Original Article

JHAS 2021; 11(2): 40-45
DOI: https://doi.org/10.37107/jhas.272

Comparative Study regarding the Quality of Life of Senior Citizen Living in Old Age Home and Own Home in a Pokhara Metropolitan City

Sharmila Paudel[1], Bimala Bhatta[1]
[1]School of Health and Allied Sciences, Faculty of Health Sciences, Pokhara University, Kaski, Nepal

ABSTRACT

Introduction: The quality of life (QOL) of elderly people has become more relevant with the demographic shifting towards the ageing population. Quality of life is a key concept in environmental, social, medical and psychological sciences as well as in public policy and the minds of the population at large nevertheless there is no consensus regarding the definition of quality of life. The objective of this study was to assess and compare the quality of life living in old aged home and own home.

Methods: A cross-sectional study was carried out among the elderly population 60 years and above. The total sample size of 228 participants was further divided into old aged home vs own home inhibiting; 114 in each category. A face to face interview was carried among the participants to assess their quality of life. Quality of life was assessed by using the Nepali version of WHOQOL-BREF questionnaires. The association between quality of life and the explanatory variables were assessed using the chi-square test and stepwise logistic regression.

Results: Amongst the 228 participants; the mean score of QOL between elderly people living in their own home (57.86±8.54) was better than the elderly people living in the old aged home (44.62±9.88). The overall quality of life of elderly people living in their own home was 5.64 times better than the elderly people living in the old aged home (AOR: 5.64, 95%CI: 2.72-11.68).

Conclusion: QOL score among senior citizen living in their own home is better compared to those living in old age home. The physical, psychological, social and environmental health domains of QOL were better in the people living with family than living in old age home. The social relation domain remains high among elderly living in their own home.

Keywords: *Quality of life, Senior citizen, Old aged home, Own home*

INTRODUCTION

Quality of Life (QOL) is defined by WHO as 'individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.[1] Quality of life of elderly people (QOL) is becoming even more relevant with the demographic shifting towards an ageing population. Ageing is inevitable developmental facts that bring along several changes in the physical, psychological, hormonal and social status. Most of these changes are expected to affect the quality of life of the elderly.[2] In Nepalese society, there is very low awareness about the special needs of elderly and caretakers are yet to understand the components of elderly care such as physical and mental, psychological and social needs.[3]

The world's population aged 60 years and above is expected to be 2 billion in recent years, increasing from 900 million in 2015 A.D. Furthermore, the data reveals 125 million people are aged 80 years or above. By 2050, there will be almost 120 million living in China alone, and 434 million people worldwide for this age group. By 2050, 80% of all older people will live in low- and middle-income countries.[4]

Overall QOL score of Nepalese elderly was 12.92, which implies that Nepalese elderly have a moderate QOL.[5] Older people's living arrangement is an important factor that influences the QOL. One-third of the total respondents living with their son/daughter rated their QOL as good while the those elderly living with spouse only was more than forty percent. Educational status and land/property ownership were positively correlated with QOL.[6] QOL of the elderly maypotentially improve by care directed towards their physical and psychological health, by strengthening family relations and by financial independence.[5]

Correspondence: Sharmila Paudel, School of Health and Allied Sciences, Faculty of Health Sciences, Pokhara University, Nepal. Email: sharmilapaudel.pkr@gmail.com

In Nepal, from 1971 to 2011 A.D, the population aged 60 years or over has increased substantially from 0.65 million to 2.15 million. The population of older persons will reach nearly 3.5 million by 2031, although the average annual growth rate is expected to decline. During the 2001-2011 period, the annual growth rate of the population aged 60 years or above was 3.59 percent, while that of the total population was 1.35 percent.[7] Like many other developing countries in the world Nepal is also observing the rapid rise in aged group of people.

According to the 2011 census, Kaski district has a population of 492, 098 among which 42,935 (8.7%) are of age 60 years and above. Pokhara metropolitan is one of the largest metropolitan city of Nepal. The urbanization, modern character, tendencies and values and world integration have led to the weakening of social values, economic structure, erosion of societal values, and social structure such as the joint family. In Nepal, there is a very little study carried out concerning the quality of life. Past studies have focused on loneliness, depression, functional disability, sleep quality and elderly abuse.[8,9] The main objectives of this study was to assess and compare the quality of life of senior citizen living in old age home and their own home.

METHODS

A cross-sectional study was conducted on Pokhara Metropolitan, Kaski district; between November 2019 to October 2020. A total sample size of 228 considered for the study consisting of equal participants from old aged homes and living in their own homes i.e 114 in each categories. The data were collected using the Probability Proportional to Size(PPS) sampling from the own home and the total enumeration sampling from the old aged home respectively. The Probability Proportional to Size (PPS) sampling was done as follow:

First stage: Among the 33 wards of Pokhara Metropolitan 5 ward were selected randomly through a simple random sampling method.

Second stage: Required sample size was determined based on probability proportional to the size of the total elderly population from selected wards.

Third stage: Respondents were selected randomly from the sampling frame.

For the sample size calculation, the reference for the quality of life was considered from a paper by where the standard deviaton of quality of life was shown to be 10.88.10 Considering this the sample size is calculated to be 114. [$n=Z^2*\sigma^2/E^2=1.96*1.96*10.88*10.88/2^2=114$; where Z=1.96 at 95%CI, SD=10.88 and E=2[10] (margin error;while taking mean and standard deviation we can consider margin error from 1-5 and 2 is considered normal value). Structured questionnaires were used to obtain information from the elderly person.Verbal as well as written consent was taken from the participants and authorized person of the old aged home. Face to face interview was conducted by visiting different old aged home and household of different wards. WHOQOL-BREF quality of life questionnaires was translated into nepali and used which consist of 4 domain and 26 items (i.e physical, psychological, social and environmental domain) to collect the information from the respondents. The questionnaires were pre-tested to 10% of the sample size and modification was done as needed. Cronbach's Alpha scale value obtained on quality of life was 0.834.

Ethical clearance from the Nepal Health Research Council (NHRC) along with written permission from the concerned local authority were obtained. Data were entered in Epi-data software and analyzed with Statistical Package for Social Science (SPSS). Both bivariate and multivariate technique was applied to identify the factor associated with quality of life.

RESULTS

The description ofthe sample distribution of the study groups by their background characteristics is shown in Table 1. Nearly two-third of respondents (58.8%)are of age group 70 or above were in the old-age homes (OAH) and approx. 58 % are of 60- 70 years age group residing in own home. More than halfof the respondent (66.7%) living in the old aged home and (51.8%) living in own home were female. Most of the respondent (94.7%) living in old age and (86.0%) living in own home were Hindu. In OAH two-fifth of the respondents (41.2%) were widow/ widower while respondent living in their own home majority (68.4%) were married and living together with their spouses. The majority of the respondents of OAH (72.8%) are not educated in comparison to those living in their own home (33.3%). In OAH; more than half (57%) of the respondents' past occupation was agriculture. Near half (49.1%) of the respondents living in their own home were unemployed.

The mean scores and comparison of QOL (domain wise) between the two groups of elderly people is shown in Table 2. The mean scores of the physical, psychological, social, and environmental health of elderly people living in their own home are better than living in old age home. The mean score of QOL of elderly living in their own home 57.86±8.54 is better than the living in the elderly homes 44.62±9.88. It indicates that the elderly living with family has better QOL compared to living in the elderly home. All the domain of quality of life and overall quality of life is statistically significant to the current living place of a senior citizen ($p<0.05$).

The variations in overall quality of life between the two study groups by their background characteristics is shown in Table 3. The chi-square values for age ($p=0.005$), ethnic group ($p=0.04$), current marital status ($p=0.01$), type of family ($p=0.01$), for elderly living on own homewere found to be significantly associated with the quality of life.

Age ($p=0.006$), level of education ($p=0.005$), and type of family ($p=0.01$) of elderly living in the old aged home were found to be significantly associated with the quality of life. The results based on the application of the multivariate logistic regression to the data are shown in Table 4. These results refer to the overall quality of life. In this model, 8 variables, including the residency variable, are included simultaneously. As the results show, the variables – age, ethnic group and physical exercise–have a significant independent influence on the overall quality of life. Even after adjusting for all the variables, those elderly living at their own homes enjoy 5.6 times the good quality of life than those living at an institution or old-age home. These results thus confirm that those elderly living at their own home has a better quality of life compared to those living at old aged home.

Table 1: Sample distribution of respondents by background characteristics

Characteristics	Old aged home n=114 (%)	Own home n=114 (%)
Age		
69 or lower	47 (41.2)	66 (57.9)
70 or higher	67(58.8)	48(42.1)
Gender		
Male	38(33.3)	55(48.2)
Female	76(66.7)	59 (51.8)
Ethnic Group		
Advantaged		
Dalit	2 (1.8)	14(12.3)
Disadvantaged Janjati	10(8.8)	14(12.3)
Terai Caste	1(0.9)	0(0.0)
Advantaged Janjati	23(20.2)	24(21.1)
Upper Caste	78(68.4)	62(54.4)
Religion of Respondent		
Hinduism	108(94.7)	98(86.0)
Buddhism	4(3.5)	16(14.0)
Christianity	2(1.8)	0
Current Marital Status		
Unmarried	27(23.7)	1(0.9)
Married	40 (35.1)	78(68.4)
Separated	0 (0.0)	4 (3.5)
Widow	47 (41.2)	31(27.2)
Education Status		
Illiterate	83(72.8)	38(33.3)
Informal Education	13 (11.4)	44(38.6)
Primary Education	14(12.3)	10(8.8)
Secondary Education	3 (2.6)	16 (14.0)
Graduate and above	1(0.9)	6(5.3)
Family Type		
Joint	57(50.0)	28(24.6)
Nuclear or other	57 (50.0)	86(75.4)
Occupational Status		
Unemployment	39 (34.2)	48 (42.1)
Housewife	10 (8.8)	8 (7.0)
Business	1 (0.9)	5 (4.4)
Agriculture	58 (50.9)	19 (16.7)
Government Job	1(0.9)	6(5.3)
Private Job	1(0.9)	4(3.5)
Daily wages	2 (1.8)	2(1.8)
Retired	2 (1.8)	22 (19.3)

Table 2: Comparison of Mean Scores of the Quality of Life (QOL) domains of the Elderly People in Two Groups

QOL Domain	Old aged home (n=114) Mean±SD	Own home (n=114) Mean±SD	p-value*
Physical	41.6±12.2	50.6±13.3	<0.001
Psychological	44.1±14.4	57.1±11.6	<0.001
Social	50.7±18.0	70.8±11.1	<0.001
Environmental	42.1±10.9	52.9±9.6	<0.001
Overall	44.6±9.9	57.9±8.5	<0.001

*Independent t-test

Note: Response rate was measured on 1-5 rating scale.The raw score was transformed in WHOQOL BREF 100 score

Table 3: Association of QOL of elderly with the socio-demographic variables

Characteristics	QOL-Old aged home		χ2	p-value	QOL-Own home		χ2	p-value
	Poor	Good			Poor	Good		
Age								
60-69	24(32.0)	23(59.0)	7.70	0.006**	6(30.0)	60(63.8)	7.74	0.005**
70 and above	51(68.0)	23(41.0)			14(70.0)	34(36.2)		
Gender								
Male	28(37.3)	10(25.6)	1.57	0.209	8 (40.0)	47(50.0)	0.66	0.41
Female	47(62.7)	29(74.4)			12 (60.0)	47 (50.0)		
Ethnic Group								
Advantaged	51(68.0)	27 (69.2)	0.018	0.893	15 (75.0)	47(50.0)	4.15	0.04*
Disadvantaged	24(32.0)	12(30.8)			5 (25.0)	47 (50.0)		
Current Marital Status								
Married	22(29.3)	18(46.2)	3.18	0.074	9(45)	69(73.4)	6.15	0.01*
Other	53(70.7)	21(53.8)			11(55.0)	25(26.6)		
Education								
No education	61(81.3)	22(56.4)	8.05	0.005**	10 (50)	28 (29.8)	3.03	0.08
Primary or higher	14 (18.7)	17 (43.6)			10 (50)	66 (70.2)		
Family Type								
Joint	31 (41.3)	26 (66.7)	6.58	0.010*	9 (45.0)	19 (20.2)	5.46	0.01*
Nuclear or other	44(58.7)	13 (33.3)			11 (55.0)	75 (79.8)		
Current occupation								
Unemployed	33(44.0)	16(41.0)	0.093	0.76	11(55.0)	45(47.9)	0.33	0.56
Agriculture & other	42(56.0)	23(59.0)			9(45.0)	49(52.1)		

* significant at <0.05 level, ** significant at <0.01 level

Table 4: Multivariate logistic regression results, overall quality of life

Variable	AOR	CI	P-value
Residency			
Old aged home	1		
Own home	5.64	2.72-11.68	<0.001*
Age			
60-69	2.07	0.99-4.31	0.05
70 or higher	1		
Ethnic group			
Advantaged	0.47	0.22-0.99	0.04*
Disadvantaged	1		
Current marital status			
Married	1.69	0.82-3.48	0.15
Other	1		
Education			
No education	1		
Primary or higher	1.72	0.77-3.81	0.18
Current use of any hard drinks			
Yes	1		
No	1.44	0.42-4.97	0.55
Physical exercise			
Yes	0.33	0.75-3.25	0.004*
No	1		
Presence of any chronic diseases			
Yes	1		
No	1.56	0.15-0.70	0.23

*Statistically significant at 95%level of confidence, p-value <0.05

Note: CI: Confidence Interval, AOR: Adjusted Odd Ratio

DISCUSSION

The total mean score of QOL between elderly living in their own home and old age home is 57.9±8.5 and 44.62±9.882 respectively. QOL is statistically significant with the living place of a senior citizen (p<0.05). It indicates that elderly people living in their own home has better QOL than living in old age home. This finding is supported by a study which was conducted in Nepal, revealing that elderly living in old aged home has a low level of quality of life compared to those living in Own home.[10] A similar finding is seen in a study which was conducted in India and Iran.[11–13] However, contradictions to our findings were also seen in studies carried out at Jharkhand India and Zagreb, Croatia.[14,15] Another study that assessed QOL through a single-item Likertscale QOL question to assess the QOL of the elderly found 45.9% of elderly reported their QOL neutral (neither good nor bad), 35.1% reported as good and 19.0% reported poor.[6] The reason could be due to the availability of a good facility, quality service and appropriate care to the senior citizen based on their need.

When controlling relevant covariates; senior citizen living in their own home has 5.64 times better quality of life as compared to those living in the old aged home. A similar finding is seen in a study which revealed that the quality of life of elderly within family setup was better as compared to elderly in OAHs, carried out on Mazandaran province in the North of Iran.[13]

Age and level of education are significantly associated with the overall quality of life (p-value <0.05) residing in the old aged home. It shows that the younger age group had a better quality of life as compared to those who were older age group. The higher level of education had a better quality of life as compared to those with lower-level or no education which was consistent with the finding of other research.[16,17]

Age and marital status are significantly associated with the overall quality of life ($p < 0.05$) residing in their own home. The married elderly have a better quality of life as compared to unmarried, separated and widow groups. These findings are consistent with the other papers findings.[18,19]

The mean score (50.60±13.25) of physical health domain is higher among the elderly living with family than of elderly living in old age home with a score of 41.57±12.20. Physical health dimension was statistically significant with the living place of a senior citizen. ($p< 0.05$) which is similar to the finding of other research.[10,13,20] The finding of the study was contradictory with the previous study done in India. The mean score of psychological health is 57.14 ±11.63 of respondents living in their own home. The mean score of psychological health living in an old aged home is 44.11±14.40. The psychological health dimension appears statistically significant with the living place of a senior citizen. ($p<0.05$) and agrees with the finding of other research.[10,21] Social domain has the highest mean score value of 70.79±11.10 in comparison to other domains among the elderly living with family than living in old age home 50.68±17.98. The social health dimension was statistically significant with the living place of a senior citizen ($p<0.05$). People living in old age home have poor social health because of the miserable social relationship of inmates of old age home with family, friends, and community than those living in their own home.[14,22] In an old age home, the person is institution bound and the interactions with people is relatively less; so, the social health appears not good in comparison to the person living in own home. The mean score of environmental health is 52.90±9.57 for the respondents living in their own home and 42.12±10.87 for those living in elderly homes. The environmental health dimension also appears to be statistically significant with the living place of a senior citizen. ($p<0.05$) and is consistent with other papers findings .[10,22]

CONCLUSION

QOL score among senior citizens living in their own home is better compared to living in an old age home. The physical, psychological, social and environmental health domains of QOL were better in the people living with family than in old age home. QOL of the elderly decreases as the age increases. The social relation domain is very high among elderly living in their own home. The QOL each individual possesses in physical, psychological, social and environmental health is very important and fulfilment in all these aspects is essential to have a high QOL.

CONFLICT OF INTEREST

None.

ACKNOWLEDGEMENTS

We are thankful to the chairman of the elderly care homes for the permission and co-operation to conduct the study. Our sincere gratitude to all participants.

REFERENCES

1. Organization WH. The World Health Organization Quality of Life (WHOQOL). Geneva: World Health Organization. Available at: http://www. who. int …; 2013.
2. Seby K, Chaudhury S, Chakraborty R. Prevalence of psychiatric and physical morbidity in an urban geriatric population. Indian J Psychiatry. 2011;53(2):121.
3. Silva PAB, Soares SM, Santos JFG, Silva LB. Cut-off point for WHOQOL-bref as a measure of quality of life of older adults. Rev Saúde Pública. 2014 Jun;48(3):390–7.
4. United Nation, Department of Economics and Social Affairs. World Population Ageing. Newyork; 2017 p.

124.
5. Joshi MR, Chalise HN. Elderly abuse and quality of life: A study of community living older people of Nepal. J Med Evid. 2021;2(2):113.
6. Joshi MR, Chalise HN, Khatiwada PP. Quality of life of Nepalese elderly living in rural Nepal. J Gerontol Geriatr Res. 2018;7(484):2.
7. CBS N. Central Bureau of Statistics. Popul Million. 2014;33:34–0.
8. Ghimire S, Baral BK, Pokhrel BR, Pokhrel A, Acharya A, Amatya D, et al. Depression, malnutrition, and health-related quality of life among Nepali older patients. BMC Geriatr. 2018;18(1):1–15.
9. Chalise HN. Social Support and its Correlation with Loneliness and Subjective Well-being: A Cross-cultural Study of Older Nepalese Adults. Asian Soc Work Policy Rev. 2010;4(1):1–25.
10. Shrestha M, Heera KC, Bhattarai P, Mishra A, Parajuli SB. Quality of life of elderly people living with family and in old age home in Morang District, Nepal. BIBECHANA. 2019;16:221–7.
11. Amonkar P, Mankar MJ, Thatkar P, Sawardekar P, Goel R, Anjenaya S. A Comparative Study of Health Status and Quality of Life of Elderly People Living in Old Age Homes and within Family Setup in Raigad District, Maharashtra. Indian J Community Med Off Publ Indian Assoc Prev Soc Med. 2018;43(1):10–3.
12. Safavi S. Comparing quality of life, social support and depression among elderly living at home and nursing home residents. 2015;13.
13. Heydari J, Khani S, Shahhosseini Z. Health-related quality of life of elderly living in nursing home and homes in a district of Iran: Implications for policy makers. Indian J Sci Technol. 2012;5(5):2782–7.
14. Panday R, Kiran M, Srivastava P, Kumar S. A study on quality of life between elderly people living in old age home and within family setup. Open J Psychiatry Allied Sci. 2015;6(2):127.
15. Brajković L, Godan A, Godan L. Quality of life after stroke in old age: comparison of persons living in nursing home and those living in their own home. Croat Med J. 2009;50(2):182–8.
16. Onunkwor OF, Al-Dubai SAR, George PP, Arokiasamy J, Yadav H, Barua A, et al. A cross-sectional study on quality of life among the elderly in non-governmental organizations' elderly homes in Kuala Lumpur. Health Qual Life Outcomes. 2016 Dec;14(1):6.
17. Tseng S-Z, Wang R-H. Quality of life and related factors among elderly nursing home residents in Southern Taiwan. Public Health Nurs. 2001;18(5):304–11.
18. Mr J, Hn C, Pp K. Quality of Life of Nepalese Elderly Living in Rural Nepal. J Gerontol Geriatr Res [Internet]. 2018 [cited 2020 Jan 20];07(05). Available from:https://www.omicsonline.org/open-access/quality-of-life-of-nepalese-elderly-living-in-rural-nepal-2167-7182-1000484-105145.html
19. Vahdaninia M, GOSHTASBI A, Montazeri A, Maftoun F. Health-related quality of life in an elderly population in Iran: a population-based study. 2005;
20. Ramocha LM, Louw QA, Tshabalala MD. Quality of life and physical activity among older adults living in institutions compared to the community. South Afr J Physiother. 2017 Feb 3;73(1):6 pages.
21. Chou K-L, Chi I. Comparison Between Elderly Chinese Living Alone and Those Living with Others. J Gerontol Soc Work. 2000 Nov 17;33(4):51–66.
22. Asadullah M, Kuvalekar K, Katarki B, Malamardi S, Khadka S, Wagle S. A study on morbidity profile and quality of life of inmates in old age home in Udupi district, Karnataka, India. Int J Basic Appl Med Sci. 2012;2(3):91–7.