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Ahmed Mohammad Munsur

Ismail Tareque

K. M. Mustafizur Rahman

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Determinants of Living Arrangements, Health Status and Abuse among Elderly Women: A Study of Rural Naogaon District, Bangladesh

By Ahmed Mohammad Munsur[1], Md. Ismail Tareque[2], K. M. Mustafizur Rahman[3]

Abstract

In this study, the socio-economic backdrops, living arrangements, health status and abuse of the women aged 60 years and older in the rural Naogaon district of Bangladesh are examined. The data were collected from seven villages by using probability proportional to size (PPS) sampling and the results show that an overwhelming majority of the elderly women in the age group 60-69 years who are widowed, illiterate, have no education and income, economically dependent, living with married children, unhealthy, suffer from arthritis related illness and are taking treatment from village doctors. Furthermore, the study shows that, nearly 35 percent elderly women are abused, mostly mentally abused due to poverty. Logistic regression analysis reveals the determinants of living arrangements, health status and abuse of the elderly women. The findings of the study should get due attention to provide secured later life of the elder especially female elderly in Bangladesh and developing nation as well.

Keywords: Living arrangements, health status, abuse, elder women, Bangladesh.

Introduction

The numerical growth of elderly persons around the world is an eloquent testimony not only of reductions in fertility but also of reductions in infant and maternal mortality, improved nutrition, reduction in infectious and parasitic diseases, as well as improvement in health care, education and income. Global total fertility rate has declined from 5.0 live births per woman in 1950-1955 to 2.7 live births per woman in 2000-2005, and is expected to further reduce to replacement level, that is 2.2 live births per woman by 2045-2050 periods (UN, 2005). Also life expectancy has increased from 46.5 years in 1950 to 66.0 years in 2000-2005, and is expected to rise to 76 years by the year 2045-2050. The most recent population census of 2001 showed hike in the population above 60 years reaching up 6.13 percent of the total population of Bangladesh (BBS, 2003) and this number will reach 14.6 million (about 9 percent of the total population) by the year 2025 (Concepcion, 1987; East-West Center, 2002). The elderly comprises a much larger proportion of the population today than ever before. It is a product of history, individual experience and social forces (Morgan and Kunkel, 2001). The ageing process is characterized by a complex set of social, psychological and biological changes of an individual. The condition of the elderly in a social setting is not merely determined by the

[1] Dept. of Health Policy Science Tokyo Medical and Dental University Tokyo, Japan
Assistant Professor Dept. of Population Science and Human Resource Development University of Rajshahi Rajshahi-6205, Bangladesh
[2] tareque_pshd@yahoo.com tarequemi_pops@ru.ac.bd
[3] M. Phil. Fellow Dept. of Population Science and Human Resource Development University of Rajshahi, Rajshahi-6205, Bangladesh

inevitable characteristics but also depends upon the cultural practices in the society which happens to be changing at a rapid pace in Bangladesh today. Culturally, Bangladesh is increasingly a youth oriented society. But in fact, demographically it is an ageing society which is reflected in the recent age structure of the population (Sattar, 1996).

As population ageing and gender differentials have become prominent issues in recent times, it is being argued that the interest in gender often focuses on inequalities that disadvantage women, while much of ageing research focuses on the economic and social vulnerability of older persons (Mba, 2003 and 2002). Also Mba (2007) found that the discourse related to population ageing and gender differentials asserted or implied that older women are universally more vulnerable to social, economic and health disadvantages than older men. In Bangladesh many older people spend their lives in poverty and ill health which is major risk for the elderly population. After a lifetime of deprivation, old age is likely to mean ill health, social isolation and poverty. Poverty and exclusion are the greatest threats to the well being of older people. This is especially true for older women, who suffer from multiple disadvantages resulting from biases to gender, widowhood and old age. Women, particularly widows, who are without living sons or who live alone, are considered to be particularly at risk of economic destitution, social isolation, poor health and death (Abedin, 2003; Kabir et al., 2005). A Bangladeshi woman often enjoys power and authority if she happens to be head of the family. If this association is broken, her access to resources for care and sustenance is reduced, making her vulnerable. This risk increases for women who have no assets for survival, such as education, possession or social status (Chang, 1992; Sattar et al., 2003). The vulnerability when compounded by falling health, disability and widowhood makes the elderly women the most defenseless in the Bangladesh context (Audinarayana and Kavitha, 2003; Chen and Dreze, 1995; Sattar, 2003).

In addition data regarding elder abuse are difficult to find and interpret because elder abuse is relatively recently recognized entity, has a wide variety of definitions from state to state, and is subject to cultural interpretation (Hansberry et al., 2005). In the present circumstances the older persons are vulnerable to abuse, neglect and exploitation (Datta, 2006). Thus, there is an urgent need of studies on the living arrangement patterns, health status and abuse and their determinants of the elderly women in Bangladesh. Therefore, this study tries to examine what type of socio-economic structure and patterns of living arrangements, health status and abuse characterize the elderly persons, as well as the factors are associated with living arrangements, health status and abuse of the elder women.

Objectives

The present study is an attempt in the direction of living arrangements, health status and abuse of the female elderly with the following objectives:

- to study the extent of socio-economic backdrops;
- to observe the pattern of living arrangements and factors affecting living arrangements;
- to observe the current health status and factors affecting health status; and
- to explore the nature, extent, reasons of elderly abuse and factors responsible for the abuse of the study population as well.

Data Sources and Methodology

The study uses the data collected from 7 villages of rural areas under Naogaon district, about 36 km away from Rajshahi divisional town of Bangladesh. One Thana named, Manda, was randomly selected from this district. From all the unions of the Thana, a Union (9 Number Tintulia Union Parishad) was randomly selected and from this union 7 villages were selected by using probability proportional to size (PPS) sampling. In order to perform the above task, first the authors made a pilot survey and collected voter list from Union Parishad Office to identify truly the aged and then identified seven villages out of total 34 villages and finally collected the information of 743 elderly persons residing in the selected villages using Lahiri's method of PPS sampling. All the elderly (743 elderly) persons aged 60+ years residing in those seven villages were interviewed during September 6 to September 16, 2007. Among all the respondents 330 are male and 413 are female. For the purpose of the study we use only female respondents' data. The data were edited, compiled, processed and analyzed by using SPSS 15.0 program.

Univariate classification analysis i.e. percentage distribution has been performed in order to observe the socio-economic characteristics of the elderly population. Finally, a multivariate technique named as logistic regression analysis is used for determining factors that are more significant for the living arrangements, health status and abuse of the elder women.

Results and Discussions

Socio-Economic Characteristics

We begin with a brief overview of the study population with respect to several socio-economic characteristics (See Table 1). Results indicates that a higher percentage of women (43.1 percent) are aged 60-69 years, while a lower percent of women are found in subsequent age groups due to the effect of mortality. However, as high as 32.4 percent of them are age 80 years and over. The vast majority of women are found as widowed (63.9 percent), while the incidence of divorce or unmarried are included in others category, which is a rare occurrence in the study area (0.7 percent). From the total data comparatively more male are found as married than their female counterparts. And this may be the effect of the early age at marriage for females in Bangladeshi society. Table 1 further shows that about 9 out of every ten of the older women have not been to school, while about 8.5 percent of them completed education for 1–5 years. These two levels of educational attainment account for 99.5 percent of the study population, implying that a fraction of the women who have been educated for 6 years and over is very small. Higher percent of women have no income (55.9 percent), where 41.6 percent have monthly income in between BDT 1-2000. Only a little over 2 percent have their monthly income more than BDT 2000.

A vast majority of the respondents (68.3 percent) have their family's monthly income less than BDT 3000, while lower percent are found in subsequent income groups due to the effect of poor setting Bangladesh especially rural areas. However, 18.2 percent have their family's monthly income of BDT 6000 and over. The overwhelming majority of the women are not satisfied with their economic condition (76 percent), only 24 percent of them are satisfied in their economic condition. Furthermore, 76 percent of the

older females, are economically dependent, more than three times those who are economically independent

Table 1. Percentage distribution of selected socio-economic characteristics of the study population

Socio-economic characteristics	Frequency (N = 413)	Percentage (100)
Age (in years)		
60-69 years	178	43.1
70-79 years	101	24.5
80+ years	134	32.4
Marital status		
Married	146	35.4
Widowed	264	63.9
Others	3	0.7
Level of education (in actual years of schooling)		
No education	376	91.0
1 - 5 years	35	8.5
6 + years	2	0.5
Respondent's monthly income (in BDT)		
No income	231	55.9
1 - 2000	172	41.6
2000+	10	2.4
Family's monthly income (in BDT)		
<3000	282	68.3
3000-5999	56	13.6
6000+	75	18.2
Economic satisfaction		
No	314	76.0
Yes	99	24.0
Economic status		
Independent	99	24.0
Dependent	314	76.0

Notes: Bangladesh currency – Taka i.e. BDT.

Living Arrangements of the Elderly Women

The living arrangements of the elderly population are often considered as the basic indicator of the care and support provided by the family. A plethora of evidence from the developing world suggests that the family is the key institution for elderly persons and their living arrangements are a fundamental determinant of their well-being (Albert and Cattell 1994; Knodel and Debavalya 1997; Mba 2005, 2004 and 2003). Percentage distribution of the older female's living arrangements is presented in Table 2. Traditionally in Bangladesh, the responsibility for the welfare of the elderly lies with their children, and the state has virtually no obligation to provide for the elderly. Culture demands that a son, preferably the eldest son, look after his parents in their old age. This system provides the son the opportunity and/or obligation to co-reside with his parents. It

is found from the Table 2 that vast majority (about 67 percent) of the elderly females are living with their children, of which about 58 percent are living with married children. The percentage of the remaining living arrangements categories remain lower, where about 19 percent older females are living with their husband only and the percentage of those living alone are also as high as 12.3 percent. A plausible reason for this is that women experience a higher risk of death of a spouse because at the time of marriage men are usually older than their wives and have higher age-specific death rates than women. Another possibility is that when the husband dies, a woman may need to move in with extended family for support.

Table 2. Living arrangements of the study population

Living Arrangements	Frequency	Percent
Living alone	51	12.3
Living with husband only	77	18.6
Living with unmarried children	37	9.0
Living with married children	238	57.6
Living others	10	2.4
Total	413	100.0

Results of Logistic Regression Analysis on the Living Arrangements of the Female Elderly

Results based on the multivariate logistic regression analysis for the living arrangements of the female elderly are shown in Table 3, considering living arrangements as the dependent variable which is dichotomized by assessing 1 if the respondents were living alone and 0 for not.

Table 3 shows that women in age group 70–79 years are 50 percent more likely to live alone than the reference category, while women aged 80 years and over are 10 percent less likely to live alone than those aged 60-69 years (reference category). Analysis shows that marital status has a significant effect on the propensity to live alone, where widowed are 5.19 more likely to live alone than their married counterparts. The results indicates that the elderly women are 1.35 times more likely to live alone than the reference category which supports Bongaarts and Zimmer's (2002) argument that older persons are more often tended to live with children in countries where educational attainment is lower. Respondents having monthly income are 6.70 times positively significant and more likely to live alone than the reference category. One possible reason is that income gives them economic satisfaction which helps them to come forward from the dependency to others. Economic condition also exerts the significant effect on the dependent variable. Economically dependent elderly women are negatively significant and less likely to live alone than those are economically independent. Table 3 further shows that, fairly healthy and unhealthy elderly females are 16 percent and 19 percent less likely to live alone than their healthy counterparts respectively. The possible reason may be those respondents need supports and care which direct them to live with others (especially with family members). Abused elderly women are 95 percent significantly and more likely to live alone than the reference category. It could be said that the abuse of elder women happens more at home and as a result elderly women want to live away from the internal conflicts of their family.

Table 3. Results of logistic regression analysis on living arrangements of the study population

Variables	ERC	SE	OR
Age (in years)			
60 – 69 (ref.)	-	-	1.00
70 – 79	0.40	0.44	1.50
80 +	-0.11	0.43	0.90
Marital status[a]			
Married (ref.)	-	-	1.00
Widowed	**1.65*****	0.54	5.19
Level of education[b]			
No education (ref.)	-	-	1.00
1 – 5 years	0.30	0.71	1.35
Respondent's monthly income (in BDT.)			
No income (ref.)	-	-	1.00
Have income	**1.90*****	0.56	6.70
Economic condition			
Independent (ref.)	-	-	1.00
Dependent	**-1.34*****	0.40	0.26
Present physical condition			
Healthy (ref.)	-	-	1.00
Fair	-0.17	0.63	0.84
Unhealthy	-0.22	0.61	0.81
Were they abused?			
No (ref.)	-	-	1.00
Yes	**0.67****	0.37	1.95
Constant	**-3.98*****	0.90	0.02
-2 Log likelihood	**218.807**		
Cox & Snell R square	**0.196**		
Nagelkerke R square	**0.371**		

Notes: ERC = Estimated Regression Coefficient;
SE = Standard Error of ERC;
OR = Odds Ratios;
ref. = Reference Category;
BDT = Bangladesh Currency – Taka i.e. BDT.;
a = Only 0.7 percent respondents in other marital status category (unmarried and divorced) are excluded;
b = Only 0.5 percent respondent's educational level 6+ years are excluded;
Coefficient significant at least 10 percent level is shown in bold type; and
Level of significance: ***p<0.01; **p<0.05; *p<0.10

Health Status of the Elderly Women

Health is a major concern of old age. Worldwide as people get older the prevalence of lifestyle diseases increases and the importance of disability at end of life years becomes more meaningful (Lopez and Murray, 1998). The illnesses of the elderly are multiple and chronic in nature. In old age the elderly are found to suffer from diseases like arthritis, gastric, blood pressure, diabetes, asthma and so on. Prevalence of malnutrition, eye problems, hearing problems among the olds are also observed. According to Fillenbaum (1984), self-perceived health status may be better indicator of potential service use than actual health condition. Moreover, self-assessments of health are common components of population-based surveys. To calculate the health status, respondents were asked a question 'what is your current health status?' The answers were recorded on three-point scales: healthy, fairly healthy and unhealthy. Table 4 shows the current health status and types of diseases of the women elderly.

About 5 of every 10 respondents were unhealthy while 36.8 percent were fairly healthy. Only 13.6 percent respondents reported that they were healthy. Though the respondents were suffer from various diseases, among them highest percentage of the respondents were suffer from arthritis (77.5 percent), followed by gastric, eye problem, blood pressure and so on. Almost same findings were declared in recent research on Bangladesh that a majority of the elderly persons suffer from arthritis related illness (Ahmed et al., 2003; Kabir et al., 2003).

As elderly persons in Bangladesh do not receive adequate help from the formal health care services, they mostly depend on informal local health care providers (GoB, 1998). With regard to health-seeking behavior, findings from the present study shows that most of the respondents were taking treatment from village doctors (41.9 percent), followed by clinic and hospital. In general, treatment from informal paraprofessionals and unqualified health care providers together was a more frequent form of management along with self-care has also been found in other studies (Ahmed et al., 2005).

Table 4. Health status and types of diseases of the study population

Variables	Frequency	Percent
Current health status		
Healthy	56	13.6
Fairly healthy	152	36.8
Unhealthy	205	49.6
Total	**413**	**100.0**
Types of Diseases		
Arthritis	320	77.5
Gastric	302	73.1
Eye problem	222	53.8
Hearing problem	69	16.7
Asthma	25	6.1
Cough	63	15.3
Diabetes	6	1.5

Blood pressure	117	28.3
Paralysis	13	3.1
Others	18	4.4
Sources of Treatment		
Hospital	151	36.6
Clinic	153	37.1
Village doctors	173	41.9
Others	15	3.6

Notes: Since for the types of illness and sources of treatment respondents were allowed to report multiple answers, the sum of percentages could be greater than 100

Results of Logistic Regression Analysis on the Health Status of the Female Elderly

Results based on the multivariate logistic regression analysis for the health status of the female elderly are shown in Table 5, considering current health status as the dependent variable which is dichotomized by assessing 1 if the respondents were unhealthy and 0 for not.

From Table 5 it is found that the likelihood of the dependent variable increase as age increase i.e. elderly female in higher age group are more likely to report unhealthy than the reference category. That means as age increase the respondents fall in various physical limitations and suffer from various diseases. Some studies (Mostafa and Streatfield, 2003; Strauss et al., 1992) found that health problems increase with age, but that women reported more health problems than do men. Marital status has a significant effect on the health status of the elderly population. Widowed are 47 percent positively significant and more likely to report unhealthy than their married counterparts. This is verified as married elderly people have lower mortality (Vallin et al., 2001), report higher level of life satisfaction (Diener et al., 2000). Education has a great impact on all stages of life. Results shows that elderly female, who have education of 1-5 years are 10 percent negatively less likely to report unhealthy than the reference category. This may be the fact that the educated respondents could have better knowledge about their self health care and would like to stay good in health. Work status also exerts the significant effect on the health status of the elderly population. Working respondents are 0.61 times negatively less likely to report unhealthy than those are not working. One possible reason for that their little physical activities help them to remain well. Indeed, physical activity plays a central role in the prevention and management of chronic disease (Cyarto et al., 2004), and physical inactivity is identified as a leading cause of disability among older adults (Buchner, 1997). Family's monthly income also shows the significant effect on the health status of the respondents, where respondents with higher family's monthly income have higher likelihood of the dependent variable than the reference category. This may due to dietary intake or dependency on other though they are able to do some regular work.

Respondents with intoxication habits are 41 percent significantly more likely to report unhealthy than the reference category which may indicate that some of their habits (especially taking betel leaf with some other materials) is harmful to their health. Table 5 further shows that, abused elderly female are 36 percent more likely to report unhealthy than the reference category. It indicates that the abused elderly are always experiencing

pressure (especially mental), which makes them ill, mentally and in turn physically and prone to suffer more from various diseases.

Table 5. Results of logistic regression analysis on the health status of the study population

Variables	ERC	SE	OR
Age (in years)			
60 – 69 (ref.)	-	-	1.00
70 – 79	0.19	0.27	1.21
80 +	0.27	0.29	1.32
Marital status[a]			
Married (ref.)	-	-	1.00
Widowed	**0.38***	0.24	1.47
Level of education[b]			
No education (ref.)	-	-	1.00
1 – 5 years	-0.10	0.38	0.90
Work status			
Not working (ref.)	-	-	1.00
Working	**-0.50****	0.26	0.61
Family's monthly income (in BDT.)			
<3000 (ref.)	-	-	1.00
3000-5999	0.06	0.31	1.06
6000+	**0.75*****	0.28	2.11
Have any intoxication habit?			
No (ref.)	-	-	1.00
Yes	**0.34***	0.22	1.41
Were they abuse?			
No (ref.)	-	-	1.00
Yes	0.31	0.23	1.36
Constant	-0.51	0.34	0.60
-2 Log likelihood	**540.560**		
Cox & Snell R square	**0.072**		
Nagelkerke R square	**0.095**		

Notes: ERC = Estimated Regression Coefficient;
SE = Standard Error of ERC;
OR = Odds Ratios;
ref. = Reference Category;
BDT = Bangladesh Currency – Taka i.e. BDT.;
a = Only 0.7 percent respondents in other marital status category (unmarried and divorced) are excluded;
b = Only 0.5 percent respondent's educational level 6+ years are excluded;
Coefficient significant at least 10 percent level is shown in bold type; and
Level of significance: ***p<0.01; **p<0.05; *p<0.10

Abuse of the Elderly Women

Although scholars express a difference of opinion in the definition of the term "elder abuse" (Pillemar and Finkelhor, 1987; Srinivas, 1996), in this article we have defined elder abuse as harm perpetrated to an older person by someone in a position of trust who may have control over the victim. This includes physical abuse, mental/psychological abuse and economic abuse. Physical abuse occurs in the form of slapping, hitting, pushing and restraint by tying, bruises, fractures burns, sprains cuts. Mental abuses include repeated and constant use of threats, humiliation, scolding and any other form of mental cruelty leading to physical, bad mental distress (treating the elderly like a child, blaming, intimidating, threatening, violence and isolation leading to fear, depression, sleeplessness and anorexia). Economic abuse occurs in the form of failure to provide food, shelter, clothing, medical care, and personal care leading to malnutrition, over-sedation, depression confusion, and life threatening health problems. In developing countries elderly population forms a large and vulnerable group suffering from high level of physical, economical and social insecurity. Though there are great socio-economic variations within the elderly population which make the care for the elderly more complex and challenging, a consideration of factors personal, familial, economical combines together resulting in elder abuse. The percentage distribution of the elderly abuse, their nature and self-stated reasons for such abuse are recorded in Table 6.

The study confirms that about one third of the respondents were abused. Most notably, the Plan of Action emanating from the 2nd World Assembly on Ageing held in April 2002 argues repeatedly through out the documents that older women are more vulnerable than their male counterparts in virtually every dimension including being economically disadvantaged (UN, 2002). Majority of the respondents were mentally abused (33.4 percent) and other types of abused contain lower percentages. Table 6 further shows that highest numbers of abuse occurred due to poverty (27.6 percent), followed by dependency (19.9 percent), inability to do any activity (14.9 percent).

Table 6: Percentage distribution of the elder abuse according to their nature and reasons

Variables	Frequency (N = 413)	Percentage (100)
Were they abused?		
No	272	65.9
Yes	141	34.1
Nature of Abuse		
Physical	12	2.9
Mental	138	33.4
Economical	28	6.8
Reasons for Abuse		
Poverty	114	27.6
Inability	74	14.9
Dependency	82	19.9
Property distribution	19	4.6
Illness	16	3.9

Others	1	0.2

Notes: Since for nature of abuse and various reasons of abuse the respondents were allowed to report multiple answers, the sum of percentages could be greater than 100

Results of Logistic Regression Analysis on the Abuse of the Female Elderly

Results based on the multivariate logistic regression analysis for the abuse of the female elderly has shown in Table 7, considering abuse of the elderly as the dependent variable which is dichotomized by assessing 1 if the respondents were abused and 0 for not.

It is found from Table 7 that elderly women in the age group 70-79 years and 80 years and over are 90 percent significantly and 58 percent more likely to face abuse than the reference category respectively. Widowed are 2.60 times highly significant and more vulnerable for being abused than the married counterparts. This indicates that life of the elderly at this stage become pathetic as they are doubly affected due to combined effects of ageing and being single. Elderly women with 1-5 years of education are 95 percent negatively highly significant and less likely to face abuse than the reference category. One possible reason for this is that the educated elderly are more aware of their rights and status. Elderly women, living with others are 44 percent less likely to face abuse than the reference category. This is an indication that elderly women in rural areas are still in care provided by the caregivers especially by their family members. The income of elderly women mostly comes from their various little farms and little land property. Some of their family members sometimes create pressure on them to handle these sources of income and deprive them from their rights and make the elderly vulnerable to abuse. From Table 7 it is observed that, those respondents having monthly income are 16 percent more likely to face abuse than the reference category. On the other hand the likelihood of the dependent variable decreases as their family's monthly income increase. This may due to the fact that elderly women are in better care in a family with higher income. Working elderly are 80 percent highly significant and more likely to face abuse than the reference category, which indicates that elderly women are not in a position to work at the last stage of life, but the fact is most of them have to work hard to survive their remaining life. Unhealthy respondents are 34 percent more vulnerable for being abused than their healthy counterparts. This is due to the fact that unhealthy elderly are treated as a burden in the family and there is always a lack of proper care provided to them by the family.

Table 7. Results of logistic regression analysis on the abuse of the study population

Variables	ERC	SE	OR
Age (in years)			
60 – 69 (ref.)	-	-	1.00
70 – 79	**0.64****	0.29	1.90
80 +	0.46	0.31	1.58
Marital status[a]			
Married (ref.)	-	-	1.00

Widowed	**0.95*** **	0.28	2.60
Level of education[b]			
No education (ref.)	-	-	1.00
1 – 5 years	**-2.97*** **	1.04	0.05
Living arrangements			
Living alone (ref.)	-	-	1.00
Living with others	-0.42	0.37	0.66
Respondent's monthly income (in BDT.)			
No income (ref.)	-	-	1.00
Having income	0.15	0.25	1.16
Family's monthly income (in BDT.)			
<3000 (ref.)	-	-	1.00
3000-5999	-0.03	0.34	0.98
6000+	-0.50	0.33	0.61
Work status			
Not working (ref.)	-	-	1.00
Working	**0.59** **	0.30	1.80
Health status			
Healthy (ref.)	-	-	1.00
Unhealthy	0.29	0.23	1.34
Constant	**-1.66*** **	0.58	0.19
-2 Log likelihood	**469.471**		
Cox & Snell R square	**0.137**		
Nagelkerke R square	**0.189**		

Notes: ERC = Estimated Regression Coefficient;
SE = Standard Error of ERC;
OR = Odds Ratios;
ref. = Reference Category;
BDT = Bangladesh Currency – Taka i.e. BDT.;
a = Only 0.7 percent respondents in other marital status category (unmarried and divorced) are excluded;
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Coefficient significant at least 10 percent level is shown in bold type; and
Level of significance: ***p<0.01; **p<0.05; *p<0.10

Conclusions and Recommendations

In this paper we have attempted to observe the socio-economic backdrops, living arrangements, health status and abuse of the older women. The findings broadly suggest that an overwhelming majority of them lack of basic education, not in any form of paid employment, widowed, having no income and economically dependent on others. Analysis of the living arrangements of the respondents, shows that a large proportion live with married children. A positive interpretation of these findings would be that the living arrangements of Bangladeshi female elderly are favorable for their overall well-being, since co-residence with kin is a reliable source of assistance and support. Furthermore, it has also been found that some variable have a significant including marital status, respondent's monthly income, economic condition and abuse on the living arrangements

of elderly females. Most elderly report their health status as ‘unhealthy’ and they mostly suffer from arthritis related illnesses acquiring treatment from village doctors. Logistic regression analysis shows that respondent’s marital status, work status, family’s monthly income and habit of intoxication significantly affect the health status of female elderly. Furthermore, analysis of the abuse of shows that, near about 35 percent were abused, mostly mentally abused due to poverty. Multivariate analysis shows that respondent’s age, marital status, level of education and work status are significantly responsible for the abuse of the female elderly.

In the patrilineal joint family, sons are expected to care for and provide assistance to parents in old age (Ghuman and Ofstedal, 2004) but the traditional joint family structure in rural Bangladesh is breaking down over last few decades due to poverty, attitudes of self-interest, quarrels, maladjustment and so on and is gradually being replaced by nuclear families (UNESCO, 1992). So, the traditional joint family system should be strengthened in order to keep the elderly population particularly the female elderly within their kinship network relations to provide economic and psychosocial support by their family members. Informal education especially education for girls and women should be introduced which could prepare them for old age and contribute to female elderly aware of their rights and self-care. Also some physical activities should be introduced which could keep them to be active and healthy in later life.

The overall findings suggest that there is a close relationship among living arrangements, health status and abuse. Older women are clearly disadvantaged. This is critical information in the development of suitable programs including the construction of ‘elder home’, old age economic and social security, increase in community awareness, a separate national policy for the elderly population addressing women, and a special regional network. All should be established to monitor and assist elderly people particularly women who suffer disproportionately in rural Bangladesh.

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