



An epidemiology study to assess quality of life among elderly in rural area, Kanpur

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ABSTRACT

Background

Ageing is a global phenomenon, with a growing elderly population, especially in developing countries like India. The quality of life (QOL) of the elderly is increasingly recognized as a crucial indicator of their overall health and well-being.

Objective

To assess the quality of life among elderly individuals residing in a rural area of Kanpur.

Methods

A descriptive cross-sectional study was conducted among 30 elderly participants aged 60 years and above using purposive sampling. Data were collected through structured interviews using the WHOQOL-BREF questionnaire, which measures QOL across four domains: physical health, psychological well-being, social relationships, and environment. Data were analyzed using descriptive statistics and chi-square tests to find associations between demographic variables and QOL.

Results

The majority of participants (70%) were aged 60–65 years, and 53.3% were illiterate. Equal gender distribution was noted. A significant association was found between gender and QOL ($p = 0.003$), as well as between disease condition and QOL ($p = 0.002$). However, age, education, occupation, and meal pattern did not show a statistically significant relationship with QOL.

Conclusion

The study highlights that gender and comorbid disease conditions are significant determinants of QOL among the elderly in rural Kanpur. There is a need for targeted interventions to address gender disparities and health management in ageing populations.

Keywords: Elderly, quality of life, WHO QOL- BREF

Introduction

Ageing is a natural, biological, and universal process. The global population is experiencing an increase in the ageing population, with this trend progressing more rapidly in developing countries.¹At the global level, the quality of life of the elderly is a matter of growing concern, as it serves as an important indicator of their health and well-being.²The elderly population in India is steadily rising and, according to the 2011 Census, it is projected to triple by 2050.³ By the year 2020, the number of elderly individuals was projected to surpass the population of children under five years of age. This demographic shift poses a significant challenge for all countries. In India, approximately 8% of the total population falls within the elderly age group, and this figure is expected to rise to 12.4% by 2026.⁴

Objective

To assess the quality of life among elderly in rural area.

Methodology

Study Design: This is descriptive design done in community rural area

Study area and population

The study was done among elderly people above 60 years.

Sample size: 30

Sampling Technique: Purposive Sampling Technique

Inclusion criteria

- Both genders are included in the study
- Population aged 60years and above

Exclusion criteria

- Elderly who are not willing to participate

Study Tool

Quality of life was assessed by WHO QOL-BREF questionnaire.⁵ The WHOQOL- BREF questionnaire consists of 26 items divided into four domains: physical health, psychological well-being, social relationships, and environment. Part A contains demographic variables. Part B contains the WHO BREF questionnaire. Each item is rated on a 5-point Likert scale. Score < 45 : Low Quality Of Life, 46 - 65 : Moderate Quality Of Life, >65 : High Quality Of Life.⁶

Data collection

A study was conducted among 30 elderly people using the WHO QOL-BREF questionnaire. After selecting the samples, the purpose of the study was explained to each participant. Structured interview schedule was used to collect data related to quality of life.

Data analysis

Data was entered in Microsoft excel and data analysis was done. QOL was assessed. Chi- square test used to find out the association.

Results

Table. 1 Socio-demographic characteristics of the study participants

S.no	Demographic variables	Category	Frequency	Percentage
1	Age	60-65 66-70 70-75 76<	21 5 4 0	70% 16.67% 13.3% 0%
2	Gender	Male Female	15 15	50% 50%
3	Education	Illiterate Primary education Secondary education Graduation	16 3 11 0	53.3% 10% 36.7% 0
4	occupation	Working Not working	16 14	53.3% 46.7%
5	Disease	Hypertension Diabetes mellitus Cardiovascular problem Vision problem Hearing problem Hypertension and DM Both	11 5 1 7 3 3	36.7% 16.7% 3.3% 23.3% 10% 10%
6	Meal pattern	2 meals/day 3 meals/day 4 meals/day	30 0 0	100%

Table. 1 Presents the socio-demographic details of the 30 participants included in the present study. The distribution was assessed based on age, gender, educational status, occupation, presence of disease, and meal pattern. With respect to age, the majority of participants (70%) were in the age group of 60–65 years, followed by 16.67% in the 66–70 years group, and 13.3% in the 71–75 years category. Notably, no participants were above the age of 75. In terms of gender, the sample was evenly distributed, with 50% males and 50% females, indicating equal representation. Regarding educational status, more than half of the respondents (53.3%) were illiterate, while 36.7% had received secondary education and 10% had completed primary education. No participants were graduates, suggesting a relatively low level of formal education among the study population. In the category of occupation, 53.3% of participants were still working, whereas 46.7% were not working, indicating a near equal distribution between active and non-active occupational status. The disease profile revealed that 36.7% of the participants were hypertensive, followed by 16.7% with diabetes mellitus, 10% with cardiovascular problems, 23.3% with vision problems, and 3.3% with hearing problems. Additionally, one participant (3.3%) reported having both hypertension and diabetes mellitus, indicating a burden of comorbid conditions in the elderly population. The meal pattern data indicated that all participants (100%) were consuming two meals per day. None of the participants reported having three or four meals daily.

Table No. 2 Determination of association of quality of life with demographic variables

Demographic variable	Quality of life			X ²	df	p- value	P<0.05
	Low	Moderate	High				
Age 60-65	2	16	3	3.35	4	.006	NS
66-70	0	4	1				

71-75	0	2	2				
Gender							
Male	0	10	5	8.48	2	0.003	S
Female	2	11	3				
Education							
Illiterate	1	11	4	0.25	4	0.25	NS
Primary education	0	2	1				
Secondary education	0	9	2				
Occupation							
Working	2	11	3	2.06 6	2	0.15	NS
Not working	0	10	4				
Disease condition							
Hypertension	0	8	3	9.32 2	12	0.002	S
Diabetes mellitus	1	4	0				
Cardiovascular problem	0	1	3				
Vision problem	1	3	0				
Hearing problem	0	3	0				
Hypertension and DM Both	0	3	0				
No Problem	1	3	0				
Meal Pattern							
2 meals/ day	2	23	5	0	0	1.00	NS

Table.2 Presents the findings of the chi-square test conducted to examine the association between quality of life and selected demographic variables among the study participants. The demographic variables considered for the analysis were age, gender, education, and occupation. The quality of life was categorized into three levels: low, moderate, and high. The results reveal that there was a statistically significant association between gender and quality of life ($\chi^2 = 8.48$, $p = 0.003$), indicating that the quality of life significantly differed between males and females. This suggests that gender may influence the perceived quality of life among individuals. On the other hand, no significant association was found between age and quality of life ($\chi^2 = 3.35$, $p = 0.08$), education and quality of life ($\chi^2 = 0.25$, $p = 0.25$), and occupation and quality of life ($\chi^2 = 2.06$, $p = 0.15$). These findings imply that age, educational status, and occupational status did not have a statistically significant impact on the quality of life in this study population. Thus, among the demographic variables assessed, only gender and disease condition showed a significant influence on the quality of life, whereas the other variables were not found to be significantly associated.

Discussion

The present study aimed to evaluate the quality of life among elderly individuals residing in a rural setting in Kanpur. The findings provide insight into the demographic and health-related factors influencing their well-being.

The study showed that most participants had a moderate level of quality of life, with very few reporting low or high levels. Notably, gender emerged as a significant factor, with males showing a better quality of life than females. This could be attributed to traditional gender roles, social dependency, or differential access to resources and Health Care. These findings are supported by previous research indicating that elderly women often face more psychosocial and economic challenges.

Another important observation was the significant association between disease conditions and QOL. Participants with hypertension and diabetes reported a lower quality of life, which aligns with studies highlighting the burden of chronic illnesses in old age. Health conditions not only impair physical functioning but also affect emotional and social well-being, emphasizing the need for improved chronic disease management at the community level.

The present study supported by A mixed-methods investigation conducted among 200 elderly individuals in rural Puducherry revealed a moderate overall quality of life, with the environmental domain scoring highest and psychological health scoring lowest.⁷

Conclusion

The study underscores the importance of addressing gender disparities and managing chronic diseases among the rural elderly to improve their quality of life. Future research with a larger sample size and in varied settings is recommended to validate these findings and guide public health interventions.

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