

Perceived stress and coping strategies among elderly people residing in geriatric centers of Nepal

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Abstract

Introduction

Senior citizens are one of the most vulnerable groups in Nepalese society. Loneliness and stress among senior people are on the rise due to a lack of dependable caregivers and unmet medical and emotional needs. However, some elders may have better coping strategies based on their life experiences and physical/mental well-being. The objective of our study was to assess the stress and coping strategies among elderly people residing in government and private geriatric centers in Central Nepal.

Materials and Method:

A descriptive cross-sectional study was conducted among the 54 respondents selected conveniently from two geriatric centers in Devghat, Nepal. The centers were Devghat Samaj Kalyan Kendra, a government geriatric center, and Devghat NRNA Briddashram, a private geriatric center.

Results:

Results show that 51.9% of the seniors living in the facilities had moderate levels of stress while 1.8% of respondents reported high levels of stress. The most commonly used coping strategies included self-distraction followed by the use of positive reframing and religion. Among the elders living in government and private geriatric centers, a significant difference was observed in behavioral disengagement (p-value 0.003). However, no significant correlation was seen between the perceived stress scale score and overall coping score (p-value 0.08) among the respondents.

Conclusion:

Our study suggests that respondents in private geriatric center display more stress than the respondents in government geriatric center.

Key words:

Coping Strategies, Government Geriatric Center, Perceived Stress Scale, Private Geriatric Center

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INTRODUCTION

Stress is an unpleasant condition of mental and physiological arousal that people experience when they believe a situation to be harmful or threatening to their health. Some people define stress as a condition or occurrence that causes them to feel tense, pressured, or negative emotions like anxiety or rage. The relationship between an individual's emotional, intellectual, social, and physical resources and the expectations placed on him or her causes stress. There's more to stress than just pressure. Stress is something more than pressure. It carries strong overtones of the breakdown of normal performance. When the demands

placed on an individual are perceived to exceed his or her ability to manage, stress results in excitement, anxiety, and/or physical strain. This perception of stress is commonly referred to as anguish or negative stress.¹

Studies have shown, that especially older adults, in particular, suffer from stress symptoms as a result of volunteer work, involvement or taking care for grandchildren or dependent relatives. Stress in daily life can cause cardiovascular diseases, depression or other disorders. Study results regarding triggers of stress, effects on health and social life of stress and coping strategies in older adults are limited.²

Coping strategies are the stabilizing factors that help individuals maintain psychological balance during stressful periods. More broadly, coping strategies are any efforts towards stress management, things that people do to avoid being harmed by life strains, or overt and covert behaviors to reduce or eliminate psychological distress. Two categories of coping behaviors are those that actively and

directly deal with the problem and those that are designed for avoidance of problem.¹

Ageing is a life process that transforms healthy adults into feeble and weak individuals with decreased reserves in most physiologic systems and an exponentially growing vulnerability to most diseases and to death.³ Senior citizens are one of the most vulnerable groups in society. Not only are they physically weak, but they also lack money resources, self-esteem, social status as well as mental wellbeing.⁴

In every society or nation, elderly people are sources of knowledge, experiences, and collections of various ideas. Our community or nation will profit from reforming national development and prosperity if we apply their abilities, lengthy experiences, and conscience. The aging population is a global issue, and it is growing at a faster rate in developing countries than in developed countries.⁵

Globally, there were 703 million older persons aged 65 or over as per the survey conducted in 2019. The world's oldest population (260 million) is found in Eastern and South-Eastern Asia, followed by Europe and Northern America (over 200 million). In 2019 one in every eleven individuals in the world (16%) was above the age of 65, a figure that will rise to one in every six people (16%) in 2020, up from one in every eleven in 2019 (9%). One in every four people in Europe and North America could be 65 or older by 2050. For the first time in history, people aged 65 and up outnumbered children under the age of five on a global scale in 2018. The number of people aged 80 and up is expected to rise.⁶

In this context, we aimed to assess the stress and coping strategies among the elderly population residing in the geriatric centers of Devghat, Chitwan, Nepal.

METHODS

A descriptive cross-sectional study was conducted among 54 respondents to assess the stress and coping strategies among the elderly people residing in government and private geriatric centers at Devghat, Nepal. Twenty-seven respondents were interviewed from Devghat Samaj Kalyan Kendra, a government geriatric center and other 27 respondents were interviewed from Devghat NRNA Briddashram, a private geriatric center.

Convenience non-probability sampling was done. A total of 54 respondents were included in the study using a one sample mean formula. For this, the reference was taken from a study conducted by Panigrahi et al. on stress and coping strategies among senior citizen in selected old age

home, Berhampur, prevalence of level of stress among senior citizen was 60.6%.⁷

sample size = z^2pq/e^2

Where,

At 95% confidence interval and 5% level of significance,

$z = 1.96$, $z^2 = 3.84$

For level of stress

$p = \text{prevalence} = 60.6\%$

$q = 1 - p = (100 - 60.6)\% = 39.4\%$

$e = \text{allowable error} = 10\% \text{ of } p = 6.06$

We have,

Sample size = z^2pq/e^2

$$= (3.84 * 60.6 * 39.4) / (6.06 * 6.06)$$

$$= 9168.53 / 36.72$$

$$= 249.68 = 250$$

Both government and private geriatric centers in Devghat has 30 seats in each (total 60) and 250 elders are not available in geriatric center. Sample size is greater than actual number of elders of geriatric center i.e. 60. Here is the equation to calculate the sample size for finite population.

$$= \frac{\text{no}}{1 + (\text{no} - 1) / N} \text{ where, no} = 250, N = 60$$

$$= 250 / [1 + (250 - 1) / 60]$$

$$= 48.54$$

Now adding 10% non-response rate, then $n = 53.39$

So sample size is 54.

ETHICS

Ethical approval for the study was obtained from the Institutional Ethical Review Committee of BP Koirala Institute of Health Science (code no. IRC/1841/020). A consent was taken from the elderly population residing in geriatric centers before proceeding the interview. Interview was carried out by maintaining privacy and the information collected was used only for research purpose. Confidentiality was maintained by not disclosing the information given by any respondent.

STATISTICS

Data was entered in Microsoft Excel sheet version 2013 and then analyzed using SPSS version 11.5. Descriptive statistics like frequency, percentage, mean, and standard deviation was applied to describe demographic variables. Inferential statistics such as Independent t test and Anova were used to find the difference in mean stress scale score and coping score according to the different characteristics of respondents. P-value < 0.05 was set as statistically significant.

RESULTS

A total of 54 respondents were included in the study. The mean age of the respondents was 77.26 with S.D. was ±9.07 ranging from 63-94 years. Similarly, 53.7% of the respondents were male. Also, of the total respondents 81.6% respondents receive their geriatric allowances.(Table 1)

Table 1: Socio Demographic Characteristics of the Respondents (n=54)

Variables	Category	Government Geriatric Center (n=27)		Private Geriatric Center (n=27)		Total	
		n	%	n	%	n	%
Age	60-70 years	6	22.2	11	40.8	17	31.5
	71-80 years	8	29.5	9	33.3	17	31.5
	81-90 years	9	33.3	6	22.2	15	27.8
	91 years and above	4	14.8	1	3.7	5	9.2
Gender	Male	13	48.1	16	59.3	29	53.7
	Female	14	51.9	11	40.7	25	46.3
Geriatric Allowances	Received	24	88.9	20	74.1	44	81.6
	Not applied	3	11.1	7	25.9	10	18.4

A total of 96 % of the respondents from the government geriatric center were satisfied with the service provided and the unsatisfied respondents stated that the reason for his dissatisfaction was no prompt action taken for medical treatment. Surprisingly, all the respondents of private geriatric center were satisfied with the service provided. (Figure 1)

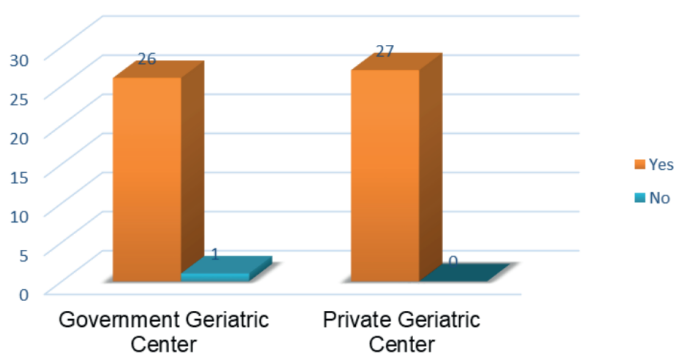


Figure 1: Satisfaction of the Respondents with the Service Provided at Geriatric Center (n=54)

About 52% of the total respondents had moderate stress in both government and private geriatric center and only 1.8% respondent had high level of stress. No any elderly had high stress in government geriatric center.(Figure 2)

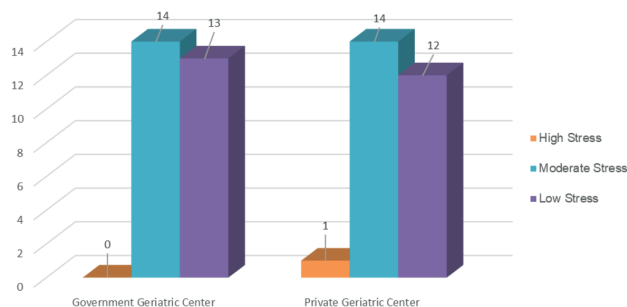


Figure 2: Perceived Stress Level among Elderly of Government and Private Geriatric Center

The difference between the elderly of government and private geriatric center with their coping strategies were found to be significant except the coping strategies i.e. behavioral disengagement (p-value 0.007). (Table 2)

Table 2: Comparison of Coping Strategies of the Respondents in Government and Private Geriatric Center (N=54)

Coping strategies	Elderly in Government (n=27) mean ± SD	Elderly in Private (n=27) mean ± SD	Total (n=54) Mean±SD	t-value	p-value
Religion	6.00±1.71	6.11±1.91	6.06±1.79	0.225	0.82
Positive reframing	6.41±1.34	6.07±1.59	6.24±1.47	-0.833	0.41
Use of emotional support	5.59±2.28	5.63±1.86	5.61±2.06	0.065	0.95
Acceptance	4.74±1.72	5.33±1.41	5.04±1.59	1.381	0.17
Humor	3.59±1.82	4.22±1.97	3.91±1.91	1.219	0.23
Use of instrumental support	5.07±1.86	5.22±1.89	5.15±1.86	0.291	0.77
Active coping	5.19±1.98	5.15±1.10	5.17±1.59	-0.085	0.93
Planning	4.52±1.37	4.81±1.64	4.67±1.51	0.720	0.48
Self-distraction	6.81±1.30	6.70±1.38	6.76±1.33	-0.304	0.76
Denial	4.30±1.68	4.11±1.50	4.20±1.58	-0.427	0.67
Substance use	3.00±1.75	3.11±1.87	3.06±1.79	0.225	0.82
Behavioral disengagement	3.41±1.31	4.67±1.90	4.04±1.74	2.835	0.007*
Venting	3.67±1.57	3.96±1.89	3.81±1.73	0.627	0.53
Self-blame	3.44±1.50	3.22±1.45	3.33±1.47	-0.553	0.58

Independent t-test * significant at p-value <0.05

Table 2 shows that difference between the elderly of government and private geriatric center with their coping strategies were found to be significant except the coping strategies i.e. behavioral disengagement (p-value 0.007).

DISCUSSION

A descriptive cross-sectional study was conducted among 54 respondents to assess the stress and coping strategies among the elderly people residing in government and private geriatric centers at Devghat Nepal. Half of the respondents i.e. 27 respondents were interviewed from

Devghat Samaj Kalyan Kendra which is a government geriatric center and other half of the respondents were interviewed from Devghat NRNA Briddashram, which is a private geriatric center. The study aimed to assess the stress and coping strategies among elderly people residing in government and private geriatric centers at Devghat, Nepal. Likewise, it also aimed to find out the association between stress and coping strategies with the selected demographic variables.

In this study, it was found that respondent's mean age was 77.26 with S.D ± 9.07 ranging from 63-94 years which is similar to the study conducted by Singh R. et al. in which 41% respondents were in the age group 70-79 in the institutionalized settings.⁸ Also, the study conducted by Pandey R. et al. at two old age homes and two areas of Rachi showed that the respondents mean age was 72.90 with S.D ± 6.92 which is somehow similar to this finding.⁹

Also, majority of respondents (53.7%) were male which is almost similar to the study conducted by Nishanthi R. et al. to assess the Level of Psychological Problems and Coping Strategies of Elderly Persons Residing in Old Age Homes where the male respondents were 55%.¹⁰

In the current study, 81.5% respondents received their geriatric allowances which is in contrast to the survey conducted among the elderly homes in Kathmandu in which the allowance receiver were only 32.78%.¹¹

In the current study, more than half of the respondents i.e. 51.9% had moderate stress which is similar to the study conducted by Singh R. et al. in Kathmandu, Nepal which is 51.5% of total score.⁸ Also, the finding is somewhat similar with the study conducted in Senior citizens by Newton A. where majority (60%) of the participants had experienced moderate level of stress.¹² But the assessment of level of stress among elderly is contradictory to the study findings of Mathew M.A. in which the author found that the that majority (72%) of elderly had mild stress and 28% had moderate amount of stress.¹³

In the present study, most commonly used coping strategies by the respondents included self-distraction followed by the use of positive reframing and religion. Almost similar finding was found in the study conducted among Senior citizens of Lucknow, India where religion, planning and self-distraction were frequently used coping strategies.¹²

The current study could serve as a baseline study in conducting future scientific studies regarding various aspects of stress and coping strategies among elderly people residing in geriatric centers.

CONCLUSION

The findings from the current study suggests that more than half of the total respondents i.e. 51.9% had moderate stress. Self-distraction followed by the use of positive reframing and religion was the most commonly used coping strategies by the study participants.

The Findings may be utilized by the nurse practitioners for delivering services to the elderly people in geriatric center. The result from the study may be helpful sources for concerned authorities for further planning and conducting various awareness programs for people residing in geriatric centers.

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