Differences in Mental and Physical Health-related Quality of Life of Older Adults in Goa

Charmaine Savia Siqueira Lobo[1]*, Savio P. Falleiro[2]

Abstract

Research Background: With a rise in population aging, there is a need for our older adults to be physically fit and mentally alert, as this affects their life's quality. **Objective:** The goal of this study is to analyze significant differences in the mental and physical health-related quality of life (HRQOL) of the aged in Goa, due to various factors. **Methods:** A total of 500 senior citizens (aged 60 and above) residing in their private houses as well as in homes for the aged were selected using multistage sampling. The Short Form Health Survey (SF-36) helped in measuring the HRQOL of the senior adults. Calculations of means, frequencies, standard deviations, analysis of variance, and *t*-tests were done. **Results and Conclusion:** The mental health summary (Mean = 60.94) was slightly higher than the physical one (Mean = 57.12). Female older adults, who were married, had higher education, and lived in urban areas and with family members, demonstrated better mental and physical HRQOL.

Keywords: Goan older adults, Health-related quality of life, Mental and physical health, SF-36, Significant differences

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Introduction

Over the past few decades, population patterns and projections bear testimony to the "Greying of the Universal Populace." Rising trends follow suit in India as well. Considerable variation exists across the states, with Kerala having the highest share of older adults (12.6%), followed by Goa (11.2%).[1] Goa faced a 3% average increase in its population aged 60 and above from 2001 to 2011, indicating that the Goan society is greying faster than the Indian society due to its low birth and death rates and increasing longevity. Vignettes of depression and dementia among older individuals in Goa were prevalent and associated with neglect, lack of affection, and abuse by children toward their parents. Family care and assistance were frequently conditional on the child's expectation of succession rights of property and possessions. Older Goans were apprehensive about the future, with "Dependency Anxiety" being prevalent.[2]

Rising global attention toward research related to health-related quality of life (HRQOL) owes to universal population aging. HRQOL is regarded as a precious measure of an individual's general health (GH) since it collects psychological and corporeal health information, highlighting how health status impacts QOL.[3] When dealing specifically with HRQOL of older adults, their physical functioning, independence, and capacity to engage in everyday tasks are of greater focus. The objective of studies on HRQOL among older adults focuses on enabling them to preserve their autonomy, agility, mental stability, and energetic participation in societal affairs while responding to various aging problems.

Materials and Methods

Data Collection

The study included a sample from the state of Goa which was selected using the multistage sampling technique. Out of the two districts of Goa, that is, North and South Goa, the researchers selected three talukas from each district, namely, Pernem, Bardez, and Tiswadi, respectively, from North Goa and Salcete, Mormugao, and Quepem from South Goa. Goa has a total of 1,63,357 people

[1]Cluster Research Centre (CRC) in Economics, Government College of Arts, Science and Commerce, Sanquelim, Goa Business School, Goa University, Fr. Agnel College of Arts and Commerce, Pilar, Goa, India
[2]Department of Economics, Fr. Agnel College of Arts and Commerce, Pilar, Goa, India

Corresponding Author: Charmaine Savia Siqueira Lobo, Cluster Research Centre (CRC) in Economics, Government College of Arts, Science and Commerce, Sanquelim, Goa Business School, Goa University, Fr. Agnel College of Arts and Commerce, Pilar, Goa, India. Mobile: +91-7038110056. E-mail: charmaine@fragnelcollege.edu.in

aged 60 years and above, according to the Census 2011. Taking a 95% confidence interval and a 5% margin of error, a total of 500 respondents living in their private homes and homes for the aged were selected for the study. Informed consent was taken from the superiors/in-charges of homes for the aged and from respondents living in their private homes. Questionnaires were administered through personal visits and telephonic interviews, given the COVID-19 pandemic situation, and the higher vulnerability of the target population.

Instrumentation

The Short Form Health Survey (SF-36) helped in evaluating older adults' HRQOL in terms of their Physical and Mental health (MH). An in-depth description is available elsewhere regarding the conceptual foundation of the SF-36, its development, testing, rating, and interpretation.[4] It is a multiple-item instrument measuring health dimensions such as physical functioning (PF), GH, role limitations due to physical health (RP), bodily pain (BP), role

limitations due to emotional problems (RE), vitality (VT), MH, and social functioning. The former four are appropriately transformed to yield the Physical Component Summary (PCS), while remaining give the mental component summary (MCS). Values range from 0 (representing the poorest health state and comparable to death) to 100 (showing the highest health status), larger values signifying improved HRQOL. Questions regarding the sociodemographic and economic details of the respondents were also included in the survey form.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) helped to analyze the data. Skewness and kurtosis of the data were checked and the data were found to follow a normal distribution. Calculation of means, frequencies, standard deviations, analysis of variance (ANOVA), and t-tests was done.

RESULTS

Elderly respondents' sociodemographic is highlighted in Table 1. Majority (55.4%) of the elderly respondents were females. About 252 (50.4%) were between 60 and 69 years of age, 160 (32%) were in the 70–79 years age category, and 80 (16%) were around 80–89 years old, while just 8 (1.6%) were aged between 90 and 99 years. About their marital status, the majority of the elderly (61.8%) were married and their spouse was alive. In terms of their living arrangements, 36 elderly respondents were living alone, while around 364 were living with family members. However, the remaining 100 were living in homes for the aged. About 40.4% lived in rural areas while 59.4% lived in urban areas. Only 17% were not educated.

Table 2 represents mean (standard deviation) subscale indicators of HRQOL. The PCS was 57.12 (21.01), while the MCS was 60.94 (18.22), signifying better MH of senior adults in Goa. Concerning RP subscales, the respondents had the highest mean scores on the role physical.

Table 3 indicates the presence of variances in mental and RP of older adults. With regard to gender, elderly males reported higher mean scores on almost all the components of physical (PF=53.8, RP=71.5, BP=61.4, and GH=58.7) and MH (SF=57.2, RE=78.5, and MH=6.5).

However, these differences were significant for the domains of PF, BP, GH, and MH. Older adults who were married had better HRQOL scores, indicating statistically significant differences for PF=52.2, RP=74.3, BP=60.0, GH=57.3, SF=59.0, and MH=67.3, compared to the unmarried, widowed, or divorced respondents. Similarly, the elderly with higher educational qualifications, that is, college and above, had significantly improved HRQOL in most domains: PF=61.4, RP=78.9, BP=71.3, GH=64.0, SF=69.6, RE=86.1, and MH=73.7 compared to people with lower education. Similarly, older adults residing with family members reported better mental and RP than those residing alone or in a home for the aged. Finally, the elderly residing in cities and towns had better HRQOL compared to those in villages, with statistically significant differences in PF=51.4, RP=72.2, BP=59.9, GH=56.4, SF=59.5, and MH=65.9.

DISCUSSION

The present study carried out an analysis of significant differences in the pyschological and physical HRQOL of the Goan elderly

Table 1: Sociodemographic characteristics of the respondents (n=500)

Characteristic	Frequency (%)
Gender	
Male	223 (44.6)
Female	277 (55.4)
Age (years)	
60–69	252 (50.4)
70–79	160 (32.0)
80–89	80 (16.0)
90 and above	8 (1.6)
Marital status	
Unmarried	42 (8.4)
Married	309 (61.8)
Widowed	140 (28.0)
Separated/divorced	9 (1.8)
Locality of residence	
Rural	202 (40.4)
Urban	297 (59.4)
Educational qualification	
Not educated	85 (17.0)
High school	197 (39.4)
Higher secondary	57 (11.4)
College and above	161 (32.2)
Living arrangements	
Alone	36 (7.2)
With family	364 (72.8)
In home for the aged	100 (20)

Table 2: Mean scores of the subscales of health-related quality of life of older adults in Goa were measured by short form health survey-36

SF-36 Subscales	Mean (SD)
Subscales of physical health	
PF	48.61 (28.14)
RP	70.10 (37.80)
BP	55.59 (28.72)
GH	53.94 (18.37)
Physical Component Scale	57.12 (21.01)
Subscales of mental health	
VT	47.01 (28.87)
SF	55.90 (30.04)
RE	77.13 (35.86)
MH	63.65 (22.30)
Mental Component Scale	60.94 (18.22)

SD: Standard deviation, PF: Physical functioning, RP: Role physical, BP: Bodily pain, GH: General health, VT: Vitality, SF: Social functioning, RE: Role emotional, MH: Mental health

people. Overall, the senior citizens' psychological health status was slightly better than their RP. However, significant differences were reported based on various factors of the elderly. Male older adults had better mental and RP, which was also found in another study by Sarker.[5] Those who were married had better health in almost all domains, comparable to findings by Zhou et al.[6] The aged adults having higher educational qualifications and those living with their family members, rather than alone or in a home for the aged, also stated they had better physical and MH. Older adults living in urban areas also reported better mental and RP similar to the findings by Usha and Lalitha.[7]

CONCLUSION

The study was conducted to analyze whether there are significant differences in the physical and mental HRQOL of the elderly in Goa. The analysis revealed that the elderly's mental status was slightly better than their physical status. Significant differences in

Table 3: Differences in short form health survey-36 scores due to various factors of the respondents

Factor	PF	RP	BP	GH	VT	SF	RE	MH
Gender								
Male	53.8	71.5	61.4	58.7	46.3	57.2	78.5	68.8
Female	44.4	69.0	50.9	50.1	47.6	54.8	76.1	59.5
P	<0.001***	0.450	<0.001***	<0.001***	0.63	0.379	0.453	<0.001***
Marital status								
Unmarried	41.1	62.0	51.1	46.7	42.0	50.6	71.4	52.5
Married	52.2	74.3	60.0	57.3	47.4	59.0	80.2	67.3
Widowed	43.3	64.8	47.3	48.4	48.6	51.5	71.7	59.3
Divorced	42.8	47.2	55.6	57.2	32.8	43.1	85.2	59.1
P	0.008**	0.025*	0.001**	<0.001***	0.26	0.039*	0.110	0.001**
Educational qualifications								
Uneducated	36.3	67.1	37.1	37.9	44.9	47.9	73.7	50.2
Class X	42.9	64.5	48.3	51.2	46.0	47.1	72.4	59.8
Class XII	50.6	69.3	64.1	59.1	50.7	59.2	73.1	68.7
College +	61.4	78.9	71.3	64.0	48.1	69.6	86.1	73.7
P	<0.001***	0.003**	<0.001***	<0.001***	0.59	<0.001***	0.001**	<0.001***
Living arrangements								
Alone	49.7	56.9	60.1	57.2	51.3	54.2	73.2	69.0
With family	53.5	72.4	61.7	58.9	47.1	58.7	78.3	69.4
Aged home	30.4	66.5	31.8	34.8	45.1	46.4	74.3	41.0
P	<0.001***	0.064	<0.001***	<0.001***	0.50	<0.001***	0.402	<0.001***
Locality								
Rural	44.5	67.0	49.0	50.2	45.5	50.6	74.8	60.2
Urban	51.4	72.2	59.9	56.4	48.1	59.5	78.7	65.9
P	0.007**	0.127	<0.001***	<0.001***	0.32	0.001**	0.231	0.005**

Significance levels indicated as follows: *$P<0.05$, **$P<0.01$, ***$P<0.001$. PF: Physical functioning, RP: Role physical, BP: Bodily pain, GH: General health, VT: Vitality, SF: Social functioning, RE: Role emotional, MH: Mental health

health status were found due to factors such as gender, locality of residence, educational qualifications, marital status, and living arrangements. Female older adults having higher education, who were married, and lived in urban areas and with family members demonstrated better mental and physical HRQOL.

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REFERENCES

1. Goli S, Reddy AB, Shrinivasn V. Economic independence and social security among India's elderly. Econ Polit Wkly 2019;39:32-41.

2. Patel V, Prince M. Ageing and mental health in a developing country: Who cares? Qualitative studies from Goa, India. Psychol Med 2001;31:29-38.

3. Revicki DA, Kleinman L, Cella D. A history of health-related quality of life outcomes in psychiatry. Dialogues Clin Neurosci 2014;16:127-35.

4. Ware JE Jr., Sherbourne CD. The MOS 36-item short-form health survey (SF-36). I. Conceptual framework and item selection. Med Care 1992;30:473-83.

5. Sarker AR. Health-related quality of life among older citizens in Bangladesh. SSM Ment Health 2021;1:100031.

6. Zhou Z, Wang C, Yang H, Wang X, Zheng C, Wang J. Health-related quality of life and preferred health-seeking institutions among rural elderly individuals with and without chronic conditions: A population-based study in Guangdong Province, China. Biomed Res Int 2014;2014:192376.

7. Usha V, Lalitha K. Quality of life of senior citizens: A rural-urban comparison. Indian J Soc Psychiatry 2016;32:158.