### **Original** Article

# Study on Geriatric Health Problems in Rural Areas of Bangladesh

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#### Abstract

**Background:** Ageing is inevitable, usually deleterious and eventually leading to death of the organism. Some disabilities like senile cataract, glaucoma, bony changes affecting mobility, diabetes, hypertension, failure of special senses etc. are inevitable with ageing. Study of these physical and psychological changes which are incident to old age is called gerontology and the care of the aged is called clinical gerontology or geriatrics<sup>1</sup>

*Objectives:* To evaluate the Geriatric Health Problems in the rural areas of Bangladesh

*Materials and Methods:* This was a cross-sectional study which was conducted at rural area of Chandra gram village, Bajitpur, Kishoreganj. The study was conducted for a period of 1 year which effect from 1<sup>st</sup> January 2023 to 31st December 2023, all the rural senior citizens in Bangladesh. Total respondents were 200. The sampling technique was convenience of non-probability type with eligible criteria and willing to participate in the study.

**Results:** Out of 200 respondents asking their facing problems during performing daily activities majority said 96(48%) both Yes and No and rest were 8(4%) non-specified. Regarding their type of problems most 43(45%) said during walking alone and followed by 20(21%) during eating meals, 13(14%) said others like sleeping, tremor etc. and rest few 4(4%) bathing, 2(2%) during walking, wearing cloths, bathing combindly.

*Conclusion:* This study presented a comprehensive overview of the geriatric health related knowledge, attitude and practice of the rural aged.

Key words: Study, Geriatric, Geriatric Health Problems, Rural Areas.

#### Introduction

Ageing is inevitable, usually deleterious and eventually leading to death of the organism. Some disabilities like senile cataract, glaucoma, bony changes affecting mobility, diabetes, hypertension, failure of special senses etc. are inevitable with ageing. Study of these physical and psychological changes which are incident to old age is called gerontology and the care of the aged is called clinical gerontology or geriatrics<sup>1</sup>. More people in both high and low income regions are living longer than ever before. The net increase of older population worldwide is about one million every month, two thirds of them being from the low income countries<sup>2</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<sup>3</sup>. Bangladesh, with one of the highest population densities

(985/km sq.) 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 20204. Very little is known about the health of the aged and its problems in Bangladesh. This study was undertaken to explore the health problems present among the elderly people residing in some rural areas of Bangladesh<sup>4</sup>.

Individuals of 60 years and above age are prone to develop certain diseases and ailments which are uncommon in younger age groups. The disorders are of two types: age dependent, which occurs as a direct consequence of physiological senescence with least possibility of treatment or control, and age related, which are more prevalent in the advanced life which can be prevented<sup>5</sup>. However, in order to overcome old age health problems, not everyone has access to proper health care facilities due to ignorance, lack of family support, easy accessibility to health care facilities, financial constraints, etc. In comparison to urban areas, access to health care services is limited in rural areas<sup>6</sup>. Decrease in fertility rate and improvement in life expectancy have led to rapid increases in number of Jahurul Islam Medical College

older people in Bangladesh with 80,000 new elderly added every year to over 60 years age group<sup>6</sup>which represents approximately 7.3 million people<sup>7</sup> .In Bangladesh, majority of the elderly people are suffering from some basic problems, such as lack of sufficient income, employment opportunities, malnutrition, chronic diseases, absence of proper health care facilities and lack of adequate family support. Furthermore, problems of elderly people in our country vary according to their socioeconomic status and residence.

This study was carried out to find out the health care seeking practice among the elderly attending a selected hospital in Dhaka city. The information collected may help provide adequate guideline to help the elderly to overcome old age health problems.

#### **Materials and Methods**

This was a cross-sectional study which was conducted among the rural aged population of Chandra gram village. The sample size was 200 respondents. The study was conducted for a period of 1 year which effect from 1<sup>st</sup> January 2023 to 31st December 2023, out of which 1st September to 15<sup>th</sup> September was spent for data collection. An interview was developed with the help of self-administered semi-structured written questionnaires for the collection of required documents.

First of all verbal consent with greetings and seeking permission was taken from the respondents before the collection of data. They were informed about the objectives of the study. They were also assured that the provided data will remain confidential and will only be used for academic or medical purpose. The study was conducted by face to face interview based on a developed written questionnaire. After compilation of data, the obtained data were checked and verified. Then data were analyzed by excel program from the Master Sheet.

#### Results

The results had been shown in tabular and graphical forms. The interpretation of the tables and graphs are as follows:

Occupational Status	Frequency	Percentage
Unemployed	61	30.50%
Agriculture	39	19.50%
Service holder	11	5.50%
Business	10	5%
Rickshaw puller	3	1.50%
Day Labourer	9	4 50%
Housewife	62	31%
Shonkeener	5	2 50%
Биоркеерег	5	2.3070
Total	200	100%

## Table I: Distribution of the respondents according to their current occupation (n=200)

The distribution of the respondents by occupation out of 200 respondents most were Housewives 62(31%), and followed by 61(30.5%) Unemployed, 39(19.5%) Agriculture, 11(5.5%), Service holder, 10(5%) Business, Day laborer 9(4.5%), Shopkeeper 5(2.5%) and Rickshaw puller 3(1.5%).

### Table II: Distribution of the respondents according to having their different problems (n=200)

Having Problems	Frequency	Percentage
Difficulty in hearing	19	9.50%
Difficult to see near objects	36	18%
Pain in the Joints	56	28%
Itching or rash in the body	12	6%
Tooth ache	10	5%
All of the above	0	0%
None	31	15.50%
Difficulty in hearing, to see near objects and pain in the		
Joints	19	9.50%
Difficulty to see near objects, pain in the Joints, Itching and		
tooth ache	10	5%
Pain in the Joints and Tooth ache	7	3.50%
Total	200	100%

Table III showed that distribution of respondents having their different problems majority 56(28%) said pain in the joints, and followed by 36(18%) difficult to see near objects, 31(15.5%) none, 19(9.5%) said both difficulty in hearing and to see near objects, pain in the joints, 12(6%) itching or rash in the body, 10(5%) difficulty in to see near objects, pain in the joints, itching and tooth ache and rest few 7(3.5%) complaint pain in the joints and tooth ache

#### Table III: Distribution of respondents according to having different problems in female.

Q-23(a)	Problems in female (Age of menopause)	Frequency	Percentage
	40 - 45 years	26	30%
	46 - 50 years	45	51%
	More than 50 years	17	19%
	Total	88	100%
Q-23(b)	Problems regarding uterine prolapse		
	Yes	3	3%
	No	79%	90%
	Non specified	6	7%
	Total	88	100%
Q-23(c)	Post -menopausal Per vaginal discharge		
	Yes	3	3%
	No	81	92%
	Non specified	4	5%
	Total	88	100%

Table no III showed that distribution of respondents according to having different problems in female regarding age of menopause out of 88 aged female most 45(51%) in the 46-50 years, followed by 26(30%) were 40-45 years, and rest few 17(19%) more than 50 years. Problems regarding uterine prolapse most 79(90%) said no, 6(7%) were non-specified and rest few 3(3%) had problem. Post-menopausal Per vaginal discharge most 81(92%) said no, 4(5%) were no-specified and rest few 3(3%) had problem



#### Figure 1: Distribution of the respondents according to age (in years) (n=200)

Out of 200 respondents most of the respondents 152(76%), were in the age group of 65 to 74 years, and followed by 36(18%) and rest 12(6%) were 75-84 years and 85 and more years respectively



#### Figure 2: Distribution of the respondents according to monthly family income (n=200)

Regarding monthly family income maximum 82(41%) had 20000-50000 taka and followed by 65(32.5%), 24(12%), 21(10.5%), 8(4%), 10000 to 20000, 50000 to 1 lac taka, Less than10000 taka and more than 1 lac taka.



#### Figure 3: Distribution of the respondents according to dependency for expenses (n=200)

Regarding dependency most respondents 123(61.5. %) said yes, rest 71 (35.5%) no and few 6(3%) were non-specified



#### Figure 4: Distribution of the respondents according to nutritional status (n=200)

Among the 200 respondents regarding their nutritional status most 113(56.5%) were average and followed by 72(36%) lean and thin and rest few 15(7.5%) were obese.



#### Figure 5: Distribution of the respondents according to duration of sufferings from problems (n=200)

Asking duration of sufferings from problems most 105(52.5%) were 1-10 years and followed by 71(35.5%) none, 11(5.5%) for 11-20 years, 10(5%) for more than 30 years and rest 3(1.5%) for 21-30 years.



#### Figure 6: Distribution of the respondents according to consultation and medication (n=200)

Regarding their duration of consultation and medication majority 138(69%) said yes, and followed by 56(28%) said no and rest few 6(3%) were answered non-specified.



# Figure 7: Distribution of the respondents according to taking medication for above mentioned problems (n=200)

Regarding their taking medication majority 112(56%) said yes, and followed by 74(37%) said no and rest few 14(7%) were answered non-specified.

#### **Observation & Results**

Total population of the study area was 43,520 and elderly aged 60 year and above was 2,541 (5.84%, the reference population). Out of total 2,581 elderly persons surveyed in the study population, 1,175 were male (46.24%) and 1366 were female (53.76%).Out of these 2,581, total 494 elderly persons (19.14%) participated in study (study sample). Maximum number of elderly persons was in the age group of 60 - 65(30.20%) and 65-70 year (33.80%).Out of 494 respondent, 204 (41.3 %) were not mentally sound. The various factors associated with mental health status of elderly persons are shown in table no.1, 2, & 3. Most of the respondents were Hindu (82 %) by religion followed by Muslims (12.8 %), Buddhist (2.2 %), christens (2%) & Jain (1%). There was no significant association between religion & mental health status of the respondents. Most of the respondents were having

some kind of addictions.61.7 % respondents were having addiction of tobacco chewing,7.9 % were having addiction of smoking, 2.4 % were alcoholics % 12.6 % were pan chewers. Indian Journal of Basic & Applied Medical Research; September 2012: Vol.-1, Issue-4, P. 309-312 311 www.ijbamr.com. Only 31.2 % respondents were having no addictions.50.6 % addicted people were having poor mental health & only 21% non-addicted persons were having poor mental health. This difference was statistically significant. (P < 0.01)<sup>8.9</sup>.

#### Discussion

A descriptive type of cross-sectional study was done to determine the knowledge, attitude, and practice towards geriatric health among rural aged (65 years and above) of a selected area of Bangladesh. A total of 200 rural aged population of Chandra gram village, Bajitpur, Kishoreganj were selected purposively.

#### Socio-demographic information

Out of 200 respondents most of the respondents 152(76%), were in the age group of 65 to 74 years, and followed by 36(18%) and rest 12(6%) were 75-84 years and 85 and more years respectively. Regarding gender variation most 112(56%) were male and 88(44%) female, Out of 200 respondents majority 196(98%) were Muslim and rest few 4(2%) Hindu. Regarding their marital status majority 146(73%) were married and 52(26%) widow/widower and rest 2(1%) were divorced. Among the 200 respondents, educational status of most of them 81(40.5%) were illiterate and followed by 55(27.5%) class 1 to 5, 41(20.5%) class 6-10, 19(9.5%) Higher Secondary, 4(2%) were University level. The distribution of the respondents by occupation out of 200 respondents most were Housewives 62(31%), and followed by 61(30.5%)39(19.5%) Agriculture, Unemployed, 11(5.5%), Service holder, 10(5%) Business, Day laborer 9(4.5%), Shopkeeper 5(2.5%) and Rickshaw puller 3(1.5%). Regarding their type of family most 88(44%) were Joint family and followed by 78(39%) nuclear and rest few 34(17%) were three generation family. The distribution of the respondents by their housing most 87(43.5%) living in Tin-shade, and followed by 61(30.5%) Pacca house, 46(23%) kancha, and rest few 6(3%) living in muddy house. Regarding dependency most respondents 123(61.5. %) said yes, rest 71 (35.5%) no and few 6(3%) were non-specified. Regarding relationship with caregiver majority 120(60%) by children, 49(24.5%) by spouse 17(8.5%) by grandchildren, 7(3.5%) both by siblings and relative. Regarding monthly family income maximum 82(41%) had 20000-50000 taka and followed by 65(32.5%), 24(12%), 21(10.5%), 8(4%), 10000 to 20000, 50000 to 1 lac taka, Less than10000 taka and more than 1 lac taka

# **Basic information (Regarding knowledge, attitude and practice of geriatric health)**

Out of 200 respondents asking their facing problems during performing daily activities majority said 96(48%) both Yes and No and rest were 8(4%)non-specified. Regarding their type of problems most 43(45%) said during walking alone and followed by 20(21%) during eating meals, 13(14%) said others like sleeping, tremor etc. and rest few 4(4%) bathing, 2(2%)during walking, wearing cloths, bathing combindly. Distribution of respondents having their different problems majority 56(28%) said pain in the joints, and followed by 36(18%) difficult to see near objects, 31(15.5%) none, 19(9.5%) said both difficulty in hearing and to see near objects, pain in the joints, 12(6%) itching or rash in the body, 10(5%) difficulty in to see near objects, pain in the joints, itching and tooth ache and rest few 7(3.5%) complaint pain in the joints and tooth ache. Distribution of the respondents according to time duration for sufferings from problem out of 169 respondents most 73(43%) for last 3-10 years, followed by 39(23%) 1-2 years, 32(19%) less than 1 year, 25(15%) for more than 10 years. Regarding their duration of consultation and medication majority 138(69%) said yes, and followed by 56(28%) said no and rest few 6(3%) were answered non-specified. Distribution of the respondents according to place of consultation for sufferings from problem out of 138 respondents most 48(35%) from Government hospital, and followed by 26(19%) Private hospital, 22(16%) village doctor/Quack, 20(14.49%) both local pharmacy and others like SACMO/MATS and rest few 2(1.44%) Kobiraj. Regarding their previous cardiac problem most respondents 44(22%) had not any problem, followed by 41(20.5%) had high blood pressure, 28(14%) became fatigue after doing some easy works, 26(13%) complaint chest and shoulder pain with sweating, 19(9.5%) palpitation, 14(7%) had chest and shoulder pain with sweating, cant not climb two flights of stairs, became fatigue after doing some easy works and palpitation, 6(3%) had all of the mentioned above, and a rest few 3(1.5%) fatigueness, palpitation and high blood pressure. Regarding their previous respiratory problems most respondents 106(53%) had none and followed by 41(20.5%) breathlessness, 28(14%) dry cough, 10(5%) shortness of breath during sleep, 7(3.5%) had breathlessness, dry cough and shortness of breath during sleep, 4(2%) had all of the mentioned above, 2(1%) complaint dry cough and shortness of breath during sleep. Regarding their previous endocrine problems most respondents 110(55%) had none and followed by 31(15.5%) excessive thirst, 17(8.5%) polyuria, 15(7.5%) weight loss in last 6 months,

11(5.5%) excessive thirst, weight loss in last 6 months and polyuria, 10(5%) weight gain and rest a few 6(3%)said all of the above mentioned complaint. Having their previous gastrointestinal problems most respondents 121(60.5%) had none and followed by 19(9.50%) pain in the abdomen, 13(6.5%) diarrhea, 11(5.5%)indigestion or bad odour in mouth, 10(5%) all of the above, 9(4.5%) nausea & vomiting, 8(4%) difficulty in swallowing solid or liquid foods, 7(3.5%) pain & bleeding during defecation and 2(1%) complaint a mass like feeling around anus during defecation. Having during micturition most respondents problems 115(57.5%) had none and followed by 20(10%) both constant back pain and difficulty in holding micturition in male, 16(8%) burning sensation of urethra, 13(6.5%) dribbling micturition, 7(3.5%) itchy genitalia, 4(2%)constant lower abdominal pain, 3(1.5%) all of the above and 2(1%) hematuria. Distribution of respondents according to having different problems in female regarding age of menopause out of 88 aged female most 45(51%) in the 46-50 years, followed by 26(30%) were 40-45 years, and rest few 17(19%) more than 50 years. Problems regarding uterine prolapse most 79(90%) said no, 6(7%) were non-specified and rest few 3(3%) had problem. Post-menopausal Per vaginal discharge most 81(92%) said no, 4(5%) were no-specified and rest few 3(3%) had problem. Distribution of respondents according to having central nervous system problems most respondents 127(63.5%) had none, and followed by 28(14%) had frequent headache, 27(13.5%) chronic headache, 10(5%) had loss of recent memory or cannot recognize their own children, 8(4%) any trauma in last 12 months. Distribution of respondents according to having central nervous system problems most respondents 127(63.5%) had none, and followed by 28(14%) had frequent headache, 27(13.5%) chronic headache, 10(5%) had loss of recent memory or cannot recognize their own children, 8(4%) any trauma in last 12 months. Respondents according to having history of psychiatric problems most respondents 104(52%) had none, and followed by 32(16%) had feeling depressed, 18(9%) insomnia, 14(7%) feeling depressed due to loss of dear one, 11(5.5%) feeling nervous or anxious, 7(3.5%) had feeling depressed, feeling nervous or anxious, feeling depressed due to rude behave of

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children and insomnia, 4(2%) had feeling depressed due to rude behave of children, insomnia and feeling depressed due to loss of dear one, 3(1.5%) had all of the above and 2(1%) had suicidal attempt. Asking duration of sufferings from problems most 105(52.5%) were 1-10 years and followed by 71(35.5%) none, 11(5.5%)for 11-20 years, 10(5%) for more than 30 years and rest 3(1.5%) for 21-30 years. Regarding their duration of consultation and medication majority 138(69%) said yes, and followed by 56(28%) said no and rest few 6(3%) were answered non-specified. Among the 200 respondents regarding their nutritional status most 113(56.5%) were average and followed by 72(36%)lean and thin and rest few 15(7.5%) were obese.

In another a cross-sectional study was conducted among elderly persons above 60 years in Ahmednagar district of Western Maharashtra in India. Study area comprised of 100 villages in 6 Primary Health Centers (PHCs) of Ahmednagar District<sup>10</sup>. The study sample included one PHC which was selected by random sampling method (lottery method) among six PHCs. The population of the selected PHC was 43,520. Enlisting of all elderly persons from all the villages in selected PHC were done using Anganwadi workers survey records & Village Panchayat record. A 20% elderly people were selected from this record using systematic random sampling which formed the study sample (total 494). A pilot study was done on 21 subjects to test the pre-designed proforma. Then necessary modifications were done in the proforma before conducting the final study<sup>11,12</sup>.

#### Conclusion

Health care seeking practice was very low among the aged respondents. This may be attributed to ignorance or poverty or social negligence.

This study presented a comprehensive overview of the geriatric health related knowledge, attitude and practice of the rural aged.I think everyone wants to be healthy and free from sick and many of the health problems can just be prevented by maintaining the good hygiene. So, awareness generating programs should be conducted in the rural areas, in the form of drama or by means of motivational speech regarding the complications that could arise from bad hygiene and also at the same time explaining the benefits of good health habits and also demonstrating the correct way of maintaining this. By maintaining good health we can at least decrease the economic burden in the family or the rural area. So, every aged person should maintain good health hygiene.

#### References

- Park K. Park's Textbook of Preventive and Social Medicine. 18th Edition, M/s Banarsidas Bhanot, Jabalpur, India. 2005; 434-435.
- Gorman M. Global Ageing- the non-governmental organization role in the developing world. Int J Epidemiology. 2002; 31: 782-5.
- 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.
- Solomon's NW. Health and Ageing. In R. Flores.
  & S. Gillespie, (eds.), Health and Nutrition: Emerging and Reemerging Issues in Developing

Countries. Washington D.C.: International Food Policy Research Institute 2001.

- Ali MY. Textbook of community medicine and public health. 3rd ed. Dhaka: RKH Publishers; 1999.
- 6. ESCAP Population Data Sheet; 1999.
- 7. Samad MA, Samad A. Implication of Asian population future and elderly. BJG. 1999; 129 41.
- Census of India (2001) Census of India, provisional tables. Government of India, New Delhi.
- 9. Dr. P.C. Bhatala: Care of elderly; Health for the millions; September October 1999.
- Gupta I, Shankar D. Health of the elderly in India: a multivariate analysis. J Health Population Developing Countries. 2003;24:1–11
- 11. Help Age India (2007) Ageing scenario. Accessible at http://www.helpageindia.org/ ageingScenario. php on 13th February 2007
- Shah B, Prabhakar AK. Chronic morbidity profile among elderly people. Indian J Med Res. 1997;106:265