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Original Research Article

Quality of life of occupants of old age homes of a northern Indian province

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ABSTRACT

Background: Although a physiological phenomenon, ageing has enormous bearing on all the dimensions of health. Against age-old tradition, India is also witnessing a rapid increase in nuclearization of families. Increase in old age homes (OAHs) has been proportional to rising number of admissions in such institutions. In order to understand the phenomenon in a holistic way, the present study evaluated the quality of life of occupants such facilities in state of Himachal Pradesh.
Methods: A descriptive cross-sectional study was conducted to capture quality of life among the occupants of all seven OAHs of the State. Data was collected using World Health Organisation quality of life-Bref (WHOQOL-Bref) instrument consisting of four domains, individual domain and overall scores were compiled; and analysed using appropriate statistical techniques.
Results: The mean WHOQOL-BREF score for a total of 145 study participants was 46.6±3 with highest score for environmental domain (49.1±4.7) and least for physical domain (44.0±5.2). Significant higher overall quality of life score was observed for comparatively younger participants, males, more educated individuals, those having a companion prior to the settlement, those having more satisfaction with facilities and lesser morbidities.
Conclusions: Considering increasing elderly population proportion, there is a need for increase in number of facilities with standardized infrastructure, staff and facilities; so that quality of life can be maintained and sustained. Being a vulnerable and deprived section of the society, it is imperative that such individuals live out the final stage of their life with quality, dignity and much neglected self-respect.

Keywords: Old age homes, Quality of life, WHOQOL-Bref

INTRODUCTION

Ageing is a natural, normal and inevitable biological phenomenon, having its own dynamics, largely beyond human control.[1] Due to declining fertility, reduction in mortality and increasing survival, the world's population is ageing and virtually every country in is experiencing growth in the number and proportion of elderly in their population**;** India being no exception. Presently India is in a phase of demographic transition with elderly population increasing over time from 5.6% in 1961 to 8.6% in 2011; leading to bulge in older cohort and rising dependency.[2,3] With future projections, it is estimated to climb dramatically up to 19% in 2050; and relatively young

India today will turn into a rapidly ageing society in the coming decades.[4] Similar projection has also been estimated for Himachal Pradesh having 10.2% elderly of population currently.[5] Increasing life expectancy is associated with decline in perceived health and increase in chronic health problems and co-morbidities like metabolic, cardiovascular, degenerative, musculoskeletal, neurological ailments and malignancies. Factors like loss of social roles, financial constraints, death of spouse or friends etc. predispose elderly to physical and mental disorders leading to chronic disability accompanied by impaired functional capacity affecting the quality of life of elderly.[6] Quality of life (QOL), which is a multidimensional concept is defined by the WHO as "individuals' perceptions 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".[7]

Family is the most important institution which provides assistance and support to the elderly; but recent upheavals in the structure of the society have considerably changed their status and living conditions.[8] As a result of industrialization, urbanization, education and exposure to life styles and race to better employment avenues, younger generation is moving out from homes and are unable to take care of elderly. Despite a good family tradition in Himachal Pradesh, about 12% of the elderly have reported experiencing some form of abuse.[5] Institutional care becomes last resort and absolutely necessary, when personal and familial circumstances of the elderly become extremely unfavourable.[9] Old age homes (OAHs) are sheltered accommodation for older people; a concept that is catching up as matter of state policy in many countries as well as a preferred individual choice given the assured safety, security and services.[10] Presently there are 1018 old age homes in India; with seven such institutions in the state.[10,11] With the increasing elder's population, the number of persons in OAHs is also increasing. The old-age home industry is mostly unregulated lacking minimum standards; often poor and destitute persons who may need institution-based care cannot afford them.[12] The extent of impact depends on the specific environment in the old age homes, care and services offered and support provided to the inmates.[10,11]

As comprehensive data on quality of life in OAHs in the regional setting is not available, it is imperative that we understand the phenomenon along with the factors that contribute to QOL in elderly and effects of strategies to promote healthy ageing and life course approaches holistically.

Keeping all this in consideration, the present study was conducted to assess the quality of life of the occupants of the old age homes of Himachal Pradesh in order to improve plight of elderly and for promoting the concept of overall healthy ageing in elderly.

METHODS

It was a cross-sectional study conducted over a period of one year, from October 2016 to September 2017 in all seven OAHs (six free government and one paid private) of Himachal Pradesh. All the elderly people of more than 60 years of age residing in OAHs giving consent and having score of more than 20 on mini mental scale (Hindi translated version of scale developed by Folstien et al), were included in the study.[13] There were 159 inmates in all the old age homes, but 145 inmates satisfied eligibility criteria.

After taking necessary approval from ethics committee, permission from appropriate authority and consent from willing participants, data pertaining to socio-demographic profile and quality of life was collected using anonymous questionnaire while ensuring confidentiality. Hindi version of World Health Organization quality of life-BREF (WHOQOL-BREF) instrument comprising of four domains with Likert responses, was used for assessing the quality of life after taking prior permission from WHOQOL division, Geneva.[14]

The scoring of WHOQOL-BREF scale and transformation of raw scores was done as per scoring manual sent by WHOQOL division, Geneva. The scores of all 4 domains were converted into scores which lie between 0-100 (the higher the score, the better is the supposed quality of life. Data was analysed by using Epi-info version 7.2. Proportion, mean, standard deviation and standard error were calculated. Chi-square, t-test and Analysis of Variance (ANOVA) tests were applied and the two-tailed level of significance was set at less than 0.05.

RESULTS

The study was conducted among seven old age homes of Himachal Pradesh, out of which six were being run by government and one private old age home by a trust. The government run old age homes were giving free services and the private old age home was giving paid services. There were 159 inmates in all the old age homes, but due to inclusion criteria constraints 145 inmates were included in the study. Out of 145 respondents 81 (55.9%) were females. The mean age of males and females was 70.9±6.5 and 74.4±7.7 respectively. The majority (48.3%) of elderly were in the 70-79 years age group. About 86.2% respondents belonged to rural area before coming to old age homes. Nearly 75.9% were Hindu by religion. Three fourth of the elderly were illiterate and most of them were females. About 44.1% were homemakers before coming to old age homes followed by (22.8%) inmates worked as labourers. Only 9% elderly were retired from government jobs. About half of the inmates (53.8%) had no children. About 15.9% were receiving pension of previous job, while 64.1% had old age pension as source of income. Only 8.2% participants were economically independent. Regarding quality of life, the

study showed that the mean WHOQOL-BREF score of total 145 inmates was 46.6±3.7. The individual domain and overall scores are illustrated in Table 1.

Tables 2 and 3 highlight the distribution of QOL scores for various factors. The age wise distribution of QOL scores is shown in Table 2. On applying one-way ANOVA, it was observed that mean scores of physical domain and overall quality of life scores decreased significantly with age. On post hoc analysis, it was revealed that the overall mean scores were statistically significantly higher in young-old age group (p=0.018) and old-old group (p=0.018) compared to the oldest-old age group. The mean scores of physical and social domains and the overall scores of QOL were significantly higher for males (Table 2).

Table 1: Mean and median scores of WHOQOL-BREF for the study population.

Score type	Physical domain	Psychological domain	Social domain	Environmental domain	Overall score
Mean scores ±2SD	44.0±5.2	46.7±4.9	46.6±7.3	49.1±4.7	46.6±3.7

Table 2: Distribution of QOL domain scores according to various characteristics.

Characteristics	Category	Physical domain (mean±SD)	Psychological domain (mean±SD)	Social domain (mean±SD)	Environmental domain (mean±SD)	Overall score (mean±SD)
Age	Young-old (60-69)	45.4±5.9	46.6±4.2	47.7±5.3	49.7±4.1	47.3±3.1
	Old-old (70-79)	44.6±4.3	47.1±5.5	47.1±7.7	49.6±4.5	47.1±3.8
	Oldest-old (≥80)	41.3±6.2	45.6±4.3	44.1±8.2	48.5±3.0	44.9±3.4
	P value	0.003	0.408	0.081	0.364	0.006
Sex	Male	45.8±5.7	47.4±4.6	48.1±5.5	49.6±4.5	47.7±3.5
	Female	42.7±4.9	46.1±5.1	45.5±8.3	49.2±3.8	45.8±3.5
	P value	0.001	0.077	0.035	0.277	0.002
Education	Illiterate	43.2±4.7	46.1±4.7	46.3±8.0	49.7±4.0	46.3±3.5
	Primary	44.8±7.3	47.0±4.5	46.1±3.8	48.7±2.5	46.6±2.6
	Middle school	42.5±5.7	45.5±3.0	48.5±3.0	50.0±0.0	46.6±2.3
	Matriculate	41.6±5.3	47.6±5.3	47.6±5.3	47.6±5.3	46.7±5.3
	Secondary level	50.0±8.4	53.0±4.2	50.0±0.0	53.0±4.2	51.5±4.2
	≥Graduation	51.5±3.7	50.5±5.4	49.0±5.6	47.5±5.9	51.8±3.2
	P value	0.001	0.024	0.812	0.229	0.027

Table 3: Distribution of QOL domain scores according to age group.

Characteristics	Category	Physical domain (mean±SD)	Psychological domain (mean±SD)	Social domain (mean±SD)	Environmental domain (mean±SD)	Overall score (mean±SD)
Marital status	Married	43.0±4.5	46.0±4.8	51.0±4.5	51.0±2.4	47.7±3.6
	Unmarried	45.4±6.1	47.7±4.1	49.4±3.7	50.3±3.8	48.2±2.4
	Separated/divorced	43.1±6.3	47.2±4.5	46.5±6.8	50.0±4.3	46.7±3.5
	Widowed/widower	44.0±4.7	45.8±5.4	44.9±8.5	47.8±5.2	45.6±4.0
	P value	0.357	0.260	0.110	0.021	0.008
Living Arrangement prior to OAH settlement	Alone	44.86±5.65	46.66±4.53	49.49±6.01	49.32±4.93	47.58±3.26
	With spouse and children	44.00±6.93	48.50±5.75	45.25±10.65	51.50±3.00	47.31±4.84
	With children only	44.00±5.12	46.93±6.65	39.37±8.03	49.33±4.51	44.90±4.74
	Others	41.46±4.22	46.08±4.14	44.92±3.67	47.92±4.47	45.09±2.70
	P value	0.053	0.804	0.000	0.415	0.001
Satisfaction level with facilities	Below average	45.4±5.9	44.5±3.2	44.7±4.7	41.7±3.5	44.1±2.7
	Average and above	43.8±5.4	47.0±5.0	44.9±7.6	50.3±3.6	47.1±3.7
	P value	0.224	0.036	0.222	0.000	0.001
Number of morbidities	≤3	46.3±4.2	47.3±5.3	47.5±7.0	49.4±4.8	47.6±3.5
	>3	38.2±3.7	44.8±3.1	44.5±7.6	48.2±4.2	43.9±2.8
	P value	<0.0001	0.006	0.029	0.158	<0.0001

There was a statistically significant difference between the different level of education groups in physical domain, psychological domain and overall score of QOL as determined by one-way ANOVA (Table 2). Post hoc test revealed that the overall mean scores were statistically significantly lower only in those participants who were illiterate (p=0.032) as compared to the graduate and above group.

There was a statistically significant difference between the different level of marital groups in environmental domain and overall score of QOL (Table 3). Further analysis revealed that the overall mean scores were statistically significantly lower only in those participants who were widowed/widower (p=0.005) as compared to the unmarried group. Higher mean scores were observed in social domain and overall quality of life for inmates who have no children (p<0.05). The mean scores in social domain were significantly higher among those who lived alone before coming to OAH settlement and the mean score decreased significantly among those who lived with spouse or children. A statistically significant difference among the various groups of living arrangements of study participants on overall QOL scores was observed as depicted in Table 3. Additional analysis on overall QOL scores across various groups of living arrangements revealed that the mean scores was statistically significantly lower among those who lived with their children only (p=0.004) and with others (p=0.011) as compared to those who lived alone. Inmates whose satisfaction level with institutional facilities was average and above had higher mean scores for psychological and environmental domains as compared to below average group as depicted in Table 2b. Their overall mean QOL score was also higher as compared to those with below average satisfaction (<0.05). Higher significant (p<0.5) mean physical, psychological, social and overall scores were also observed among those with lesser number of morbidities (Table 3).

DISCUSSION

The mean WHOQOL-BREF score of total 145 inmates was 46.6±3.7. The mean score of physical, psychological, social and environmental domains were 44.0±5.2, 46.7±4.9, 46.6±7.3 and 49.1±4.7 respectively. Highest score was for environmental domain and lowest for physical domain, which may be due to the fact that three fourth of the inmates were suffering from one or more diseases and most of them were satisfied with the environment in which they were residing. Environmental domain scores were higher in studies by Vitorino et al, and Asdullah et al.[15,16] However in study by Asdullah et al, social domain had lowest scores due to miserable social relationship.[16]

The mean scores for physical domain and overall QOL scores were higher in young-old age group as compared to old-old age group; however, there was no such difference in studies by Gupta et al and Asdullah et al.[12,16] This could be due to the fact that young-old age group had lesser number of chronic diseases as compared to old-old age group which also affects the overall quality of life. The results showed that the mean scores of physical domain, social domain and the overall score of quality of life were higher for males which are comparable with the results of study done by Bishak et al, in Iran.[17] However there was no difference in domain scores gender wise in studies by Gupta et al and Asdullah et al.[12,16]

The physical domain score and overall QOL scores was lower in illiterate inmates as compared to inmates with education level of graduate and above which was in agreement with the study by Vitorino et al.[15] This may be better socio-economic status and more awareness about health issues in inmates with higher education. Higher mean scores were observed in social domain and overall quality of life for inmates who have no children in this study. Probably this may be due to the reason that elderly people with children expect from their children to take care of themselves and moreover if they don't come to meet them, the social aspect of their life worsens leading to low scores.

The mean score of social domain and overall QOL was higher in inmates living alone before coming to old age homes as compared to inmates who had either children or living with relatives. Inmates living alone have no expectations from children, relatives and friends. So, they easily adjust with the new environment, whereas others instead find it difficult to make adjustment affecting their overall quality of life. Inmates whose satisfaction level with institutional facilities were average and above had higher mean scores for psychological and environmental domains along with overall score. It is obvious that if inmates living in OAH feel satisfied with the facilities, the environment domain scores will be better and which could also raise the overall quality of life. Higher mean domain scores were observed among those with lesser number of morbidities, which is in agreement with Gupta et al; reflecting that number of morbidities decreases the scores of physical domain and overall QOL scores.[12]

Being a time bound study, it could not go in-depth for exploration of reasons behind low quality of life scores. Study would have been strengthened if it had a qualitative component added to it.

CONCLUSION

Old age is the last stage of human's life, which is inevitable and comes in every one's life. To avoid aging from becoming a nightmare, and so that living does not become merely "adding years to years", there is a need to create homes for the aged that are true homes for them and ensure quality of life. Study addresses a key but neglected issue as in the regional context and throws light on the different aspects of a deprived and vulnerable section of the society. As the number of elderly females is increasing, the living arrangements should be such which

can maintain dignity and privacy of the female inmates. Most of the elderly belonged to lower socio-economic status even after getting old age pension. Increase in pension should be based on market inflation rates. Regular medical check-ups should be made mandatory. Screening and counselling services should be started. Elderly should be educated about the concept of healthy ageing and life course approach. There is need to conduct further studies in similar settings involving some care interventions and their impact on quality of life of the elderly people.

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