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Quality of Life Among Residents of Government Run Old Age Homes in Delhi

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ABSTRACT

World is ageing as an obvious consequence of the process of demographic transition and it is happening fastest in the developing world. Simultaneous disintegration of joint family system and changing social values, often obligate the elderly segment of society to live alone or in old age homes which make them increasingly vulnerable to mental health problems and other undesirable effects influencing their quality of life. The study aims to investigate the factors of quality of life among inhabitants of old age homes in Delhi. The cross-sectional study was undertaken in four government administered old age homes (OAHs) in Delhi. 2 of these were free stay and other 2 being pay and stay OAHs. In all 148 subjects of both sexes and aged 60-85 years constituted study sample. Study tool included a semi structured proforma to assess Sociodemographic profile and WHOQOL-BREF scale was used for quality of life assessment. 2/3rd OAH inhabitants were female and rest 1/3rd being male. WHOQOL-BREF domain scores were higher in pay/stay homes as compared to free stay homes, furthermore all 4 domains score were significantly higher for male residents on t' test. Quality of life among OAH residents is influenced by various psychological, social and economic factors. This emphasized the need for better management of government run old age homes to ensure improved quality of life of our senior citizens.

INTRODUCTION

One of the biggest social changes brought about by development and improved standards of living is population aging. Population ageing is experienced fastest in the developing world. By 2050, older people will outnumber children under the age of 14 years^[1]. Globally, the share of the 60 and above population have increased from only 8% of world population (200 million people) in 1950 to around 11% (760 million) in 2011, with further expected to reach 22% (2 billion) by 2050^[1]. According to the 2011 census, population share of elderly in India stands at 8% which is projected to increase to 18.3% (300 million) by 2050^[2,3]. Population aged 60 years and above in the city of Delhi is 5.9% according to 2011 census^[2]. 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. Increasing age is one of the risk factors affecting physical and psychological well-being which has a significant impact on their quality of life. 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^[4]. 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"^[5]. Given the rate of population aging, it becomes important to focus on aging issues related to poor health and to take effective measures to improve the quality of life in old age. Family is an important social institution which plays supportive role for elderly, but recent changes in the structure of the society have considerably changed their status and living conditions^[6]. 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. Institutional care in the form of Old Age Homes (OAHs) becomes last resort and absolutely necessary, when personal and familial circumstances of the elderly become extremely unfavourable^[7,8]. There is paucity of data on quality of life in OAHs to understand the factors contributing towards quality of life in elderly. Keeping all this in consideration, the present study was conducted to assess the quality of life among the old age homes residents in Delhi.

MATERIALS AND METHODS

Study Design: The present study was cross-sectional study, undertaken in all the four government run old age homes (OAHs) in Delhi.

Study Setting and Sample: The present study was undertaken in all the four government run old age homes (OAHs) in Delhi. The administrative structure of these OAHs varied in terms of ownership, resident capacity and payment structure. Two OAHs were pay and stay homes run by New Delhi Municipal Corporation (NDMC), one with resident capacity of 55 (male and female), other one with resident capacity of 34 (female only). One OAH is free stay home run exclusively by Delhi government with resident capacity of 67 (male and female). Delhi government also run an OAH in public private partnership with a NGO, with resident capacity of 26 (male and female) on 50% pay and 50% free payment mode. The study included residents of both sexes, between age 60-85 years of age, stay duration of >1 year and willing to provided written informed consent to participate. Those already medically diagnosed with psychiatric or neurological illnesses were excluded from the study. After official permissions from the appropriate authorities, a total of 148 (out of 182), who met the study criteria constituted the study sample.

Study Tools:

- Semi-structured proforma for socio-demographic profile was developed for the study purpose.
- **WHOQOL-BREF^[9]:** World Health Organization Quality of Life-BREF scale (1996) is a self-report/researcher assisted 4 point rating scale consist of 26 items divided over 4 domains (physical, psychological, social and environmental). The scale has good reliability and validity across many culture and adult age groups. Higher score indicated better quality of life on the scale.

Data Analysis: The obtained data was analyzed with the help of SPSS Version 20.0, Frequency distribution and cross-tabulation used to create summary tables and compare items.

Ethical Consideration: Approval was obtained from the Institute ethical committee of National Institute of Health and Family Welfare, New Delhi. Informed written consent was obtained and confidentiality and privacy of the study subjects were maintained throughout.

RESULTS AND DISCUSSIONS

Although all four government-run OAHs in Delhi were included in the sample, their administrative structure varied in terms of ownership, resident capacity and payment structure. (Table 1) demonstrates the characteristics of four different OAHs as well as the number of total residents enrolled for the present study. Due to the nature of difference in the payment mode of the old age homes, the residents of the four

Table 1: Administrative Structure and Residenty of OAHs

Old Age Homes (OAH)	Administrative structure	Payment structure	Resident capacity	Study subjects recruited
OAH 1	Delhi govt.	Free stay	67	52
OAH 2	NDMC*	Pay and stay	34	29
OAH 3	NDMC*	Pay and stay	55	45
OAH 4	Delhi govt. and NGO (PPP#)	50% free stay	26	22
Total		50% pay and stay	182	148

*NDMC- New Delhi Municipal Corporation

#PPP-Public Private Partnership

Table 2: Sociodemographic Profile of Study Subjects

Sociodemographic Profile		Old Age Homes				
		OAH 1	OAH 2	OAH 3	OAH 4	Total
Gender	Male	15	0	29	11	55 (37.2%)
	Female	37	29	16	11	93 (62.8%)
Age Group	60-65 Yrs	11	5	8	4	28 (18.9%)
	65-70 Yrs	10	11	13	4	38 (25.7%)
	70-75 Yrs	12	3	10	4	29 (19.6%)
	75-80 Yrs	8	4	4	3	19 (12.8%)
	80-85 Yrs	11	6	10	7	34 (23.0%)
Marital Status	Single/ Unmarried	5	3	1	7	16 (10.8%)
	Married	4	0	13	2	19 (12.8%)
	Separated	4	1	0	0	5 (3.4%)
	Divorced	1	1	0	1	3 (2.0%)
	Widowed	38	24	31	12	105 (70.9%)
Living with Partner	Yes	2	0	12	2	16 (10.8%)
	No	50	29	33	20	132 (89.2%)
Educational Status	Illiterate	28	1	0	16	45 (30.4%)
	Primary	10	2	1	1	14 (9.5%)
	Secondary	10	13	15	3	41 (27.7%)
	Higher Secondary	1	0	0	0	1 (0.7%)
	Graduate	3	7	25	2	37 (25.0%)
Monthly Income	Postgraduate	0	6	4	0	10 (6.8%)
	Nil	49	11	13	22	95 (64.2%)
	1-5000	2	0	0	0	2 (1.4%)
Financial Dependence	Above 5000	1	18	32	0	51 (34.5%)
	YES	46	2	7	21	76 (51.4%)
	No	6	27	38	1	72 (48.6%)
Stay duration at OAH	1-5 YEARS	37	14	26	12	89 (60.1%)
	5-10 YEARS	11	13	12	6	42 (28.4%)
	Above 10 Years	4	2	7	4	17 (11.5%)

Table 3: Quality of Life Across Different Domains Among Study Subjects

Quality of life		Old age Homes				
		OAH 1	OAH 2	OAH 3	OAH 4	All OAHs
Quality of Life (WHOQOL BREF) mean score	Physical OOL	52.89	61.45	62.84	57.27	58.99
	Psychological QOL	51.40	62.83	62.31	51.73	57.01
	Social QOL	48.17	49.59	54.44	46.64	50.13
	Environmental QOL	47.29	56.79	56.69	34.23	50.07

Table 4: Gender Difference in Quality of Life Among OAH Residents

Quality of Life domains	Male (N=55)	Female (N=93)	t'	P
Physical QOL	62.9 (9.8)	56.6 (11.6)	3.38	< 0.01**
Psychological QOL	60.1 (11.5)	55.2 (11.9)	2.44	< 0.05*
Social QOL	51.1 (8.3)	49.5 (9.6)	1.04	> 0.05
Environmental QOL	52.5 (11.2)	48.6 (11.5)	2.03	< 0.05*

old age homes hail from varied background. Delhi government administer OAH 1 entirely and OAH 4 partly in collaboration with a NGO on PPP mode, providing services free of charges. These two OAHs are home to people mostly from underprivileged background with no family or financial support and also destitute picked up and brought by police abiding the court directions to government to make arrangement for such people. While NDMC administered old age homes, OAH 2 and OAH 3, are essentially pay and stay homes. Most residents of these homes come from reasonably privileged background with sound financial and/or family

support. (Table 2) presents the sociodemographic characteristics of the OAH residents enrolled in the study. The majority of study sample of 148, was constituted by female residents with 62.8% share (N=93) while male contributed 37.2% (N=55) of population. The mean age of the sample was 72.81 years (Minimum 61 and maximum 85 years). More elderly were in the age group of 65-70years (N=38 and 25.7%), followed by 80-85 (N=34 and 23%), 70-75 (N=29 and 19.6%), 60-65 (N=28 and 18.9%), 75-80 (N=19 and 12.8%) age groups. A majority of the sample (70.9%, N=105) was widow/widowers and 89.2% (N=132) were not living with the

partners. The educational status showed that a total of 45 (30.4%) elderly were illiterate followed by 41 (27.7%) elderly with secondary level education and 37 (25%) with graduation degree. While 95 (64.2%) elderly had no monthly income, 51 (34.5%) had a monthly income of \geq INR. 5000.00/-. A majority (N=89, 60.1%) of the elderly has been staying in old age homes for the past 1-5 years followed by 42 (28.4%) between 5-10 years, and 17 (11.5%) elderly staying >10 years. (Table 3) demonstrates distribution of quality of life scores measured using WHOOL BREF scale. It presents the data score across all four major domains namely physical, psychological, social and environmental QOL for the entire sample. It was revealed that the mean scores for physical (M=58.99, SD=11.33) and psychological (M=57.01, SD=12.01) quality of life were better than the social (M=50.13, SD=9.15) and environmental (M=50.07 (SD=11.52) quality of life. However, the quality of life in all domains was better in pay and stay OAHs as compared to either free or 50% free old age homes. An independent sample t test was conducted to compare the QOL scores across all four domains in male and female elderly people as displayed in (table 4). Significant difference was observed in Physical QOL scores between male (M=62.95, SD=9.763) and female (M=56.65, SD=11.588), $t(146)=3.383$, $p<0.01$, higher mean score in male suggesting higher physical QOL in male, Psychological QOL scores between male (M=60.09, SD=11.501) and female (M=55.18, SD=11.993), $t(146)=2.443$, $p<0.05$, higher mean score in male representing higher psychological QOL in male. Environmental QOL scores between male (M=52.55, SD=8.308) and female (M=48.60, SD=9.601), $t(146)=2.034$, $p<0.05$, higher mean score in male reflecting higher environmental QOL in male. No significant difference found in Social QOL scores between male and female.

The mean WHOQOL-BREF score of total 148 OAH residents was found to be 54.05. The mean score of physical, psychological, social and environmental domains were 58.99, 57.01, 50.13 and 50.07 respectively. Lower score for the social and environmental domain could be attributed to the fact that the residents find it difficult to adjust to the new environment away from family, friend and relatives at this stage of life. This finding is line with the study by Vitorino *et al* and Asdullah^[10,11] However in study by Asdullah *et al*, social domain had lowest scores due to miserable social relationship^[11]. Physical, psychological and environmental QOL domain scores were found to be significantly higher in male residents as compared to the females. No significant difference was observed in social QOL

domain score across gender profile of subjects. These findings are comparable with the results of study done by Bishak^[12].

CONCLUSION AND RECOMMENDATION

Although aging is a universal phenomenon, its impact and meaning are largely influenced by various biological, psychological, economic and sociological factors. Low socioeconomic status, loss of spouse, living alone, decreased family association, poor physical infrastructure and health services in OAHs, chronic physical comorbidities and restricted ADL are some of the significant risk factors of poor quality of life. The findings suggest enhancing factors such as food quality, hygiene standards, and a healthy environment along with integrated health services focusing on complete psycho social and physical well being.

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