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Interpersonal relationships, subjective health, psychological well-being, and quality of life among older adults in South India: Evidence from a population-based study

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Abstract:

BACKGROUND: Subjective health and well-being are closely linked with quality of life (QoL) in older adults. Self-reported health, happiness, satisfaction with life and interpersonal relationships, social support, loneliness, and social isolation make robust indicators for the psychological well-being of older adults. This study aimed to explore subjective health, psychological well-being and associated factors, and their relationship with QoL in older adults.

MATERIALS AND METHODS: This was a cross-sectional, community-based survey that included adults aged 60 years and above ($n = 260$) who were living in selected communities. A semi-structured questionnaire was used to collect data on self-reported health, happiness, satisfaction with family and marital relationships, and felt loneliness and isolation. The relationship between psychological well-being and QoL was identified. Data analysis was carried out by descriptive and analytical statistical applications using Statistical Package for the Social Sciences (SPSS) version 20 at $P \leq 0.05$.

RESULTS: Study findings showed that a significant number of older adults (56%) reported poor general health; 56.4% of men and 59.2% of women were "not at all happy" with their family and interpersonal relationships, and 13.5% of respondents were not at all happy in general. Self-reported health (0.277**) and happiness (0.506**) were positively correlated with the psychological domain of QoL ($P \leq 0.01$).

CONCLUSIONS: The study findings identified the interrelationship between changing family and social relationships and psychological well-being of older adults, which is an immediate public health concern. Inadequate social support and deficient quality of interpersonal relationships predispose loneliness and isolation in later life. Strategies to promote social support and age-friendly social and healthcare resources are urgent needs for healthy aging.

Keywords:

Aging, interpersonal relationships, psychological well-being, quality of life, subjective health

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Introduction

Although population aging is a global phenomenon, the growth of the aging population is seen faster in developing countries.[1] In India, the projected number of adults above 60 years of age will be threefold by 2050, according to the number identified in 2011.[2] Although the growing number of the aging population is an indicator of the country's achievements in promoting quality and standards of life and health care, it comes with social and healthcare challenges of diverse and multiplied care needs of the aged. Changing social and family

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transitions, stereotypes, and agism further aggravate the vulnerability of adults in later life. Compared with developing countries, a rapidly aging population is more challenging for countries such as India due to the huge population size and inadequate social security[3] and care resources for older adults. Social relationships in late life are mostly the product of a lifetime and age-related declines in social role and connectivity reduces the quantity and quality of social participation, thus serving as a predictor for loneliness and social isolation in older adults. A perceived deficiency in belonging needs, social affiliation, reduced meaningful interaction with family and friends, etc., may result in a sense of social detachment and loneliness in older people. Loneliness is usually an outcome of reduced personal, family, and social relationships[4] and is closely linked with mental health in older adults. Support from family, friends, and community participation serves as a source of coping and well-being in adults.[5] Optimized interpersonal relationships and family and social support positively influence subjective health and psychological well-being

An individual's optimized psychological functioning is an integral component of subjective well-being (SWB).[6] Social capital and psychological resources are strong predictors of SWB in older adults, and gender is another significant determinant of SWB in the older population.[7] Social norms, agism, and stereotypes may influence the health and well-being of men and women differently. Women usually show lower levels of well-being due to recurrent exposure to compromised social privileges and resources, adversely impacting their health in many societies worldwide.[8] In Asian countries like India, social norms, gender attributes assign women, a caretaker role with less significant play in the family and marital decision-making. Marital satisfaction is another closely connected determinant in the health and perceived well-being of older adults.[9] Marital satisfaction is the individual perception of marital harmony and quality of the marital relationship that plays a significant role in family functioning and may occur over time in a marital relationship, and the product of mutual respect and reciprocation of values and preferences endures the relationship. Entering into marriage impacts men more positively than women[10] with higher physical health benefits, whereas women experience higher marital stress and vulnerability.[11] Perceived satisfaction in marital relationship may buffer stressful life events with better coping and emotional support; however, people with marital strain experience poorer health than those with good marital relationships.[12]

Subjective health (self-reported) is closely connected with health outcomes among older adults. Self-reported health, happiness, and social support are independent predictors for health outcomes than the conventional objective measures.[13] Self-reported psychological well-being such as perceived happiness, satisfaction with life, and social relationships strongly influences the quality of life (QoL) in older adults. Lack of family support and social connectivity and reduced social participation were found to be major contributors to loneliness and depression in later life.[14] The three components of psychological well-being include evaluative well-being (life satisfaction), hedonic well-being (happiness, sadness, despair, etc.), and eudemonic well-being (purpose and meaning in life).[15] Felt loneliness, isolation, and lack of social support are predictors for poor health outcomes; however, positive feelings and SWB predict health and longevity.[16] Studies highlight the need for a multidimensional approach to understand health and gender inequalities in the older population;[17] however, there is limited research available on interpersonal relationships and psychological well-being in Indian older adults. In consideration of the need, this study investigates self-reported health, perceived happiness, interpersonal relationships, and its association with QoL in older adults. The study attempts to explore the status of psychological well-being and associated factors among older adults in India, where there is an immediate need to address the mental health needs of a swiftly growing aging population. Thus, this study attempts to fill the gap by identifying Indian adults' perspectives of self-reported health, happiness, felt loneliness, satisfaction with family and marital relationships, social isolation, and its relationship with the QoL in older adults, in South India.

Materials and Methods

Study design and setting

This study adopts a cross-sectional community-based survey to investigate the predictors of subjective health (self-reported health) and psychological well-being (perceived happiness, social support, and satisfaction with family and marital relationships). Negative predictors of psychological well-being such as loneliness and social isolation were identified. The study population included adults 60 years of age and above living in the selected urban and rural communities with not less than six months. An urban and rural health center in the purview of the selected district was randomly selected from which two urban and peri-urban areas (referred to as rural areas as they fall under rural health center) were purposively selected.

Study participants and sampling

Adults 60 years and above of age, willing to participate in the study, and meeting the study criteria were purposively selected. The sample size was calculated by $Z\ (\alpha/2)^2{*}p\ (1-p)/1+(Z(\alpha/2)^2{*}p\ (1-p)/e^2N)$. Considering 5% of population above 60 years according to Census

2011, Z (a1/2) = 1.96, p (expected population) = 5%, and d (absolute error)= 5%, and the sample size estimated was 384; however, only 295 participants agreed to participate.

Data collection procedure, tools, and techniques

Data collection was undertaken through a house-to-house survey over a period from June 2018 to October 2019 by a trained field assistant after screening the older adults' orientation and ability to participate in the study before obtaining written informed consent.

The validated semi-structured interview schedule was administered to collect the data on the selected variables.

A semi-structured questionnaire developed by the investigator was used to collect socio-demographic characteristics, such as age, gender, education, and employment, financial status and financial autonomy, type of family, marital status, living arrangements, and number of households. Similar to earlier research, this study estimated self-reported health with the question "In general how do you perceive your health and how would you rate it?" The responses ranged from excellent/very good to poor, on a rating scale from 4 to 1. Perceived happiness was measured in general, how happy one considers them self, and responses on a rating scale from 4 (very happy) to 1 (not happy). Loneliness and perceived isolation were examined to determine how frequently one felt left out and isolated and had no one to turn to. The Lubben social network scale (LSNS)[18] was used to estimate the risk of social isolation. QoL was assessed using the World Health Organization (WHO) QOL BREF[19] scale, and the relationship of perceived well-being with QoL was estimated.

Descriptive analysis was carried out after the data were entered in Excel sheets, associations were estimated (Chi-square), and correlation was assessed by Pearson's (two-tailed) correlation (SPSS version 20), at a significance level of 0.05.

Ethical considerations

Institutional ethical approval was obtained before initiation of the study, and adults willing to participate in the study and meeting inclusive criteria were enrolled to participate in the study after securing written informed consent, and the study purpose and approximate time taken for their participation were briefed; anonymity and confidentiality were assured before initiating the data collection process.

Results

Findings of the study were distributed by gender; of the total estimated sample size, 295 older adults agreed to participate; however, 260 adults participated with a nonresponse rate of 11.86%. Of the total, 106 (40.8%) were men and 154 (59.2%) were women, aged between 60 and 92 years. The mean age of men, women, and overall participants was 69 ± 9, 69 ± 7, and 69 ± 6, respectively.

The socio-demographic distributions of the participants [Table 1] show that most of the women were not gone for schooling (83%), and none of them had higher education. The majority of women (77.9%) never worked outside and engaged in household and other family responsibilities, 54.9% were dependent on their son/daughter for financial needs, and 27% of older people agreed to be financially independent. The majority of older women (53%) and men (43%) said that they were somewhat happy, and of all, 13.5% of older adults were not at all happy, 56% of older adults reported poor general health, 29% of older adults felt lonely often (17.9% of men and 36.4% of women), and 42.7% felt lonely sometimes [Figure 1]. Felt isolation in older adults was significantly higher among men (65%) than women (60%) [Figure 2].

Satisfaction with family relationships [Table 2] is inversely correlated with loneliness (-.366**) and isolation (-.259**) and positively correlated with self-reported health, happiness, and social support. Marital satisfaction was negatively correlated with loneliness (-.296**) and perceived isolation (-.236**). Loneliness has a strong negative correlation (r = -0.546) with self-rated happiness, a moderate negative correlation with social support (r = -0.443), and self-reported health (r = -0.296) [Table 3]. Self-reported health and happiness in older adults [Table 4] are positively correlated with all four domains of QoL. The mean score in the urban population was 13.54 ± 5.989, the rural adult score was 17.08 ± 3.6, and the total score was 17.08 ± 3.6. QoL is an essential indicator of general health and well-being in adults. The WHOQOL tool[19] assesses health in four domains: physical, psychological, social, and environmental health. Study findings estimate the interrelationship of these four

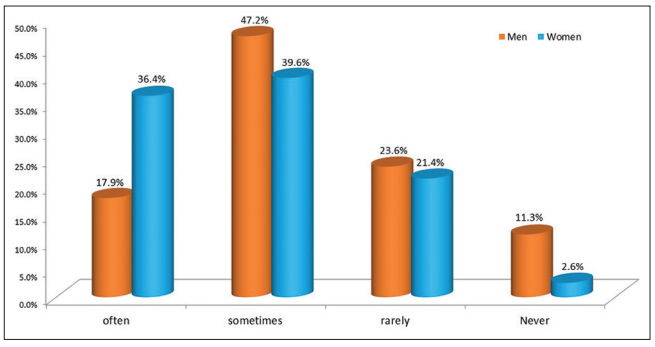

Figure 1: Felt loneliness among men vs women

Table 1: Socio-demographic characteristic distribution among older adults (*n*=260)

Variables	Gender		Chi-square	*P*
	Men	Women		
Community				
Urban	54 (50.90)	76 (49.40)	0.064	0.801
Rural	52 (49.10)	78 (60.00)		
Total	106 (40.8)	154 (59.2)		
Age				
60–69	64 (60.40)	95 (61.70)	0.363	0.834
70–79	34 (32.10)	45 (29.20)		
80 and above	8 (7.50)	14 (9.10)		
Education				
No formal schooling	52 (49.10)	128 (83.10)	38.411**	0.0001
Primary education	18 (17.00)	13 (8.40)		
Secondary school education	25 (23.60)	12 (7.80)		
Higher secondary education	7 (6.60)	1 (0.60)		
Degree and above	4 (3.80)	0 (0.00)		
Employment				
Employed (govt/non-govt)	17 (16.00)	22 (14.30)	43.970**	0.0001
Self-employed	21 (19.80)	7 (4.50)		
Not working/never worked outside home	46 (43.40)	120 (77.90)		
Retired	22 (20.80)	5 (3.20)		
Marital status				
Never married	0 (0.00)	1 (0.60)	83.905**	0.0001
Married	97 (91.50)	53 (34.40)		
Widowed	9 (8.50)	99 (64.30)		
Divorced/separated	0 (0.00)	1 (0.60)		
Type of family				
Joint	56 (52.80)	95 (61.70)	3.799	0.15
Nuclear	50 (47.20)	57 (37.00)		
Extended	0 (0.00)	2 (1.30)		
Number of households				
≤ 3 people	35 (33)	46 (29.87)	0.296	0.862
4–5 people	20 (18.90)	31 (20.13)		
≥6 people	51 (48.10)	77 (50)		
Living arrangements				
Living alone	2 (1.89)	18 (11.69)	46.85**	0.0001
Living with spouse and/or unmarried children	76 (71.70)	45 (29.22)		
With son's/daughter's family	27 (25.47)	87 (56.49)		
With relatives	1 (0.94)	4 (2.60)		

Table 2: Correlation of satisfaction in family and marital relationship with loneliness and isolation

Correlation among variables		Loneliness	Isolation
Satisfaction with family relations	Pearson correlation	-0.366**	-0.259**
	Sig. (2-tailed)	0.000	0.000
Marital satisfaction	Pearson correlation	-0.296**	-0.236**
	Sig. (2-tailed)	0.000	0.000

**Correlation is significant at the 0.01 level (2-tailed)

domains with self-reported health, perceived happiness, loneliness, and isolation, and satisfaction with family and marital relationships. Overall QoL self-rated health and WHOQOL had a moderate positive correlation. Self-rated happiness and QoL had a strong positive relationship. Loneliness and QoL had a moderate negative correlation.

This study reveals that 7.3% spent quality time with their family every day, 13.9% rarely or never had any quality family time in the past six months, and the majority of the older adults (56.4% of men and 59.2% of women) were "not at all happy" with their family interpersonal relationships. Older adults expressed concern about diminishing family bonds and not having time to interact with each other due to their children being busy or staying away. They felt that reduced physical and economic capacities were reasons for their diminished role and negligible status in the family causing them to feel isolated in their own families. The social networking and risk for social isolation as assessed by the LSNS show that 36.2% of older adults from urban communities and 13.8% from rural communities were at risk for isolation.

Table 3: Correlation of satisfaction in marital and family relationships, loneliness and isolation with self-reported health, happiness, and social support

Correlation among variables		Social support	Self-reported health	Perceived happiness
Satisfaction with marital relationship	Pearson's correlation	0.321**	0.234**	0.368**
	Sig. (2-tailed)	0.000	0.000	0.000
Satisfaction with family relationship	Pearson's correlation	0.496**	0.312**	0.430**
	Sig. (2-tailed)	0.000	0.000	0.000
Loneliness	Pearson's correlation	-0.443**	-0.296**	-0.546**
	Sig. (2-tailed)	0.000	0.000	0.000
Isolation	Pearson's correlation	-0.150*	0.006	-0.226**
	Sig. (2-tailed)	0.015	0.920	0.000

Table 4: Correlation of psychological well-being and subjective health and family interactions with domains of quality of life

Correlation		Physical	Psychological	Social	Environment
Felt loneliness	Pearson's correlation	-0.329**	-0.400**	-0.197**	-0.481**
	Sig. (2-tailed)	0.000	0.000	0.001	0.000
Felt isolation	Pearson's correlation	-0.141*	-0.319**	-0.106	-0.207**
	Sig. (2-tailed)	0.023	0.000	0.087	0.001
Quality family interaction	Pearson's correlation	0.108	0.108	0.162**	0.347**
	Sig. (2-tailed)	0.083	0.083	0.009	0.000
Self-rated health	Pearson's correlation	0.366**	0.277**	0.207**	0.395**
	Sig. (2-tailed)	0.000	0.000	0.001	0.000
Self-rated happiness	Pearson's correlation	0.438**	0.506**	0.433**	0.608**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
LSNS	Pearson's correlation	0.140*	0.284**	0.286**	0.052
	Sig. (2-tailed)	0.024	0.000	0.000	0.407

*Correlation is significant at the 0.05 level (2-tailed). **Correlation is significant at the 0.01 level (2-tailed)

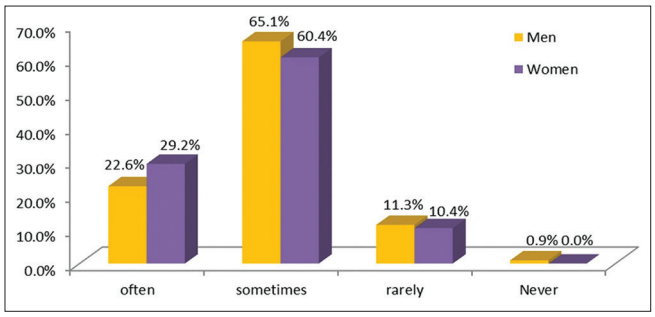

Figure 2: Felt isolation in older men vs women

Discussion

Evidence shows that adults increasingly experience isolation and loneliness, and its impact on health and psychological well-being is well known; however, there is limited research available to verify the relationships of loneliness, isolation with perceived well-being (happiness and social support), self-reported health, and QoL. This study focused on the subjective health and psychological well-being among older adults and their perceived satisfaction with marital and interpersonal relationships. The study findings provide evidence of interpersonal relationships affecting older adults' psychological well-being with a focus on gender differences. This study estimates self-reported health, happiness, loneliness, social isolation, gender distributions of study variables, and correlation with the QoL. Findings suggest that the majority of the older adults (56.4% of men and 59.2% of women) were "not at all happy" with their family and interpersonal relationships, which is a strong predictor for loneliness among older adults. Older people from both urban and rural areas reported a reduced sense of family bonding. Healthy family relationships and a satisfying marital relationship are rooted in the perceived well-being experienced by people. The present findings identify that older adults experience higher levels of loneliness and lower perceived happiness than less educated and uneducated adults who perceived good QoL. The perceptions of family transitions, reduced interpersonal relationships, and loss of a spouse were some of the major reasons for loneliness; similarly, a previous study reported the rupture of the traditional family system, which is the backbone of informal care that triggers the disruption in the psychological well-being of the older adults.[20] Similarly, a previous study reported[4] that the experience of loneliness among older adults was connected to the absence of meaningful interpersonal interactions.

Similar to the present findings, a previous study identified inadequate care and attention toward older people resulting in perceived social and negative

feelings toward aging.[21] The findings from the present study show that the majority of older people (64.2%) agreed that they were somewhat happy with the marital relationship, similar to a similar study,[22] which reported gender differences in perceived quality in marital relationships. Consistent with the previous research,[23] present findings identify reduced family support as one of the major contributors to feeling unhappy. Family support and sense of availability of family when needed were known to be connected with positive self-rated health in older adults.[24] In concurrence with the present study findings, previous studies report the importance of family relationships for the older adults' sense of psychological well-being and satisfaction, and it was shown as a source for informal care,[25] which does not let the older people perceive hopelessness and lonely; however, it helps in the improvement of their psychological well-being.[26] Evidence supports that social participation promotes subjective health and psychological well-being among older adults, and increased social participation promotes psychological well-being among older adults.[27] A stronger social role is another factor associated with men in the Indian context, which makes men perceive as more vulnerable compared with older women in later life[28] who have lost spouse and have least or no family support.

Self-rated health is another dimension of psychological well-being among older adults, and poor self-rated health was associated with an increased risk of loneliness and low psychological well-being, which is similar to previous studies.[29] The present findings show that a significant number of (56%) older adults rated their health as poor and more women rated their health as poor than men, similar to other studies.[11,30] However, contrary to the findings, few earlier findings identify no gender differences in self-reported health.[31] Existing evidence establishes gender variations in self-rated health in late adulthood.[32] The morbidity pattern identified in the present study was consistent with previous research.[33,34] Similar to current findings, perceived social support[35] has shown a stronger relationship with mental health among the elderly. The present study findings on felt loneliness and isolation negative relation with QoL in older adults were consistent with previous evidence[29] and identified that older adults increasingly experience loneliness due to reduced family interactions and social support similar to the study finding an association between social isolation and QoL.[28] The present study findings reveal the observations that the majority of older people report lower-to-moderate QoL, and gender differences were evident in SWB, loneliness, and QoL and also in interpersonal relationships. Gender discrimination is wider in older Indian adults as reported by a previous study,[36] and the gender gap, which is social advantages as per the self-reports, is wider in Indian perspective.

Limitations and recommendations

The strength of the study was that it was a cross-sectional and population-based survey, effectively undertaken by studying multiple variables among community-dwelling older adults. However, the present study has limitations to establish a causal relationship between the variables. Self-reported data in the presence of family members and possible social desirability tend to be biased.

Further research may be carried out to establish a causal relationship between the variables and to study the mediating effects of loneliness and isolation on psychological well-being and QoL.

Future research to explore the lived experiences of older adults in long-term settings and old age homes and in a larger population is recommended. The study findings will allow policymakers to develop strategies for active and healthy aging for health promotion of the aged in community settings.

Conclusion

The present study examines the contemporary challenges of loneliness, disruption in family and social ties, and growing mental health burden in the aging population. The study focuses on the prime areas of SWB, self-reported measures of health, and interpretation of how physical health and social connectedness impact the perceived happiness and QoL among older people. The present study thus attempted to explore the need for the perceived well-being of adults in later life from Indian perspectives. The comprehensive study of determinants enables us to understand the demographic need and provides evidence of the impending aging challenges in India. This study suggests an immediate need to focus on strengthening social capital to combat loneliness, to promote social connectedness and well-being among older people, and to promote age-friendly communities for increased social participation of the aging population. The suboptimized perceived well-being and QoL indicate the impending challenge of aging population. The present study highlights the need for appropriate policy design to establish a life-learning motivation along with social security and provision of social support alternative care and strategies for healthy aging among adults in later life.

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Conflicts of interest

There are no conflicts of interest.

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