

## Health Problems of the Elderly Population in Some Selected Urban Slums of Dhaka City

S FARAH<sup>a</sup>, M KARIM<sup>b</sup>, UHS KHATUN<sup>c</sup>

### Summary:

*Aging is universal and it is inescapable, beginning at birth, which should be regarded as a normal biological process leading to functional deterioration, vulnerability and ultimately culminating to extinction of life. Population ageing is becoming a major concern both in the developed and developing countries. Many health problems are known to increase with age and this demographic trend may lead to an increase in the absolute number of health conditions in this population. To identify health problems of elderly population and assess their socioeconomic condition.*

*This descriptive cross sectional study was carried out over 531 elderly people selected purposively from some urban slums of Dhaka city during July to December, 2013. Each eligible participant was informed about the purpose and procedure of the study. Trained interviewers collected information by face to face interview using a pre-tested questionnaire having both structured and open ended questions.*

### Introduction:

Ageing is defined as a biological process with time dependent irreversible changes leading to progressive loss of functional capacity after the point of maturity. Last two decades have seen drastic changes in population and the increase of aged (above 60 years) population (60.5% during 1980-2000) is more than that of general population (37.6%); the increase were 82.5% and 46.2% respectively in developing countries. Those

*Majority 389 (73.3%) were from the age group of 60-69 years. The mean age of the respondents was found to be 65 years; (SD±7.048). Majority of them were male 68.7%, illiterate 78.8%, employed as small businessman 26% and belonged to joint family 75.0%. Their average monthly income was 4747.02 ± 2796.368 Taka. About 272(51.2%) respondents were dependent on other earning family members. A significantly higher proportion of women suffered from diabetes, hearing impairment, vertigo, joint pain, depression, while chest pain, chronic cough, difficulty in micturation, anxiety were observed more in elderly men.*

*The study sheds new light which may help to provide adequate guideline for the senior citizens to overcome old age health problems. As there is a rapid increase in the number of elderly population, there is an urgent need to develop affordable and accessible health care services.*

**Key words:** Elderly population, Health problem, Slum.

(J Bangladesh Coll Phys Surg 2015; 33: 202-206)

above 80 years were 34.2 million in 1980 and are expected to reach 103.9 million in 2020; an increase of about 204%.<sup>1</sup> Dhaka is the capital city of Bangladesh and one of the most densely populated and rapidly expanding megacities in the world. It is estimated that every year 300,000 to 400,000 new migrants come to Dhaka from different parts of the country and mainly reside in more than 5,000 slums across the city.<sup>2</sup> Proximity to health care is greater in urban Bangladesh than in rural areas, but proximity doesn't always ensure better access or utilization. This is because most slum dwellers are not aware of how to utilize urban health care systems.<sup>3</sup> The issue of health care-seeking (medical-care) behavior is crucial to all societies.<sup>4</sup> Large gaps still exist in the knowledge on the health status and health seeking behavior of the elderly persons.<sup>5</sup> Population ageing has grown into a 'defining global issue' and concerns have emerged regarding development policy interventions appropriate for older people, especially in the area of elderly health problems and health care. Majority of the elderly people are suffering from some basic problems, such as lack of sufficient income, employment opportunities, malnutrition, chronic diseases, absence

- Dr. Shayela Farah, Assistant Professor, Department of Community Medicine, Dhaka Community Medical College, Moghbazar, Dhaka-1217.
- Dr. Mohoshina Karim, Lecturer, Department of Community Medicine, Dhaka Community Medical College, Moghbazar, Dhaka-1217.
- Dr. U.H. Shahera Khatun, Professor & Head Department of Anaesthesiology, Dhaka Community Medical College, Moghbazar, Dhaka-1217.

**Address of correspondence:** Dr. Shayela Farah, Assistant Professor, Department of Community Medicine, Dhaka Community Medical College, Moghbazar, Dhaka, Contact no.-01716143491, E-mail: shayelafarah@yahoo.com

**Received:** 27 April, 2014      **Accepted:** 15 September, 2014

of proper health care facilities and lack of adequate family support.<sup>6</sup>

The Government of Bangladesh has initiated some programs like pension, gratuity, welfare fund, aged persons fund, group insurance and provident fund for the retired government officials and employees. Health care issue of the elderly people in Bangladesh has not yet received any importance, though it is increasing alarmingly.<sup>7</sup> With reduced ability to generate resources, the elderly lack basic needs that affect their health status. Emphasis for an effective health policy for the senior citizen may reduce this problem.<sup>5</sup> This study was undertaken to explore the health problems present among the elderly people residing in some selected urban slums of Bangladesh.

#### Methodology:

This was a descriptive cross sectional study done over 531 elderly people purposively selected from Moghbazar, Kamalapur, Bashaboo slums of Dhaka city during July to December, 2013 to assess their socioeconomic condition and identify their health problems. A house to house survey was conducted and a total of 531 respondents were enrolled for the study. Sample size was detected by using formula  $n = Z^2 pq/d^2$ . Purposive sampling technique was used in the study. Each eligible participant was informed about the purpose and procedure of the study. Only interested dwellers were interviewed. After obtaining a verbal consent, trained interviewers collected information's by face to face interview using a pre-tested questionnaire having both structured and open ended questions. The questionnaire included socioeconomic variables like age, sex, education, family size, dependency, occupation and monthly family income. Some questions related to health problems were also included in the questionnaire. Assurance had been given that the confidentiality concerning their information would be maintained strictly. Collected data were checked, verified & then enter into the computer. Only the fully completed questionnaire was entered into the computer for final analysis which was carried out with the help of SPSS (Statistical Package of Social Science, version-17) windows software program.

#### Results:

Table 1 shows that out of 531 respondents, majority 389 (73.3%) were from the age group of 60-69 years. Remaining other respondents, 98(18.5%), 34(6.4%) and

**Table-I**

*Distribution of the elderly people by socio-demographic characteristics (n = 531)*

Variables	Frequency	Percent
Age group		
60-69 years	389	73.3
70-79 years	98	18.5
80-89 years	34	6.4
≥90years	10	1.8
Mean = 65.00; (SD = ± 7.048)		
Sex		
Male	365	68.7
Female	166	31.3
Religion		
Islam	496	93.4
Hindu	31	5.8
Christian	2	0.4
Buddhist	2	0.4
Educational qualification		
Illiterate	418	78.8
Literate	113	21.2
Occupation		
Unemployed	73	13.7
Rickshaw/van puller	71	13.4
Home assistant	44	8.4
Small business	138	26.0
Day labour	76	14.3
House wife	80	14.8
Others	49	9.2
Monthly income		
Taka d"2000	90	17.1
Taka 2001-4000	189	35.5
Taka 4001-6000	126	23.7
Taka 6001-8000	65	12.2
Taka e"8001	61	11.4
Mean = 4747.02; (SD = ± 2796.368)		
Type of house		
Kaccha	372	70.0
Semipacca	139	26.2
Pacca	20	3.8
Type of family		
Nuclear	133	25.0
Joint	398	75.0
Spouse		
Present	392	73.8
Died	130	24.5
Divorced	04	0.8
Separated	05	0.9

10(1.8%) were in the age group of 70-79 years, 80-89 years and  $\geq 90$  years respectively. Their mean age was 65 years; (SD $\pm$ 7.048). Majority of the elderly population 365(68.7%) were male and 166 (31.3%) were female. Most 496(93.4%) of the respondents belonged to the Muslim. Regarding educational status, 418(78.8%) was illiterate and only 113(21.2%) elderly people were literate. Among the respondents till at work, 138(26.0%) were working as small businessman. The average monthly family income of the respondents were 4747.02  $\pm$  2796.368 Taka. Majority of 327(70.0%) elderly people lived in kaccha houses and about 398(75.0%) respondents were from joint family. Near about 392 (73.8%) respondents had spouse followed by 130(24.5%) spouse died, 04(0.8%) divorced and 05(0.9%) separated.

Table-2 shows that 259(48.8%) elderly people were independent and 272(51.2%) were somehow dependant on other earning members of the families. Among them 206(38.8%) respondents dependent on son, 40(7.5%) daughter, 26(4.9%) elderly people dependent on their relatives.

**Table-II**

*Distribution of the elderly people by dependent of geriatric people (n= 531)*

Dependent of elderly people	Frequency	Percent
Dependency		
Independent	259	48.8
Dependent	272	51.2
If dependent		
On son	206	38.8
On daughter	40	7.5
On relative	26	4.9
Total	531	100.0

Table 3 shows that a significantly higher proportion of women suffered from diabetes (females: 29.5% vs. males: 19.7%), hearing impairment (females: 31.3% vs. males: 16.4%), vertigo (females: 51.8% vs. males: 28.5%), joint pain (females: 60.2% vs. males: 43.0%), depression (females: 21.1% vs. males: 6.8%), while chest pain (males: 30.4% vs. females: 21.7%), chronic cough (males: 27.4% vs. females: 16.9%), difficulty in micturation (males: 18.4% vs. females: 7.2%), anxiety (males: 43.6% vs. females: 40.4%) were observed more in elderly men.

**Table-III**

*Specific disease pattern of the respondents (n=531)*

Diseases	Sex		p value
	Male	Female	
Endocrinology (Diabetes)	72 (19.7)	49 (29.5)	0.017*
Eye (Cataract)	49 (13.4)	18 (10.8)	0.406
E.N.T.(Hearing impairment)	60 (16.4)	52 (31.3)	0.001*
Neurological			
Tremor	90 (24.7)	58 (34.9)	0.014*
Vertigo	104 (28.5)	86 (51.8)	0.001*
Loss of memory	74 (20.3)	43 (25.9)	0.147
Loco motor system			
Joints pain	157 (43.0)	100 (60.2)	0.001*
Back pain	175 (47.9)	91 (54.8)	0.142
CVS			
Chest pain	111 (30.4)	36 (21.7)	0.037*
Respiratory system			
Chronic cough	100 (27.4)	28 (16.9)	0.009*
Breathlessness	33 (9.0)	21 (12.7)	0.202
GIT			
Pain abdomen	56 (15.3)	31 (18.7)	0.336
Anorexia	112 (30.7)	66 (39.8)	0.040*
Constipation	95 (26.0)	49 (29.5)	0.402
Uro-genital			
Burning micturation	42 (11.5)	29 (17.5)	0.061
Difficulty in micturation	67 (18.4)	12 (7.2)	0.001*
Psychology			
Anxiety	159 (43.6)	67 (40.4)	0.489
Stress	152 (41.6)	89 (53.6)	0.010*
Insomnia	105 (28.8)	65 (39.2)	0.017*
Depression	25 (6.8)	35 (21.1)	0.001*

Notes- \* Because of the multiplicity of health problems in subjects total percentage is more than hundred percent.

Table 4 shows that logistic regression analysis showing the effect of 6 independent variables on elderly people's current health status. The variables age of the respondents, sex, educational qualification, occupation, monthly family income and type of family had significant influence on the health status.

**Table-IV**

<i>Logistic regression analysis showing the effect of independent variables on health status of elderly population (n=531)</i>							
Independent variables	B	S.E.	Wald	Sig.	Exp(B)	95.0% CI. for EXP (B)	
						Lower	Upper
Age group	-.002	.244	.000	.993	.998	.618	1.611
Sex	.133	.445	.089	.766	1.142	.478	2.730
Occupation	-.184	.080	5.255	.022*	.832	.711	.974
Education	-.071	.114	.389	.533	.931	.744	1.165
Income	-.336	.169	3.946	.047*	.714	.513	.996
Family type	-.358	.419	.730	.393	.699	.308	1.589
Constant	-.581	.978	.352	.553	.560		

\*Significant  $p < 0.05$

### Discussion:

Ageing of population is a natural and unavoidable demographic process. All countries around the world have to face this reality in course of time. Majority of the elderly Bangladeshi slum population in urban setting is suffering from various health problems, however, health care services are insufficient to cope with the problem. The study tried to assess the socioeconomic condition of elderly population and identify their health problems in some selected urban slums of Dhaka city.

Out of 531 elderly respondents, majority 365(68.7%) were male and 166 (31.3%) were female and their mean age was found to be 65 years; ( $SD \pm 7.048$ ). A study "Morbidities among older people in Bangladesh: Evidence from an aging survey"<sup>8</sup> where analysis finding correlates in our study. Regarding educational status, 418(78.8%) was illiterate and only 113(21.2%) elderly people were literate which is almost similar with the findings done by Munsur A.M. et al.<sup>9</sup> Among the respondents till at work, 138(26.0%) were working as small businessman and their average monthly family income were  $4747.02 \pm 2796.368$  Taka. About seventy percent aged people lived in kaccha houses. Kalam I.M.S et al.<sup>8</sup> noted that 30.8 percent in kaccha house (made of mud, bamboo materials etc.). While only a minor fraction (2.8 percent) lived in paccka house (buildings made of bricks and concrete). The most (56 percent) used housing material was found to be tin. Seventy five percent of the elderly people were from joint family this goes on line with results from urban slums of Hyderabad,

Andhra Pradesh, India.<sup>10</sup> Near about 392(73.8%) respondents had spouse followed by 130(24.5%) spouse died, 04(0.8%) divorced and 05(0.9%) separated. A study conducted by Thakur RP et al.<sup>11</sup> reported that 96.31% (392/407) of the elders lived with their spouse and/or their children, while 8.1% (33/407) lived alone.

Falkingham JC, et al (2011)<sup>12</sup> conducted a study on the health status among older people living in a deprived area of Nairobi, Kenya where most of the older people rely on their own or spouse's income (68%) as their main source of livelihood with a higher proportion of women relying on external support from children / relatives (25%) compared with men (6%). These findings were corresponds with the present findings. Health status of the elderly population is a major problem. The present study showed that a significantly higher proportion of women suffered from diabetes (females: 29.5% vs. males: 19.7%), hearing impairment (females: 31.3% vs. males: 16.4%), vertigo (females: 51.8% vs. males: 28.5%), joint pain (females: 60.2% vs. males: 43.0%), depression (females: 21.1% vs. males: 6.8%), while chest pain (males: 30.4% vs. females: 21.7%), chronic cough (males: 27.4% vs. females: 16.9%), difficulty in micturation (males: 18.4% vs. females: 7.2%), anxiety (males: 43.6% vs. females: 40.4%) were observed more in elderly men. These findings were similar with the findings of the study done by Munsur A.M,<sup>9</sup> Ahmed S.<sup>13</sup> Statistically association was found between age, sex and the state of dependency among the respondents. Similar observation was made by Uddin M.T.<sup>14</sup> Logistic

regression analysis found that age of the respondents, sex, educational qualification, occupation, monthly family income and type of family had significant predictors in determining health status which was similar with the findings of study done in Thailand.<sup>15</sup>

### Conclusion:

The study showed that ageing and illness is interrelated and is a natural process. It should not take as burden or liability. Older people should be regarded as valuable human resources. There is a growing need for establishment of counselling centers that can take care of various physical, physiological, psychological and social needs of the elderly. Their ability to lead productive, healthy and meaningful lives should be ensured by the younger generations and the government respectively. It is anticipated that the findings of the study will help the planners and policymakers to offer a better society in future.

### Affiliations:

- Graduate School of Peking Union Medical College, Beijing, China
- National Research Institute for Family Planning, Beijing, China

### References:

1. Chakraborty S: Health Seeking Behaviour of Aged Population of a Rural Block in West Bengal, Working Paper No. 8 May 2005 Web site: <http://sctimst.ac.in>.
2. Baten A, Ahammad M, Azad TMA: Health status and its implications for the livelihoods of slum dwellers in Dhaka city, Working paper number 11, January 2013.
3. Rasheed, Sabrina and George Smith (2010). "Health care in slums: No strategy works", Published in The Daily Star, November 31, 2010.
4. Baliga SS, Gopakumaran PS, Katti SM: Treatment Seeking Behavior and Health Care Expenditure Incurred for Hypertension among Elderly in Urban Slums of Belgaum City; National Journal of Community Medicine, 2013, 4 (2).
5. Biswas P, Kabir ZN, Nilsson J, Zaman S. Dynamics of health care seeking behavior of elderly people on rural Bangladesh. International Journal of Ageing and Later Life 2006; 1: 69-89.
6. Begum MS: Geriatric Health Problems and Health Care Seeking Practice Among Elderly People Attending One Selected Geriatric Hospital; Bangladesh J Physiol Pharmacol 2007; 23(1, 2) : 20-24.
7. Ali MH, Karim M, Lahiry S: Gender Differentials in Nutritional Status of Elderly People in Selected Rural Areas of Bangladesh; Bangladesh Journal of Medical Science: 2013, 12(02)
8. Kalam I. M. S. and Khan H. T. A.: Morbidities among older people in Bangladesh: Evidence from an ageing survey; BRAC University Journal, 2006, 3(2), 75-83.
9. Munsur A.M., Tareque M.I. and Rahman K.M.M.: Determinants of Living Arrangement, Health Status and Abuse among Elderly Women: A Study of Rural Naogaon District, Bangladesh. Journal of International Women's studies, 2010; 11 (4): 162-176.
10. Thomas V, M LK, Morbidity Profile And Health Seeking Behaviour Of The Elderly In Urban Slums Of Hyderabad, Andhra Pradesh, India – A Cross Sectional Study. IJCRR. 2012; 4(19): 174-180
11. Thakur RP, Banerjee A, and Nikumb VB: Health Problems Among the Elderly: A Cross-Sectional Study, Ann Med Health Sci Res. 2013; 3(1): 19-25.
12. Falkingham JC, Langat GC, Kyobutungi C, Ezeh A, and Evandrou M: Does Socioeconomic Inequality in Health Persist among Older People Living in Resource-Poor Urban Slums? Journal of Urban Health: Bulletin of the New York Academy of Medicine, 2011; 88(2), S381-S400.
13. Ahmed S, Shirin S, Mohsena M: Geriatric Health Problems in a Rural Community of Bangladesh; Ibrahim Med. Coll. J. 2007; 1(2): 17-20
14. Uddin MT, Chowdhury M.A.I., Islam MN and Baher GU: Status of elderly people of Bangladesh: Health Perspective; Proc. Pakistan Acad. Sci. 2010; 47(3):181-189.
15. Haseen F, Adhikari R and Soonthorndhada K: Self-assessed health among Thai elderly; BMC Geriatrics 2010, 10:30. Available from: <http://www.biomedcentral.com/1471-2318/10/30>.