

## Study the Socioeconomic, Psychological and Health Characteristics of Aged People in Rural Area of Natore District in Bangladesh

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**Abstract:** The purpose of this study is to study the socioeconomic, psychological and health characteristics of aged people in rural area of Natore District in Bangladesh. For this the primary data collected by purposive sampling interviewed method has been used as raw materials in this paper. Some statistical mechanisms such as frequency distribution, contingency analysis, c2-test and logistic regression model have been applied in this article. In this study, it is found that aged people are suffering from economic insecurity, unhealthy house structure, insufficient medical facility and home care, isolation, shortage of recreational instrument, shortage of balance diet and some psychological problems. Logistic analysis shows that mental status of aged population is positively influenced by land property, decision acceptance in family and getting pension (Boisko Bhata).

**Key words:** Aged Population socio-economic variables, psychological variables, logistic regression model

### INTRODUCTION

Population aging in Bangladesh is viewed as natural outcome of demographic transition from high fertility and mortality to low fertility and mortality. Until the year 1961, the sequence of high birth rate followed by high death rate kept the proportion of population aged 60 years and above at a low level. In the recent years steady decline in birth rate accelerated the aging process. It is likely to reach 9.1% in 2010,<sup>[1]</sup> and in terms of absolute number elderly person would be 13.3 million in 2010. During the many years of successful family planning and public health programs that have changed the population growth of the country and the demographic transition that has occurred, is enviably the outcome of socioeconomic transformations through the process of development underway in the country<sup>[2]</sup>. Development process not only has changed the demographic phenomena but also has changed inters life style, values, outlook of the young population, and roles and functions of the family and community and thus overall change the society.

Aging population creates problems; in every sector. In economic area it creates problems on pension scheme, savings, retirement, employment etc. In political area, it retards to change leadership. In developed countries elderly people is a social problem since many years of age but in developing countries it is a new problem. The statistical data represent that in Bangladesh from the year

1974 to 2001 the number of elderly population has increased from 1.38 million to 7.5 million and at present in Bangladesh 7.8 million of population are elderly. It is expected that by 2021 the number of elderly will be 7.2% of the total population<sup>[3]</sup>. About 6.22 million elderly people are living in rural areas in Bangladesh among them 3.43 million are male elderly and 2.79 million are female elderly population<sup>[4]</sup>.

Rural old people are more in Bangladesh than urban. They are fully dependent of their own land property or sons. But traditional joint family pattern has being changed. On the other hand, social security system does not develop in rural area. Though some security systems are available for service holder people is very few in rural areas. Once average land was standard level of rural people but now maximum village people are landless. From the overall situation of old age people of Bangladesh by considering the basic characteristic of old people especially rural aged people of the country, it is realized a dangerous picture. In this circumstance elderly people of rural Bangladesh suffering from mental torture, permanent illness and physically depression<sup>[5]</sup>. So basic characteristics of rural aged people in Bangladesh is now in troublesome condition and we have to identify these characteristics perfectly and exactly.

During the past few years, numerous reports both in popular press and professional journals indicate that one of the greatest achievement of the 20th century is the

Table 1: Percentage distribution of respondents by socioeconomic characteristics Day

Characteristics	Frequency	Percentage	Characteristics	Frequency	Percentage
<b>1.Respondents Education</b>	135	67.5	<b>9. Main Decision Maker in the family</b>		
Illiterate	29	14.5	Own	109	54.5
Primary	9	4.5	Son	72	36.0
Junior secondary	11	5.5	Husband	8	4.0
Secondary	11	5.5	Wife	8	1.5
Higher Secondary	4	2.0	Others (Daughter, Sister Brother,, Grandson)	3	4.0
Graduate	1	.5	Total	200	100
Post Graduate					
Total	200	100			
<b>2.Respondents Occupation</b>			<b>10. Best dwelling Place opinion to aged population</b>		
Farmer	56	28.0	Single	13	6.5
Housewife	82	41	Together	178	89.0
labor	30	15	Old house	9	4.5
Others (Business, Services, Bua )	32	16	Total	200	100
Total	200	100			
<b>3. Respondents Religion:</b>			<b>11. Own Land:</b>		
Islam	176	88	Yes	98	49.0
Hindu	24	12	No	102	51.0
Others	0	0	Total	200	100
Total	200	100			
<b>4. House Type</b>			<b>12. Getting Boisko Bhata:</b>		
Katcha	107	53.5	Yes	13	6.5
Pacca	60	30	No	187	59.3
Others (Tinshed, Straw)	33	16.5	Total	200	100
Total	200	100			
<b>5.Ownership of House:</b>			<b>13. Taking Care During Illness:</b>		
Own	120	60	Wife	91	45.5
Son	60	30	Daughter in law	61	30.5
Husband	8	4	Daughter	25	12.5
Others (Wife, Daughter, Brother, Grandson)	12	6	Son	12	6.0
Total	200	100	Others (Husband, Brother)	11	5.5
			Total	200	100
<b>6. Household Head</b>			<b>14. Sources of Drinking Water:</b>		
Own	115	57.5	Tube well	198	99
Son	68	34.0	Well	2	1
Husband	19	4.5	Total	200	100
Others (Wife, Daughter, Brother, Grandson)	8	4			
Total	200	100			
<b>7. Sources of Income</b>			<b>15. Sanitation Facility:</b>		
Agriculture	75	37.5	Yes	198	99
Day labor	66	33	No	2	1
Business	28	14	Total	200	100
Others (Services, Bua)	31	15.5			
Total	200	100			
<b>8.Main Income Earners</b>			<b>16. Types of Latrine:</b>		
Own	61	30.5	Soils	55	27.5
Son	127	63.5	Sanitary	52	26.0
Others (Husband, Wife Daughter, Brother, Sister, Grandson)	12	6	Hanging	25	12.5
Total	200	100	Half sanitary	68	34.0
			Total	200	100

Responding by socioeconomic characteristics

world wide graying of nations or the survival of more and more people into the advanced stages of life. Today in most of develop countries; it has stretched to over 70<sup>[6]</sup>. A hundred years ago, the average life expectancy in most

part of the world was 20 to 30 years. When medical science was in pre-mature stage the death rate and birth rate was very high but modern medical science check high death rate, so consequently longevity of modern people

Table 2: Percentage distribution of respondents by psychological characteristics

Characteristics	Frequency	Percentage	Characteristics	Frequency	Percentage
<b>1. Decision accepted in family</b>			<b>6. Position in society:</b>		
Yes	163	81.5	Good	73	36.5
No	37	18.5	Cursorily	106	53.0
Total	200	100	Bad	21	10.5
<b>2. Type of Decision aged population accepted in family:</b>			Total	200	100
No suggestion	36	18	<b>7. Under Estimated in Family</b>		
Education	29	14.5	Yes	96	48.0
Treatment	42	21	No	104	52.0
Marriage	48	24	Total	200	100.0
Others (Shopping, Family quarrel, Business)	45	22.5	<b>8. Mentally strong</b>		
Total	200	100	Yes	50	25.0
<b>3. Addiction</b>			No	150	75.0
Yes	143	71.0	Total	200	100.0
No	57	29.0	<b>9. Because of not Mental Strong Mentally strong</b>		
Total	200	100	Mentally strong	48	25.0
<b>Types of Ad 4. diction</b>			Solitary	15	7.0
No smoking	58	29	Helplessness	20	10.0
Cigarette	8	4	Weakness	78	39.0
Birri	32	16	Others	39	19.5
Pan-jorda	100	50	Total	200	100.0
Others	2	1	<b>10. Knowledge of Elderly Welfare institution:</b>		
Total	200	100	Yes	70	35.0
<b>5. State of Elderly in Family</b>			No	130	65.0
Burden	48	24	Total	200	100.0
Hopeful	76	38			
Asset	76	38			
Total	200	100			

has increased unexpectedly. Day by day elderly population unexpectedly increases in Bangladesh if immediately necessary steps and actions are not taken within short time it is going to be a serious problem of the country.

In 1998, the Ministry of social welfare of Bangladesh introduced new pension scheme called “Boisko Bhata”. Under this scheme 10 elderly persons among 100 are being provided Tk. 100 each per month for one year. But at present this amount is 125 taka per month. This is not sufficient but it is a good step for older person. At present the Government of Bangladesh recognizes the problem and has taken following programme for elderly persons:

- Programmes on health problems, mentally handicap, nursing.
- Setting-up of the institute of Geriatric Medicine at Dhaka for medical, social recreational service to elderly person.
- The government formed formation of a national committee on aging with the Minister in charge of the Ministry of Social Welfare as its chairman.
- Observance of the International Elders Day in Bangladesh 1 October, 1995 as elsewhere in the world by “ Ministry of Social Welfare and Probin Hitayshi

Sangha” in order to create awareness among the population about problems of elderly persons.

Therefore the specific objectives of this study are as follows:

- to assesses the status, roles and functions of the aged population in the family and community
- to investigate living condition and health status of the rural elderly aged population
- to identify the factors affecting mental status and dwelling of elders.

### MATERIALS AND METHODS

**Data Source:** In this study, it is to investigate the aging situation in rural area of Bangladesh, specially the basic characteristics of rural elderly people. This research is based on the survey data of ten villages of Natore Thana under Natore District. The study areas have a population of 7150 which 3820 are males and 3330 females (Union Parishad-2001). For the purpose of data collection personal interview approach was followed. This method relates to the collection of information directly from the respondents. For the method of data collection the elderly

people were directly interviewed and collect the desired information by the pre-designed questionnaire. The present study was carried out to collect information on socio-economics, psychological and health characteristics.

To test any association between different phenomenon contingency and logistic analysis could be useful in the socio- economic condition of the borrowers. c2-test is also applied in this study. It should be mentioned here that to analyze logistic regression model mental status of aged people treated as dependent variable that is-

Y=1, if the respondents are mentally strong.

Y= 0, if the respondents are not strong.

And independent variables used in the model are (1) family type (2) land property (3) decision accepted in family (4) getting pension (Boisko Bhata ) (5) Change behavior (6) mass media.

## RESULTS AND DISCUSSION

**Respondent's Education and Occupation:** Education is the most important indicator of the socioeconomic status of an individual, which affects almost all aspects of human life, including demographic health behaviour. Usually, an educated person lives a better life than an illiterate person. It is obvious from the Table 1 that about 67.5% of the respondents have no education, 14.5% respondents are primary education and others are junior secondary, secondary, higher secondary, graduate and postgraduate. From the same table the information suggests that 28% males are farmer, 41% females are housewife and 15% males and females are day labor. Besides this, 16% elderly are engaged with different occupation such as service, business and female servant.

**Religion:** It is very important characteristics in relation to the aging of person particularly for Islamic believes. It is an important community characteristic. Majority people of Bangladesh are Muslims. Also other people are Hindu, Buddha and Christian. In my study, it is found that 88% respondents belong to Muslims community and 12% belong to Hindu community.

**House Type:** Healthy and comfortable residence is essential for body and mind. Unhealthy house is responsible for health hazard and diseases, so it is an important factor for human being. The information suggests 53.5% provided katcha house for dwelling, 30% provided house are pacca and 16.5% others ( Tinsed, straw ). The overall observation indicates that maximum of the respondents come from lower economic level.

**Ownership of House:** The information suggests ownership of house 60% own, 30% son and 10% others (Husband, Wife, Brother, Daughter and Grandson).

**Household Head:** The information suggests maximum family household head own and son between these 57.5% own, 34% son and 8.5% others (Husband, Wife, Brother, Daughter and Grandson).

**Sources of income:** The information suggests sources of income 37.5% agriculture, 33% day labor, 14% business and 15.5% others (Service, Bua).

**Main Income Earners:** The information suggests main income earners 30.5% own, 63.5% son and 6% others (Husband, Wife, Brother, Sister, Daughter and Grandson).

**Main Decision Maker in the Family:** The information suggests main decision maker in the families 54.5% own, 36.0% son and 9.5% others (Husband, Wife, Brother, Sister, Daughter and Grandson).

**Best dwelling place opinion to aged population:** The information suggests best dwelling place opinion to aged population 6.5% single, 89.0% together and 4.5% old house.

**Getting Boisko Bhata:** The information suggests 6.5% aged population getting boisko bhata and 93.5% have not getting boisko bhata.

**Taking Care During illness:** The information suggests taking care during illness 45.5% wife, 30.5% daughter in law 12.5% daughter, 6.0% son and 5.5% others (Husband and Brother).

**Sources of Drinking Water :** Table 1 reveals that the proportions of the elderly respondents having the availability of Tubewell water, which is 99% and 1% well.

## HEALTH AND SANITATION FACILITY

An unhygienic environment is enormously important cause of bad health of elderly .The better is the sanitary condition of a locality the less would the likelihood of being sick of elderly from environmental hazards. Household sanitation facility recorded in this study as whether the latrine exists or not. The overall sanitation arrangements of the respondents are not. From Table 1, the information of my study shows that, 27.5% are soils latrine, 26.0% are sanitary, 12.5% are hanging, and 34.0% are half-sanitary.

**Table 3: Percentage distribution of respondents by health characteristics**

Characteristics	Frequency	Percentage	Characteristics	Frequency	Percentage
<b>1. Sighting Power:</b>			<b>7.Problems with Bearing 5KG</b>		
Good	50	25	Not at all	124	62.0
Medium	90	45	Small amount	32	16.0
Bad	60	30	Large amount	44	22.0
Total	200	100	Total	200	100.0
<b>2. Hearing Power:</b>			<b>8. Problems of Moving around the home:</b>		
Good	104	52	Not at all	139	69.5
Medium	70	35	Small amount	43	21.5
Bad	26	13	Large amount	18	9.0
Total	200	100	Total	200	100.0
<b>3.Physical Power:</b>			<b>9. Problems of walking 1 or 2 Miles</b>		
Good	37	18.5	Not at all	81	40.5
Medium	113	56.6	Small amount	62	31.0
Bad	50	25	Large amount	57	28.5
Total	200	100.0	Total	200	100.0
<b>4. Sleeping Power:</b>			<b>10. Problems of Eating:</b>		
Good	64	32	Not at all	124	62.0
Medium	91	45.5	Small amount	32	16.0
Bad	45	22.5	Large amount	44	22.0
Total	200	100	Total	200	100.0
<b>5. Digestion Power:</b>			<b>11.Problems of Clothing:</b>		
Good	87	43.5	Not at all	155	77.5
Medium	93	46.5	Small amount	16	8.0
Bad	20	10.0	Large amount	29	14.5
Total	200	100	Total	200	100.0
<b>6. Problems with laying and Sitting:</b>			<b>12. Problems of caching something:</b>		
Good	80	40.0	Not at all	154	77.0
Medium	97	48.5	Small amount	35	17.5
Bad	23	11.5	Large amount	11	5.5
Total	200	100	Total	200	100.0

**Mental Health :** Not only physical health but also mental and emotional health of the older persons is equally important for their well-being. From the Table 2, the information of my study shows that 81.5% elder population decision accepted in his family and 18.5% have not accepted. 38% elder person thinks they are asset of his family, 24% are burden and 38% hopeful. 25% elder person thinks they are mentally strong and 75% are not strong such as solitary, helplessness, weakness and others. The position of elder person in the society are 36.5% good, 53% cursorily and 10.5% bad. 48% elder person thinks they are under estimated in his family and 52% are estimated. 18% elder person cannot given suggestion any affairs and 82% can given suggestion about education, treatment, marriage and others. 29% elder person does not drink any addiction and 71% are addicted about cigarettes, birri and pan jorda.

**Health Condition:** Bangladesh is an underdeveloped country of villages. According to census report 2001, 76.61% of its total population lives in villages. Hence the question rural health is a vital matter for us. The development of rural health is an important in the overall

development of our country .If we want to see a health Bangladesh we should take all necessary steps for development of rural health. In many villages there are no good doctors or even any doctors at all. There is only one qualified doctor for every 25,000-village people on the average<sup>[7]</sup>. Most of our people do not have any knowledge about health care.

We can observe that illiterate people of our rural areas are not aware of the importance of the rules of health and sanitation. They take impure water and inhale polluted air. As a result they are attacked with water borne and air borne diseases, like cholera, diarrhoea and dysentery. Many of them do not keep their teeth, fingers, nails and body clean. They do not keep their food covered so as to prevent contamination by flies and other insects. Malnutrition is another major problem in our rural areas. It is due to the lack of balanced diet and protein. Prevalence of malnutrition, eyesight problems, hearing problems and mental disorder among the old are also observed. From Table 3, the information of my study shows that sighting power of elderly population are 25% good, 45% medium and 30% bad. Hearing power of elderly population are 52% good, 35% medium and 13% bad.

Table 4: Results of Contingency Analysis with d.f. and Significant level

Attribute	Value of $\chi^2$	value of $\chi^2$ Tabulated	Degrees of freedom	Asymp. Sig. (2-sided)	Significanc of association at 5% level
Ed Vs Occupation	123.715	43.773	30	.000	Significant
Ed Vs T.House	44.390	28.869	18	.001	Significant
Ed Vs T.Latrine	74.163	28.869	18	.000	Significant
Ed Vs T.Family	15.572	12.592	6	.016	Significant
Ed Vs T.Adiction	74.296	24.996	15	.000	Significant
Ed Vs T.Treatment	37.118	36.415	24	.043	Significant
Ed Vs S.Status	53.300	21.026	12	.000	Significant
Ed Vs S.Position	47.502	21.026	12	.000	Significant
Ed Vs S.Drink water	.973	12.592	6	.987	Insignificant
Ed Vs S.M.Income	38.008	45.32	36	.378	Insignificant
Ed Vs F.Dicision	41.576	50.371	36	.241	Insignificant
Ed Vs Entertainment	19.379	18.307	10	.036	Significant
Ed Vs S.Expenditure	67.936	43.773	30	.000	Significant
Ed Vs S.Advice	64.210	12.592	6	.000	Significant
AGVs M.Condition	19.559	28.869	18	0.358	Insignificant
AGVs T. Adiction	29.612	28.869	18	.041	Significant
AGVs Si.Power	19.607	21.026	12	0.075	Insignificant
AGVs He. Power	13.981	28.869	18	0.730	Insignificant
AGVs Sp.Power	10.311	21.026	12	0.589	Insignificant
AGVs Phy.Power	27.024	21.026	12	.008	Significant
AGVs Slp.Power	17.490	21.026	12	.132	Insignificant
AGVs Dig.Power	12.683	21.026	12	.392	Insignificant
AGVs P.lay&Sitting	15.380	21.026	12	.221	Insignificant
AGVs P.Bearing	30.333	21.026	12	.002	Significant
AGVs P.Upwarding	28.806	21.026	12	.004	Significant
AGVs P.Catching	16.593	21.026	12	.166	Insignificant
AGVs P. Eating	11.739	21.026	12	.467	Insignificant
AGVs P.Bathing	14.169	21.026	12	.290	Insignificant
AGVs P. Clothing	11.469	21.026	12	.489	Insignificant
AGVs P.Walking	30.186	21.026	12	.003	Significant
AGVs T.Disease	78.569	98.66	78	.461	Insignificant
AGVsT. Treatment	12.566	36.415	24	.973	Insignificant
AGVs C.Behaviour	9.834	21.026	12	.631	Insignificant
AGVs S.Status	17.643	21.026	12	.127	Insignificant
AGVs S. Position	10.356	21.026	12	.585	Insignificant
AGVs T.H.work	56.236	71.1	36	.017	Insignificant
MDVs P.Lay&Siting	30.329	38.885	26	.254	Insignificant
MDVs P.Bearing	26.476	38.885	26	.437	Insignificant
MDVs P.Walking	25.589	38.885	26	.486	Insignificant
MDVs P.Clothing	33.453	38.885	26	.149	Insignificant
MDVs P.Eating	31.603	38.885	26	.207	Insignificant
MDVs Phy.Power	37.393	38.885	26	.069	Insignificant
MDVs Si.Power	23.174	38.885	26	.623	Insignificant
MDVs Slp.Power	32.676	38.885	26	.172	Insignificant
MD Vs Sp Power	40.488	38.885	26	.035	Significant
MD Vs He Power	130.947	176.412	39	.000	Insignificant
MD Vs Dig Power	33.967	38.885	26	.136	Insignificant

Note: ED: Educational Qualification, AG: Age Group, MD: Major Diseases, Slp: Sleeping Power, Si: Sighting power, Sp: Speaking Power, Hep: Hearing Power, Dig: Digest Power, Phy: Physical Power.

Physical power of elderly population is 18.5% good, 56.5% medium and 25% bad. Sleeping power is 32% good, 45.5% medium and 22.5% bad. Digestion power is 43.5% good, 46.5% medium and 10.0% bad. Problems with laying and sitting are 40% not at all, 48.5% small amount and 11.5% large amount. Problems with bearing 5kg are 62.0% not at all, 16.0% small amount and 22.0% large amount. Problems of moving around the home are 69.5% not at all, 21.5% small amount and 9.0% large amount. Problems of walking 1 or 2 miles are 40.5% not at all, 31.0% small amount and 28.5% large amount. Problems of eating are 73.0% not at all, 14.5% small amount and 12.5% large

amount. Problems of clothing are 77.5% not at all, 8.0% small amount and 14.5% large amount. Problems of catching something are 77.0% not at all, 17.5% small amount and 5.5% large amount.

**Major Health Problems :** According to the constitution of the World Health Organization (WHO) "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Deviations from this ideal may be regarded as morbid condition. Deterioration of ones physical well being is a natural part of aging. From the Table 5 some of the most common

**Table 5: Percentage distribution of respondents diseases by sex**

Major disease	Sex		Total (%)
	Male (%)	Female (%)	
Gout	15.5	19.0	34.5
Dysentery	2.5	1.5	4.0
Diabetes	3.0	2.0	5.0
Blood pressure	7.0	6.5	13.5
Asthma	6.5	0	6.5
Cough	3.0	1.5	4.5
Peptic Ulcer	3.0	1.5	4.5
Back pain	1.0	4.0	5.0
Heart disease	2.5	2.0	4.5
Stomach problem	1.5	0	1.5
Eyes problem	2.5	4.0	6.5
Urine and Stool problem	0.5	0.5	1.0
Sometimes fever	0.5	2.5	3.0
Others	4.0	2.0	6.0
Total	53.0	47.0	100.0

health problem among elderly in present study are gout, blood pressure, dysentery, diabetes, heart disease, stomach problem, peptic ulcer, back pain, asthma, cough, sometime fever, urine and stool problem and others. The present study reveals that health conditions of rural elderly are not fair. About 91% older persons are suffered from some these health conditions, because of the aging process and the lack of available health care facilities. Among various diseases most common diseases that are observed among rural aged population are gout and blood pressure in highest number. Old-olds (age 70+) compared to young old (age 60-70), females compared to males have great problems with functional activities, like catching, clothing, lifting, walking etc. and also the problems of daily living like taking to bath and going to toilet, preparing medicine and so on. From Table 5, the information of my study shows that, male and female combinable 34.5% gout, 4.0% dysentery, 5.0% diabetes, 13.5% blood pressure, 6.5% asthma, 4.5% cough, 4.5% peptic ulcer, 5.0% back pain, 4.5% heart disease, 1.5% stomach problem, 6.5% eyes problem, 1.0% urine and stool problem, 3.0% sometimes fever and 6.0% others diseases attack in the elderly population.

**Nature of Treatment:** Medical services are limited in Bangladesh and thus lead to greater problems for the elderly. As a part of a vulnerable group, the older population has a greater need for, but less access to health care. The medical facilities are not adequate to meet the health care requirements of 130 million people, let alone the 7.84 million elderly. There is thus differential care received by those who are socio-economically advantage. 89% respondents have reported taking treatments and 11% without taking treatment.

From Table 6, it is observed that majority percent elderly take treatment from village doctor. Most of them have no appropriate training to identify diseases but still

**Table 6: Percentage distribution of respondent by treatment type**

Nature of treatment	Sex		Total (%)
	Male (%)	Female (%)	
Without treatment	1.5	4	5.5
Government hospital	3	3.5	6.5
Private hospital	21.5	13.5	35
Rural Doctor	21.5	25	46.5
Homeo Doctor	1	1	2
Kabirajee	1.5	3	4.5
Total	50	50	100

they are serving as a good doctor. As a result, very often-valuable lives are fall into death.

The information of my study shows that 1.5% male and 4% female would not get treatment, 3% male and 3.5% female would get treatment from government hospital, 21.5% male and 13.5% female take treatment from private hospital, 21.5% male and 25% female take treatment from rural doctor, 1% male and 1% female take treatment from homeo doctor and 1.5% male and 3% female take treatment from kabirajee.

## RESULTS AND DISCUSSION

**Result of contingency analysis:** From Table 4, it is seen that elders educational qualification is statistically significant associated with occupation, type of house, type of latrine, type of family, type of addiction, type of treatment, social status, social position, entertainment, sources of expenditure, social advice. Thus, from statistical point of view, the above socioeconomic variables collected from rural elderly are greatly influenced by education. The degree of association between occupation and type of latrine, type of addiction, social status, social position, sources of expenditure, social advice are more. It is true that education is the single most predominant variable, which has inhibiting effect on above variables. But education has statistically insignificant effect on sources of drinking water, sources of main income and family decision. Hence the degree of association among education and these variables is poor.

With respect to the age of rural elderly, age is significantly associated with type of addiction, physical power, problem of bearing, problem of up warding and problem of walking. But insignificantly associated with mental condition, sighting power, hearing power, speaking power, sleeping power, digesting power, problem of laying and sitting, problem of catching, problem of eating, problem of bathing, problem of wearing, type of disease, type of treatment, behaviour, social status, social position and type of home work.

From the above table we see that major disease is statistically significantly associated with speaking power and insignificantly associated with problem of laying and

Table 7: Results of logistic regression analysis according to mental status of aging people by selected characteristics

Characteristics	Co-efficient (b)	S.E	Odds Ratio [Exp(b)]
Family Type- Unit (Ref:)	-	-	1.0000
Joint	.3240	.3580	1.3826
Land property- Yes (Ref:)	-	-	1.0000
No	-.9313	.3850	0.3941
Decision Accepted in Family- Yes (Ref:)	-	-	1.0000
No	-.6184	.5320	0.5388
Getting Pension- No (Ref:)	-	-	1.0000
Yes	-.5595	.7300	0.5715
Change Behavior- No (Ref:)	-	-	1.0000
Yes	-.7712	.9794	2.1623
Mass Media- No (Ref:)	-	-	1.0000
Yes	-.4448	.3761	0.6410

sitting, problem of bearing, walking, wearing and eating, physical power, sighting power, sleeping power, hearing power and digesting power.

**Results of logistic regression analysis:** The findings of logistic regression analysis are presented in Table 7. From this table we see that elder’s who lived in a joint family had 1.3826 times more mentally strong than unit family. Elders who had not land property he or she is .3941 times less mentally strong than who had. Elders whose decision not accepted in family were .5388 times less mentally strong with compared to those whose decision were accepted. Elders who getting pension or Boisko Bhata were .5715 times less mentally strong with compared to those who were not getting pension. Elders who had changed behavior 2.1623 times less mentally strong with compared to those who had not changed

### CONCLUSIONS

**Conclusion and Policy Implications:** Aging population is gradually emerging as an issue in Bangladesh. It is a formidable problem of rural Bangladesh as well as a national problem. It has many socioeconomic effects on national development. In demographic context and view of age structure, aged people are considered as a dependent portion of manpower. Though, it is not so serious problem like western countries like Bangladesh. We also found such type of economic problem in research area. Though there are some natural, cultural and sociopolitical problems of aged people, economic problem is the root cause of other problems. In this research the most remarkable problems of rural aged are economic insecurity, unhealthy house structure, insufficient medical facility and home care, isolation, shortage of recreational

instrument, shortage of balance diet and some psychological problems.

Our present study summaries that the elderly, who are maximum illiterate (67.5%), posses higher number of children (61% have 5+ children), economically inactive (66%), mentally weak (75%) and male hold agriculture (28%) and female hold house wife (41%) as a main occupation. From our findings only 5% get pension and 53.5% live in unit family. Health situation is very bad. Majority percent are suffered from diseases (95%) and duration of suffering is too long. Sighting and Physical power of the aged are exist in medium condition which are 45% and 56.5% respectively. 22.5% use strick. Besides physical health, mental health is also bad. 75% seems that they are less evaluated in his family.

In contingency analysis we have found significant association between education and some other socioeconomic variables, such as education Vs occupation, sanitation facility etc. In the same way elder’s age have showed significant relation with different physical state.

Logistic regression shows that family type, land property, decision acceptance in family, getting pension (Boisko Bhata), change behavior, have significant influence on mental status.

**Policy implication:** Aging is a process of life. Population aging in Bangladesh is becoming a serious concern for the development agendas. In Bangladeshi society older persons are enormously respected and valued. They remain active in a variety of activities that have significant bearing on the cultural, social and economic life a country and society. They have a significance presence in both formal and informal sectors. So the government should take necessary steps of the well fare for elderly people. In this context the government should give economic security, (like pension medical allowance, recreational facility etc.). To improve health and sanitation facility and for overall betterment of elderly people are necessary curriculum included in the national text. As an elderly welfare program the following consideration may be mentioned:

- The traditional joint family system should be strengthened in order to provide basic needs and psychosocial support to the elderly.
- The government should take necessary steps to enhance the care-giving capacity of family through appropriate program.
- The government should take necessary steps for the welfare of the aged be taking mass education programme and awakening the people about the duty towards elderly people.

- Government should give economic security (like pension, medical allowance, recreational facility etc.) for geriatrics.
- Government, NGO and all other organization have to build care home and available recreational facilities there for elders.
- Access to treatment facility should be available and cheap for elders and special emphasis on care of geriatrics should be taken every health centers, medical colleges, and community clinics in both rural and urban areas.
- Government should supply latrine in cheap rate to improve health and sanitation facility and necessary curriculum should be included in the national text.

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