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Original Research Article

Factors Associated With Quality of Life of Senior Citizens Residing in Tarakeshwor Municipality, Kathmandu

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ABSTRACT

Introduction: Globally, identifying factors associated with quality of life of senior citizens have become a public health concern. Quality of life (QoL) of senior citizen is affected by many factors associated with age related changes in physical in health status, psychological status and changing social role in family. Thus, this study aims to identify factors associated with QoL of senior citizens.
Methodology: This study followed descriptive cross sectional research design. Four hundred sixty two senior citizens aged 70 and above, residing in Tarakeshwor Municipality, Kathmandu was included in a study by using non-probability purposive sampling technique. Data was collected from December 25th 2017 to March 23rd 2018 by team members of faculty research through individual interview method by using pretested structured interview guideline in Nepali version. Data was analyzed by using descriptive statistics and inferential statistics specifically Chi square and Pearson's correlation coefficient tests.
Results: This study findings shows that most of the senior citizens were self-dependent on their activities of daily living. Likewise, most of them had good relation with spouses, children, and grand children, family as well as with friends and neighbours. Beside this majority of them had never experienced physical torture, insecurity; humiliation, neglect, sadness, stress where as more than two third experienced loneliness and boredom. Nearly half of them had some level of depression. On overall score of quality of life (QoL) revealed that More than four fifth of senior citizens had at fair level of QoL.
Factors associated with low QoL of senior citizens were demographical factors such as increased age, female sex, living alone low, education and economic status. Also status of dependency on performing moderate household activities of daily living. Also findings revealed negative relationship between increased level of depression and QoL score.
Conclusion: Overall quality of life was fair among these senior citizens. These identified factors as increased age, female sex, living alone, low education and economic status, dependency on performing moderate household activities of daily living and relationship between depression and QoL need to be highly considered while planning health program for senior citizens in Nepalese context from concern authorities.
Key words: Factors associated, Quality of life, Senior Citizen

INTRODUCTION

Aging, along with the physical and psychological functional decline or disability, economic dependence, and social cut off, autonomy of young generation, compromises QoL of senior citizens. Globally, QoL among elderly is an important area of concern which reflects the health status and well-being of this population. [(1)] QoL is affected by the many demanding situations and associated with ageing related factors that are changing in health status, coping with new restrictions in life, identifying new roles, opportunities and

available social support. [2] Studies have revealed that age, gender, education ethnicity, financial dependency, social status, feeling of loneliness and social supports also affects QoL of senior citizens. QoL was found to be better among married elderly than single; better among elderly without physical, mental health problems; psychosocial issues and their functional status. [3] Increased functional dependency, morbidities, chronic illness, loneliness, low education and poor economic condition result in poor mental health among senior citizens. [4,5]

Elderly people are highly prone to mental morbidities due to aging of the brain, multiple physical health problems, cerebral pathology, decreasing family supports and economic dependency. [6] Older people with depression loss social harmony, struggle in managing their self care activities and their QoL deteriorates considerably. [7] National level research study has emphasized for promoting health situation and improving QoL of senior citizens. [8] Therefore, this study aims to identify the factors associated with QoL of senior citizens is considered importance.

METHODOLOGY

Descriptive cross-sectional study design was adopted. The population of the study was all senior citizens age 70 and above residing in Tarakeshwor Municipality of Kathmandu. Likewise, 462 senior citizens were included as a sample by using non- probability purposive sampling method. Sample size was calculated by referring sample P= 68.5%. [9]

After getting formal approval from University Grants Commission as a faculty research grant, ethical clearance was obtained from Institutional Review Board of Institute of Medicine, Kathmandu. After obtaining written approval from authority of Tarakeshwor Municipality, data was collected from 25th December 2017 to 23rd March 2018. Written consent was obtained from each respondent. Respondent's right to voluntarily informed consent, withdrawal from the study at any time without giving reason were considered. Data was collected through interview method. All members of faculty research collected data by using face to face interview schedule. Pretested interview schedule in Nepali version were used to collect data. Questionnaire was consisted of socio-demographic characteristics; status of family and relation, social status relations; perceived physical health status of the respondents as well as Katz index of independence in activities of daily living scores of 6 items questions; [10] psychological status assessing by short form of geriatric depression scale of 15 items of total scores of 15 questions, [11] and 24 items of total scores of 120 quality of life of senior citizen questionnaire developed for World Health Organization. [12] During data collection privacy was maintained by taking interview in separate room and corners of the home setting. Confidentiality was maintained by using code number in each form and also respondents were assured that the information they provide would be used for the research purpose only.

The collected data was entered into SPSS version 16 and were analyzed by using descriptive statistics and inferential statistics in which Pearson Chi square test was used to measure the statistical association between selected variables and relationship between depression and QoL was assessed by applying Correlation Coefficient test. [13]

RESULTS

Sociodemographic Status of the Senior Citizens

This study revealed that 77.9% of senior citizens were belonged to 70-80 years of age, the males /females ratio is about 1:1, 68.6% were married and living with spouse and 80.7% were unable to read and write. Similarly, 65.8% of their individuals or family income was sufficient for 6 months. More than half (52.4%) of them were ever or currently cigarette smoker and 45.7% were ever or currently alcohol drinkers.

Status of Relationship of Senior Citizens with Family Members and Society

This study findings show that on social factors related to QOL 74.7% and 83% of them had good relation with children and grandchildren respectively. Besides these, 80.1% had good communication within family. Most of them never experienced physical torture, insecurity, humiliation, neglect sadness and stress where as majority of them experienced loneliness and boredom within one month of data collection. Likewise, 81.2% and 77.1% of them had good relation with their friends and neighbors respectively. Most of times, they visited their relatives (77.7%) and participated in religious activities (64.7%). Only, 39.8% involved in social gathering, 8.9% participated in clubs and 7.8% in volunteer activities.

Table 1 shows that 77.1% of respondents had good relationship with their neighbor. Similarly, 81.2% had good relationship with their friends as 18.2% had neither good nor bad and 0.6% had. Regarding social participation, 77.7%, 64.7% and 39.8% of the respondents most of times involved in visiting relatives, participated in religious activities and involved in social gathering respectively. Only 8.9% and 7.8% of them participated in clubs and volunteer activities respectively.

TABLE: 1 Status of Social Relations and Participation of the Respondents N = 462

Status of Respondents	Frequency	Percentage
Relation with neighbors		
Good	356	77.1
Neither good nor poor	94	20.3
Poor	12	2.6
Relation with friends		
Good	375	81.2
Neither good nor poor	84	18.2
Poor	3	0.6
Visiting relatives		
Most of times	359	77.7
Sometimes	74	16.0
Never	29	6.3
Participate in religious activities		
Most of times	299	64.7
Sometimes only	149	32.3
Never	14	3.0
Participate in social gathering		
Most of times	184	39.8
Sometimes only	249	53.9
Never	29	6.3
Participate in club/Civic groups		
Most of times	41	8.9
Sometimes only	91	19.7
Never	330	71.4
Participate in volunteer activities		
Most of times	36	7.8
Sometimes only	146	31.6
Never	280	60.6

TABLE 2: Physical, Psychological and QoL Status of the Respondents N = 462

Status	Number	Percent
Self reported Physical status		
One or more physical problems	450	97.4
Psychological status**		
No depression	244	52.8
Mild depression	140	30.4
Moderate depression	39	8.4
Severe depression	39	8.4
Quality of Life #		
Fair	375	81.2
High	80	17.3
Low	7	1.5

WHOOoL-Old Scores: low (24-55), fair (56-88) and high (89-120) [24]; **Score based on short form GDS [13]

TABLE 3: Association between QoL and selected Sociodemographic Variables N = 462

Variables	Quality of life Scores			Chi square value	P value
	Low	Fair	High		
Age in years					
70-80	3	288	69	8.502	0.014*
81and above	4	87	11		
Sex					
Male	2	174	56	16.021	0.000*
Female	5	201	24		
Marital status					
Alone	6	123	16	36.912	0.000*
Living with spouse	1	252	64		
Income					
Less than 6 month	5	45	2		0.000*
Upto 6 months	2	255	47		
Upto one year	0	75	31		
Education					
Not able to read and write	6	317	49	20.039	0.000*
Able to read and write	1	58	31		
Use of Alcohol					
Never drink	5	192	54	14.834	0.005*
Drank	2	183	26		

*(*P<0.05, significant at 95% Confidence Level)*

Table 2 depicts that almost all of the respondents had one or more self reported physical problems. Regarding depression, 30.4% had mild; remaining 8.4% had moderate and severe depression respectively. Likewise, 81.2% of them had fair level of QoL where as 17.3% and 1.5% had high and low level respectively.

Table 3 shows that there is significant statistical association between QoL and sex, age, marital status, economic status, education and alcohol drinking habit (P<0.05).

TABLE 4: Association between Respondents' QoL & Moderate Activities of Daily Livings and Comorbid Status

Variables	Quality of life Scores			P value
	Low	Fair	High	
Moderate activities				
Walking in stairs				
Independence	2	296	77	0.000*
With support	4	51	2	
Unable	1	28	1	
Performing simple activities				
Most of household activities	5	259	70	0.007*
Few activities	0	55	7	
Unable	2	61	3	
Co-morbid Status				
None	0	11	1	0.238
1-3 health problems	0	34	11	
4 or more than 4 health problems	7	330	68	

*(*P<0.05, significant at 95% Confidence Level)*

Table 4 shows that there is statistically significant association between QoL and ability to perform moderate activities with value (P<0.000).

TABLE 5: Relationship of QoL with Depression of the Respondents

Depression	Interrelation	Quality of Life Score
Depression	Correlation Coefficient (r)	-.579**
	P value	0.000

n= 462
**Pearson correlation coefficient

Table 5 shows significant interrelation-ship of QoL of the respondents with depression where depression is -.579 negatively interrelated with QoL of the respondents. These relationships are statistically significant (p value= < 0.001).

DISCUSSIONS

Physical, Psychological Status and Quality of Life of Senior Citizens

Almost all (97.8%) were suffering from more than one self reported physical problems. This finding is supported by study done in Kathmandu among elderly which showed that 93.9% of older adults had some health problems. [(14)] Few other studies–conducted in Health Status, Family Relation and Living Condition of Elderly People Residing in Geriatric Homes of Western Nepal shows 84.1%; another studies done in Varanasi district on health status of elderly population in rural area and in Shikla Hills of India on morbidity pattern and health-seeking behavior of aged population of India showed that 88.8% and 84% of them suffered from at least one medical problems respectively. [(15-17)]

This study showed that 47.2% of the senior citizens had depression among which 30.0% mild, 8.4% moderate and 8.4% severe respectively. This finding is supported by a study done in Nepal which showed that 53.2% older adults had depression. [(18)] One of the study conducted in Kathmandu, on prevalence of depressive symptoms and its associated factors in older adults showed that 60.6% of the senior citizen had some form depression in which 27.7%, 21.1% and 11.8% of them had mild, moderate and severe depression respectively. [(19)] The greater prevalence of mild depression relative to severe depression is consistent with findings from other studies conducted across the globe. However, one of the studies done in Kathmandu among elderly showed that only 29.7% had depression, in which 24.2% had mild and 5.5% had severe depression. [(14)] This different might be due to different in study population as mention author had conducted study among only ethnic group that is Rai elderly people. Likewise, a study done in Pakistan on Depression in the elderly showed that 19.8% had depression. [(20)] Several studies done in India, revealed that the prevalence of depression among older adults varies from 6% to 53.7%. [(21-23)] This difference in

the prevalence with this study might be due to the different instruments used the same instrument as our study to detect depression, also showed lower figure.

Concerning QoL, most of them (81.2%) of the senior citizens had fair level, 17.3% had high and 1.5% had low level of QoL. This is consistent with the study done in a Phayao Province, Thailand that showed 68.5% had QoL at fair level, followed by high (29.5%) and low level (2%). [(9)] Similarly, the another study done in the Northeast of Thailand revealed that 79% of the senior citizens had fair level, followed by high (10.5%) and low level (10.5%) of QoL. [(24)]

Factors associated Quality of Life of Senior Citizens

This study shows the statistically significant association between QoL and age of the senior citizens (P= 0.014). This result is supported by the hospital based study carried out in Iran among 212 elderly which showed significant association with QoL and their age (P=0.01). [(25)]

Likewise, this study finding shows the significant differences between QoL of senior citizens and sex, males had high level of QoL than females (p = 0.000). Similarly, the study done in Tabriz, Iran on Assessing the QoL in Elderly People and Related Factors in Tabriz, Iran showed that males had high scores than females (p<0.001). [(26)] In contrary, study by done in Slovakia on determinants of QoL among the elderly did not show significant relationship between QoL and sex. [(27)]

Similarly, this study showed significant association between QoL and marital status (P=0.000) in which QoL is high in married elderly, living with spouse. Supporting this finding, research conducted in old age homes and community and associated factors in India showed that QoL is high in married and low in separated individuals. [(1)] This study result showed that QoL is high in people who had their economic status sufficient for upto 6 month. Supporting this finding, research conducted in India showed QoL is more in middle than low or high socioeconomic status. [(1)]

This study showed statistically significant association between QoL of senior citizens and education (P= 0.000). Supporting this finding by the cross sectional study in Finland, Poland and Spain showed that lower educational levels were associated with diminished QoL as compared to having high school or academic degrees. [(28)] Similarly, this study finding shows the statistically significant association between QoL and drinking habit (P=0.005). However, cross-sectional study done in Finland, Poland and Spain on Determinants of Quality of Life in Ageing Populations showed that moderate alcohol consumption was associated to better QoL as compared to being abstainer. [(28)]

There is statistically significant association between QoL and ability to perform moderate activities. The studies conducted in Tabriz, Iran on self-rated quality of life of city-dwelling elderly people benefitting from social help: results of a cross-sectional study [(26)] and another study done on chronic conditions, disability and quality of life in older adults with multimorbidity in Spain showed that quality of life senior citizens was twice as low in the elderly with functional disability. [(29)]

This study finding shows that there is statistically significant association between QoL and their relation with spouse, children, grandchildren and communication within family (P value <0.05). Similarly, this study depicts that there is statistically significant association between QoL and experiencing insecurity, boredom, loneliness, stress, neglect, sadness, humiliation and physical torture from the family environment within 1 month of the respondents.

This study shows the statistically significant association between QoL and relation with neighbors and friends (p value 0.000). Similarly, there is statistically significant association between their QoL and social participation (p value 0.000). One of the studies done in Myanmar showed that

family relationships and social support were significantly related to QoL of senior citizens. [(30)] Another study done in Turkey found that disability was associated with QoL of elderly in social participation, getting around and life activities. [(31)]

This study findings showed that there was not statistically significant association between QoL and physical problem. The reason may be QoL is not dependent solely on chronic illness and other factors may involve, such as illness acceptance. Kurpas and colleagues pointed out that illness acceptance are strongly related to age and QoL when considering chronic conditions. High level of acceptance in turn, enhances self-reliance and self-esteem and creates the ability to cope with chronic disease and its treatment. [(32)] In contrast with the result of this study, one of the study done in Tabriz, Iran done on assessing the QoL in elderly people related factors showed significant difference between QoL and diseases background (P<0.001). [(26)] This study finding showed that there was a adverse relationship between depression and QoL where if depression score is increased by 1 point then QoL will be decreased by 0.579 points (p value= < 0.001). This finding is supported by several international studies [(29-31, 33-35)] as the presence of symptoms of depression negatively affected QoL of seniors. So, depression has become a very serious problem among them and aging, contributing significantly reduction in QoL.

CONCLUSION AND RECOMMENDATIONS

Overall QoL of senior citizens is fair. Most of the senior citizens were self-dependent on daily living activities; had good relation with spouse; children; and grandchildren and had good communication within the family. Likewise, majority of them had never experienced physical torture, insecurity; humiliation, neglect, sadness, stress where as more than two third of them experienced loneliness and boredom. Almost half of them had depression. There is negative relationship between depression and QoL. Depression is one of the factors of poor QoL among senior citizens.

Factors associated with low QoL among senior citizens are increased age, female sex, living alone, low family income, less education, alcohol consumption and dependent status of performing moderate activities.

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Limitations

Due to resource and time constraints, the study sample was drawn from only one municipality of Kathmandu District; as such the sample may not fully represent the elderly population of Nepal. Another caveat to this study is that the physical and depressive symptoms were reported by older adults may not necessarily equate to a clinical diagnosis of physical problems or depressive disorders. Therefore, there is a risk of incorrectly attributing reports of diagnosed physical problems or depressive symptomatology to actual clinical physical and mental health problems, leading to potentially an overestimation of the 'true' prevalence of physical problems and depression in this group. Similarly, the quality of life of senior citizens was measured by self reported verbal responses on the basis of items developed by WHOQOL-OLD, which depend upon respondents' subjective information. Finally, due to the cross sectional design of the study, this limits definitive inferences of causal relationships between quality of life of senior citizens and the various variables.

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