ORIGINAL ARTICLE

A study on health related risk factors and health seeking behavior among elderly population in rural Bangladesh

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Abstract

Globally, 10% of the world population is elderly people and it is expected to increase to 21% in the year 2051. In the year 2002, the number of elderly people in the world was estimated to be 605 million, which is expected to rise to more than 1.2 billion by the year 2025. This cross-sectional study was conducted to find out the health-related quality of life and risk factors among elderly population in the selected rural population of Shyamnagar Upazila of Satkhira District. Data was collected from both the male and female population, aged 60 years and above, during February to June 2018. Purposive sampling technique was used to collect data from 50 respondents by face to face interview with semi-structured questionnaire. In the study, the mean age of elderly was male 63 (±2.95) years, and female 61.8 (±2.04) years. Other socio-demographic factors among elderly were as follows: 20 (40%) of elderly were illiterate, 15 (30%) of elderly were doing business, 21 (42%) were doing farming. 40 (80%) of elderly were married. The study also reported the five most common disease co-morbidities for elderly which included: 71.43% male and 28.57% female had hypertension while 72.22% of male and 27.78% of female patients were already treated, 68.75% male and 31.25% female had diabetes mellitus and 100% of them were treated, 50% of male elderly and 50% of female elderly were suffering bone and joint pain/arthritis and 60% of them were received treatment, hearing impairment found among 100% of male while two-third of patients received treatment, one-third of female and two-third of male elderly suffered from poor vision; however, only one-third of female patients were treated. On the basis of these findings, it can be recommended that there is a need to develop geriatric health-care services.

Keywords: Bangladesh, Older persons, Quality of life.

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Introduction

Ageing is a global phenomenon. With tremendous improvement in global health, people live longer; however, it poses special challenges for the 21st century. In 2011, life expectancy in countries like Japan and Switzerland was already more than 82 years.[1] Countries' health systems around the world are burdened with increasing health care expenditures for ageing populations. In Malaysia, a projected model estimated that the number of elderly would reach 3.4 million in 2020, which is more than 10% of the population.[2] The proportion of older persons in Bangladesh is significantly increasing due to demographic transition. This will bring new demands related to older persons' health and social needs. Expeditious development of initiatives to face these coming challenges is required. The majority of Bangladeshis (including older persons) live in rural areas.[3] These areas are considered disadvantageous due to their lack of modern facilities for citizens. This lack may affect older persons' quality of life. A study of older persons in a northern district of Bangladesh[4] reported a low mean quality of life score. This study also reported that participants' sex, family type, and occupation influenced quality of life scores. However, these results may not be transferable to other regions of Bangladesh due to regional differences in older persons' physical status, level of education, and economic status. The present study, therefore, investigates older persons' quality of life and its relationship to various socio-demographic characteristics in two southern districts of Bangladesh. Older persons may suffer from various health and social problems.[5,6] Their social problems may include inadequate financial support from the government, insufficient health care, weakening family care systems,[7] and decreasing social interactions. All of these problems may contribute to reduced quality of life and even disability. Quality of life is "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns".[8] It is important to investigate the lives of older persons and the problems that they face..

Materials and methods

This cross-sectional study was conducted to find out the health-related quality of life and risk factors among elderly population in the selected rural population of Shyamnagar Upazila of Satkhira District. Data was collected from both the male and female population, aged 60 years and above, during February to June 2018. Purposive sampling technique was used to collect data from 50 respondents by face to face interview with semi-structured questionnaire. No sensitive or privacy invasive questions were asked. They were interviewed after filling up the informed consent form. All the data were checked and edited after collection. Results were analyzed by using SPSS for Windows XP program version 17.0. An analysis plan was developed keeping in view with the objectives of the study. Appropriate statistical tests were done according to the need of the study objectives where and whenever required.

Results:

Table 01: Socio-demographic characteristics of respondents

Characteristics	Male (%) n= 30	Female (%) n= 20
Age (in years)		
60-62	12 (40.00%)	10 (50.00%)
63-65	8 (26.67%)	8 (40.00%)
66-68	8 (26.67%)	2 (10.00%)
≥69	2 (6.67%)	00
Marital Status		
Married	30 (100.00%)	10 (50.00%)
Unmarried	00	00
Widowed	00	10 (50.00%)
Religion		
Islam	28 (93.33%)	20 (100.00%)
Hindu	2 (6.67%)	0
Others	0	0
Educational Status		
Illiterate	8 (26.67%)	12 (60.00%)
Primary	12 (40.00%)	5 (25.00%)
Secondary	5 (16.67%)	3 (15.00%)
SSC	5 (16.67%)	0
HSC and above	0	0
Occupation		
Business	12 (40.00%)	3 (15.00%)
Farming	16 (53.33%)	5 (25.00%)
Day labor	0	0
Shop keeper	2 (6.67%)	0
Housewife	0	12 (60.00%)

In the study, the mean age of elderly was male 63 (±2.95) years, and female 61.8 (±2.04) years. Other socio-demographic factors among elderly were as follows: 20 (40%) of elderly were illiterate, 15 (30%) of elderly were doing business, 21 (42%) were doing farming. 40 (80%) of elderly were married

Table 02: Smoking habit (Current) of respondents

Cigarette Smoking	Respondents		Total
	Male (%) n=30	Female (%) n=20	
Yes	12 (85.71%)	2 (14.29%)	14 (28.00%)
No	18 (50.00%)	18 (50.00%)	36 (72.00%)
Total	30 (60.00%)	20 (40.00%)	50 (100.00%)
Significance	$\chi^2 = 5.357$, df = 1, $\chi^2/df = 5.36$, $P(\chi^2 > 5.357) = 0.0206$		

The data revealed that majority (28%) were currently smoker and rest (72%) were currently tobacco nonsmoker. Among the current smokers, (85.71%) were male and among nonsmokers majority (50%) were female. Chi-square test showed significant association between smoking habit and sex (p=0.0206).

Table 03: Tobacco chewing habit among the respondents

Tobacco chewing habit	Respondents		Total
	Male	**Female**	
Yes	10 (40.00%)	15 (60.00%)	25 (50.00%)
No	20 (80.00%)	5 (20.00%)	25 (50.00%)
Total	30 (60.00%)	20 (40.00%)	50 (100.00%)
Significance	$\chi^2 = 8.333$, df = 1, $\chi^2/df = 8.33$, P($\chi^2 > 8.333$) = 0.0039		

Among the respondents, 25 (50%) were tobacco non chewer. Only 25 (50%) had the habit, among them majority were female 15 (60%). Significant association was found between sex and current tobacco chewing habit (p=0.0039).

Table 04: Five commonest risk factors among respondents

Risk Factors	Male (%) n=30	Female(%) n=20	Total(%) n=50
Hypertension			
Yes	20 (71.43%)	8 (28.57%)	28 (56.00%)
No	10 (45.46%)	12 (54.54%)	22 (44.00%)
Diabetes Mellitus			
Yes	22 (68.75%)	10 (31.25%)	32 (64.00%)
No	8 (44.44%)	10 (55.56%)	18 (36.00%)
Joint Pain/Arthritis			
Yes	15 (50.00%)	15 (50.00%)	30 (60.00%)
No	15 (75.00%)	5 (25.00%)	20 (40.00%)
Hearing Impairment			
Yes	5 (100.00%)	0	5 (10.00%)
No	25 (55.56%)	20 (44.44%)	45 (90.00%)
Vision impairment/ Cataract			
Yes	13 (68.42%)	6 (31.58%)	19 (38.00%)
No	17 (54.84%)	14 (14.16%)	31 (62.00%)

Table 05: Sub analysis among elderly receiving treatment for risk factors

Treatment Received	Male (%)	Female (%)	Total (%)
Hypertension(n=28)			
Yes	13 (72.22%)	5 (27.78%)	18 (64.29%)
No	7 (70.00%)	3 (30.00%)	10 (35.71%)
Diabetes Mellitus(n=32)			
Yes	22 (68.75%)	10 (31.25%)	32 (100.00%)
No	0	0	0
Joint Pain/Arthritis(n=30)			
Yes	10 (55.56%)	8 (44.44%)	18 (60.00%)
No	5 (41.67%)	7 (58.33%)	12 (40.00%)
Hearing Impairment (n=5)			
Yes	2 (100.00%)	0	2 (40.00%)
No	3 (100.00%)	0	3 (60.00%)
Visual impairment/Cataract (n=19)			
Yes	8 (66.67%)	4 (33.33%)	12 (63.16%)
No	5 (71.43%)	2 (28.57%)	7 (36.84%)

The study also reported the five most common disease co-morbidities for elderly which included: i) 71.43% male and 28.57% female had hypertension while 72.22% of male and 27.78% of female patients were already treated; ii) 68.75% male and 31.25% female had diabetes mellitus and 100% of them were treated; iii) 50% of male elderly and 50% of female elderly were suffering from bone and joint pain/arthritis and 60% of them were received treatment; iv) hearing impairment found among 100% of male while two-third of patients received treatment; v) one-third of female and two-third of male elderly suffered poor vision; however, only one-third of female patients were treated.

Discussion

Understanding variation and relationships among socio-demographic factors are increasing epidemiological interest in studying the effects of contextual and geographical factors on health disparities.[9] In our study the mean age of elderly was male 63 (±2.95) years, and female 61.8 (±2.04) years. Other socio-demographic factors among elderly were as follows: 20 (40%) of elderly were illiterate. Generally, those with higher educational levels could have better awareness of health and be more involved in cognitive activities such as reading and writing. Moreover, illiteracy, significantly related to malnutrition and a further risk for a poor health state[10] could affect upon the health status of studied elderly. 15 (30%) of elderly were doing business, 21 (42%) were doing farming. 40 (80%) of elderly were married.

Among 50 respondents (28%) were currently smoker and rest (72%) were currently tobacco nonsmoker. Among the current smokers, (85.71%) were male and among nonsmokers majority (50%) were female. Chi-square test showed significant association between smoking habit and sex (p=0.0206).

Among the respondents, 25 (50%) were tobacco non chewer. Only 25 (50%) had the habit, among them majority were female 15 (60%). Significant association was found

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Conclusion

The elevated morbidity load among elderly population pressurizes for efforts to assist them with specialized healthcare. The elderly population must be made aware of periodic medical checkups to enable prevention and early recognition of the chronic ailments. Furthermore, the study shows that elderly people living in rural areas are the most vulnerable group in their health-seeking behavior. To overcome this, the policymakers must concentrate more on rural elderly population and on their negative views, which stop them from seeking health care.

Conflict of Interest: Nothing to declare.

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