

Determinants of quality of life of geriatric population in rural block of Haryana

Meena Rajput¹, Pinki², Shiba³, Sunil Kumar⁴, Ravish Ranjan⁵

¹Professor, Department of Community Medicine, Pt. B. D. Sharma, PGIMS, Rohtak, Haryana, ²PGT Economics, Department of Education, Haryana, ³Assistant Professor, Department of Community Medicine, SKGMC, Sikar, Rajasthan, ⁴ASMO, Department of Health, Haryana, ⁵Junior Resident, Department of Community Medicine, PGIMS, Rohtak, India

ABSTRACT

Background: The quality of life (QOL) of the geriatric population in India is an important issue because of the lack of social security schemes and dilution of Indian culture which ensures due care and regard to the elderly. The primary health care physicians have to face more challenges in handling the elderly patients in comparison to the younger patients because the elderly have more physiological and emotional problems along with medical conditions and illnesses which, in turn, affect their QOL. The study aims to find out the determinants that affect the QOL of the elderly in a rural area of Haryana. **Material and Methods:** This observational study with a cross-sectional design was carried out among 400 elderly (60 years and above) in a rural area of district Jhajjar, Haryana. The world health organization quality of life scale (WHOQOL-BREF) scale was used. Data entry and analysis were performed using Statistical Package for Social Sciences (SPSS) version 20.0. **Results:** The mean score of the environmental domain was the highest (62.72 ± 14.18), followed by the physical health domain (60.77 ± 15.82). Education, age group, caste, marital status, occupation, and socioeconomic status exhibited significant relationships with different domains of QOL. **Conclusions:** With the advancement of age, QOL deteriorates. Higher education and higher socioeconomic status of the study participants help them to live a better QOL. Those participants who were married and were busy in any kind of work experienced a better QOL.

Keywords: Correlation, domains, elderly, quality of life

Introduction

Aging is a universal process and it affects every individual, family, community, and society. It is a normal, progressive, and irreversible process. Sir James Sterling Ross commented, "You do not heal old age, you protect it, you promote it and you extend it." These are the principles of Preventive Medicine. With aging due to structural changes, deterioration in the functional capacity of an individual occurs.^[1]

The world's population is aging, and virtually, every country in the world is experiencing growth in the number and proportion

of older persons in their populations due to decreased fertility and reduction in mortality, particularly at older ages leading to a longer life span of individuals.^[2,3] Population aging refers to the increasing share of older persons in the population which has poised to become one of the most significant social transformations of the twenty-first century. Moreover, since corona virus disease (COVID-19) is a new disease in humans, and the pandemic is ongoing, the available studies of its impact on older persons remain inconclusive.^[4]

The United Nations uses 60 years to refer to older people. But in many developed countries, the age of 65 is used as a reference point for older persons as this is the age at which people become eligible for old-age social security benefits.^[4] In India, as per the "National Policy on Older People," a senior citizen is defined as a person who is 60 years old or above.^[5]

Address for correspondence: Dr. Sunil Kumar, S/O- Sh. Jagdish Chander, VPO Mayar, Teh, Hisar, Haryana - 125044, India.
E-mail: soksokhal@gmail.com

Received: 28-09-2021

Revised: 14-12-2021

Accepted: 21-12-2021

Published: 14-10-2022

Access this article online

Quick Response Code:



Website:
www.jfmpc.com

DOI:
10.4103/jfmpc.jfmpc_1943_21

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Rajput M, Pinki, Shiba, Kumar S, Ranjan R. Determinants of quality of life of geriatric population in rural block of Haryana. J Family Med Prim Care 2022;11:5103-9.

Globally, there were 727 million persons aged 65 years or over in 2020. It is projected that the number of older persons worldwide in the next three decades will be more than double the 2020 figure, that is, reaching over 1.5 billion in 2050. All regions will see an increase in the size of the older population between 2020 and 2050.^[4]

With the rise in the elderly population, the concern about the problems faced by the aged people is also obvious. According to different researches, the major problems of the aged people include economic problems (lack of employment or income) leading to low self-esteem, physiological problems (lack of stamina) leading to behavioral and attitudinal changes, housing problems due to failing eyesight, forgetfulness, etc.^[5]

All these problems profoundly affect the quality of life (QOL) of the elderly. The World Health Organization defined QOL as “an individual’s perception of life in the context of culture and value system in which he or she lives and in relation to his or her goals, expectations, standards and concerns.”^[6] It is, thus, a broad concept covering the individual’s physical health, mental state, level of independence, social relationships, personal beliefs, and their relationship to the salient features in the environment.^[7] Diener *et al.*^[8] stated: “People react differently to the same circumstances, and they evaluate conditions based on their unique expectations, values, and previous experiences.” The WHOQOL-BREF Scale supports this subjective measurement of QOL.^[9]

The health status has a substantial influence on the QOL in the elderly population. Both perceived health and chronic illness are major elements of health status because perceived health declines with age and chronic health problems increase with age. Furthermore, there is a growing body of evidence indicating that older people are at risk for multiple comorbidities.^[10] Functional decline along with economic dependence, social cut-off, and autonomy of the young generation compromises the QOL of the elderly.

The Government has undertaken various new initiatives to improve the life of the elderly which include the National Action Plan for the Welfare of Senior Citizens (NAPSrC) which was launched on April 1, 2020. Another effort on the list is introducing National Awards for Senior Citizens (*Vayashreshtha Samman*) on January 22, 2013, to showcase the Government’s concern for senior citizens and its commitment toward the senior citizens to strengthen their legitimate place in the society.^[5]

The current statistics for the elderly give a prelude to a new set of medical, social, and economic problems that could arise if a timely initiative in this direction is not taken. The primary care physicians face difficulty in handling the elderly patients in comparison to the younger patients because the elderly patients have more physiological and emotional problems along with medical conditions and illnesses. In the elderly, the physicians should not just be concerned about increasing the life span by

treating the underlying disease alone but also improving the QOL by tackling the psychological, emotional, security, and other issues concerning them. So, the present study was planned to know the QOL of the elderly.

Furthermore, to mitigate the ill effects of the aging population, all their problems need to be tackled at the primary health care level and by giving more inputs to the scarce resources for social policies and programs for the elderly.

In the northern part of India, including Haryana, the QOL of the elderly population needs to be explored. This research is an attempt to study the factors affecting the QOL of the old age people residing in the rural areas of Haryana which in turn can also help the primary health care physicians while dealing with the elderly population.

Material and Methods

Type of study

A descriptive cross-sectional study was conducted in five Primary Health Centers (PHCs), areas served by the Community Health Center (CHC), Dighal, Jhajjar, Haryana. Out of the five PHCs two PHCs were selected randomly and from each PHC, two sub-centers and from each sub-center one anganwadi centre (AWC) [Figure 1] was selected by simple random sampling; 100 study subjects from each selected AWC were included in the study.

Sample size

The sample size was calculated as 400 subjects using the prevalence of good QOL in the geriatric population to be 34% and an allowable error of 15%.^[11] A sub-center-wise list of the geriatric persons who were 60 years and above was prepared with the help of the multi purpose health worker (MPHW) from the village information and survey register. A total of 100 study subjects were selected by simple random sampling from each selected AWC. Informed written consent was obtained from the respondent before inclusion in the study. The study subjects were contacted

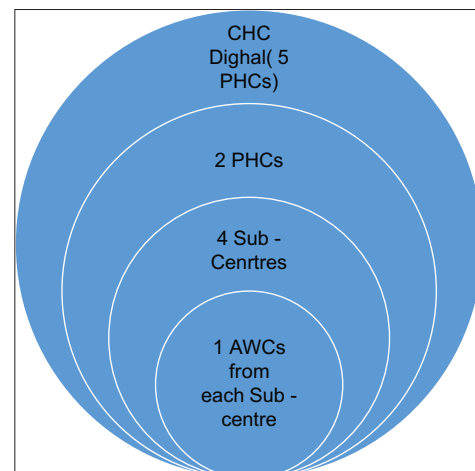


Figure 1: Sampling technique

through house-to-house visits by the investigator. If the investigator was not able to contact the selected subject during two consecutive home visits, another study subject was selected randomly. From each household, only one study subject was enrolled for the study. Data were collected on the sociodemographic factors that include age, sex, education, occupation, and marital status using a pre-tested semi-structured schedule. The socioeconomic status was determined using a Modified BG Prasad scale^[12] and the QOL was assessed by using the WHOQOL-BREF scale.^[6] The questions of different domains of the instrument were scored according to the Likert response scale. The raw scores of all four domains were converted into the final scores which lie between 0 and 100 (the higher the score, the better is the supposed QOL of the elderly for that domain). Overall, the QOL was calculated by the sum of the final scores of all four domains (physical, psychological, social relationships, environmental) and converting it into a scale of 0–100.^[6] It was further divided into five categories to identify the levels of the QOL (Very Poor: 0–20, Poor: 20–40, Average: 40–60, Good: 60–80, Very Good: 80–100.^[13]

Statistical analysis

Data analysis was performed using the Statistical Package for Social Sciences (SPSS) version 20.0 software.

Results

Table 1 reveals that the mean scores of the males in all domains were found higher than the females and were found statistically significant ($P < 0.05$) which indicates better QOL of the males compared to the females.

The study participants who belonged to the backward classes had a higher mean score compared to the general category and scheduled castes (SCs)/scheduled tribes (STs). The elderly living with their partners and in a joint family enjoyed a better QOL in the social relationships domain ($P < 0.01$). While the elderly residing with their children had better QOL in the physical health and psychological domains, study participants of age group 60–65 years enjoyed a better QOL in the physical health and social relationships domains. The post-graduates and above enjoyed a better QOL in all domains compared to others who had lower qualifications. The study participants of the upper-middle socioeconomic status (SES) who were involved in any business/private work enjoyed better QOL in physical health and psychological domains. The retired persons had better QOL in social relationships and environmental domains. The upper class had a better environmental domain of QOL. The study participants who were dependent on others had poor quality in physical health, psychological, and environmental domains. The elderly having any health problem showed the worst QOL in all four domains. Physical health, psychological, and environmental domains of QOL were found adversely affected if the family member of the study participants had any health problems [Table 1].

On analyzing the relationship between the sociodemographic factors and QOL, it was found that education, age, caste,

marital status, occupation, and socioeconomic status exhibited a significant relationship with different domains of QOL [Table 2].

Education showed a significant negative correlation with all the four domains of QOL. The results suggested that with a decline in education (from postgraduate to illiterate) the QOL of the study participants deteriorated further. The age and marital status of the study subjects exhibited a significant negative correlation with the social relationships domain of QOL. This suggested that with increasing age, the social relationships of the study participants were adversely affected. The caste of the study participants showed a significant negative correlation with the psychological and social relationships domains of QOL. This indicates that QOL in these two domains was adversely affected when the caste status moved from the general category to SCs/STs. The occupation of the study participants showed a positive correlation with all four domains of QOL. It means that as the occupation moved from unemployed to business/private work, the QOL of the participants improved [Table 2].

As per the coefficient of determination values (R^2) seen in Table 3, from the best-fit regression model for physical health QOL considering any health problem (AHP), education (E), family member having any health problem (FMAHP), residing with children (RWC), financial dependency (FD), occupation (O), and age group (AG) together explained 25.9% of the variance ($R^2 = 0.259$). From the best-fit regression model for psychological QOL considering education (E), family member having any health problem (FMAHP), residing with children (RWC), financial dependency (FD), any health problem (AHP), type of family (TOF), occupation (O) and socioeconomic status (SES) together explained 20% of the variance ($R^2 = 0.200$). Marital status (MS), education (E), family member having any health problem (FMAHP), any health problem (AHP), caste (C), sex (S), and religion (R) considered together in the regression model could explain 26.2% change in the variance ($R^2 = .262$) in social relationships QOL. Education (E), socioeconomic status (SES), financial dependency (FD), any health problem (AHP), duration of health problem of family member (DOHPFM), and duration of health problem of the study participant (DOHP) considered together explained 19.8% of the variance ($R^2 = .198$) in environmental QOL.

Discussion

The mean age of the study participants in the present study was 66.98 ± 6.89 years. A similar finding was reported by Hameed *et al.*^[14] in which they reported the mean age of the study participants as 66.86 ± 6.3 years.

The married participants living with their partners had statistically significantly higher mean scores in the social relationships domain of QOL while those residing with their children had better scores in the physical health and psychological domains. Thadathil *et al.*^[15] in their study observed that the study participants who were living with their partner had better QOL in all four domains.

Table 1: Distribution of the sociodemographic factors among domain-wise quality of life

Sociodemographic characteristics	Domain-wise QOL mean score				
	Frequency (%)	Physical health	Psychological	Social relationships	Environmental
Sex					
Male	190 (47.5)	63.36±16.72	53.92±13.65	57.73±18.34	65.14±14.19
Female	210 (52.5)	58.42±14.59	50.60±12.38	46.77±17.32	60.52±13.84
P		0.002**	0.011*	0.000**	0.001**
Age group (in years)					
60-65	220 (55)	63.26±15.24	52.86±12.17	53.98±18.43	63.46±14.00
65-70	69 (17.3)	58.28±17.03	53.80±15.81	53.39±19.84	62.38±15.42
70-75	62 (15.5)	57.85±15.08	49.00±12.93	48.29±17.36	59.87±13.47
75-80	20 (5.0)	54.20±14.38	48.25±12.73	50.00±14.74	59.65±9.47
>80	29 (7.2)	58.48±17.00	52.66±12.47	42.62±18.94	66.03±16.10
P		0.009**	0.128	0.011*	0.225
Caste					
General	294 (73.5)	60.93±15.52	52.57±12.79	52.81±18.88	62.84±14.30
Backward Classes	59 (14.8)	64.42±15.52	54.56±13.71	57.22±15.24	65.98±12.78
Schedule Castes/Scheduled Tribes	47 (11.8)	55.15±16.77	46.72±12.91	40.17±16.09	57.85±14.05
P		0.010*	0.005**	0.000**	0.013*
Marital status					
Unmarried	2 (0.5)	50.00±26.87	37.50±26.13	56.50±17.68	62.50±9.19
Married	278 (69.5)	61.24±15.57	52.49±13.09	56.61±17.30	62.96±14.46
Separated	1 (0.3)	69.00	56.00	44.00	63.00
Divorced	3 (0.8)	81.33±22.75	60.67±14.43	54.33±13.05	66.67±12.90
Widowed	116 (29.0)	59.21±15.87	51.43±12.84	40.80±17.21	62.02±13.77
P		0.105	0.356	0.000**	0.963
Living with partner					
Yes	263 (65.5)	61.16±15.70	52.65±13.03	56.96±17.34	62.98±14.37
No	137 (34.5)	60.01±16.08	51.27±13.19	42.40±17.23	62.20±13.85
P		0.490	0.317	0.000**	0.600
Residing with children					
Yes	355 (88.5)	61.54±15.80	52.96±12.77	52.05±18.56	63.17±14.17
No	45 (11.5)	54.67±14.71	46.00±14.04	51.40±19.24	59.11±13.86
P		0.006**	0.001**	0.826	0.070
Type of family					
Joint	295 (73.8)	60.85±15.48	51.93±12.64	50.64±17.60	62.24±13.63
Nuclear	105 (26.2)	60.51±16.80	52.89±14.30	55.73±20.84	64.05±15.62
P		0.850	0.519	0.016*	0.263
Education					
Post- graduation and above	2 (0.5)	75.00±8.49	66.00±4.24	72.00±4.24	81.00±0.00
Graduation or professional degree	12 (3.0)	74.08±10.88	63.08±10.52	68.83±16.80	77.83±12.81
Senior secondary	24 (6.0)	60.88±14.91	51.67±15.66	54.46±21.10	65.29±11.36
Secondary	73 (18.3)	66.90±13.99	56.79±13.23	59.78±17.03	68.11±12.57
Primary	108 (27.0)	61.32±15.67	52.76±12.44	55.81±16.35	61.67±13.30
Illiterate	181 (45.3)	56.90±15.80	49.16±12.29	44.87±17.61	59.62±14.45
P		0.000**	0.000**	0.000**	0.000**
Occupation					
Unemployed/Homemaker	201 (50.2)	58.15±14.44	50.45±12.18	47.84±17.45	61.28±13.61
Agriculture/Farmer	121 (30.3)	60.83±17.79	51.16±14.28	54.26±19.81	62.16±14.33
Retired	29 (7.2)	66.38±15.92	58.52±12.27	61.03±17.48	72.07±14.75
Shopkeeper	9 (2.3)	64.78±10.73	55.67±7.95	59.67±17.04	61.89±14.26
Laborer	11 (2.8)	62.09±10.25	49.00±8.14	51.27±14.49	53.64±11.14
Private work	29 (7.2)	71.28±13.88	62.21±11.59	59.97±17.32	69.31±12.57
P		0.000**	0.000**	0.000**	0.000**
Socioeconomic status					
Upper	73 (18.2)	62.52±16.02	54.55±12.31	52.56±17.06	67.53±13.73
Upper Middle	79 (19.7)	65.42±16.30	54.96±13.01	56.44±16.65	66.01±12.88
Lower Middle	97 (24.3)	60.89±14.16	52.14±13.14	51.85±18.82	63.62±14.14
Upper Lower	95 (23.8)	57.42±16.56	49.84±14.32	48.76±21.63	59.35±13.55
Lower	56 (14.0)	57.38±14.73	49.18±10.69	50.59±16.48	55.93±14.13
P		0.005**	0.017*	0.099	0.000**

Contd...

Table 1: Contd...

Sociodemographic characteristics	Domain-wise QOL mean score				
	Frequency (%)	Physical health	Psychological	Social relationships	Environmental
Financial dependency					
Yes	51 (37.8)	57.45±14.57	48.87±12.71	49.87±19.79	58.48±13.61
No	349 (72.2)	62.78±16.22	54.18±12.92	53.25±17.78	65.28±13.93
P		0.001**	0.000**	0.079	0.000**
Participant having any health problem					
Yes	220 (55.0)	54.81±15.00	49.64±12.68	48.95±18.28	60.17±14.44
No	180 (45.0)	67.09±14.14	54.88±13.00	55.19±18.46	65.42±13.41
P		0.000**	0.000**	0.001**	0.000**
Family member having any health problem					
Yes	90 (22.5)	55.57±13.98	48.21±13.15	49.64±19.25	59.60±14.44
No	310 (77.5)	62.22±16.04	53.33±12.86	52.65±18.40	63.62±14.00
P		0.001**	0.001**	0.178	0.018*
Duration of health problem of family member (in years)					
<1	15 (16.66)	55.13±11.02	48.00±9.73	49.60±14.14	59.20±12.72
1-5	34 (37.78)	53.97±16.28	46.03±14.24	49.47±22.56	59.85±15.82
5-10	22 (24.44)	59.27±13.43	52.41±12.99	57.91±14.86	61.50±14.04
>10	19 (21.12)	55.42±12.39	47.42±13.50	40.42±17.68	57.26±14.34
P		0.010*	0.007**	0.028*	0.162

*Significance at $P < 0.05$, **Significance at $P < 0.01$

Table 2: Correlation between the sociodemographic variables and domains of quality of life

Variable	Physical health		Psychological		Social relationships		Environmental	
	Correlation coefficient (r)	P	Correlation coefficient (r)	P	Correlation coefficient (r)	P	Correlation coefficient (r)	P
Caste	-0.072	0.151	-0.104*	0.038	-0.157**	0.002	0.068	0.175
Marital status	-0.045	0.369	-0.025	0.624	0.383**	0.000	-0.028	0.574
Age group	-0.151**	0.002	-0.071	0.156	-0.169**	0.001	-0.025	0.621
Education	-0.250**	0.000	-0.236**	0.000	-0.333**	0.000	-0.282**	0.000
Occupation	0.223**	0.000	0.220**	0.000	0.200**	0.000	0.124*	0.013
SES	-0.159**	0.001	-0.164**	0.001	-0.092	0.066	-0.275**	0.000

*significant, **highly significant

Table 3: Linear regression for factors correlated with domains of QOL

QOL domain	Variable	β	R^2	P
Physical health	AHP + E + FMAHP + RWC + FD + O + AG	-0.087	0.259	<.01
Psychological	E + FMAHP + RWC + FD + AHP + TOF + O + SES	-0.103	0.200	<.01
Social relationships	MS + E + FMAHP + AHP + C + S + R	0.090	0.262	<.01
Environmental	E + SES + FD + AHP + DOHPFM + DOHP	0.185	0.198	<.01

β - Regression coefficient, R^2 - coefficient of determination. AHP- Any health problem, E - Education, FMAHP - Family member having any health problem, RWC - Residing with children, FD - Financial dependency, O - Occupation, AG - Age group, TOF - Type of family, SES - Socioeconomic status, MS - Marital status, C - Caste, S - Sex, R - Religion, DOHPFM - Duration of health problem of family member, DOHP - Duration of health problem of study participant

Kaur *et al.*^[16] in their study found that QOL was better in the study subjects who were living with their partners because the elderly people feel less neglected and there is better interaction, bonding, and sharing of responsibilities in a joint family compared to the nuclear one.

The elderly, who were residing with their children, had statistically significantly higher mean scores in the physical health and psychological domains of QOL. Ghosh *et al.*^[17] in their study observed that the study participants who were residing with their children had better QOL in all four domains.

The study participants living in a joint family had a higher mean score in the social relationships domain. This may be

because of better self-esteem, physical, social, and emotional support provided by the family members, leading to better social relationships of the elderly. The younger generation hardly gets time to interact with their elderly family members, whereas, in a joint family, there are more people, more social connectivity, and sharing of responsibilities. Thadathil *et al.*^[15] in their study found similar findings, that is, better social relationships domain of QOL among the study participants who had a joint family.

In our study, the study participants who were in the age group of 60–65 years had a higher and statistically significant ($P < 0.01$) mean score in the physical health and social relationships domains of QOL. Almost similar findings were observed in a study conducted by Mudey *et al.*^[18] in which they found better

physical and social relationships domains of QOL in the age group of 60–70 years. Karmakar *et al.*^[19] and Hameed *et al.*^[14] in their studies reported better physical health domain in the age group of 60–70 years.

The study subjects who were post-graduates and above along with upper-middle-class SES had a higher mean score in all four domains of QOL compared to others because they have better access to the information and health care system which adds to their QOL. Education makes a better understanding of their aging process and better accommodation of lifestyle changes and nutritional habits in a positive direction. Higher education also leads to better occupation and a high SES which, in turn, causes better QOL. Similar findings were observed by Qadri *et al.*^[20], Hameed *et al.*^[14] and Mudey *et al.*^[18] The study participants who were involved in any business/private work had a better and statistically significant ($P < 0.01$) higher mean score in the physical health domain of QOL. The retired persons had a higher and statistically significant ($P < 0.01$) mean score in social relationships and environmental domains. This may be because getting involved in a job helps them to maintain their physical health and earnings which leads to a high level of self-esteem which in turn leads to life satisfaction and better QOL in the physical and psychological domains. The retired study participants have enough time to take care of their social relationships creating a better environment.

The elderly who were financially dependent had a statistically significant lower mean score in physical health, psychological, and environmental domains. This may be because financial independence brings the power of autonomy, opportunities to fulfill the needs in an independent and more satisfactory way explaining better QOL. Similar findings were reported by Kaur *et al.*^[16] and Sowmiya *et al.*^[21]

The mean score of the study participants who had any health problems was statistically significantly lower ($p < 0.01$) in all four domains of QOL. Health problems can cause physical dependence which limits movements and, in turn, can lead to economic dependence and psychological ill-health. This results in poor QOL. A similar finding was observed by Thadathil *et al.*^[15] in which they reported that the QOL in all four domains was adversely affected if the study participants had any health problems.

Our study showed that the duration of health problems of the elderly was significantly associated with the QOL. The study participants who had duration of illness of less than 1 year showed a higher and statistically significant mean score in the physical domain of the QOL compared to others who were suffering for more than a year. In social relationships and environmental domains of the QOL, the mean scores were higher in those elderly who had the duration of illness of more than 10 years compared to others and the differences in the means were statistically significant. The psychological domain was better in participants who had the duration of illness of

5–10 years compared to the other study participants. The mean scores in all four domains were statistically significant with the duration of the disease.

In the present study, it was observed that the physical health, psychological, and environmental domains of the QOL were adversely affected if their family members had any health problems. The differences in the mean found were statistically significant. This is probably because having an ill or disabled relative imposes a burden on the family caregivers and non-caregiving family members. These “spill-over” effects of illness affect many aspects of the family member’s life, from physical to psychological and environmental domains.

The present study observed that the mean scores of physical health, psychological, and social relationships domains were higher and statistically significant ($P < 0.05$) in the study participants whose family members had any health problems for 5–10 years. This may be probably because of their adaption to the home environment and getting involved in other recreational/leisure activities, causing better QOL in these domains.

Correlation

The socioeconomic status showed a significant negative correlation with the physical health, psychological, and environmental domains of QOL. This suggested that with a decrease in SES, the QOL of the study participants decreases in these three domains. A similar finding was observed by Naing *et al.*^[22] in which they found that an increase in the family income of the study participants was positively correlated.

Regression

The study subjects having no health problems contribute better to the QOL. A similar finding was observed by Deshmukh *et al.*^[23] The regression analysis exhibited that the financial dependency status of the study participants made a positive contribution to the QOL in physical health, psychological, and environmental domains. This suggests that as the status moved from yes to no, the QOL in these three domains became better. Dasgupta *et al.*^[24] also reported FD as a predictor of QOL.

The age group of the study participants made a negative contribution to the physical health domain of the QOL. This indicates that as the age group advances, it worsens the QOL of the study participants in the physical health domain. A similar finding was observed by Deshmukh *et al.*^[23] Caste and gender contributed negatively to the social relationships domain of QOL. Deshmukh *et al.*^[23] revealed similar findings regarding the sex of the participants.

Conclusion

With the advancement of age, the health status of an individual does not remain the same nor does the income, and thus, the QOL deteriorates. The elderly women are having an even worst

scenario. Higher education and higher socioeconomic status of the study participants help them live a better QOL. Those participants who were married and were busy in any kind of work experienced a better QOL. Overall, government and policymakers should give proper attention to the seriousness of the issue and proper welfare schemes for the elderly.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

- Harman D. The free radical theory of aging. *Antioxid Redox Signal* 2003;5:557-61.
- Department of Economic and Social Affairs, Population division. *World Population Ageing 1950-2050*. New York: United Nations; 2002.
- Prakash IJ. *Ageing in India*. Geneva: WHO; 1999.
- United Nations Department of Economic and Social Affairs, Population Division (2020). *World Population Ageing 2020 Highlights: Living arrangements of older persons*.
- Ministry of Statistics & Programme Implementation, Government of India. *Elderly in India, 2021*. New Delhi: National Statistics Office, Social Statistics Division; 2021.
- World Health Organization. WHOQOL-BREF: Introduction, administration, scoring and generic version of the assessment. *Programme on Mental Health*. Geneva: WHO; 1996.
- Gill TM, Feinstein AR. A critical appraisal of the quality of quality-of-life measurements. *JAMA* 1994;272:619-26.
- Diener E, Suh EM, Lucas RE, Smith HL. Subjective well-being: Three decades of progress. *Psychol Bull* 1999;125:276-302.
- Power M, Harper A, Bullinger M. The World Health Organization WHOQOL-100: Tests of the universality of quality of life in 15 different cultural groups worldwide. *Health Psychol* 1999;18:495-505.
- Gijzen R, Hoeymans N, Schellevis FG, Ruwaard D, Satariano WA, van den Bos GA. Causes and consequences of comorbidity: A review. *J Clin Epidemiol* 2001;54:661-74.
- Anand B, Shukla M, Ahmad S, Soni S. Dimensions and determinants of quality of life among elderly in a rural population of Barabanki District, Uttar Pradesh. *Indian J Forensic Community Med* 2017;4:1-6.
- Prasad BG. Social classification of Indian families. *J Indian Med Assoc* 1968;51:365-6.
- Gupta A, Mohan U, Tiwari SC, Singh SK, Singh VK. Quality of life of elderly people and assessment of facilities available in old age homes of Lucknow, India. *Natl J Community Med* 2014;5:21-4.
- Hameed S, Brahmabhatt KR, Patil DC, Prasanna KS, Jayaram S. Quality of life among the geriatric population in a rural area of Dakshina Kannada, Karnataka, India. *Glob J Med Public Health* 2014;3:1-5.
- Thadathil SE, Jose R, Varghese S. Assessment of domain-wise quality of life among elderly population using WHO-BREF scale and its determinants in a rural setting of Kerala. *Int J Curr Med Appl Sci* 2015;7:43-6.
- Kaur H, Kaur H, Venkateshan M. Factors determining family support and quality of life of elderly population. *Int J Med Sci Public Health* 2015;4:1049-53.
- Ghosh S, Sarkar G, Bhattacharya K, Pal R, Mondal TK. Quality of life in geriatric population in a community development block of Kishanganj, Bihar, India. *J Krishna Inst Med Sci* 2017;6:33-41.
- Mudey A, Ambekar S, Goyal RC, Agarekar S. Assessment of quality of life among rural and urban elderly population of Wardha District, Maharashtra, India. *Ethno Med* 2011;5:89-93.
- Karmakar N, Datta A, Nag K, Tripura K. Quality of life among geriatric population: A cross-sectional study in a rural area of Sepahijala District, Tripura. *Indian J Public Health* 2018;62:95-9.
- Qadri S, Ahluwalia SK, Ganai A, Bali S, Wani F, Bashir H. An epidemiological study on quality of life among rural elderly population of northern India. *Int J Med Sci Public Health* 2013;2:514-22.
- Sowmiya KR, Nagarani. A Study on quality of life of elderly population in Mettupalayam, A rural area of Tamilnadu. *Natl J Res Community Med* 2012;1:139-43.
- Naing MM, Nanthamongkolchai S, Munsawaengsub C. Quality of life of the elderly people in Einme Township Irrawaddy Division, Myanmar. *Asia J Public Health* 2010;1:4-10.
- Deshmukh PR, Dongre AR, Rajendran KP, Kumar S. Role of social, cultural and economic capitals in perceived quality of life among old age people in Kerala, India. *Indian J Palliat Care* 2015;21:39-44.
- Dasgupta A, Pan T, Paul B, Bandopadhyay L, Mandal S. Quality of life of elderly people in a rural area of West Bengal: A community-based study. *Med J DY Patil Vidyapeeth* 2018;11:527-31.