SOCPGECONOMIC STATUS OF ELDERLY PEOPLE AT HOUSEHOLD LEVEL: A SOCIOLOGICAL STUDY ON RANGPUR CITY CORPORATION

Md. Ripul Kabir*, Shammy Islam2, Dipika Chandra1

1 Sociology Discipline, Khulna University, Khulna 9208, Bangladesh
2 Department of Sociology, Begum Rokeya University, Rangpur 5400, Bangladesh

KUS: 20/03: 09032020

Manuscript submitted: March 20, 2020 Accepted: March 16, 2021

Abstract: The main aim of this study was to assess the socioeconomic status of elderly people of Rangpur City Corporation. The study conducted a survey and used random sampling technique to collect primary data from the purposively selected three wards (no-23, 24 & 25) of Rangpur City Corporation. The immense sources of financial support for the elderly people in this study stood on sons’ ground. More than half of the elderly people were treated carefully during their illness even they were found in good health condition. A large number of aged people experienced discrepancy in taking decisions in the family atmosphere. It is evident from the study that the family members came closer to them based on age and educational attainment when they faced any kind of problem. A positive relationship between elderly peoples’ occupation and their sufferings from various diseases (p<0.000) was found in this research. A concern from the corner of humanity regarding the socioeconomic and health issues of the elderly should be followed at the household level.

Keywords: Financial support, health condition, occupation, family conflict, elderly role

Introduction

Childhood, youth, adult and elderly are the stages of human life (Bayram et al., 2011). People who have crossed 60 years of age can be considered as elderly. Obviously, the bodies of older people go through the most dramatic changes with the passage of time and this process causes a functional deterioration, degradation of physical strength and hindrance to carry out one’s normal functioning as one did before (Hossain et al., 2006). In Bangladesh, over the past decades there has been a significant and noteworthy decline in infant and child mortality rate due to the development of medical science and technology and this progression constitutes the elderly population as a mammoth; their number is quite significant and these populations have serious consequences on family structure as well as on the overall socio-economic development of the country (Banglapedia, 2006).

Families are the cornerstone of all human societies which have been discovered in every human culture and it is such a social institution that can influence us in everyday lives (Morgan & Kunkel, 2006). It is a place where a person finds and expects the most encouragement, comfort and security

*Corresponding Author: <mrkabirku03@gmail.com>
DOI: https://doi.org/10.53808/KUS.2020.17.1and2.2003-S
and help if needed. Elderly people are most happy with family life especially with their children (Läidmäe et al., 2012). Older people prefer to be in their own homes and communities (WHO, 2011.) But the trends of family to live separately have increased and family members' job seeking and studying in different places are also increasing enormously which is creating fewer young family members left available to provide care to the elderly people (Ghimire & Gurung, 2014). However, it may not be enough for them.

From the old person’s point of view, the decreased functional ability and suffering from various health complaints also means dependency on family members as well as others for carrying out daily activities (Andersson et al., 2008). These perceptions are, multidirectional and multidimensional, implying that individuals experience both gains and losses in different domains, such as physical, psychological, and social functioning (Bode et al., 2012). It is difficult for older one to leave the position where they get respect, regular income and social network of friends, colleagues and acquaintances; similarly, it causes transition from the daily recognition to one with limited recognition and possible isolation and it creates psychological problems of elderly people (Ghimire & Gurung, 2014). Even, older people who live at home could also have the problems with basic daily life such as cooking, visiting toilet and shower (Mustakallio, 2015). Most of the older people in Bangladesh suffer from some basic human problems, such as poor financial support, senile diseases and absence of proper health and exclusive and negligence, deprivation and socioeconomic insecurity (Rhaman, 2000).

In traditional Bangla deshi society, the old parents generally lived with their male offspring and depended on them in meeting their needs. However, the traditional joint families have started splitting into nuclear and small size families and at the same time the situation of elder people is changing extremely. Where the majority of older people like to live at home and receive care at community settings; most of the families cannot provide care and lend a hand to older one (Hautsalo et al., 2012). This study investigated such a matter in the newly constituted Rangpur City Corporation congenial to robust social relations. This study focuses on these types of issues as well as newly emerging factor related to elderly people’s physical and mental health. Some of the old people live with children and they get help from younger family members. However, who live alone or with the spouse might require more help than old people who live with children (Mustakallio, 2015). In the last stage of life, the elderly people lose their capacities for self care. However, this is the period of diminishing social contact and domestic support. In many countries isolated older people make inexplicably heavy claims on the state affairs while this study seeks to find such type of issues in the household level. The objectives of the study were to know the socio-demographic and economic status of the elderly people, to explore the aspects of their living atmosphere (both physical and mental) and to identify the role of the family members to the elderly people in the household level.

Materials and methods

This study was carried out in the purposively selected three wards (no.-23, 24 & 25) of Rangpur City Corporation, Bangladesh. The survey method was used to collect data from both male and female aged 60 and above. The survey was conducted between June and August, 2018. Total population of the study area was 600 (according to National Census, 2011). Random sampling technique was used to follow up the study. By using Cochran's Modified Formula, 235 elderly people were selected as a sample based on 95 percent confidence interval. This was done in the following way-

\[ n_0 = \frac{Z^2pq}{e^2} \]
Where: \( e \) is the desired level of precision (i.e. the margin of error), \( p \) is the (estimated) proportion of the population which has the attribute in question, \( q \) is \( 1 - p \). The \( z \)-value is found in a Z table.

\[
\frac{n}{1 + \left( \frac{n_0 - 1}{N} \right)}
\]

Modified Cochran Formula for Sample Size Calculation; Here, \( n_0 \) is Cochran’s sample size recommendation, \( N \) is the population size, and \( n \) is the new, adjusted sample size.

A structured interview schedule was developed and followed for data collection from the field. A pilot survey was conducted for a period of two weeks to make reliable and concise questions and for this purposes data were collected from 20 elderly people. Modifications were possible to do as indicated by the pilot study. Thereafter, data were collected from 235 respondents (114 male and 121 female). After completing data collection, all the data were coded and entered into a database system using software named Statistical Package for the Social Sciences (SPSS). Both descriptive and inferential statistics were used for Univariate and Bivariate analyses.

Results

**Socio-demographic and economic profile of the elderly people:** Table 1 shows that more than 77 percent respondents were aged between 60 to 69 years whereas only 20 percent of them were between 70 and 89 years with an average age of 66.22 and the standard deviation of age was 7.54. In the case of marital status, more than 60 percent were married whereas only 11.4 percent were divorced and 27.7 percent were widow. More than 59 percent respondents were illiterate whereas only 9.8 percent of higher secondary and tertiary level constitutes the literate portion. From occupational structure, it is seen that 20.9 percent respondents were involved with agricultural activities, 18.7 percent were housewife, 17.9 percent were teacher, about 16.6 percent were day labor, 12.3 percent were businessman and 13.6 percent of them were service holder. More than 43 percent of the respondents had one to three children whereas 40.9 percent had four to six children, 7.6 percent of them had more than 7 children with an average of 3.50 along with the standard deviation of 1.98 and even some (8.1 percent) had no children at all. More than 81 percent respondents’ family earning members were between 1 and 2 whereas 11.5 percent had between 3 and 4 earning member of the family and there were no earning member in some cases.

Table 1. Socio-demographic and economic information of the elderly people

| Categories | N   | Categories | N (%) |
|------------|-----|------------|-------|
| Age ( year)|     | Gender     |       |
| 60-69      | 182 | Male       | 114(48.5) |
| 70-79      | 36  | Female     | 121(51.5) |
| 80-89      | 11  |            |       |
| 90+        | 6   |            |       |
| Mean- 66.22|     | Std. Deviation-7.54 | |
| Religion   |     |            |       |
| Islam      | 214 |            | 1001-2000 |
|            | 21  |            | 2001-3000 |
| Sanatan    |     |            | 3001-4000 |
| Marital status| |           | 4001-5000 |
| Married    | 143 |            | 5001+    |
| Widow      | 68  |            | 47(19.9)  |
| Mean- 3281.33 |   | Std. Deviation- | |
### Socio-economic involvement of the elderly people:

Data presented in Table 2 shows that income source of a large number of family was job and some depended on business. They could take the meal timely (87.7 percent) whereas they had their favorite food menu (24.7 percent) regularly. In addition, they had the addiction to betel leaf (43.8 percent), tea (24.3 percent), cigarette (14 percent) and tobacco (17.4 percent). They were found in fairly health condition. 79.1 percent of them had no bank account. 48.1 percent elderly could not wear clothes according to their choice and it was more surprising that they were to wash their clothes by themselves (29.8 percent). Being aged, most of the respondents had observed some changes i.e. problems of showing respect (26.8 percent), problems of working properly (51.5 percent) and found themselves to be burden (21.7 percent) in the family. In the case of financial support, more than 81 percent people got help from their son although a small portion of support came from daughters and wives. Respondents of this study needed not to seek permission to go outside (41 percent) and even to purchase (51.9 percent) anything.

| Table 2. Socio-economic involvement of the elderly people |
|---------------------------------|----------------|----------------|
| Variables                       | N (%)          | Variables      |
| Disability                      | Bank account   | Source of financial help |
| Yes                             | Yes            | Son            |
| 18(7.7)                         | 49(20.9)       | 192(81.7)      |
| No                              | No             | Daughter       |
| 217(92.3)                       | 186(79.1)      | 26(11.1)       |
| Habits                          | Income source of family |
| Nothing                         | Farming        | Feeling when grand children want money |
| 1(0.4)                          | 47(20.0)       | Give           |
| Tobacco                         | Business       | 172(73.2)      |
| 41(17.4)                        | 60(25.5)       | Become angry   |
| Betel leaf                      | Job            | 10(4.3)        |
| 103(43.8)                       | 75(31.9)       |                |

*Calculation for this study - As N=600 Then n=385 / (1+( 384 / 600 )) =385/1+0.64=385/1.64= 234.75≈235*
In case of health treatment, 53.6 percent elderly were treated carefully during illness whereas a few numbers of them (9 percent) were tactically avoided from that kind of situation. More than 45 percent respondents faced problems of discrepancy in decision making, 33 percent were followed by problems of continuing food habit and 21.7 percent faced teenagers' disagreeability.

**Socio-demographic characteristics and the roles played by the elderly people:** Table 3 shows that the age group between 60 and 69 played a vital role in resolving the family problems. They sometimes kept themselves silent even going out of home when their family was in conflict. From gender perspectives, male respondents came forward to mitigating their family problems but females played their pivotal role in keeping themselves silent. A positive association can be drawn from the relationship measurement \( p < 0.002 \) regarding the issues. Religion is also another factor tended to have a close relationship when their family was in conflict \( p < 0.016 \).

Table 3. Socio-demographic characteristics and the roles played by the elderly people when their family was in conflict

| Characteristics                  | Role played when family was in conflict | \( \chi^2 \) (df) | \( p \)- value |
|----------------------------------|----------------------------------------|------------------|----------------|
|                                  | Try to mitigate                        | Keep silent      | Go out of home |
| Gender                           |                                        |                  |                |
| Male                             | 91 (79.8%)                             | 17 (14.0%)       | 7 (6.1%)       | 12.165 (2)   | .002*       |
| Female                           | 72 (59.5%)                             | 39 (32.2%)       | 10 (8.3%)      |                |             |
| Religion                         |                                        |                  |                |
| Islam                            | 154 (72.0%)                            | 45 (21.0%)       | 15 (7.0%)      | 8.280 (2)    | .016**      |
| Sanatan                          | 9 (42.9%)                              | 10 (47.6%)       | 2 (9.5%)       |                |             |

* Significance at 1% and ** significant at 5% level of confidence
**Occupation and suffering from diseases:** Table 4 shows that elderly people from farmers category (28.6 percent) suffered from fever and cough more than housewife category (25 percent). The Pearson Chi-Square test reveals that there was a relationship between the occupation of aged peoples and their sufferings from various diseases ($p<0.000$). In the second segment it can be drawn that son of aged people (52.8 percent) played a huge role to support parents who suffered from fever &cough. So, it can be concluded that treatment toward the elderly people by the family head had an impact on the sufferings from diseases ($\chi^2=25.115$, df=15 & $p<0.048$).

Table 4. Suffering from diseases by occupation

| Occupation    | Diabetes | Fever & cough | Pressure | Pain | Asthma | Eye problem |
|---------------|----------|---------------|---------|------|--------|-------------|
| Housewife     | 9(20.5%) | 11(25.0%)     | 7(15.9%)| 11(25.0%) | 2(4.5%) | 4(9.1%)     |
| Farmer        | 8(16.3%) | 14(28.6%)     | 4(8.2%) | 9(18.4%) | 9(18.4%) | 5(10.2%)    |
| Teacher       | 6(14.3%) | 7(16.7%)      | 2(4.8%) | 8(19.0%) | 9(21.4%) | 10(23.8%)   |
| Day labor     | 8(20.5%) | 7(17.9%)      | 7(17.9%)| 7(17.9%) | 4(10.3%) | 6(15.4%)    |
| Business      | 7(24.1%) | 5(17.2%)      | 1(3.4%) | 6(20.7%) | 5(17.2%) | 5(17.2%)    |
| Service holder| 3(9.4%)  | 9(28.1%)      | 5(15.6%)| 6(18.8%) | 5(15.6%) | 4(12.5%)    |

Pearson Chi-Square ($\chi^2=22.59$) df=25 p-value=0.000*

* Significance at 1% and **significant at 5% level of confidence

**Religion and acceptance of giving money from daughter in law's side:** Religion in human society always imposes and draws a line on its people. Data presented in Table 5 asserts that daughters in law (65.4 percent) of Muslim community accepted giving money to their fathers in law and obviously there exists a positive relations (both from Chi-Square and Fisher's Exact Test) articulated by the religion in the society.

Table 5. Religion of the elderly people and acceptance of giving money from daughter in law’s side

| Religion | Acceptance of giving money from daughter in law’s side | $X^2(1)$ | p-value | Fisher's Exact Test |
|----------|-------------------------------------------------------|---------|---------|---------------------|
|          | Yes | No | Total |                     |         |                   |
| Sanatan  | 8(38.1%) | 13(61.9%) | 21(100.0%) | 6.124(1) | .013** | .018** |
| Islam    | 140(65.4%) | 74(34.6%) | 214(100.0%) |                     |         |                   |
| Total    | 148(63.0%) | 8(37.0%) | 235(100.0%) |                     |         |                   |

** Significant at 5% level of confidence

**Multi-nominal regression**

**Relationship of expenditure with income, occupation, property and earning member:** This model (Table 6) enumerates an overall effect of expenditure of the family on the income, occupation and earning member of elderly people. Both income (where $F=10.172$ with df=27 and $p<0.000$) and occupation (where $F=3.213$ with df=5 and $p<0.016$) had a positive effect on the expenditures of the elderly. Property and the position of the family (as a head) were included in subjects effects (as $F=3.523$ with df=3 and $p<0.024$). Finally both income and occupation were found in the subject effects (where $F=5.975$ with df=11 and $p<0.000$). 95 percent of the variables can be explained by the
model where effects of income, occupation and property of the respondents were found on their expenditure.

Table 6. Effect of income, occupation, property and earning member on the expenditure

| Dependent variable: source of expenditure | Tests of Between-Subjects Effects |
|-------------------------------------------|----------------------------------|
| Corrected model                           | Type III sum of squares          |
|                                           | df                      | Mean square | F       | Sig.    |
| Intercept                                 | 3.17                    | 1           | 3.17    | 1.03    | 0.000*  |
| Occupation                                | 4.91                    | 5           | 9824591.35 | 3.21    | 0.016** |
| Earning member                            | 1.89                    | 5           | 33780030.57 | 1.23    | 0.311   |
| Income                                    | 8.39                    | 27          | 3.11    | 10.17   | 0.000*  |
| Property and family head                  | 3.23                    | 3           | 1.07    | 3.52    | 0.024** |
| Occupation and earning member             | 3.43                    | 5           | 6875111.53 | 2.24    | 0.069   |
| Occupation and income                     | 2.01                    | 11          | 1.82    | 5.97    | 0.000*  |
| Error                                     | 1.19                    | 39          | 3058226.49 |        |        |
| Total                                     | 1.30                    | 235         |         |        |        |
| Corrected Total                           | 2.81                    | 234         |         |        |        |

\[ a. \text{R Squared} = .958 (\text{Adjusted R Squared} = .746) \]

* Significance at 1% and **significant at 5% level of confidence

**Discussion**

Family provides care to elderly people to assist and help in variety of physical tasks such as bathing, dressing, giving medication and feeding those (Morgan & Kunkel, 2006). More than half of the elderly people's ages in this study were between 60 and 69 years; most of them were married and Muslim. In addition, their illiteracy rate was high. They were not involved with any kind of job thus a great number of elderly people had no income. Though they had one to two earning family members, they had to pass their life with economic crisis. Elderly people suffer mostly from loneliness (Tomstad et al., 2012) but in this study most of the elderly people had one to three children in their family; so they did not face such kinds of loneliness. In traditional Bangladesh society, older people are involved in some sorts of addiction like smoking which may take shape in adolescence and early adulthood, tend to continue into old age, should be a concern for the family members. Because such types of habit exerts a risk on their aged health. Addiction to betel leaf was found highest among the studied elderly.

The most specific need of older patients is often the multiple need of care (Andersson et al., 2011). In urban and city corporation areas, it is really difficult to look after the older members accordingly as most of the members of the family are to keep themselves in some routine works. However, at the later stage of life, old people cannot control themselves in many ways such as food habit. In this study, they took their meal timely and even sometimes they got their favorite food items. Though this study area is impoverished in terms of development compared to other regions of Bangladesh, it was a matter to be noticed that a great number of elderly people were found in a good health condition in their respective household. Though a large number of the elderly people's family income source was service-based, they did not have any bank account for the economic activities.

In a study, invariably all the elderly people felt that though they contribute to the total family income, their words in many occasions were being ignored; they have no control over the money (Vijayanchali & Gandhi, 2012). The members of the family in this study took the consent of elderly to sell any property if needed. Washing clothes in the later stage of life is thought to be
difficult and inhuman but this study found such cases. As the older people have to depend on others where economic affairs have a mighty effect and it is true that Bangladesh government has not provided economic security so as to needed. Almost in all occasions the elderly were not being consulted and informed and hence they were depressed and being with the attitude of ignorance or negligence (Vijayanchali & Gandhi, 2012). Respondents of this study asserted that their families consulted with them in such a situation.

Elderly people generally do not desire to be dependent and do not accept help from others but due to decline in the health status, they reached in such a condition where support and help from others were needed (Brossoie, 2013). Adult children, particular sons, are considered to be the main source of security and economic support to their parents, particularly in the time of disaster, sickness and old age (Cain, 1986). The main source of financial support for the elderly in this study was their sons’ income. Like other family members, children also gave assistance to their elderly (Brossoie, 2013). Elderly people gave money to their grand children when they were asked. Most of the family of the elderly had some problems i.e. family members did not respect and did not give time (Tajrin & Hossain, 2018). For this study the same behavior toward the elderly was appraised i.e. problems of showing respect, discrepancy in decision making.

Loneliness, social exclusion and family rejection comprise the equality of life of elderly people (Sousa & Rodrigues, 2009) and living alone is a risk factor for feeling poor among the elderly people; they were 2.5 times more likely to perceive themselves as poor compared to those not living alone (Jerliu et al., 2012). Elderly people do not like to stay at home all day long. They like to move outside their home for being refreshed. Moreover, in city corporation areas, there are some problems of free movement for elderly people. For extra care, family does not let them to be out due to their physical imbalance. In most of the cases, they needed to seek permission to go outside home but in case of purchasing something it did not require permission in the household level.

One of the great and responsible manners expected to the family members of elderly people is the nature of medical treatment provided by them in the household level. Elderly care is important part in healthcare. Though, elderly care has been the responsibilities of family members, elderly people in modern societies are mainly alone at home or they are cared in elderly home. The main reason for such situation includes decreasing family size, two-career family and increased life expectancy (Ghimire & Gurung, 2014). Nature of treatment during their illness was found 'carefully treated'. Older people faced the problems of discrepancy in taking decision in the family and even they could not work properly in the family environment. In finding the relationship between other family member and the elderly in terms of 'coming closer with', it was assessed that considering age and educational attainment, they came closer in their danger time or when faced with monetary problem or in case of taking decision. The older people were respected by all and enjoyed important social position in the extended household. In our traditional society, elders are to solve the family disputes and their successive rates are praiseworthy. In this context, gender and religion of the elderly people played a vital role in mitigating the family conflict.

In Bangladesh elderly people mostly suffer from various complicated physical diseases and the number is increasing gradually but the services provided through government hospitals are inadequate compared to the demands. Moreover, suffering from various diseases especially in the later stage of life is very common sight both for the rural and urban areas even for developing and developed countries. The aging process reduces physiological capacity, which makes the elderly more susceptible to many health threats (Lepeule et al., 2014). This study revealed a positive relation between older people’s occupation and suffering from various diseases

In Bangladeshi society, in some regions, it is seen that giving money to the older people especially to the fathers in law cannot be tolerated as a normal one but in this study, it was carried out
that their daughters in law did not show any kind of negation regarding the issues. Both chi-square and fishers exact test proved it. Occupation, religion and educational attainment were also valued in terms of the matter but not venerable by statistical calculation.

Wide scale study over the country is needed to realize the actual situation of the elderly. Proper respect should be shown and quality time should be given to them at the household level. Special measures can be taken against the elderly people negligence especially during illness. Fundamental changes in attitude and treatment towards the older people can remove these discrepancies from family. The vulnerable issues of the elderly people found in this study at household level should be addressed into the national policy of elderly people in Bangladesh.

Conclusion
The numbers of elderly people are increasing over the globe rampantly competing with the development of medical science and technologies. Families are also starting to breakdown and the role of the family members to the elderly is being observed questionable. As the older remains deserted, neglected and burden-like in the modern family, their vulnerable socioeconomic condition should be venerable. They require a physical and mental support from the household level to avoid elderly complications. The role of the family members should therefore be vivid and flamboyant though members of the family are often busy in outside works. Bangladesh government has taken a historical and distinguished initiative regarding older peoples and passed laws to look after them in the final stage of life. This initiative should be further nourished by the government so that the members of the respective family keep their elders (caring, family support) always in mind. With the passage of time, the concept of elderly nourishment and caring must be proper, demand oriented and self-esteemed. Otherwise, it will not be possible for the society to be serene, advanced and developed.

References
Andersson, L., Burman, M. & Skär, L. (2011). Experiences of Care Time during Hospitalization in a Medical Ward: Older Patients’ Perspective, Scandinavian Journal of Caring Sciences, 25(4); 646-652.

Andersson, M., Hallberg, I. R. & Edberg, A. (2008). Old People Receiving Municipal Care, Their Experiences of What Constitutes a Good Life in the Last Phase of Life: A Qualitative Study. International Journal of Nursing Studies, 45(6); 818-828.

Banglapedia, (2006) Aging, National Encyclopedia of Bangladesh, Asiatic Society of Bangladesh, Dhaka

Bayram, Z., Öksüz, A., M., Türk,Y.,A. & Sağsöz, A. (2011). The Problems of the Elderly in the Use of Public Space and Their Expectations: A Pilot Study in Trabzon (Turkey), International Journal of Academic Research, 3(3);165-173.

Bode, C., Taal, E., Westerh of, G. J., Gessel, L. & Laar, M. A. (2012). Experience of aging in patients with rheumatic disease: a comparison with the general population. Aging & Mental Health, 16(5); 666-672.

Brossioie, N. (2013). Social Gerontology. In the book Robnett, Regula H & Chop, Walter C. Gerontology for the Health Care Professionals, Jones and Bartlett Publishers, USA, 17-42.

Cain, M (1986). The consequences of reproduction failure: Dependence, mobility, and mortality among older people of rural South Asia. Population Studies, 40: 375-388.

Gurung, S. & Ghimire, S. (2014). Role of Family in Elderly Care (Bachelor's Thesis), Degree Programme of Nursing, Lapland University of Applied Science, Kemi, USA
Hautsalo, K., Rantanen, A. & Astedt-Kurki, P. (2012). Family functioning, health and social support assessed by aged home care clients and their family members. *Journal of Clinical Nursing*, 22(19-20); 2953-2963.

Hossain, M. I., Akhtar, T. and Uddin, M. T. (2006). The elderly care services and their current situation in Bangladesh: An understanding from theoretical perspective. *Journal of Medicine and Society*, 6(2); 131-138.

Jerliu, N., Toçi, E., Burazeri, G., Ramadani, N. & Brand, H. (2012). Socioeconomic conditions of elderly people in Kosovo: a cross-sectional study. *BMC Public Health*, 12:512.

Läidmäe, V., Tammsaar, K., Tulva, T & Kasepalu. (2012). Quality of Life of Elderly in Estonia, *The Internet Journal of Geriatrics and Gerontology*, 7(1).

Lepeule, J., Bind, M.C., Baccarelli, A.A., Koutrakis, P., Tarantini, L., Litonjua, A., Sparrow, D., Vokonas, P. & Schwartz, J. D. (2014). Epigenetic Influences on Associations between Air Pollutants and Lung Function in Elderly Men: The Normative Aging Study. *Environmental Health Perspectives*, 122(6); 566-572.

Mustakallio, S. (2015). The experience of elderly people to cope with their lives at home: A literature Review (Bachelor's Thesis). Degree programme of nursing, Lapland University of Applied Science, Kemi, USA.

Morgan, L. A. & Kunkel, S. R. (2006). In *The Book Aging, Society and the Life Course*, 5th Edition, Springer Publication, New York.

Rhaman, A.A.S.M (2000). The characteristics of old age in Bangladesh. *Bangladesh Journal of Geriatrics*, 37; 14-15.

Sousa, L. & Rodrigues, S. (2009). Linking Formal and Informal Support in Multi-problem Low-Income Families: The Role of the Family Manager, *Journal of Community Psychology*, 37(5); 649-662

Tajrin, M. S., Hossain, B. (2018). The Socio-Economic Condition of the Physical Labor of Lower Class Older People in Rural Areas of Bangladesh, *Global Journal of Arts, Humanities and Social Sciences*, 6(1); 70-87.

Tomstad, S. T., Soderhamn, U., Espenes, G. A., and Soderhamn, O. (2012). Living alone, receiving help, helplessness, and inactivity are strongly related to risk of under nutrition among older home-dwelling people. *International Journal of General Medicine*, (5):231–40.

Vijayanchali, S. S. and Gandhi, E. A. (2012). Socio-Economic and Health Status of Elderly *Journal of Research, Extension and Development*, I(3), 177-183.

World Health Organization (2011). Global Health and Ageing. US National Institute of Ageing, www.nia.nih.gov/sites/default/files/global_health_and_aging.pdf.