Health status of older people in slums of Bangladesh: A cross-sectional study in Khulna city corporation

Jahan Nusrat
Khulna University
Chandra Dipika
Khulna University
Polly Afsana
Khulna University
Akter Shahinur
Khulna University
Heme Morsheda Akter
Khulna University
Siddiqua Laila
Khulna University
Rahman Rumana
Khulna University
Mohsin Kaniz Fatima
Khulna University
Hossain Md. Tanvir (tanvirku05@soc.ku.ac.bd)
Khulna University

Research Article

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Abstract

Background

The world is experiencing a demographic change – an explosion of the elderly population. However, the growing elderly population also poses a significant challenge for the government to ensure universal healthcare as people are physically and mentally vulnerable, especially in old age. This study, therefore, aimed to explore the health problems of the elderly among urban slum dwellers and identify the associated risk factors.

Methods

This cross-sectional study was carried out in four slums of Bangladesh's Khulna city corporation (KCC). Data were randomly collected from 636 elderly individuals by administering a semi-structured interview schedule. Data were analyzed using IBM SPSS Statistics (version 26), and both bivariate [Pearson's Chi-square (χ^2) and Yate's continuity correction ($\chi^2_{Yate's}$)] and multivariate (multivariable logistic regression) tests were executed.

Results

Findings indicate that 80 or above aged people were more prone to infirmity (AOR = 2.263, $p < 0.01$) than their younger counterparts, while people with relatively more education (AOR = 0.640, $p < 0.05$) and better income (AOR = 0.503, $p < 0.10$) were less likely to be sick, respectively. Surprisingly, married elderly was also found to be sick (AOR = 2.443, $p < 0.05$) more than widow/divorced older adults. Meanwhile, older people capable of doing daily activities were prone to health problems (AOR = 1.077; $p < 0.10$), whereas people with higher life satisfaction were less vulnerable to sickness (AOR = 0.858; $p < 0.01$).

Conclusion

To ensure universal healthcare coverage, particularly in urban areas and their slums, improving the financial and social protection mechanisms for the older people in Bangladesh is strongly recommended. Besides, policymakers should also emphasize family cohesion to support the elderly emotionally and financially when they are vulnerable.

Background

The population of Asia is expected to increase to about 5.9 billion by 2050, where the population over 65 will constitute approximately 1 billion [1]. Though this aging population represents medical advancement along with social and economic progress over the past centuries, it poses significant challenges to the governments, particularly in the health, pension, and employment sectors [2]. Bangladesh, one of the most populous countries in the world, is experiencing a demographic transition as life expectancy at birth has risen due to a progressive decline in crude birth rates, death rates, and fertility rates [3]. Although most of the elderly live in rural Bangladesh [4], rapid urbanization, climate change, and growing poverty force people to migrate to cities to pursue better economic opportunities and living conditions [5]. There has been a six-fold increase in the population living in urban settings in the past 40 years [5]. Aged individuals constitute 8% of the population in Bangladesh; it is anticipated that the elderly population will rise to 11.5% in 2030 and 21.5% by 2050 [6]; thus, giving the nation far less time to deal with the increasing elderly population [7].

With the rites of passage, aged individuals lose productivity while becoming reliant and vulnerable physically, psychologically, and economically [8]. They face several challenges, including social, mental, medical, and economic problems [9], and these problems increased further with a poor implication of the social safety net, together with the financial crisis, health problems, lack of emotional support, depression, and social isolation [8]. The situation of the elderly further deteriorates for those living in urban slums in developing countries. Slums are the areas of concentrated

vulnerability featured with a higher density of population, poor infrastructure, less housing facilities, polluted environment, and growing poverty [10]. Among the elderly in slums, various health problems are common, including visual and auditory impairment, gastrointestinal diseases, rheumatic pain, asthma, and so on [11-13]. Besides, anxiety and depression are notable diseases among the elderly [14].

Several factors affect the health of the elderly. The health status and nourishment of the elderly can be determined by the e availability of nutritious food, safe water, proper sanitation facilities, and upholding hygienic practices [15]. Since health practice shapes their health status, urban slum residents were found to have poorer health conditions than other urban residents [10]. The lifestyle of individuals in slums comprising their daily habits, smoking, diet pattern, alcohol consumption, and obesity management is correlated with the health condition of the aged [16]. Educational attainment of the elderly was found to have an important impact on health conditions [12]. Interestingly, gender construction of the slum elderly tends to make a difference in their health status. The female elderly population encounter more depression-related pain than their male counterparts [14]. Moreover, the mental and physical health of the elderly is linked with loneliness. Loneliness can cause undernutrition which leads to weight loss and anemia. Becoming divorced or widowed increases loneliness and depressive disorders among older people [17].

In Bangladesh, there are several studies have been conducted [13, 14, 17] that brought out some of the health problems of the elderly in Bangladesh. However, the studies were limited to rural and urban areas and very few studies in Bangladesh were done solely on the health conditions of the aged population living in slum areas. The present study explored the health problems of the elderly among marginalized groups who lived in urban slums aiming at identifying their health situations and finding out the indicators affecting the conditions.

Materials And Methods

Study settings and participants

This cross-sectional study was carried out in the Khulna City Corporation (KCC) area of Khulna district; a southwestern divisional headquarter in Bangladesh. Located between 24°45’ and 24°54’ north latitudes and between 89°28’ and 89°35’ east longitudes, KCC covered an area of 45.7 Km^2 and consists of 31 wards, and it is the fifth-largest city corporation in Bangladesh in terms of concentration of slums (1,134) and slum dwellers (79,827 people in 40,015 households) [18-20]. Moreover, a significant percentage of older people (7.34%) live in these urban slums [21]. therefore, certain attributes were specified to identify the households with older people in the slums of KCC to facilitate a face-to-face interview: i.e., (a) a household with at least one resident who must be an aged people in the age bracket of 60≥ (above) years; (b) s/he must be living in the selected slums of KCC area; (c) for at least five consecutive years; (d) with or without a spouse, but married at least once; (e) staying with their family or their own. Considering the criteria, the participants were identified using a door-to-door census following a two-stage area probability sampling approach. At the initial stage, three *Thana* – an administrative unit in the local government system in Bangladesh – i.e., Khulna *Sadar*, Khalishpur, and Sonadanga, were selected considering the concentration of slums; in the second stage, four slums were selected based on the number of slum dwellers. After a week-long census by a group of ten data enumerators, 1,104 older people were identified from 2,167 households within the selected areas. Later, 636 older people were interviewed by administering an interview schedule, proportionate to the geographical location as well as the concentration of the population.

Ethical issues

The research was performed in accordance with the Declaration of Helsinki, and the ethical clearance committee of Khulna University, Bangladesh, approved this study (Reference No. KUECC – 2022/06/02). In this study, informed

consent was obtained from all the participants, i.e., the elderly slum dwellers, and they were notified about the purpose of the study, and they were assured by the data enumerators about anonymity and confidentiality of the information. The participation was voluntary, and there was no incentive for the participants. Moreover, the participants had the right to revoke their participation and shared information without prior justification.

Procedures

A semi-structured interview schedule (IS) was developed after carefully reviewing relevant literature considering the research objectives. The IS was divided into three mutually inclusive sections, e.g., the first section focused on socio-demographic information, including age, sex, religion, occupation, income, beneficiary/non-beneficiary status in cooperatives, recipient/non-recipient of social assistance, the second section comprised information regarding the non-monetary wealth (NMW) of the households [22], the ability to manage activities of daily living (ADL) [23] and satisfaction with domain of life (SDL) [24], whereas the second section highlighted the health status of participants, including ailment, healthcare status, care-seeking behavior and so on. Following the development of IS, it was verified by a pre-test on 20 elderly slum dwellers to make sure of its adequacy to extract relevant information from the participants, minimize redundancy and non-response rate, as well as provide first-hand experience for the data enumerators to curb the timing of the interview [25]. It is important to note that the researchers extensively trained the data enumerators for a week through classroom-based lectures, role-playing, and practice sessions on the content of the IS and the techniques to establish rapport and extract information. Data were collected for three months, starting in July, and ending in September. Later, to ensure standardized data collection, twenty households were re-surveyed randomly by the researchers to identify inconsistencies and re-visited families with the data enumerators to confirm the highest data quality.

Measures

Socio-demographic information

Some specific socio-demographic factors, including age, sex, education, occupation, income, marital status, were considered as the predictors of health status, e.g., ailment, of the older people living in slums of KCC areas.

Indices

An index of non-monetary wealth (NWM) was measured considering different dimensions, including ‘elements of comfort’ – television, refrigerator, ceiling fan, stand fan; ‘communication and comfort’ – mobile, bicycle, rickshaw, van, easy bike; ‘consumption of water’ – potable, protected and unprotected – for primary, secondary and tertiary us; ‘housing structure’ – floor, walls, ceiling; ‘energy consumption’ – electricity, solar power and kerosene/wood/leaf – for power and cooking; ‘sanitation facility’ – unitary or common, modern or tradition [22]. The summation of the response for each item was added and an index of non-monetary wealth was developed. Likewise, an index of activities of daily living (ADL) was used to assess the physical capacity of older people to execute certain daily activities, including bathing, personal hygiene, medication, chores with and outside of the household or their dependence on others [23], and the summation of each item led to the ADL index. Finally, the satisfaction of domains of life (SDL) assessed the satisfaction of older people regarding their physical health, economic status, relationship with spouse and children as well as their overall life [24]. SDL was measured in a five-point Likert scale, and summation of each item resulted in the SDL index.

Health status (ailment)

Health status was measured by a dichotomous response – 'No = 0' and 'Yes = 1' – for the question – 'did you suffer any kind of ailment or physical problem in the last one month?' This dichotomous response was considered as the dependent variable for this study.

Analysis

Data were analyzed in two consecutive staged using IBM SPSS Statistics (version 26). At first, descriptive statistics, including frequency and percentage analysis was used followed by Pearson's Chi-square (χ^2) and Yate's continuity correction ($\chi^2_{Yate's}$) to explore the association between health status (ailment) and the socio-demographic factors. Finally, multivariable logistic regression was executed considering the variables found statistically significant in Pearson's Chi-square and Yate's continuity correction test. Findings were shown using the crude odds ratio (COR) and the adjusted odds ratio (AOR) with 95% confidence interval at a 10% level of significance.

Results

Descriptive information of the participants and their association with ailment

Table 1 illustrates the basic characteristics of the participants. Among the participants, more than half were in their sixties (51.7%) and female (51.3%). Around 30% had primary (22.5%) and secondary (5.5%) education, while the rest were uneducated. Nearly 54% of the participants were physically disable or housewife with no income, whereas more than 40% were widow/widower (36.3%) and divorced/deserted (6.8%). It is also evident that only one in four of the participants received the government aided social assistance and less than 15% were involved in any kind of social cooperatives for financial support.

Table 1 further shows the association between socio-demographic information and health status of the older people living in slums of Bangladesh. The findings suggest that the participants younger than 70 years of age reported more ailment than their older counterparts ($\chi^2 = 10.521$, $p = 0.01$, $\varphi_c = 0.129$), whereas female older people were more sick than male older people ($\chi^2_{Yate's} = 3.175$, $p = 0.10$, $\varphi = -0.074$). It is also apparent that older people with no education suffered more sickness than people with primary or secondary education ($\chi^2 = 7.621$, $p = 0.05$, $\varphi_c = 0.109$). Likewise, people with no income experienced higher sickness than people engaged in income generating activities ($\chi^2 = 8.790$, $p = 0.05$, $\varphi_c = 0.118$). Interestingly, married older people were more susceptible to ailment than divorced/deserted people ($\chi^2 = 12.960$, $p = 0.01$, $\varphi_c = 0.143$), while recipient of government social assistance were less vulnerable to sickness ($\chi^2_{Yate's} = 5.053$, $p = 0.05$, $\varphi = 0.093$)

Multivariable logistic regression

From the Pearson's Chi-square, the significant factors were retained to present the unadjusted effects of each independent variable. Moreover, the indices were also included in the multivariable logistic regression analysis (Table 2). The adjusted effects of the explanatory variables were measured along with a 95% CI after controlling effects of all other variables. The findings show that age, education, income, marital status, ADL index as well as SDL index were the key predictors of ailment among older people living in slums of KCC area of Bangladesh. Results revealed that people with more than 80 years of age had higher adjusted odds of getting sick (AOR = 2.263; 95% CI, 1.239 – 4.130) than those

below the age of 70 years. Among the older people, participants with primary education were less likely to suffer from sickness (AOR = 0.640; 95% CI, 0.424 – 0.968) than people with no education. Likewise, older people earning more than BDT 6,001 were less susceptible (AOR = 0.503; 95% CI, 0.238 – 1.065) to ailment of any kind compared to people earning less than BDT 6,000 or with no income. Surprisingly, married people were more likely to be sick (AOR = 2.443; 95% CI, 1.201 – 4.969) than widow/widower and divorced/deserted. Meanwhile, older people capable to do daily necessary activities were prone to health problems (AOR = 1.077; 95% CI, 0.988 – 1.173), and people with higher satisfaction regarding life were less vulnerable to sickness (AOR = 0.858; 95% CI, 0.911).

Discussion

The demographic structure over the world has been undergoing a rapid change as well as witnessing the numerical growth of elderly people and Bangladesh is not exception in this case [2, 13]. The major concerning issue in recent years for elderly, however, is health vulnerability and insufficient access to healthcare services due to several causes like natural calamities, financial crisis, lack of living arrangements and well facilitated infrastructure, especially in urban slums [3, 10]. As the healthcare seeking behavior of the elderly determines their status of health, so the present study tries to explain the health status of the elderly in urban slums of KCC in Bangladesh analyzing the association between socio-demographic variables and status of infirmity among the older people. In general, the present study found that age, education, monthly income, marital status, ADL, and SDL had significant influence on health status of the older people at slums of Khulna City Corporation area in Bangladesh.

The present study found that the oldest aged were two times more susceptible to illness than the younger older. Studies conducted in Indonesia [26], India [27] and China [28] also noted that with the growth of age, the immunity of the older persons slow down gradually that eventually increased their health risk, frequency of medication and medical treatment. The reasons behind the regularity of ill health of the elderly could lie in the facts like sufferings from chronic diseases, living arrangement and availability of healthcare access as well as services in slums. Another cause might be financial limitation as the senior citizens might not get any type of health allowance, and in most cases, they have to rely on family members for medical expenditure. As a result, the older urban slum dwellers were reluctant to utilize the modern health care services and choose the alternative ways to recover sickness [29, 30]. On the other hand, some previous studies illustrated negative association between age and health status of the aged people as physical fitness depended mostly on sound and good health not on age whereas people of any age could suffer from morbidity [31-33].

The findings of the study also found a significant relationship between education and ailment of the elderly in urban slums which reflected a similar finding in the works of Javadzade, Sharifirad [34] and Srivastava and Gill [35]. These studies pointed out that education enhanced health consciousness among older people and increased the capacity to seek healthcare services appropriately. The possible reason might be older people who had completed at least primary education more likely to seek institutional healthcare facilities relative to traditional cure system. But surprisingly a study in India revealed a negative association between years of schooling and marginal self-rated health outcome for elderly of both men and women despite having better education [36]. Another study found that participants with higher education suffered from higher levels of mental and physical distress in Portugal [33].

In this study it was observed that elderly people, earning above more than others, were less likely to suffer from sickness compared to those who had no income or earned less money. Prior studies showed that older persons with income could take decisions regarding their health and needed not to depend on any other person about the choices for health as well as safeguarded their health condition [28, 37, 38]. Likewise, older person specially widows or deserted who did not live with their son could not avail the expenses of food, nutrition and healthcare facilities [15], which made clear that having income had relationship with health status of the aged. On the contrary, some other studies mentioned that higher level

income could improve the physical and mental health but it also increases the prevalence of alcohol consumption that in turn deteriorates the health status of elderly people [39, 40].

It was also found in the current study that marital status had significant association with the health condition of the aged whereas married elderly was more likely to suffer from sickness than divorced or deserted or widow or widower elderly. Consistent with the result of the study, Anwar and Asif [41] noted that due to familial responsibilities married older persons could not take care of themselves. The possible reason could be that in developing countries like Bangladesh, married older people had more familial distress than divorced or deserted and widow or widower aged persons. Consequently, married aged persons had more susceptibility to sickness. In contrast, it was also evident that threat of suffering from infirmity was quite common among the elderly of separated or divorced and widow or widower in comparison to the married people as married couples could take care of each other as well as share their physical and mental distress in comparison to the rests (Kalam & Khan, 2006). Besides, it was also found in some previous studies that elder people partaking a role in the family along with being both physically and economically functional could have better health status than those persons living alone [36, 40, 42].

The activities in daily living (ADL) of this research concluded that higher the ADL represented higher susceptibility to illness. Likewise, Islam and Rahman [43] and Sarker [14] also observed that with the growth of nuclear family, the older people had become isolated from their family members which increased the risks in activities for daily living, also detrimental for health condition of the urban senior citizens than their rural counterparts with low quality of life. The probable reason might be older urban slum dwellers who performed activities of daily living, like bathing, medication, shopping, cooking, visiting or going out, washing clothes or utensils, performing household chores and managing finance, by their own were more at risk of infirmity. But in Japan it was found that more social participation (SP) and instrumental activities in daily living (IADL) had positive association with sound health of the elderly whereas women who performed IADL along with SP were less likely to suffer from ailment than their male counterparts [44].

At last, the present study represented that older urban slum residents with high satisfaction with domains of life (SDL) were less prone to suffer from health sickness compared to those having medium or low SDL. Seemingly, several studies revealed that the domestic prominence, monetary gratification, control over life, and overall life satisfaction witnessed significant relationship with healthy life expectancy which lessens health perils among the aged men and women in Bangladesh [40, 45, 46]. The possible explanation for this positive association between SDL and ailment might be elderly who had satisfaction with physical health, economic status, relationship with spouse and children along with life contentment in general could lead distress free life than those dissatisfied with their lives. On the other hand, Garrido, Méndez [47] observed that satisfaction with life had weak association with objective measures of health because the adaptation to health problems like prolonged physical disorder might bring dissatisfaction with life of older persons.

Limitations

Despite some important findings, readers should consider the following limitations. This study followed a cross-sectional design, which may limit the causal relationship between healthcare seeking behavior and its determinants. The ADL and SDL were assessed based on the self-reported scale, which may not be accurate; thus, other medical approaches should be used in future research. This study was conducted within a limited geographical area; therefore, a countrywide longitudinal study is recommended to understand the healthcare seeking behavior of elderly people living in slums. Besides, the recall bias may also limit the generalizability of the findings of this study.

Conclusion

This study aimed to identify the determinants of health status of the elderly people in slums of KCC areas, Bangladesh. The findings indicate that age, education, marital status, ADL, and SDL significantly determined the health status of the elderly in slums. Thus, to ensure universal healthcare coverage, effective planning and strategies should be implemented, particularly in urban areas and its slums, to minimize health vulnerabilities of elderly. Moreover, it is strongly recommended to improve the financial and social protection mechanisms for the older people in Bangladesh, especially the marginalized elderly living in slums. This study further emphasized on family cohesion and strengthening the bonding among family members as people at old age requires emotional support for living a satisfying and healthy life both physically and mentally. However, this study also recommends a nationally representative study to further investigate the social dynamics of elderly in Bangladesh.

Declarations

Ethics approval and consent to participate

The research was performed in accordance with the Declaration of Helsinki, and the ethical clearance committee of Khulna University, Bangladesh, approved this study (Reference No. KUECC – 2022/06/02). In this study, informed consent was obtained from all the participants, i.e., the elderly slum dwellers, and they were notified about the purpose of the study, and they were assured by the data enumerators about anonymity and confidentiality of the information. The participation was voluntary, and there was no incentive for the participants. Moreover, the participants had the right to revoke their participation and shared information without prior justification.

Consent for publication

Not applicable.

Data availability statement

The data supporting the findings of this article will be made available by the corresponding without undue reservation to any qualified researcher(s).

Competing interest

The authors declare no conflict of interest, financial or otherwise.

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Authors’ contribution

NJ, DC and MTH contributed to the research conception and design. MTH, NJ and DC prepared the material and collected the data. Data were analyzed and interpreted by MTH and NJ. NJ, SA, MHE, DC, AP, LS, KFM drafted the manuscript. MTH, RR, SH and NJ revised the manuscript. All authors contributed to the article and approved the final version for publication.

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Tables

Table 1. Descriptive information and their association with health status.

Variables	*f* (%)	Ailment		Statistics	Effect size
		No	Yes		
Overall		**335 (52.7)**	**301 (47.3)**		
Age					
≤ 69	329 (51.7)	191 (57.0))	138 (45.8)	10.521^{***}_{a}	0.129^{***}_{d}
70-79	230 (36.2)	114 (34.0)	116 (38.5)		
80 ≥	77 (12.1)	30 (9.0)	47 (15.6)		
Sex					
Female	326 (51.3)	160 (47.8)	166 (55.1)	3.175^{*}_{b}	-0.074^{*}_{e}
Male	310 (48.7)	175 (52.2)	135 (44.9)		
Education					
No education	458 (72.0)	226 (67.5)	232 (77.1)	7.621^{**}_{a}	0.109^{**}_{d}
Primary	143 (22.5)	86 (25.7)	57 (18.9)		
Secondary	35 (5.5)	23 (6.9)	12 (4.0)		
Occupation					
Skilled/semi-skilled/	67 (10.5)	33 (9.9)	34 (11.3)	1.756_{a}	0.053_{d}
Menial services/unskilled	230 (36.2)	129 (38.5)	101 (33.6)		
Physical disability/housewife	339 (53.3)	173 (51.6)	166 (55.1)		
Monthly income (in BDT)					
No income	339 (53.3)	173 (51.6)	166 (55.1)	8.790^{**}_{a}	0.118^{**}_{d}
≤ 6000	246 (38.7)	125 (37.3)	121 (40.2)		
6001 ≥	51 (8.0)	37 (11.0)	14 (4.7)		
Marital status					
Divorced/deserted	43 (6.8)	26 (7.8)	17 (5.6)	12.960^{***}_{a}	0.143^{***}_{d}
Widow/widower	231 (36.3)	100 (29.9)	131 (43.5)		
Married	362 (56.9)	209 (62.4)	153 (50.8)		
Social assistance					
No	473 (74.4)	262 (78.2)	211 (70.1)	5.053^{**}_{b}	0.093^{**}_{e}
Yes	163 (25.6)	73 (21.8)	90 (29.9)		
Membership in cooperatives					
No	550 (86.5)	292 (87.2)	258 (85.7)	0.175_{b}	0.021_{e}
Yes	86 (13.5)	43 (12.8)	43 (143)		

Note. [a.] Pearson's chi-square; [b.] Yate's continuity correction;

[d.] Cramer's V (φ_c); [e.] Phi (φ)

[***]. Significant at 0.01%; [**]. Significant at 0.05%; [*]. Significant at 0.10%

Table 2. Multivariable logistic regression analysis of health status of elderly and its predictors.

Variables	Crude Odds Ratio					Adjusted Odds Ratio				
	B (SE)	Sig.	COR	95% CI for COR		B (SE)	Sig.	AOR	95% CI for AOR	
				Lower	Upper				Lower	Upper
Age										
≤ 69 [R]	1.000					1.000				
70-79	0.342 (0.173)	0.048	1.408	1.004	1.976	0.289 (0.198)	0.145	1.335	0.905	1.969
80 ≥	0.744 (0.259)	0.003	2.168	1.305	3.603	0.816 (0.307)	0.008	2.263	1.239	4.130
Sex										
Female [R]	1.000					1.000				
Male	-0.296 (0.159)	0.063	0.744	0.544	1.016	0.024 (0.222)	0.913	1.025	0.662	1.585
Education										
No education [R]	1.000					1.000				
Primary	-0.437 (0.195)	0.025	0.646	0.441	0.946	-0.446 (0.211)	0.034	0.640	0.424	0.968
Secondary	-0.677 (0.368)	0.066	0.508	0.247	1.046	-0.240 (0.401)	0.549	0.787	0.359	1.725
Monthly Income (in BDT)										
No income [R]	1.000					1.000				
≤ 6000	0.009 (0.168)	0.958	1.009	0.726	1.401	0.104 (0.215)	0.630	1.109	0.727	1.691
6001 ≥	-0.931 (0.332)	0.005	0.394	0.206	0.756	-0.687 (0.382)	0.072	0.503	0.238	1.065
Marital Status										
Divorced/deserted [R]	1.000					1.000				
Widow/widower	0.113 (0.330)	0.732	1.120	0.587	2.136	0.600 (0.366)	0.102	1.822	0.889	3.737
Married	0.695 (0.339)	0.040	2.004	1.031	3.894	0.893 (0.362)	0.014	2.443	1.201	4.969
Social Assistance										
No [R]	1.000					1.000				
Yes	0.426 (0.183)	0.020	1.531	1.070	2.190	0.091 (0.204)	0.654	1.096	0.735	1.633
Non-monetary Wealth Index	-0.064 (0.029)	0.026	0.938	0.886	0.992	0.013 (0.034)	0.696	1.014	0.948	1.084

Activities of Daily Living Index	-0.032 (0.033)	0.331	0.968	0.908	1.033	0.074 (0.044)	0.091	1.077	0.988	1.173
Satisfaction with Domain of Life Index	-0.148 (0.026)	0.000	0.863	0.821	0.907	-0.153 (0.030)	0.000	0.858	0.809	0.911

Note. COR. Crude odds ratio; AOR. Adjusted odds ratio; CI. Confidence interval; Sig. Significance; R. Reference group