

Common Health Problems among Geriatric Patients Attended in Dhaka Medical College Hospital, Bangladesh

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Abstract

Background: The average life expectancy in the world is increasing dramatically for quite a few years. Over 13 million people in Bangladesh are over 60 years old as of 2019, accounting for 8% of the country's overall population. Health care among these groups of people is not very much concerned yet especially about non communicable diseases which are increasing globally day by day. This study aimed to find out the common health problems among the geriatric patients attended in Dhaka Medical College Hospital, Bangladesh.

Objective: The objective of the study was to find out the common health problems among geriatric patients admitted in Dhaka Medical College Hospital.

Methods: This descriptive type of cross-sectional study was conducted among 149 patients of the outdoor and indoor departments of Dhaka Medical College Hospital, aged 60 years and above during the period from November 2021 to April 2022. Data were collected through face-to-face interviews using a pretested semi-structured questionnaire. The questionnaire included socio-demographic data and status of common health problems among elderly population. Then data were cleaned checked and analyzed according to objective.

Results: The survey revealed that 83.22% of respondents were 60-70 years old. Maximum respondents were illiterate (40.27%) and came from rural areas (71.14%). Approximate 57.72% of sons were principal earning members and 36% of sons were the principal caregivers of the respondents. Fifty-one percent of geriatric patients (both male and female) had hypertension, visual impairment 48.3%, joint pain 45% and diabetes mellitus 35%. Most importantly, the proportion of female patients was more who suffered from hypertension (57%), visual impairment (53%), diabetes mellitus (42%), cardiovascular diseases, and memory loss. Joint pain was found in the same proportion both in males and females. Male suffered more from respiratory diseases, hearing problems, and COVID-19 than females.

Conclusion: This study showed a significant proportion of the geriatric patients suffered from different types of non-communicable diseases such as hypertension, visual impairment, diabetes mellitus, joint pain, respiratory diseases, etc. It is therefore demands more attention to be paid in making geriatric people-focused health care services at all levels.

Keywords: Geriatric Patients, Older People, Bangladeshi geriatric people, Common Health Problems.

Introduction

In just 15 years, the number of older people is expected to rise by more than 60%-by 2030, there will be around 1

billion older people worldwide, accounting for 12% of the overall population. In the next 20 years, the proportion of older people will continue to rise: by 2050, there will be 1.6 billion older individuals on the planet, accounting for 16.7% of the total population of 9.4 billion people. Between 2015 and 2050, this equates to a 27.1 million rise in the number of persons aged 65 and more on an annual basis¹. Over 13 million persons in Bangladesh are over 60 years old as of 2019, accounting for 8% of the country's overall population. With 36 million people over the age of 60, the proportion of senior persons is predicted to become 21.9 percent in 2050. This indicates that one out of every five Bangladeshis will be beyond the age of 65. The need for health care grows as the population ages. Due to the aging of the immune system, older people suffer from both degenerative and communicable diseases. Infections are the primary cause of morbidity, with vision impairment, difficulties walking, chewing, hearing, osteoporosis, arthritis, and incontinence rounding out the list.

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In 2018, Bangladesh was ranked 136th out of 189 countries in the United Nations Human Development Index. In

Bangladesh, hardly a third of those over the statutory pensionable age (33.4 percent) get an old-age pension (contributory, noncontributory or both). With the old-age dependence ratio predicted to increase in the next few decades, there will be fewer and fewer working-age people to give economic support throughout old age². The average life expectancy in the world is increasing dramatically for quite a few years. Likewise, the health problems related to aging such as visual impairment, hearing impairment, diabetes mellitus, hypertension, cardiovascular diseases, chronic respiratory diseases etc. are also increasing. Old people who are suffering from these health conditions need special attention. The following review of the literature estimates the common health problems of the elderly in Bangladesh and explores the difference in morbidity between gender and urban-rural distributions. The health problems related to aging have been on the rise in the world for the past few decades. At this time the share of the population aged 60 years and over will increase from 1 billion in 2020 to 1.4 billion. By 2050, the world's populations of people aged 60 years and older will double (2.1 billion). The number of persons aged 80 years or older is expected to triple between 2020 and 2050 to reach 426 million.³

The population in South-East Asia Region is ageing rapidly. While the proportion of people aged 60 or above was 9.8% in 2017, it will be increased to 13.7% and 20.3% by 2030 and by 2050, respectively⁴. Bangladesh is no exception in this regard. 7.9% of the population of Bangladesh is aged 60 and above, with males accounting for 8.2% and females 7.7%.⁵

As ours is a developing country, the health sector often fails to ensure equitable distribution and accessibility of ideal health care to the elderly population due to various limitations⁶.

Bangladesh, with one of the highest population densities (985/km sq) in the world, is projected to experience dramatic growth in the absolute number of its population aged 60 years or older from the current level of approximately 7 million to 14 million by 2020. Very little is known about the health of the aged and its problems in Bangladesh.⁷

Health problems of the geriatric population of Bangladesh are of great concern because of increase in longevity will lead to an increased number of old people in Bangladesh. According to the demographic cycle, Bangladesh will soon have a population where the highest proportion lies in the age range of above 60. This proportion of the population will be dependent. Pain characteristics as well as any association with changes in physical performance in community-dwelling older adults are a common problem

in Bangladesh. To combat this problem adequate health care is a must.⁸ The morbidity and mortality pattern of geriatric people associated with a group of some common health deviations make health problems of the elderly a public health concern, the prevalence of which generally differs in different countries and within various regions of a country depending upon the social, economic, racial and environmental factor.⁹

These study findings can be used to assess the proportion of common health problems among the geriatric population to provide adequate and appropriate medical support. Estimation of health problems of the elderly in developing countries are required from time to time to predict trends in disease burden and plan health care for the elderly. Early diagnosis of the geriatric problems by screening in order to reduce the cost of treatment, complications and the severity of the disease, reduce morbidity and mortality. Age-induced changes in the physique of the geriatric population result in decreased mobility of their joints, often accompanied by decreased bone strength and other anabolic & neurologic processes that weaken their loco-motor strength in general. Their diet is often not tailored to this altered requirement due to a lack of nutritional awareness and variable degrees of negligence from younger family members, perpetuating the deficiencies and causing further weakening of their loco-motor processes.¹⁰

This study was aimed to explore the common health problems present among the elderly people along with their socio-demographic characteristics attended at the out-patient and in-patient department of Dhaka Medical College Hospital from all areas in Bangladesh.

Materials and Methods

This descriptive type of cross-sectional study was conducted among 149 purposively selected patients at the outdoor and indoor departments of Dhaka Medical College Hospital for the period of 6 months (November 2021 to April 2022). Both male and female geriatric patients (aged 60 years and above) were included in this study. After taking informed written consent, data were collected through face-to-face interviews using a pretested semi-structured questionnaire. The questionnaire included socio-demographic data and status of common health problems among elderly population. Then data were cleaned checked and analyzed according to objective by using Microsoft Excel 2019 software.

Results

After analysis the results were presented by following tables, graphs and charts:

Table 1: Socio-demographic characteristics of geriatric patients (n=149)

Attributes	Frequency	Percentage
Age of the patients		
60- 70	124	83.22
70- 80	22	14.77
80- 90	3	2.01
Gender		
Male	75	50.33
Female	74	49.67
Area of residence		
Rural	106	71.14
Urban	43	28.86
Level of education		
Illiterate	60	40.27
Primary	54	36.24
Secondary	19	12.75
Higher secondary	12	8.05
Graduate	3	2.01
Post graduate	1	0.67
Principal earning members		
Respondent	32	21.48
Son	86	57.72
Spouse	19	12.75
Daughter	6	4.02
Others	6	4.02

Table 1 shows that, 83.22% respondents were 60-70 years age group and 50.33% were male. About 71.14% lived in rural area and 40.27% were illiterate.

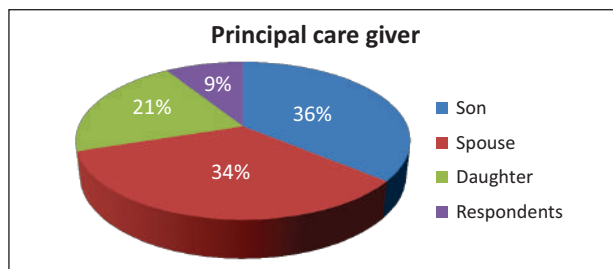


Figure 1: Principal care giver at families of respondent (n= 149)

Figure 1 shows that in 36% cases son is the principal caregiver and 34% were dependent on their spouse.

Table 2: Proportion of common health problems among geriatric patients (n=149*)

Health problems	Frequency	Percentage
CVD	29	19.5
Respiratory diseases	48	32.2
HTN	76	51
DM	52	35
Dementia	24	16.1
Joint pain	67	45
Visual impairment	72	48.3
Hearing problems	21	14.1
Covid-19	13	8.7
Cancer	2	1.3

*= Multiple answer
 CVD= Cardiovascular diseases. HTN= Hypertension, DM= Diabetes Mellitus

Table 2 shows that 19.5% patients had CVD, 32.2% had respiratory diseases, 48% had visual impairment and only 1.3% had cancer.

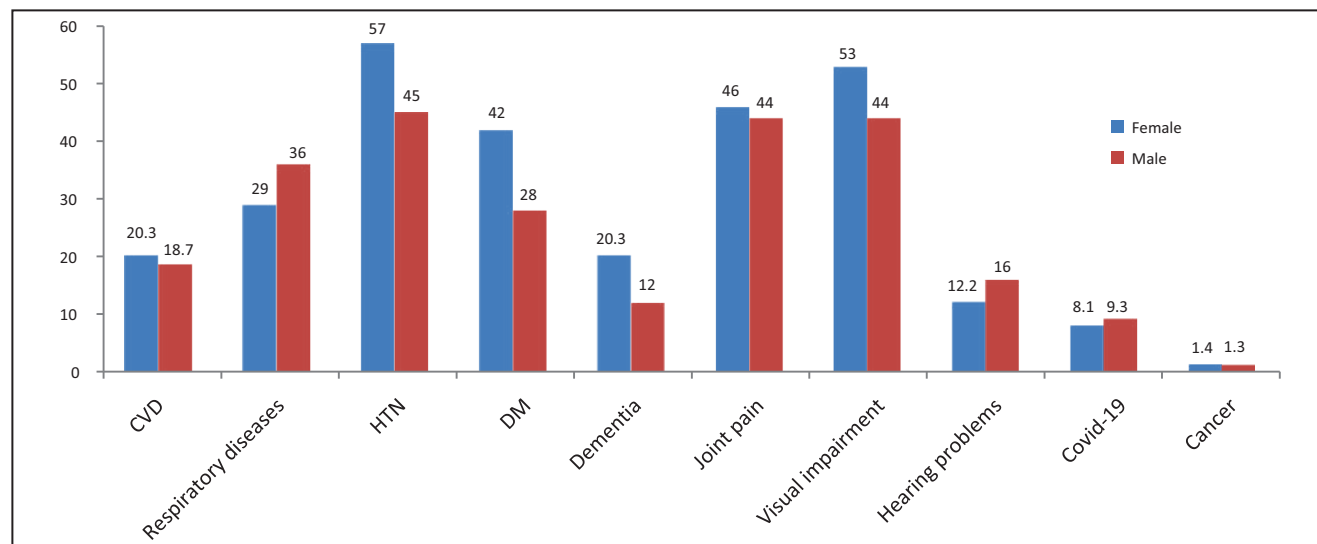


Figure 2: Comparison of common health problems among male and female geriatric patients (n= 149)

Figure 02 shows that females suffer more from CVD, HTN, DM, Dementia, visual impairment and cancer. On the other hand male suffer more in respiratory diseases, hearing problems and covid-19

Discussion

Bangladesh, with one of the highest population densities (985/ square km) in the world, is projected to experience a dramatic growth in the absolute number of its population aged 60 years or older from the current level of approximately 7 million to 14 million by 2020. Very little is known about the health of the aged and its problems in Bangladesh⁷. Data were collected from 75 male and 74 female respondents most (83.22%) of the respondents were 60-70 years age group, 14.77% respondents were 70-80 years age group and only 2.01% of the respondents were in 80-90 years age group. According to a cross sectional study conducted by Canadian Institute of Health Information, estimated from 2017 shows that 17% of Canada's population was aged 65 & older.¹¹

The current study revealed that the majority of the respondents resided in rural area (71.14%), and rest 29.86% resided in urban area. These findings showed that illiterate patients from rural area came more in Government hospitals.

This study showed that most of the respondents were illiterate (40.27%), followed by Primary School (36.24%), Secondary School (12.75%), Higher Secondary (8%), Graduate (2%) and Postgraduate or Higher (1%). Demographic characteristics of participants enrolled from the elderly health examination programme in Taipei, 2013-2015 showed, there were mostly older men in Taipei with no less than 16 years of education (36.4%). In addition, 19.3% of the men fell in the education level category of no more than six years, 10.0% in the category of 7-9 years, 22.5% in the category of 10-12 years, and 11.8% in the category of 13-15 years. In contrast, there were mostly older women with no more than six years of education (36.2%), with 16.2% having 7-9 years, 23.8% having 10-12 years, 9.0% having 13-15 years, and only 14.8% having no less than 16 years of education.¹²

It is found that the maximum occupation of the male respondents (27%) were farmer, followed by businessmen (24%), retired (19%), service holder (17%), labourer (6.7%) and others (6.7%). Most of the female respondents (95%) were homemaker, 2.7% farmer and others were 2.7%. A cohort study showed both men and women with lower income status occupied a small proportion of all participants; 3.1% of men and 1.9% of women were from lower-income households which was very similar to our study.¹²

This study illustrated that in more than half of the families of the respondents (58%) son was the principal earning member. Respondent own is the principal earning member in 21% families. Spouse of the respondent is the main

earning person in 13% families, daughter in 4% families and others in 5% families. This is a common cultural context of Bangladesh. Most of the cases (36%) son was the principal caregiver to the respondents and the spouse, in 34% families, followed by the daughter in 21% families. In 9% families, the respondent own is the principal caregiver. We can see principal caregiver was a vital factor for geriatric patients.

This study demonstrates that among several geriatric health problems, hypertension was present in more than half of the elderly people (51%) which was the highest proportion. A cross-sectional study conducted in India among senior citizens, 42.7 % people accounted for hypertension and diabetes mellitus.¹³ We should give more focus on these non-communicable diseases for betterment of health of geriatric people. We also found that irrespective of gender visual impairment was the next issue of concern which was found in 48.3% respondents. A cross sectional study in Lucknow among senior citizens, 93.3% were suffering from vision problem in left side of the eyes followed by 136 people (90.7%) had been suffering from vision problem in right side of the eye, 84 (56.0%) had been suffering from hearing problems in the left side of the ear, 81 (54.0%) had been suffering from hearing problems in right side of the ear¹³ and joint problems in 45% cases. About 65.5 % of the respondents in a sample of 226 elderly people in Sreepur Upazilla of Gazipur, Bangladesh were found to be suffering from joint pain that resembles to our study.⁷

Diabetes mellitus was present in more than one third (35%) of the elderly that sounds alarming. About 25 % people over age 60 years were living with diabetes mellitus according to another cross sectional study conducted in outpatient department of Dhaka Medical College that shows diabetes mellitus is a common health problem of our country.⁸

Respiratory diseases were also found in almost one third (32.2%) patients in our study. According to a retrospective study conducted by the Department of Respiratory Medicine, Dhaka Medical College Hospital, Community acquired pneumonia was observed in 65.6% elderly, chronic obstructive pulmonary disease in 20.7%, bronchitis in 8.2%, hospital acquired pneumonia in 5.5 % elderly people.¹⁴ Only 1.3% of the respondents were diagnosed with cancer. One study of a private cancer hospital in Bangladesh showed the prevalence of geriatric cancer is about 33.77%⁹. COVID-19 was also found to be tested positive in 8.7% cases. In case of hypertension female respondents had a greater proportion (57%) than that of male respondents (45%). Female respondents also had more proportion of diabetes mellitus (42%) when compared to male respondents (28%). Another study conducted throughout the outdoors of randomly selected hospitals of Dhaka city on 300 patients aged 65 or above established the fact that prevalence of hypertension, diabetes mellitus and ischemic heart disease was found

more in men.⁶ The scenario was quite opposite in our study. Male respondents informed to have respiratory diseases in 36% of cases which is more than females (29%). Visual impairment was found in 53% of females and 44% of males. Joint pain was almost in same proportion. About 18.7% male and 20.3% female were suffering from cardio-vascular diseases. Hearing problems were more frequent in males (16%) than females (12.2%). Females faced memory loss problems more frequently (20.3%) than males (12%). COVID-19 had a slightly higher prevalence in males (9.3%) than in females (8.1%). Cancer was rare in both sexes with an almost the same percentage but very slightly higher in females (1.4%) than males (1.3%). A study on 6492 new cancer patients was done at the National Institute of Cancer Research & Hospital (NICRH), Mohakhali, Dhaka from January 2006 to December 2006 showed, in adult males Lung cancer ranked at the top (909, 24.1%) followed by cancer of lymph node and lymphatic (264, 7.0%), Laryngeal carcinoma (247, 6.5%) and Esophageal Carcinoma (199, 5.3%). Breast cancer (24.48) was the major malignancy amongst adult females (633, 23.3%) followed by that of the cervix (583, 21.4%), Lung (153, 5.6%) and Oral cavity (116, 4.3%).⁹ Limitations in this study were firstly the sample size due to COVID-19 situations. Secondly, it was a purposive sampling method. Thirdly, data were collected on the basis of patient's statement having the chance of recall bias.

Conclusion

In spite of the various limitations, the study revealed the different common diseases among elderly population. As life expectancy is increasing day by day it is a major concern to detect the geriatric problems and take immediate and appropriate action to resolve those.

Conflict of interest: No

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