

## Health Problems of Elderly Patients attending Combined Military Hospital, Dhaka

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### Abstract

**Introduction:** Health problems of elderly are an emerging health burden throughout the world. Bangladesh is currently undergoing a demographic transition and the proportion of the population of 60 years and older is increasing rapidly. Health care providers and policy-makers are highly concerned with this burning issue.

**Objective:** To know the disease pattern among the elderly patients in Combined Military Hospital, Dhaka.

**Materials and Methods:** This cross-sectional study was carried out from July 2015 to June 2016 among 152 elderly patients above 60 years of age admitted in Combined Military Hospital (CMH), Dhaka Cantonment. Data were collected by face-to-face interview with semi-structured questionnaire and checklist following purposive sampling technique. Analysis of data was done by Statistical Package for Social Science (SPSS, version 20.0).

**Results:** Mean age of the elderly was 72.06±4.56 years with the range of 60-80 years and majority (90.8%) of the elderly was male. Out of total 152 elderly patients, by occupation majority (31.6%) were in the business group followed by 30.3% in the retired group and 9.2% in the housewife group. Average monthly family income was BDT 17927.63±7360.75 with the range of BDT 6000-35000. With initial complaints elderly patients reported to doctors in private chamber (38.2%), private hospital (25.6%) and Govt hospital (5.9%). Among all of the elderly patients, majority (21.1%) had Diabetes Mellitus followed by Rheumatoid Arthritis (17.6%), Asthma (12.5%), Cataract (11.2%), ENT problem (6.6%), Malignancy (5.9%) and Benign Enlargement of Prostate 8(5.3%).

**Conclusion:** The number of elderly people is expanding rapidly; it also presents multifaceted health problems and thus creates unique challenges for the national healthcare

services. Early identification of problem and ensuring the availability of health with economic and social support can have a control over the elderly health problems.

**Key-words:** Elderly patient, Combined Military Hospital (CMH), Bangladeshi Taka (BDT).

### Introduction

Old age comprises the later part of life; the period of life after youth and middle age usually with reference to deterioration. The beginning of old age cannot be universally defined because it shifts according to the context. The United Nations has agreed that 60+ years may be usually denoted as old age, and this is the first attempt at an international definition of old age. However, the World Health Organization (WHO) set 50 years as the beginning of old age<sup>1</sup>.

Bangladesh is currently undergoing a demographic transition and the proportion of the population of 60 years and older irrespective of sex is rapidly increasing. Currently, older peoples are around 7% of the country's total population, amounting to roughly 10 million people. The number of elderly people is increasing rapidly in the developed countries but it is also increasing in the developing countries by leaps and bounds. According to United Nations, the total number of elderly people in the world will reach at 1200 million by the year 2025 which indicates that by this time 15% of the total populations will reach 60 years or more. Elderly people have got limited regenerative abilities and are more susceptible to disease syndromes and sickness than younger and adults<sup>2</sup>.

Old age is not a disease itself; elderly are vulnerable to disease of long-term insidious onset such as cardiovascular illness, arthritis, cancers, eye disease, diabetes, musculoskeletal and mental illnesses. They have multiple

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symptoms due to decline in the functioning of various body functions. The Government of Bangladesh is committed to bring sustainable improvement in health, nutrition and family welfare especially for vulnerable groups such as the elderly, pregnant mothers, infants and people of low socioeconomic status<sup>3</sup>.

The government should effectively plan Health Care Services for the elderly and prepare a feasible implementation design relevant to country needs. The problems associated with the ageing of the population are that of the absence of facilities for medical treatment and of providing economic and social support hence information on morbidity profile of this population is essential for planning its healthcare facilities<sup>4</sup>.

### Materials and Methods

This cross-sectional study was carried out in CMH, Dhaka with duration of one year from July 2015 to June 2016. All forms of elderly patients above 60 years age admitted in CMH, Dhaka were included in this study. Severely ill patients, patients suffering from extreme deafness and psychological illness were not included in this study.

Systematic random sampling technique was followed. Semistructured questionnaire and checklist were used as research instruments. Data were collected with a pretested semistructured questionnaire by face to face interview and by a checklist reviewing medical documents of the respective participants. A checklist was used for diagnosis of the health problems. Written permission was taken from hospital authority. Informed written consent was taken from legal guardians of the patients before data collection. On an average, 3-4 respondents were interviewed every day from 9 am to 2 pm. All collected data were checked and verified thoroughly to reduce the inconsistency. Quality of data was always ensured. Analysis of data was done by Statistical Package for Social Science (SPSS 20).

### Results

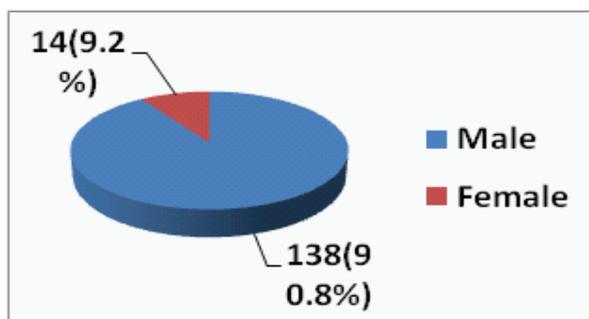
This cross-sectional study was conducted among 152 elderly patients who were admitted to CMH, Dhaka to find out their health problems. All the collected data were edited and analyzed with the help of SPSS 20. The analyzed data were presented in different tables and figures.

Table-I shows that out of total 152 elderly patients, majority 57(37.5%) were in 75-80 years and 11(7.2%) were 60-64 years of age. The mean age was 72.06±4.56 years and the range was 60-80 years.

**Table-I:** Distribution of Respondents by Age (n=152)

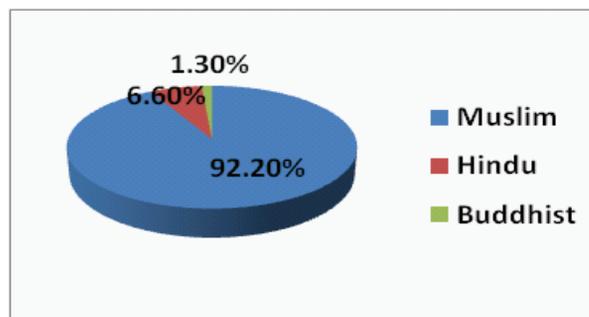
Age Group	Frequency	Percentage
60 -64 yrs	11	7.2
65 - 69 yrs	33	21.7
70 - 74 yrs	51	33.6
75-80 yrs	57	37.5
Total	152	100.0
Mean ± SD	72.07 ±4.56	

Figure-1 shows that among all the respondents, the majority 138(90.8%) were male and 14(9.2%) were female. The male-female ratio was 9.85:1.



**Fig-1:** Distribution of sex among the respondents (n=152)

Figure-2 shows that out of total 152 elderly patients, majority 140(92.1%) were muslims followed by 10(6.6%) hindu and 2(1.3%) Buddhists.



**Fig-2:** Distribution respondents by religion (n=152)

Table-II shows that out of 152 elderly respondents, majority 63(41.4%) were educated upto higher secondary level followed by 56(36.8%) studied upto primary level and 28(18.8%) were illiterate and 5(3.23%) were graduate.

**Table-II:** Distribution of respondents by educational qualification

Educational qualification	Frequency	Percentage
Illiterate	28	18.42
Primary	56	36.84
Higher secondary	63	41.45
Graduate	5	3.23
Total	152	100

Table-III shows that out of 152 elderly patients, majority 48(31.6%) were in the business group followed by 46(30.3%) who were in the retired group and only 14(9.2 %) were in housewife group.

**Table-III:** Distribution of respondents by occupation (n=152)

Occupation	Frequency	Percentage
Retired	46	30.3
Housewife	14	9.2
Businessmen	48	31.6
Farmer	44	28.9
Total	152	100.0

Table-IV shows that out of 152 elderly patients, monthly family income of majority 50(32.9%) was BDT 10000-14000 and only 3(2.0%) had BDT 1000-9000. The mean monthly income of the families of elderly was BDT 17927.63±7360.

**Table-IV:** Distribution of respondents by monthly family income

Income Group	Frequency	Percentage
1000 - 9000	3	2.0
10000 -14000	50	32.9
15000 - 19000	39	25.7
20000 - 24000	30	19.7
25000 - 29000	18	11.8
30000 - 50000	12	7.9
Total	152	100.0
Mean ±SD	17927.63±7360.26	

Table-V shows that among all the respondents 55(36.2%) stayed in hospital for 2-4 days and only 6(3.9%) stayed for 25-30 days; mean hospital stay was 6.26±5.47 days.

**Table-V:** Duration of hospital stay of the respondents (n=152)

Duration of Hospital Stay	Frequency	Percentage
02 - 04 days	54	35.5
05 - 09 days	55	36.2
10 - 14 days	18	11.8
15 - 19 days	12	7.9
20 -24 days	7	4.6
25 - 30 days	6	3.9
Total	152	100.0

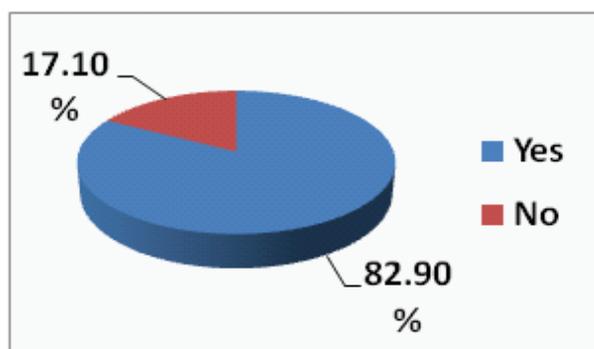
Table-VI shows that regarding initial complaints by the respondents of total 152 elderly patients, majority 35(23.4%) were with general weakness followed by 25(16.4%) with joint pain then 20(14.2%) with eye problem (cataract), 20(16.2%) with hypertension, 15(9.8%) with ENT problem, 15(9.8%) with anorexia, 14(1.3%) with retention urine and 12(7.3%) with respiratory problems.

**Table-VI:** Distribution of initial complaints by the respondents

Complaints	Frequency	Percentage
General weakness	35	23.0
Bone and joint pain	25	16.4
Eye problem	18	12.4
Anorexia	15	9.9
Respiratory problem	12	7.9
Hypertension	20	13.2
Numbness of limbs	13	9.0
ENT problem	15	9.9
Retention of urine	14	7.5

\* Multiple Responses

Figure-3 shows that among all the respondents, the majority 126(82.9%) reported sick after initial complaints received instant treatment and 26(17.1%) did not report sick to a physician after initial complaints.



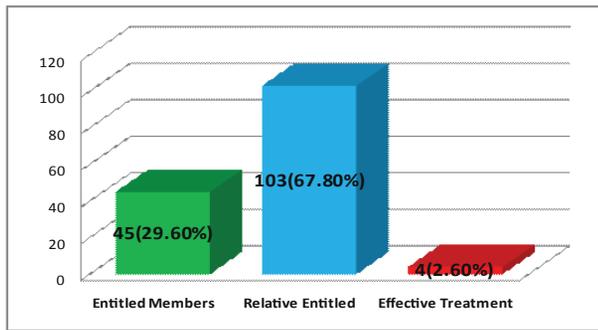
**Fig-3:** Distribution of patients by reporting sick after initial complaints (n=152)

Table-VII shows that out of 152 elderly, after initial complaints majority 58(38.2%) reported to the doctor in private chamber, 38(25.6%) reported to private hospital or clinic 24(15.8%) reported to NGO hospital, 9(5.9%) reported to Govt hospital, 8(5.3%) reported to Homeopath, 11(6.6%) reported to traditional healers.

**Table-VII:** Distribution of sources of initial treatment of the respondents (n=152)

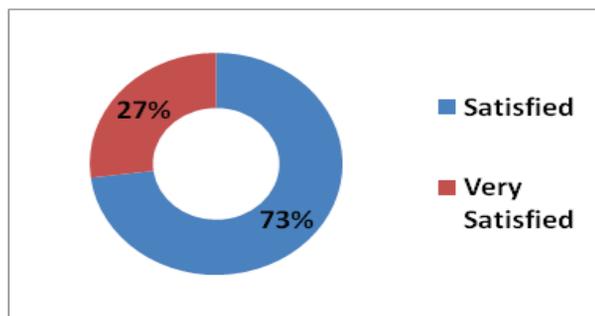
Source of Treatment	Frequency	Percentage
Govt hospital	13	8.6
NGO hospital	24	15.8
Private hospital	38	25.6
Private chamber	58	38.2
Homeopath	9	6.3
Traditional healers	11	6.6
Total	152	100.0

Figure-4 shows that among all the respondents, the majority 103(67.8%) reported to this hospital as they were entitled and only 4(2.65%) reported that the treatment was effective.



**Fig-4:** Distribution of type of entitlement of respondents (n=152)

Figure-5 shows that among all the respondents, the majority were 111(73.0%) satisfied, 41(27.0%) were very satisfied and no one reported as not satisfied.



**Fig-5:** Distribution of level of satisfaction of the elderly regarding hospital service.

## Discussion

This study was carried out in CMH, Dhaka, a tertiary level of referral hospital. Most of the specialist medical care's with all modern facilities are available in this hospital. So in this hospital like other patients, elderly also get better and modern treatment. Thus this study may act as a source of information for future researchers and health policymakers.

Study results revealed the mean age of elderly was 72.06 ±4.56 years with the age range of 60-80 years. A similar study was conducted by Begum MS<sup>5</sup> at Prabin Hitayishi Hospital, Bangladesh which included 107 respondents aged 60 years and above. Out of 107 respondents, 46.7% were aged 65 years or above and also shown that co-morbidity increases with the increase of age. A research was conducted in India<sup>6</sup> which showed that people of more than 60 years of age faces a lot of geriatric health problems and with the increases of age health problems also increases which is almost similar to this study.

Among all the elderly in this study, majority 90.8% were male. A similar study was conducted by Evert J et al<sup>7</sup> showed that 24% of the study populations were male and 76% female.

Another study in India by Ingle and Nath<sup>6</sup> showed the sex ratio of the aged favoured males. In this study, the male percentage is higher because the CMH is a tertiary level referral hospital where referred patients are mostly male, as well as retired personnel are mostly male.

In this study, 92.1% were Muslim followed by 6.6% were Hindu. A similar study by Jabeen S et al<sup>8</sup> was conducted in NICRH where 92% of study populations were Muslims and 8% were Hindu. This finding is almost similar to present study.

Out of the entire 152 elderly respondents majority 63 (41.4%) were educated at higher secondary level, 28 (18.8%) were illiterate and only 4(2.6%) were graduate. A study conducted in Iran<sup>9</sup> regarding the effect of educational status on geriatric health revealed that individuals with less education, lower income are related to poor health status (mental and physical). Literacy rate was found 64.6% in a study<sup>10</sup> and at secondary school certificate level it was 47% which is similar to this study.

Out of total 152 elderly patients, by occupation majority 48(31.6%) were in the business group followed by 46 (30.3%) were in the retired group and only 14(9.2 %) were in the housewife group. As the hospital is a military hospital as well as urban-based so retired armed forces personnel and businessmen (mostly parents of soldiers) are more. Moreover, the relatives of armed forces personnel may also get treatment under special circumstances who come from different part of the country.

Majority of the elderly patients were found in BDT 10000-14000 income group and the mean monthly income of the family of elderly patients was BDT 17927.63±7360 found in this study. A study conducted in NICRH<sup>8</sup> stated that the mean of family income was BDT 8129.88±2809.21. In the present study, the family income is a bit more, because per capita income of Bangladeshi people has increased within last five years.

According to initial complaints in this study, majority of the patients presented with general weakness but other diseases also were the concern like joint pain, eye problem (cataract), hypertension, ENT problem, anorexia, retention urine and respiratory problem. A cross-sectional study conducted by Khanam MA et al<sup>11</sup> showed that patients over 60 years of age in Matlab, Bangladesh suffered from more than 2 diseases, such as arthritis, stroke, thyroid functions, obstructive pulmonary symptoms, symptoms of heart failure, impaired vision, hearing impairment and high blood pressure. That finding corresponds with the present study.

A similar study by Prince MJ et al<sup>12</sup> revealed that the leading contributors to disease burden in older people are cardiovascular diseases (30.3% of the total burden in people aged 60 years and older), malignant neoplasms (15.1%), chronic respiratory diseases (9.5%), musculo-skeletal diseases (7.5%) and neurological and mental disorders (6.6%) which are almost similar to present study. But the initial complaints vary may be due to the understanding of complaints by the participants, multiple co-morbidities and also due to diversified features of elderly health problems from person to person or country to country.

Among all the respondents, majority of the patients reported sick after initial complaints but rest did not report sick to a physician. Moreover, after initial complaints, majority reported to doctor in private chamber, private hospital/clinic or NGO hospital and a minimum reported to Govt hospital, Homeopath and traditional healers. Due to overall national development, people now-a-days are conscious enough regarding the treatment and maltreatment more so due to increasing economic support, they are ready to spend money and visit a qualified doctor either in the chamber or to private sector hospital. But still, in the rural area, a fair number of people visit homeopath or traditional healers.

It is revealed from this study, majority reported to this hospital (CMH) as they are relative who are permitted for treatment (29.6%) and were the entitled member of armed forces. It was seen in this study that majority of the patients were satisfied and rest were very satisfied with the treatment they received.

### Conclusion

Health problems of elderly are a burning issue and recognized as an emerging public health problem in Bangladesh. The numbers of elderly people are expanding rapidly and it presents multifaceted health problems thus creates unique challenges for the national healthcare services. Early identification of problems and ensuring the availability of health facilities with economic and social support can have a control over the elderly health problems. Since elderly health problems is an emerging public health issue so countrywide comprehensive geriatric healthcare facilities should be made available to reduce the treatment cost.

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