

## Quality of Life among Elderly People and its Associated Factors in Makwanpur District: A Descriptive Cross-Sectional Study

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### ABSTRACT

**Introduction:** Aging is a universal process and it affects every individual, family, community, and society. It is a normal, progressive, and irreversible process.

**Objective:** To assess quality of life among elderly people at old age home of Makwanpur district, Nepal.

**Methods:** A descriptive cross-sectional study was conducted among 82 elderly people in old age home using complete enumeration sampling. A structured interview session was conducted by using WHOQOL-BREF tool. Data analysis was done in SPSS version 20 using descriptive statistics such as frequency, percentage, mean and standard deviation. Inferential statistics such as Chi square test was used to determine association.

**Results:** Out of 82 respondents, majority of the respondents perceived QOL as neither poor nor good. Among total respondent's, 36.6% were satisfied with overall perception of health. Also the study revealed the mean score was found higher in physical and psychological domain (50.609±11.75) and 50.304±12.13 respectively. The overall quality of life was found to be 71.292 which is good quality of life. There was significant association of age and religion with physical domain.

**Conclusions:** The study concludes the overall quality of life was good among elderly. The mean score was found to be higher in physical and psychological domain in comparison to environmental and social relationship domain. Significant association was found in physical domain with age and religion.

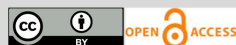
**Key Words:** Elderly people; old age home; quality of life.

### INTRODUCTION

Aging is a universal process and it affects every individual, family, community, and society.

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#### Citation

Kharel S, Karkheti A, Bajracharya A, Paudyal L, Kharel SK. Quality of Life among Elderly People and its Associated Factors in Makwanpur District: A Descriptive Cross-Sectional Study. Nepal J Health Sci. 2023 Jul-Dec; 3(1): 36-43.

It is a normal, progressive, and irreversible process. Sir James Sterling Ross commented, "You do not heal old age, you protect it, you promote it and you extend it." These are the principles of Preventive Medicine. With aging due to structural changes, deterioration in the functional capacity of an individual occurs.<sup>1</sup>

Globally, the elderly population is increasing globally. Between now and 2050, the population aged 60 years and older (elderly) will double from 12% (900 million) to 22% (2 billion). Moreover, approximately 125 million people are currently 80 years or older. The pace of ageing is much higher in developing countries. It is predicted that by 2050, 80% of older individuals will be living in low and middle-income countries (LMICs).<sup>2</sup>

One of the greatest challenges to public is to improve the quality of later years of life as life expectancy continues to rise.<sup>3</sup> Quality of Life (QOL) is the individual's subjective perception of their position in life in the cultural and social context in which they live relative to their goals, expectations, standards and concerns. It is the wellness resulting from a combination of physical, functional, emotional and social factors.<sup>4</sup> Quality of life depends on economic, cultural, educational status, health care conditions and social interactions; besides these indicators, as a result of diminished physical and mental functions, aged people have greater probability of suffering from multiple health problems.<sup>5</sup> Poor functional ability, increasing dependence, and requirement of hospital services affect their quality of life.<sup>6</sup>

Poor muscle strength, reduced flexibility, and limited exercise capacity are some of the health issues that manifest during the aging process. These physiological changes might lead to loss of physical function and disability.<sup>7</sup>

In India, 90% of older persons are from the unorganized sector, with no social security at the age of 60. Thirty percentages of elderly lie below the poverty line and 33% just marginally over it.<sup>8</sup>

In Nepal, as of 2019 over 2 million people living in Nepal are over 60 years which is 9% of the total population. With the advancement in age, older people suffer from diseases. Living longer does not mean we will have a good quality of life in later years.<sup>9</sup> In our context, there is low awareness about needs of elderly so, it is very important to understand the need and quality of life of elderly people.<sup>10</sup> So the present study was conducted to assess quality of life among elderly people at old age home of Makwanpur district.

## METHODS

A Descriptive cross sectional research design was adopted among the elderly residing in 3 geriatric homes of Makawanpur district. There are total 6 geriatric homes in Makawanpur District. Out of that, 3 geriatric homes were selected by using simple random sampling method. The total population of elderly and location of geriatric homes were traced with the help of focal person of the respective geriatric homes. Complete enumerative sampling technique was used and the total sample size was 82. Data was collected from 18<sup>th</sup> April 2023 to 10<sup>th</sup> May 2023 at Selected Geriatric homes of Makawanpur district. The response rate of the study was 100%. Both male and female elderly people aged  $\geq 60$  years currently residing in the geriatric home and who were willing to participate in the study were included in this study and those elderly who suffered from serious illness, deaf and who were unwilling to participate in the study were excluded.

A structured WHOQOL-BREF<sup>4</sup> tool was used for structured interview schedule consisting of demographic, Physical, Psychological, Social and environmental domain to collect data from selected elderly peoples. Reliability of the instrument was maintained by pretesting of the

Nepali version of instrument among 10 elderly residing in Sarbeshwor Geriatric home of Makawanpur and necessary modification was done in the question related to socio-demographic. Internal consistency was maintained by calculating the Cronbach's alpha value. The Cronbach's alpha coefficient was 0.7.

Ethical approval was obtained from Institutional Review Committee (IRC-25/ 079-080), Madan Bhandari Academy of Health Sciences. Informed verbal and written consent were obtained from the respondents prior to data collection. Confidentiality was maintained by not disclosing the information given by them. Anonymity was maintained by using coding system.

The collected data was checked, reviewed and organized for accuracy, completeness and consistency. All collected data were analyzed by using SPSS-20 version. Frequency, mean and standard deviation were used to calculate the finding. Chi square test was used to examine the association between selected variables.

## RESULTS

Out of 82 respondents 34.1% come under age of 60-69. The calculated mean and SD for age was 73.71 ±8.24 with minimum age 60 and maximum age 95. Among them 35.4% were female and 64.6% were male. Majority of the respondents (95.1%) were Hindu. Among total respondents, 51.2% of them were married. Majority of the respondents that is 57.3% were illiterate and 1.2% of them had completed above certificate level. Regarding occupation, 46.3% were agriculturist. More than half (68.3%) of the respondents were financially dependence on others whereas only 51.2 percent received senior citizen allowances. (Table 1)

**Table 1: Demographic information of the respondents (N=82)**

Characteristics	Frequency (f)	Percentage (%)
<b>Age in Years</b>		
60- 69	28	34.1
70-79	31	37.8
80 and above	23	28.0
Mean age±SD =		
73.71±8.24		
<b>Gender</b>		
Female	29	35.4
Male	53	64.6
<b>Religion</b>		
Hindu	78	95.1
Buddhist	4	4.9
<b>Marital Status</b>		
Married	42	51.2
Widow/Widower	30	36.6
Unmarried	10	12.2
<b>Educational Status</b>		
Illiterate	47	57.3
Primary level	26	31.7
Secondary level	4	4.9
Certificate level	4	4.9
Above certificate level	1	1.2
<b>Past Occupational Status</b>		
Agriculture	38	46.3
Business	15	18.3
Labor	12	14.6
Government Service	10	12.2
House wife	5	6.1
Others	2	2.4
<b>Financial Dependency on Others</b>		
Received of Senior Citizen Allowance	42	51.2

Majority of the respondents had stayed at old age home for more than two years. Regarding the reason of stay at old age home majority of the

respondents (40.2%) verbalized no one to take care at home. Majority of the respondents (72.0%) had less than 5 children's and among those who had children, 55.4% of the respondent's children never visit them. Regarding use of social media more than half of the respondent's (54.9%) don't use social media. (Table 2)

**Table 2: Social information of respondents (n=82)**

Characteristics	Frequency (f)	Percentage (%)
<b>Duration of Stay in old age home</b>		
0-6 months	14	17.1
6-12 months	22	26.8
12- 24 months	14	17.1
More than 24 months	32	<b>39.0</b>
<b>Reason of Stay in old age home</b>		
No one to take care home	33	<b>40.2</b>
Child abroad	18	22.0
Home Conflict	13	15.9
Unwillingness to stay at home	10	12.2
abandoned by Child	8	9.8
<b>Number of Children</b>		
No children	17	20.7
Less than 5	59	<b>72.0</b>
More than 5	6	7.3
<b>Visit by Children (n=65)</b>		
Never	36	<b>55.4</b>
Occasionally	25	38.5
Every week	1	1.5
Every month	3	4.6
<b>Use of social media</b>		
Yes	37	45.1
No	45	<b>54.9</b>

Regarding perception of quality of life and quality of health where majority verbalized neither poor nor good as the perception of QOL and regarding overall perception of health (36.6%) were satisfied. (Table 3)

**Table 3: Overall perception of quality of life and quality of health (n=82)**

Perception	Frequency (f)	Percentage (%)
<b>Overall perception of QOL</b>		
Poor	10	12.2
Neither poor nor good	37	<b>45.1</b>
Good	31	37.8
Very good	4	4.9
<b>Overall perception of health</b>		
Very dissatisfied	1	1.2
Dissatisfied	15	18.3
Neither satisfied nor dissatisfied	35	42.7
Satisfied	30	<b>36.6</b>
Very satisfied	1	1.2

Overall quality of life was  $195.90 \pm 48.438$ . Among the QOL score of each domain highest mean score was found on physical domain and lowest score was on social relationship domain of  $46.749 \pm 17.161$ . The overall quality of life was found to be 71.29 in raw score and 195.90 in transform score. (Table 4)

**Table 4: Quality of Life (QOL) score of each domain (n=82)**

Domain	Raw score Mean $\pm$ SD	Transform Score Mean $\pm$ SD
Physical	21.17 $\pm$ 3.291	50.60 $\pm$ 11.755
Psychological	18.07 $\pm$ 2.913	50.30 $\pm$ 12.139

Social relationship	8.60±2.059	46.74±17.161
Environmental	23.43±6.311	48.24±19.722
Overall Quality of life	71.29±11.870	195.90±48.438

Regarding association, it reveals association between age and physical domain. Age was significantly associated with physical domain which means more the age more is the physical activity affected This table also reveals relationship between religion and physical domain. (Table 5)

**Table 5: Association of Socio demographic characteristics with domains of QOL scores (n=82)**

Variable	Physical (Mean ±SD)	Psychological (Mean ±SD)	Social (Mean ±SD)	Environment (Mean ±SD)
<b>Age</b>				
60-69	46.43±10.28	47.701±9.61	44.25±17.55	45.69±10.14
70 and above	52.89±11.96	51.73±13.19	48.11±16.95	49.65±23.34
P value	<b>0.016</b>	0.152	0.333	0.388
<b>Sex</b>				
Male	50.94±11.51	51.41±12.60	47.48±18.82	50.12±22.81
Female	50.12±12.37	48.27±11.16	45.40±13.83	44.82±11.88
P value	0.731	0.265	0.603	0.248
<b>Education</b>				
Illiterate	52.20±12.82	50.71±12.75	47.16±16.78	49.33±24.19
Literate	48.47±9.92	49.76±11.43	46.19±17.89	46.78±11.46
P value	0.156	0.729	0.801	0.566
<b>Religion</b>				
Hindu	51.19±11.66	50.53±11.981	47.01±17.51	48.64±19.83
Buddhist	39.28±7.71	45.83±16.31	41.66±6.80	40.62±18.04
P value	<b>0.048</b>	0.453	0.547	0.431
<b>Marital status</b>				
Married	50.51±11.71	50.69±12.34	49.21±17.63	49.11±25.39
Single	50.71±11.94	49.89±12.06	44.16±16.47	47.34±11.33
P value	0.781	0.097	0.268	0.083
<b>Economically dependent</b>				
Yes	49.69±12.69	50.15±12.86	45.08±17.61	47.93±22.77
No	52.61±9.34	50.64±10.65	50.32±15.89	48.92±10.86
P value	0.297	0.866	0.201	0.835
<b>Provision of allowance</b>				
Yes	50.25±11.66	52.48±11.89	48.81±18.55	51.93±24.58
No	50.98±11.94	48.02±12.11	44.58±15.51	44.37±11.93
P value	0.781	0.097	0.268	0.083
<b>Presence of child</b>				
Yes	51.37±11.48	45.83±13.42	40.19±14.20	42.65±12.49
No	47.69±12.68	51.47±11.60	48.46±17.55	49.71±21.04

P value	0.252	0.088	0.077	0.190
<b>Duration of stay</b>				
Upto1 year	50.99±12.45	51.62±10.46	48.84±19.02	49.22±11.460
More than 1 year	50.31±11.31	49.27±13.33	45.11±15.58	47.48±24.42
P value	0.796	0.389	0.331	0.696

p- Value significant at <0.05

## DISCUSSION

Regarding overall perception of Quality of life majority of the respondent's (45.1%) rated their perception of Quality of life as neither poor nor good. This finding is not similar with the study conducted on Karnataka, India where maximum of the respondents perceived QOL as good.<sup>11</sup>The overall perception of health was perceived to be satisfied (36.6%) which is similar to the study conducted in Biratnagar, Nepal<sup>5</sup> and Kathmandu<sup>12</sup> where majority of the respondents were satisfied with their perception of health.

The mean score was found higher in physical domain (50.60±11.755) and psychological domain (50.30±12.139) as compared to environmental domain (48.24±19.722) and social relationship (46.74±17.161) which is similar to the other study conducted on elderly people residing in old age homes at Biratnagar and India respectively.<sup>5,13,14</sup> Similarity could be due to the growing number of abandonment and neglect faced by elderly. As physical domain includes components as daily activities, treatment used, sleep, rest, pain and discomfort for which elderly are conscious and

seek immediate care in case of any deviation from normal. Similarly, the psychological domain includes components as body image, feelings, spirituality, religion, concentration, self-esteem which are also the area of concern among the elderly and it is the culture of our community that when people age, they start indulgent in religious and spiritual activities.<sup>5</sup> The mean score of the social relationship domain is found to be low which is in consistent with the study conducted in Nepal (Biratnagar,Dhankuta)<sup>5,15,16</sup> which could be because of the aspects such as personal relationships, social support and sexual activity which may be obvious due to separation from family members, loss of loved ones due to their death, loss of sexual activity either due to aging or death of spouse. The overall score for quality of life was found to be good which is similar to the study conducted in Morang, Nepal where the total raw mean score was 60.06.<sup>13</sup>

This study revealed, significant association between age and physical domain which is similar to the study conducted in Morang<sup>13</sup> and Malaysia.<sup>17</sup>This could be elderly people suffer

from various functional limitations compared to younger groups. In this study, this can be found that there is significant association between religion and physical domain which is in contrast with the study conducted in Nepal.<sup>13</sup>

Women had a significantly lower quality of life in all domains compared to men. This could be because the women perceive ageing more negatively than the men. Other studies reported that low quality of life scores among women and recognized their findings to feelings of unattractiveness among elderly women, which could lead to low self-esteem and also add to negative perception of ageing among elderly women.<sup>18</sup> Female have a lower quality of life in all domains compared to men because women perceive ageing negatively in comparison to men.

### Funding

The research was funded by the Research Center of Madan Bhandari Academy of Health Sciences, Hetauda, Nepal [Gnt.08/079/80].

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### CONCLUSIONS

This study reveals quality of life among elderly living in old age home. Regarding overall perception of Quality of life majority of the respondent's rated their perception of Quality of life as neither poor nor good. The overall perception of health was perceived to be satisfied. Also the study has revealed higher scores in physical and psychological domains reflecting the health seeking behavior and self-care behavior is satisfactory among them. The overall score for quality of life was found to be good. There was significant association of physical domain with age and religion. Women had a significantly lower quality of life in all domains compared to men.

**Conflict of interest:** None

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