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## Assessment of Quality of Life Among Elderly People Residing in Western Nepal

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### Abstract

**Introduction:** Rapidly growing elderly population is witnessing poor health status and decreasing functional capacity affecting overall health of the individuals globally. In Nepal awareness level about special needs of elderly and elderly care (Physical, psychological and social needs) is very low which directly affect the Quality Of Life (QOL) of elderly.

**Objective:** The objective of the study was to assess the quality of life among elderly people residing in Dhodegaun, Nepalgunj.

**Method:** It was a cross sectional study conducted at Dhodegaun, Nepalgunj from October 2018 to July 2019 among 100 elderly people. The samples were chosen through consecutive sampling. A standardized and validated WHO Quality of Life- BREF (WHOQOL-BREF) questionnaire was used. Permission for study was taken from Bheri Nursing College, Nepalgunj. Informed consent from each participant was taken. Confidentiality and privacy of participants was maintained in the study.

**Result:** Majority of respondents (83%) had a fair QOL whereas; none of them had excellent QOL. The QOL score of elderly was found better in the environmental domain ( $83.36 \pm 12.34$ ) whereas; social domain was worse ( $35.36 \pm 6.88$ ). The physical and psychological domains of QOL in male were significantly better as compared to females. The physical, psychological and social domains of QOL in married elderly (60-70 years) with absence of disease were significantly better as compared to the age group more than 70 years who were widow/er and had illness. Whereas only the psychological and environmental domain of QOL in elderly people with primary level education was significantly better as compared to illiterate elderly people.

**Conclusion:** The QOL score was highest in the environmental domain while it was lowest in the social domain. This emphasizes that community people and policy makers should focus on the need for more social support-related interventions among elderly in the community.

**Keywords:** Ageing; Elderly people; Quality of life

## Introduction

The progressive loss of function along with decreasing fertility and increasing mortality with advancing age is defined as ageing.<sup>1</sup> Ageing is a phenomenon of an unavoidable derangement and developmental changes in the physical, psychological, hormonal and social conditions.<sup>2</sup> To improve the quality of life in elders has become one of the greatest challenge of public health.<sup>3</sup> WHO has defined QOL as an individual's perception of life in the context of culture and value system in which he/she lives and in relation to his/her goals, expectations, standards and concerns.<sup>4</sup>

QOL of elderly people assures different health domain like physical, psychological, social and environmental domains.<sup>5</sup> Various factors in elderly people like poor economy, cultural, illiteracy, inadequate social interaction, health care conditions can result in poor QOL.<sup>6</sup> The most common chronic co morbid conditions like diabetes mellitus, coronary heart disease, hypertension, musculoskeletal disorder and visual problems which causes limitation in functional disabilities and affect the elderlies' QOL in the community.<sup>7</sup>

The number of populations aged >60 years is expected to rise from 900 million (12%) from 2015 to 2 billion (22% of global population) by 2050.<sup>8</sup> There were 2.1 million elderly population alone in Nepal (2011 census). The rapidly growing elderly population globally has increased the risk of challenge to their QOL. The Nepal Government in 9<sup>th</sup> 5 year plan (1997-2002) policy was to improve the geriatric life by emphasizing actions that would reinforce dignity, economic opportunities, respect and social security for the elderly.<sup>9</sup>

QOL is an important concept in evaluating the well-being of the elderly, which can be compromises in various ways and various factors influence it.<sup>10</sup> Considering the vulnerability and importance of health status in elderly population and due to lack of studies regarding QOL of elderly in different communities of Nepal, the

present study was aimed to assess the QOL among elderly people residing in the Dhodegaun community of Nepalgunj, Nepal. In view of the above, it is imperative to analyze the QOL of elderly so that effective measures to improve the QOL can be implemented at community level.

## Method

A cross sectional study was conducted at Dhodegaun-12, Nepalgunj from Oct 2018 to July 2019. The total number of 100 elderly people aged  $\geq 60$  years were selected through consecutive sampling. Complete enumeration of the total elderly population in the study area was done as per the family register maintained by the ward office of Dhodegaun-12, Nepalgunj. A total of 150 elderly were noted in the family register in which taking in account the drop out number of 30 and rest 20 elderly with some forms of mental illness were not taken into consideration. A standardized and validated WHOQOL-BREF questionnaire was used as a research tool. The adapted WHO instrument comprised four domains: Physical, Psychological, Social Relations and Environment domain. Questionnaire was categorized into two parts. Part I: Performa related to demographic characteristics of elderly people. Part II: WHOQOL-BREF questionnaire. It contained 2 items from the overall QOL and General Health and 24 items of satisfaction that divided into 4 domains: Physical Health (7 items), Psychological Health (6 items) Social relationship (3 items) and Environmental Health (8 items). Each item was rated on a 5-point Likert scale. Domain score were scaled in a positive direction (i.e., higher scores denote higher QOL). The mean score of items within each domain was used to calculate the domain score.<sup>4</sup> Face to face interview technique was used to collect data. Permission for study was granted from Bheri Nursing College, Nepalgunj. Informed consent from each participant was taken. Confidentiality and privacy were maintained. After completion of the data collection, data was checked for its completeness and accuracy. The collected data

was checked, coded and entered in a Microsoft excel and analyzed by SPSS software. The association between variable was tested by independent t-test and ANOVA and  $p < 0.05$  was considered significant.

## Result

**Table 1: Socio Demographic of study participants (n=100)**

Characteristics	n (%)
Sex	
Male	61 (61.0)
Female	39 (39.0)
Age	
60-70 Years	86 (86.0)
>70 Years	14 (14.0)
Ethnicity	
Muslim	13 (13.0)
Terai (Madhesi)	87 (87.0)
Religion	
Hindu	87 (87.0)
Muslim	13 (13.0)
Married	84 (84.0)
Marital status	
Widow	6 (6.0)
Widower	10 (10.0)
Education status	
Illiterate	91 (91.0)
Primary level	9 (9.0)
If any illness/ Disease	
Yes	59 (59.0)
No	41 (41.0)

More than half (61%) of them were male and majority (86%) belongs to 60-70 years. In the same way most of them (87%) were Terai ethnic groups i.e., they belonged to Madhesi. Most of them (87%) belong to Hindu religion and majority (84%) were married. Similarly, most of them (91%) were illiterate and more than half (59%) were ill (Table 1).

**Table 2: Grading of QOL (n=100)<sup>10</sup>**

QOL Grades (Score)	n (%)
Excellent (110-89)	0 (0.0)
Good (88-67)	2 (2.0)
Fair (66-45)	83 (83.0)
Poor (44-22)	15 (15.0)

Majority (83%) had fair QOL whereas; none of them had excellent QOL (0.0%) (Table 2).

**Table 3: QOL scores of elderly people in each domain (n=100)**

Domains of QOL	Mean	SD
Physical domain	74.44	15.31
Psychological domain	62.28	11.41
Social domain	35.36	6.88
Environmental domain	83.36	12.34

The mean QOL score of elderly people was higher ( $83.36 \pm 12.34$ ) in the environmental

domain whereas the lowest ( $35.36 \pm 6.88$ ) in the social domain (Table 3).

**Table 4: Association of Socio demographic characteristics with domains of QOL score (n=100)**

Variable	Physical (Mean $\pm$ SD)	Psychological (Mean $\pm$ SD)	Social (Mean $\pm$ SD)	Environmental (Mean $\pm$ SD)
Sex				
Male	78.22 $\pm$ 14.22	66.42 $\pm$ 10.7	35.93 $\pm$ 7.21	85.18 $\pm$ 11.87
Female	68.51 $\pm$ 15.25	55.79 $\pm$ 9.35	34.46 $\pm$ 6.33	80.51 $\pm$ 12.68
t-test (p value)	0.001*	0.001*	0.299	0.064
Age				
60-70 Years	76.18 $\pm$ 14.99	63.20 $\pm$ 11.45	36.13 $\pm$ 6.62	84.28 $\pm$ 11.99
>70 Years	63.71 $\pm$ 13.17	56.57 $\pm$ 9.65	30.57 $\pm$ 6.77	77.71 $\pm$ 13.47
t-test (p value)	0.004*	0.043*	0.004*	0.065
Marital Status				
Married	76.09 $\pm$ 14.52	63.90 $\pm$ 10.86	36.71 $\pm$ 6.45	84.61 $\pm$ 11.47
Widow	56.00 $\pm$ 13.38	48.00 $\pm$ 2.52	26.66 $\pm$ 4.13	77.33 $\pm$ 17.09
Widower	71.60 $\pm$ 16.59	57.20 $\pm$ 12.37	29.20 $\pm$ 4.23	76.40 $\pm$ 14.41
ANOVA (p value)	0.005*	0.001*	0.000*	0.063
Educational status				
Illiterate	73.58 $\pm$ 15.26	61.41 $\pm$ 11.38	35.07 $\pm$ 6.83	81.93 $\pm$ 11.72
Primary level	83.11 $\pm$ 13.82	71.11 $\pm$ 7.69	38.22 $\pm$ 7.24	97.78 $\pm$ 9.19
t-test (p value)	0.075	0.014*	0.193	0.000*
Illness				
Present	68.74 $\pm$ 14.84	58.84 $\pm$ 10.91	34.03 $\pm$ 7.02	81.89 $\pm$ 13.14
Absent	82.34 $\pm$ 12.02	67.21 $\pm$ 10.36	37.26 $\pm$ 6.28	85.46 $\pm$ 10.90
t-test (p value)	0.001*	0.001*	0.001*	0.156

Independent t-test and ANOVA test; \*Significant at p value  $< 0.05$

The physical and psychological domains of QOL in male were significantly ( $p < 0.01$ ) better as compared to females. The physical, psychological and social domains of QOL in the age group 60-70 years were significantly ( $p < 0.01$ ;  $p < 0.05$  and  $p < 0.01$  respectively) better as compared to the age group more than 70 years which indicates that the QOL deteriorates with increasing age. In married elderly people, physical, psychological and social domains of QOL were significantly ( $p < 0.01$ ;  $p < 0.01$  and  $p < 0.001$  respectively) better as compared to widow and widower. Whereas; only the psychological and environmental domain of QOL in elderly people with educational status was significantly ( $p < 0.05$  and  $p < 0.001$ ) better as compared to illiterate elderly people. Elderly people with absence of any kind of illness had significantly ( $p < 0.01$ ) better physical, psychological and social domains of QOL as compared to elderly people with several illnesses (table 4).

## Discussion

In the present study, majority of elderly (61.0%) were male, married (84.0%) and illiterate (91.0%). Most of the elderly (86.0%) were between 60-70 years, belonging to the Terai ethnic group and follow Hindu religion (87.0%) in which half of the elderly (59.0%) had several illnesses. The finding of the present study is supported by another study which revealed that among 76 respondents, 57.9% respondents were male. Out of total respondents, the majority

(44.7%) belonged to the 60-70 years age group. Majority of the respondents (86.9%) were married. Most of the respondents were Hindu (81.6%) by religion.<sup>11</sup> The age of the participants ranged from 60 to 90 years with mean of  $68.62 \pm 6.59$  years which was similar to the studies with mean age of the study population  $65 \pm 5$  years<sup>12</sup> and  $68.32 \pm 7.35$  years<sup>13</sup>. The majority (85.4%) of the respondents were of Hindu religion. About 65.1% of them were married.<sup>14-15</sup> Similarly another report shows, majority were married (60.81%), illiterate (63.9%) and Hindus (90%).<sup>10</sup> Similar results of mean age  $76.6 \pm 9.5$  years and 81.6% illiterate revealed the cause of illiteracy was that either they never attended the school or did not complete their primary level education.<sup>16</sup> In the present study majority of the respondents (83%) had a fair QOL. Similarly in a study majority (84.3%) had a moderate quality of life.<sup>17</sup> A similar study reveals that none of the elderly (0.0%) had Poor, 3.2% had fair, 56% had good and 40.8% had excellent quality of life.<sup>12</sup> The study findings revealed a higher environmental domain score ( $83.36 \pm 12.34$ ) whereas the lowest social domain score ( $35.36 \pm 6.88$ ). Similar findings were seen in the studies where social domain score was comparatively lower than other domains.<sup>18</sup> Some other studies noted higher mean scores for social domain which contradict to our study findings, while other domain scores are comparable.<sup>19</sup> In contrast to our findings, a study has revealed highest social domain score and lowest environmental domain score.<sup>20</sup> Variance in pattern of associated factors which impact QOL in different settings may be the consequence for dissimilar QOL score in various domains. Elderly people from rural settings had lower QOL score in social domain.<sup>21</sup> Low QOL score of elder people in social domain was reported compared to other domains irrespective to their residence.<sup>22</sup>

The physical and psychological domains of QOL in male were significantly better as compared to females. Similar studies conducted in other parts of Nepal also revealed better QOL in elderly males as compared to females.<sup>22-23</sup> This could be because of negative perception on ageing and feelings of ugliness among elderly female, which may lead to low self-confidence.<sup>24</sup> The physical, psychological and social domains of QOL among >70 years age group were more affected which indicates the QOL deteriorates with increasing age which is in agreement with other studies.<sup>22-24</sup>

The lower QOL score in physical domain may be due to functional limitations and other illness in comparison to younger age group. The factors like abandonment and negligence, loneliness, thinking limitations and sleep problems may lead to depression which worsens the psychological domain of QOL.<sup>25</sup> The QOL score of couple elderly people living together in all the domains were better as compared to widow and widower which is in support with the numerous studies. The social and emotional support received from their husband, wives, children and relatives may support the couple elderly people for better QOL in various domains.<sup>12, 26</sup> In the context of education, literate elderly people had better QOL in psychological and environmental domains as compared to illiterate elders which is in support of the study which revealed elderly with higher education had better QOL in different domains as compared to uneducated elderly people.<sup>10</sup> Education in elderly people helps them to improve psychological resilience, coping mechanism and manage stressors faced in homes and society which results in better QOL in different domains.<sup>24</sup> In the study elderly people with absence of any kind of illness were found to have better QOL in different domains as compared to the elderly people with several illness. Elderly people are more susceptible to numerous diseases (principally which are chronically degenerative and progressive decrease in functional capacity) which ultimately deteriorates the QOL of different domains.<sup>27</sup> Due to resources and time constraints, the study was conducted in only one ward of Nepalgunj on a limited of hundred subjects which may not absolutely represent the elderly population of Nepal. This study is focused only in an urban community/ that may not be generalized to rural settings. The physical and depressive symptoms and other chronic illness were not addressed by this study.

## Conclusion

Quality of life among the elderly people was fair. Among the different domains social domain was more affected in elderly people. The quality of life of elderly decreases with increasing age. Elderly males had better social relations as compared to elderly females. The physical, psychological and social domains of quality of life were affected more in elderly widow/er while only the psychological and environmental



domains of Quality of life were affected in illiterate elderly people.

### Recommendation

The replication of this study can be done with large samples in different settings to validate and generalize the finding. Health education related activity as well as programs that help elderly people improve social relationships should be developed. Further analytical studies will support in understanding the association of factors influencing quality of life.

### Conflict of Interest

The author declares no conflict of interest.

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