community. All required investigations cannot be done due to economical constraints so comorbidities were evaluated on the basis of histories, clinical examinations and previous available investigations.

Conclusion:

This study reflect that many elderly patient got hospitalized for communicable diseases and some preventable noncommunicable diseases. Proper care and regular monitoring can reduce

the rate of hospitalization of this group people. We should increase hospital facilities to provide proper care for multiple comorbidity of elderly people.

**Figure 1:** Age distribution of the respondent**Table 1:** Socio Demographic Characteristics of Respondent (N=200)

Characteristics	Classification	Number	%
Sex	Male	100	50.0%
	Female	100	50.0%
Urban-rural	Urban	145	72.5%
	Rural	55	27.5%
Religion	Muslim	122	61%
	Hindu	68	34%
	Buddhist	10	5%

Table 2: Dependency status of Respondent (N=200)

Category	Male (100)	Female (100)
Independent	10	5
Dependent on Husband	0	27
Dependent on Son	53	39
Dependent on Daughter	33	23
Dependent on Relative	4	6

Table 3: Primary Diagnosis of Respondent (N=200)

Disease	Male	Female	Total	% of total
Pneumonia	9	8	17	8.5%
Electrolyte imbalance	8	14	22	11%
Malignancy	10	5	15	7.5%
Tuberculosis	9	4	13	6.5%
Anaemia	8	15	23	11.5%
UTI	7	13	20	10.0%
Osteoarthritis	4	8	12	6%
Stroke	7	4	11	5.5%
Uncontrolled DM	5	3	8	4%
Uncontrolled HTM	4	5	9	4.5%
Parkinson's	1	1	2	1%
Vertigo	1	4	5	2.5%
Hypoglycaemia	2	3	5	2.5%
TIA	2	2	4	2%
Acute Exacerbation of Bronchial Asthma	7	5	12	6%
Actue exacerbation of COPD	9	2	11	5.5%
Non specific symptom	7	4	11	5.5%

Table 4: Associated Comorbidities of Respondent (N=200)

Condition	Num of patient	%
Arthritis	156	78%
PUD and Hyperacidity	180	90.0%
Dental problem	95	47.5%
Cataract	86	43%
Hearing defect	59	29.5%
Haemorrhoidal disease	43	21.5%
Partial paralysis	95	47.5%
CKD	10	5%
Cholelithiasis	8	4%
Memory Loss	107	53.5%
Skin disease	36	18%
HTN	56	28%
DM	40	20.0%
Hernia Male	7	7%
Hernia Female	4	4%
BEP (Male)	56	56%
Uterine prolapse (Female)	15	15%

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