Satisfaction with life among senior citizens in Pokhara metropolitan city: A cross-sectional study

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ABSTRACT

Introduction: The number of senior citizens in the world is growing rapidly so life satisfaction is the best indicator for evaluating successful aging. The aim of the study was to assess life satisfaction among senior citizens in Pokhara metropolitan city. **Methods:** This community-based cross-sectional study was conducted among 325 samples from 17 cluster of Pokhara metropolitan city. Life satisfaction were measured through life satisfaction index-A. Descriptive statistics and inferential statistics were computed at a 5% level of significance. Study participants were aged 60 years and above, residing permanently in the study sites. Wards, households, and respondents were selected randomly. Data were entered in Epi Data and analyzed using statistical package for the social sciences 16.0 version. **Results:** Findings revealed that 53.5% respondents were not satisfied with their life. Likewise, age below 70 (52.4%), male respondents (53.7%), senior citizens (60+) living with partner (50.8%) were more satisfied. In multivariate analysis pension (OR=0.482, CI=0.248, 0.935), sufficient money for expenditure (OR=2.370, CI=1.362, 4.123), family income (OR=4.391, CI=2.019, 9.551), state of health (OR= 0.464, CI= 0.215, 0.923) and role in family decision making (OR=2.001, CI=1.055, 3.793) were positively associated with life satisfaction. **Conclusions:** More than half of the senior citizens were dissatisfied with their life. Financial state, state of health and role in family decision making are the main determinant factors of life satisfaction. Therefore, the authority body needs to be developing proper old age policies to resolute the socioeconomic problems of old people.

Keywords: Life satisfaction, life satisfaction index, role in family, senior citizens.

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INTRODUCTION

Depending on prevailing of the socio-cultural norms and values, countries define men as an old after crossing certain age.[1] Nepal Senior Citizens Act define senior citizen as the citizens of Nepal having completed the age of sixty years.[2] The concept of life satisfaction (LS) is not just an absence of disease or disability; it includes the satisfaction of person's social and psychological needs. When a person finds joy in their daily lives, finds meaning in the life they are living/has lived, and feels they have achieved most of their goals, this can be characterized as high LS.[3] Different factors like culture, physical activity, social interaction, social support, income, health status etc. effect on person's life satisfaction.[4]

A cross-sectional study in Kathmandu showed that 82.7% of the senior citizens were satisfied with their life. Among them 67.3% were satisfied with their living condition, 64.7% were satisfied with their present health status and 79.3% were satisfied with their ability to involve in basic activities.[5] Likewise, study conducted at Gorgan revealed that 60% of the elderly participants were not satisfied with their lives. Men experience more life satisfaction than female and educated were more satisfied then uneducated.[6] LS was positively associated with being married, high family income, involvement in

active earning, and a high nutritional score.[7]

In some countries like Nepal and India, senior citizens are taken into consideration as the head of the family but they are not involved in decision making which makes them feel isolated, depressed and demoralized.[8] True happiness is the center of satisfaction. Aging happiness depends on social behavior towards them, sense of well-being, and compatibility with life processes. Even though the adult life is full of transitional state as is life before twenty. Most research studies have focused only on infancy and adolescence changes and their needs. Studies among elderly also mainly focus on depression, caregiver burden; quality of life. Hence, the objective of the study was to assess the life satisfaction among senior citizens in Pokhara metropolitan city.

METHODS

A cross-sectional descriptive study was conducted from May 25 to July 21, 2019. Considering the definition of elderly population given by the senior citizen act of Nepal, only those who were aged 60 years and above residing permanently in different wards of Pokhara metropolitan city were included.

To calculate sample size, Cochrane's formula was used for infinite population $n= Z^2pq/d^{2,9}$ with 5% level of significance and 82.7% of prevalence from LS among senior citizens in a community of Kathmandu.[5] Hence, the calculated sample size was 217. Then the researcher used the correction formula for finite population by multiplying it with design effect of 1.5 as cluster random sampling the sample was 325. Assuming each ward as a cluster of 50%, i.e. 17 clusters were taken. Since sampling frame of each ward was not available, therefore data was collected assuming that one household consists of one study population. Sampling interval was obtained by dividing the total household by the number of cluster made. Random number was obtained by using decision analyst STAT software. The first random number generated was 306. After obtaining the first random number, subsequent cluster was selected at every 6214 interval. Required number of households from each cluster was calculated by proportionate allocation according to the total number of household present in each ward, so that household from each cluster were ranged from 11 to 35. Households in each cluster were selected using random walk method.[10] Data were collected from households of the selected wards at the place of their residence by face to face interview. If more than one study population were present in households, only one of them was selected randomly by lottery method. Similarly, if the study population was not present in the selected house, sample was taken from subsequent house. Elderly people who had problems with hearing, speaking or unable to respond were excluded. Ethical clearance was obtained from NHRC (ERB number 2065/2019). Prior to data collection, verbal and written informed consent was obtained from each respondent.

Instrument consisted of two parts. Part I included sex, marital status, education level, economic status, family relationship, health status of the senior citizens. Part II consisted of Life Satisfaction Index -A (LSITA) [11] with 35 items. It was categorized into five dimensions.

i)   The zest versus apathy scale measures social or intellectual engagements,

ii)   The resolution and fortitude scale measures acceptance of personal responsibility,

iii) Congruence between desired and achieved goals scale measures satisfied or dissatisfied with achieved goals in life,

iv)   The self-concept scale measures present emotional, physical, and intellectual dimensions of life, and

v)   The mood tone scale measures optimism and happiness.

Before data collection tool was translated to Nepali language then back translation was done into English with the help of language expert. Six points Likert scale (from 1=strongly disagree to 6= strongly agree) was used to measure LS and reversed scoring was done on natively stated questions. Pretesting of the instrument was done for its feasibility and appropriateness among the 10% of the sample in the different cluster, which was not included in the study. The alpha scale reliability was 0.79.

Descriptive statistical analysis (frequency and percentage) and inferential statistics were done using statistical package for social science (SPSS) version 16.0. Satisfaction was classified into satisfied and not satisfied based on LSITA Scoring Matrix (Mean ± SD). Chi-square test was carried out to assess the association between different independent variables and level of satisfaction. Those variables significantly associated with level of satisfaction (p-value<0.05) were further subjected to bi-variate regression analysis so that the effect of the confounding factors would be eliminated.

RESULTS

A total of 325 senior citizens were included in this study. The mean age and standard deviation of age was 71.46±8.55. Eighty four percent of senior citizens were Hindu and 59.4% of them were lived with their spouse.

Similarly, 11.1% respondents had completed SLC or higher level education while 57.5% of them were illiterate. Also, 68.6% respondents lived in joint family and only 63.1% respondents were involved in family decision making (Table 1).

Table 1: Baseline Characteristics and Life Satisfaction (N=325)

Characteristics	Life Satisfaction		Total	χ²	P-value
	Satisfied Frequency (%)	Not Satisfied Frequency (%)			
Age Group					
Age below 70	89(52.4)	81(47.6)	170	4.974	0.02*
Age above 70	62(40.0)	93(60.0)	155		
Mean ± SD (71.46±8.55)					
Range (60-95 years)					
Sex					
Female	79(41.4)	112(58.6)	191	4.844	0.28
Male	72(53.7)	62(46.3)	134		
Education					
Illiterate	70 (37.4)	117 (62.6)	187	14.431	0.001*
Literate	81 (58.7)	57 (41.3)	138		
Marriage					
Living with partner	98(50.8)	95(49.2)	193	3.558	0.05*
No Partner	53(40.2)	79(59.8)	132		
Types of Family					
Nuclear	37(47.4)	41(52.6)	78		
Joint	103(46.2)	120(53.8)	223	0.040	0.98
Extended	11(45.8)	13(54.2)	24		

* Statistically significant

Economical and health related information of male and female respondents was shown in Table 2. Fifty-three percent of the male respondents were financially independent, whereas 52.4% female respondents partially depend on family members. Allowances are the present income source of 50.0% male respondents as well as 68.0% female respondents. Out of 325, 83.69% respondents had problems in health and major problem is related to sensory.

Table 2: Economical and health related information

Variables	Male n=134(%)	Female n=191(%)
Manage Expenses		
Independent	71(53.0)	74(38.7)
Partially dependent	57(42.5)	100 (52.4)
Fully dependent	6(4.5)	17(8.9)
Present Income source*		
Allowances	67(50.0)	130(68.1)
House Rent/Business	28(20.8)	13(16.2)
Agriculture	24(17.9)	17(8.9)
Daily wages	6(4.5)	6(3.1)
Others	23(17.1)	12 (6.3)
Problem in body system*		
Suffering from health problems	104 (77.6)	168 (88.0)
Vision Problem	73(54.5)	133(69.7)
Cardiovascular	55(41.0)	84(44.0)
Orthopedic	40(29.9)	85(44.5)
Endocrine	24(17.9)	21(11.0)
Respiratory	23(17.2)	55(28.8)
Digestive	22(16.4)	67(35.1)
Urinary/Reproductive	11(8.2)	29(15.2)
Nervous	3(2.2)	16(8.4)

*Multiple Responses

Among different dimensions of LS (Table 3), the mean value of mood tone is found to be higher as compared with other dimensions with SD of 7.63 following resolution and fortitude. After computing all dimension of life satisfaction, 46.5% respondents were satisfied with their life (133.37 ± 5.83) which is low compare to LSTIA mean score.

Table 3: Life satisfaction and its dimensions

Domain of Life Satisfaction	Satisfied Frequency (%)	Not Satisfied Frequency (%)	Mean ± SD Senior Citizens	Mean ±SD LSITA
Zest vs. Apathy	165 (50.8)	160 (49.2)	25.45 ± 5.83	30.5 ± 5.2
Resolution & Fortitude	139 (42.8)	186 (57.2)	31.08± 6.19	39.4 ± 4.8
Congruence between desired and Achieved goals	142 (43.7)	183 (56.3)	18.73± 4.41	22.2 ± 3.0
Positive self-concept	126 (38.8)	199 (61.2)	14.68 ± 3.49	25.2 ± 3.3
Mood Tone	150 (46.2)	175 (53.8)	35.94 ± 7.63	32.9 ± 6.3
Total score of Life Satisfaction	151 (46.5)	174 (53.5)	133.37± 21.85	151.0 ±19.5

Keeping remaining variables as constant, the total LS among the respondents who do not have pension were less likely (OR= 0.464, CI= 0.215, 0.923) satisfied as compared to the respondents who have pension. Regarding the daily expenditure, the life satisfaction is 2.37 times higher to the respondents who have sufficient money for expenditure then the respondents who do not have sufficient money (OR=2.370, CI=1.362, 4.123). Likewise, the total life satisfaction among the respondents whose family income was more than 10,000 were about 4.39 times more likely satisfied as compared to the respondents whose family income was less than 10,000 per month (OR=.4.391, CI=2.019, 9.551).The respondents who have a role in family decision were about 2 times more likely satisfied than the respondents who do not have role in family decision (OR= 2.001, CI= 1.055, 3.793). Regarding the state of health, senior citizens who have problems in health is 0.446 times less likely satisfied as compared to the respondents who do not have problem in health (OR= 0.464, CI=0.215, 0.923). Therefore, this table shows that economical condition, role in decision making and state of the health are the main determinants of life satisfaction (Table 4).

Table 4: Odds ratios from binary logistic regression of life satisfaction among Senior citizens (N=325)

Respondents characteristics	Odds Ratio (β)	95% Confidence Interval (Lower, Upper)	p-value
Present source of Income (Pension)			
No (ref.)	1		0.03*
Yes	0.482	0.248, 0.935	
Daily Expenditure			
Insufficient (ref.)	1		0.001*
Sufficient	2.370	1.362, 4.123	
Family Income/Month			

Less than 10,000(ref.)	1		0.001*
More than 10,000	4.391	2.019, 9.551	
Role in Family Decision Making			
No (ref.)	1		0.03*
Yes	2.001	1.055, 3.793	
Suffering Diseases			
Yes (ref.)	1		0.02*
No	0.446	0.215, 0.923	

*Statistically significant

DISCUSSION

The changing demographic pattern is the new challenges to the world for improving wellbeing of senior citizens. Although, the burden of worsening life satisfaction was significantly higher in low socioeconomic groups, but financial growth isn't simplest the answer for enhancing existence satisfaction.[12]

In this study, 46.5% of senior citizens were satisfied with their lives. Consistent findings were reported by the study of Chehregosha et al.[6] In regards to financial state, statistically significant association was observed in family income and financial independence with life satisfaction which was similar in the study done in India.[10] There are various factors which directly or indirectly affect on life satisfaction of elderly. Physical conditions, demographic factors, role in family, economic status and so on have influence on life satisfaction. Therefore, it is difficult to interpret the differences between different levels of life satisfaction in various communities.

In terms of dimensions of LSITA, this study pertained highest and lowest mean scores on zest verses apathy (25.45±5.83) and the positive self-concept (14.68±3.49) subscales, in respective order. Similarly, study conducted at India also obtained highest mean score on domain of resolution and fortitude (6.1±2.5) and lowest score on positive self-concept (3.1±1.2).[6] In the present study, family income, economical independency and sufficient money for expenditure are the determinant factors for life satisfaction which is consistent with the findings of the Loewe et al.[7,13] This study also suggests higher level of education to be an influential factor for determining the life satisfaction because higher level of education develop a feeling of efficiency, economic independence and more realistic outlook on life processes among senior citizens. Like the current findings, Ghimire et al.[7] revealed that the married participants were significantly more satisfied with their life than those who were living alone. Conversely, participants living in a nuclear family are significantly more satisfied than those living in a joint family.

Aging is accompanied by different changes in the body systems, reduced levels of activity and performance as well as the emergence of diseases, which can influence the overall satisfaction with life for the elderly. This study also shows that people who are suffering from diseases are less likely satisfied then people who do not have disease. In United States 5.6% adults were dissatisfied with their life. As the level of life satisfaction decreased, the prevalence of getting poor health increases. The prevalence of smoking, obesity, physical inactivity, and heavy alcohol consumption have also decreased life satisfaction.[14] Therefore, the Nepal government needs to address the issues of aging through advocacy and sensitization at local and national levels by launching a national public information campaign. As well as, authority body need to strengthen the existing program by finding a probable solution to the problems faced by seniors. This study is a cross sectional study, therefore results may change over time.

CONCLUSIONS

The life satisfaction among senior citizens in Pokhara metropolitan city was low. Financial state, state of health and role in family decision making are the main determinant factors of life satisfaction. Therefore, the authority body needs to develop proper old age policies to resolute the socio-economic problems of the senior citizens to make them feel part of society and improve their life satisfaction. To address effectively to the problem faced by senior citizens more scientific studies are required.

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