Original Article

Health Problems of the Elderly Attending Tertiary Level Hospital in Urban Area

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Abstract

Background: Health problems of the elderly are an emerging health burden through 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: This study was conducted to explore the disease pattern among the elderly patients admitted in a tertiary care hospital in Dhaka city.

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

Results: Mean age of the respondents was 72.06±4.56 years and 90.8% of the respondents were male. Majority i.e 48 (31.6%) were in business group followed by 46 (30.3%) were in retired group and 14 (9.2 %) were house wife. Average monthly family income was Tk- 17927.63±7360.75 with the range of Tk- 6000- 35000. Regarding health problems, General weakness and Numbness of limbs 48 (31.57%), Musculo skeletal problems 25 (16.44%), Eye problems 18 (11.84%), GIT problems 15 (9.86%), Respiratory problems 12 (7.89%), Cardio vascular problems 20 (8.55%), ENT problems 15 (9.86%), Uro-genital problems 14 (9.21%) were found among the respondents. Mean hospital stay was 6.26±5.47 days and about 73% of the respondents were satisfied by hospital services.

Conclusion: The number of older people in the low-income countries is expanding rapidly. It also presents multifaceted health problems not commonly associated with low-income countries and thus creates unique challenges for the national health care service.

Key words: Elderly, Health problems, Urban area, tertiary level hospital.

Introduction

Elderly comprises the later part of life; the period of life after youth and middle age usually with reference to deterioration. When old age begins 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[1].

Irrespective to sex Bangladesh is currently undergoing a demographic transition and the proportion of the population of 60 years and older 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 thistime15% 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.[2]

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Old age is not a disease in itself, but the elderly are vulnerable to long term diseases of insidious onset such as cardiovascular illness, arthritis ,CVA, cancers, eye, diabetes, musculoskeletal and mental illnesses. They have multiple symptoms due to decline in the functioning of various body functions. The Government of Bangladesh is committed to sustainable improvement in health, nutrition and family welfare especially for vulnerable groups such as the elderly, pregnant mothers, infants, and peoples of low socioeconomic status.[3]

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 aging of the population are that of 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 health care facilities.[4]

Material and Methods

This cross sectional study was conducted for the duration of one year (from July 2015 to June 2016. Systematic random sampling technique was followed to collect 152 respondents. All the patients were admitted in inpatient department in different unit of Combined Military Hospital, Dhaka and all were above 60 years of old. Severely ill patients, suffering with extreme deafness and psychological problems were not included in this study. After taking informed written consent, data were collected by face to face interview with a pre-tested semi-structured questionnaire along with a checklist using for reviewing medical documents of the respective participants to find out the health problems. 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, version 20.0) in the computer.

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Results

This cross sectional study was conducted among 152 elderly patients those who are admitted in Combined Military Hospital Dhaka to find out their health problems. All the collected data were cleaned, edited, analyzed and presented through different tables and figures as follows:

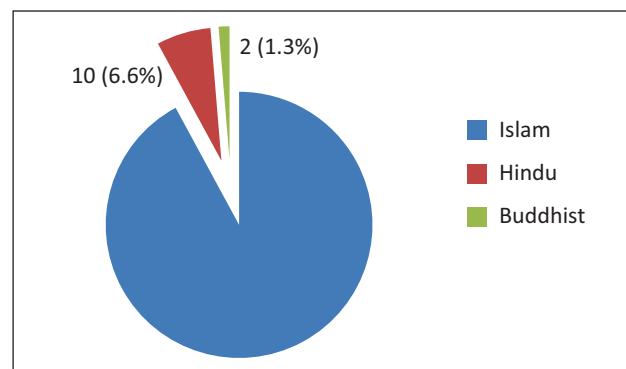**Table 1:** Distribution of the respondents according to age (n=152**)**

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

Table 1 shows that majority (37.5%) of the respondents were 75-80 years old and 11(7.2%) were 60– 64 years of age. The mean age of elderly was 72.06 ± 4.56.
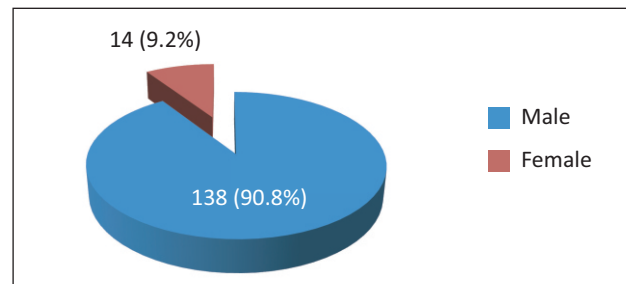
Figure 1: Distribution of the respondents according to sex (n=152)

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

Figure 2: Distribution of the respondents according to Religion (n=152)

Figure 2 shows that 140(92.1%) of the respondents were Muslims followed by 10(6.6%) were Hindu and 2(1.3%) were Buddhist.

Table 2: Distribution of the respondents according to their educational qualification (n=152)

Educational qualification	Frequency	Percentage
Illiterate	28	18.4
Primary	56	36.8
Higher secondary	63	41.4
Graduate	4	2.6
Total	152	100

Table 2 shows that majority (41.4%) of the respondents had higher secondary level education followed by 56(36.8%) were primary level, 28(18.8%) were illiterate and 4(2.6%) were graduate.

Table 3: Distribution of the respondents according to their occupation (n=152)

Occupation	Frequency	Percentage
Retired	46	30.3
House wife	14	9.2
Business	48	31.6
Agriculture	44	28.9
Total	152	**100.0**

Table-3 shows that among the all the patients, majority i.e 48(31.6%) were in business group followed by 46(30.3%) were in retired group and only 14(9.2%) were house wife.

Table 4: Distribution of the respondents according to monthly family income (n=152)

Monthly family income (In taka)	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 4 shows that out of 152 patients monthly family income of majority i.e 50(32.9%) were Tk- 10000– 14000 and only 3(2.0%) were Tk-1000 - 9000. The mean monthly family income was Tk- 17927.63 ± 7360.

Table 5: Distribution of the respondents according to their health problems during admission (n=152*)

| Mhealth problems	Frequency	Percentage
General weakness and Numbness of limbs	48	31.57
Musculo skeletal problems	25	16.44
Eye problems	18	11.84
GIT problems	15	9.86
Respiratory problems	12	7.89
Cardio vascular problems	20	8.55
ENT problems	15	9.86
Uro-genital problems	14	9.21

 * Multiple Responses

Table-5 shows that majority (31.57%) of the respondents had general weakness followed by 25(16.44%) had musculo skeletal problems, 18(11.84%) had eye problems, 15(9.86%) had GIT problems, 12(7.3%) had respiratory problem, 20(16.2%) had cardio vascular problems, 15(9.86%) had ENT problems.

Table 6: Distribution of the respondents according to duration of hospital stay (n=152)

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

Table 6 shows that among all the respondents 55(36.2%)were stay in hospital for 2- 4 days and only 6(3.9%) were stay for 25-30 days, mean of hospital stay were 6.26±5.47 days.
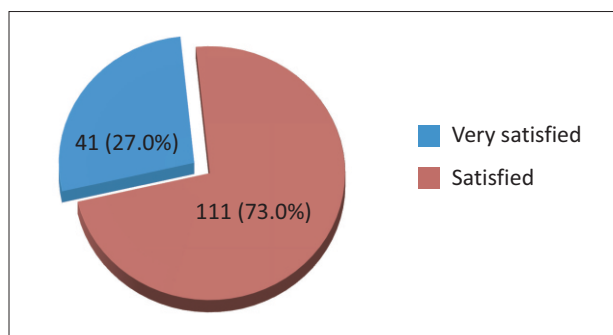
Figure 3: Distribution of the respondents regarding satisfaction of hospital services

Figure 3 shows that among all the respondents, majority(73.0%) were satisfied, 41(27.0%) were very satisfied and no one reported as not satisfied.

Discussion

This cross sectional study was carried out in Combined Military Hospital, Dhaka, a tertiary level of referral hospital. Most of the Specialist medical cares 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 futures researchers and health policy makers.

Study results revealed that Out of total 152 elderly patients majority i.e 57(37.5%), were 75-80 years old followed by 51(33.6%) were in 70 -74 years of age, and 11(7.2%) were 60 – 64 years of age. The mean age of elderly was 72.06 ± 4.56 years and the age range was 60– 80 years. A similar study was conducted by Begum at Prabin Hitayishi Hospital, Bangladesh, included 107 respondents aged 60 years and above. Out of 107 respondents, 46.7% were aged 65 years or above, also shown that co morbidity increases with the increase of age of the elderly.[5] In India, a research was conducted, where it is shown that age more than 60 years people faces lot of geriatric health problems and with increase of age health problems also increases, which is almost similar to this study.[6]

Among all the elderly majority i.e 138(90.8%) were male and 14 (9.2%) were female. A similar study was conducted by Evert[7] where it is shown that 44% are male and 42% are female. Another study in India by Ingle and Nath, shows the sex ratio of the aged favors males. In this study male percentage is higher because combined military hospital is a tertiary level referral hospital where referred patients are mostly male as well as retired personnel are mostly male. Thus we can consider the outcome of those studies is consistent with this study.[6]

Out of 152 elderly maximum i.e 140(92.1%), were Muslim followed by 10(6.6%) were Hindu and 2(1.3%) Buddhist. A similar study by Jabeen et al at NIRCH where 92% were Muslim and 8% were Hindu which is almost similar to present findings.[8]

This study also revealed that majority i.e 63(41.4%) were educated at higher secondary level, 28(18.8%) were illiterate and only 4(2.6%) were graduate. A study was conducted in Iran regarding the effect of educational status over geriatric health and revealed that individuals with less education, lower income are related with poor health status (mental and physical). Literacy rate was 64.6% and at secondary school certificate level 47% which is similar to this study.[9]

According to occupation majority i.e 48(31.6%) were in business group followed by 46(30.3%) were in retired group and only 14(9.2 %) were house wife. As the hospital is a military hospital as well as urban based so retired armed forces personnel and businessman are more.

Among all the elderly patients majority i.e 50(32.9%) were Tk-10000-14000 followed by 39(25.7%) were in Tk-15000-19000 of 30(19.7%) were Tk-20000-24000   and 12(7.9%) were Tk-30000 - 50000 and 3(2.0%) were Tk-1000 - 9000. The mean monthly income of the family elderly was Tk-17927.63 ± 7360 while the range of monthly family income was Tk-6000-35000. A study conducted in NIRCH where the mean of family income was Tk- 8129.88± 2809.21. In the present study the family income is more as because per capita income of Bangladeshi peoples increased within last five years.[10]

This study also revealed that, majority (31.57%) of the respondents had general weakness followed by 25(16.44%) had musculo skeletal problems, 18(11.84%) had eye problems, 15(9.86%) had GIT problems, 12(7.3%) had respiratory problem, 20(16.2%) had cardio vascular problems and 15(9.86%) had ENT problems. A cross sectional study conducted by Khanam et al., among the persons aged ≥ 60 yrs of age in Matlab, Bangladesh. Suffering from more than two diseases such as arthritis, stroke, thyroid functions, obstructive pulmonary symptoms, symptoms of heart failure, impaired vision, hearing impairment and high blood pressure. Those finding corresponds with the present study.[11] A similar study 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%), musculoskeletal diseases (7·5%), and neurological and mental disorders (6·6%) which are almost similar to present study.[12]

Among all the respondents, majority were 111(73.0%) were satisfied, 41(27.0%) were very satisfied and no one reported as not satisfied. As it is a tertiary level hospital and operated by a group of armed force persons, it is predicted that their services will be better than other hospitals.

Conclusion

Health problems of elderly are a burning issue and recognized as an emerging public health problem in Bangladesh. This study intended to find out the health problems of the elderly tertiary level hospital in urban area. These findings may help the researcher to do further research and for the policy maker to take necessary action to meet the health services need of the elderly people.

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