ORIGINAL RESEARCH PAPER

Psychiatric morbidity, quality of life, and perceived social support among elderly population: a community-based study

Abstract

Background: The growth in the elderly population means an inevitable increase in general physical health, psychobiological and mental health-related problems. Aim of the study: The present study aims to examine psychiatric morbidity, quality of life, and perceived social support among elderly population. Research design: A cross-sectional community-based study was conducted. People in age group of 60 years and above, who were permanent members of their respective households of Ranga Pukri Para and Dekargaon village in Tezpur, Sonitpur district of Assam, were the sample for the present study. One thousand four hundred and ninety adult populations had been identified as sample frame from the electorate list. One hundred and four people of age 60 years and above had been identified from the list for the study purpose. Random sampling method was used for selection of the sample. Semi-structured socio-demographic datasheet, General Health Questionnaire-12 (GHQ-12), CAGE questionnaire, Multidimensional Scale of Perceived Social Support, and World Health Organization Quality of Life (WHOQOL-BREF) scale were administered to the respondents. Results: Based on the GHQ-12 score, it was found that 24% of the respondents showed an indication of mental health problems and from the CAGE score, it indicated that 13% of the respondents were found to be misusing or was in dependence in alcohol. The result from the present study indicated that elderly population was getting more family social support, followed by friends and from significant others. The result indicated that the mean score was low in the domain of social relationships. Environment domain was high followed by physical health and psychological domains of WHOQOL-BREF. Conclusion: In the elderly population, overall health can be influenced by multiple factors, including a person's physical, psychological, behavioural, and social factors. The mental health professionals can provide resources, services, and opportunities for the elderly population and their families.

Keywords: Mental Health. Alcoholism. Family.

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Introduction

Elderly population is more vulnerable to health-related problems including mental health problems. Various prevalence studies have reported mental health problems among elderly adults.[1-6] The overall prevalence of psychiatric morbidity in rural older adults is 23.7 per cent (95% confidence interval [CI]=21.89-25.53).[5] Similarly, a study conducted by Sathyanath *et al.*[6] in rural population found that depression among the elderly was significantly higher than that in the middle aged group.

The quality of life (QOL) of the elderly is dependent on various factors such as physical health, psychological health, the living arrangement, level of independence, personal and social relationships, working capacity, access to health and social care, home environment, transportation facilities, and the ability to acquire new skills. So, understanding QOL of

elderly means assessing and understanding these domains of life and their implications on wellbeing. QOL is one of the central concepts in ageing research. [7,8] Qadri *et al.*[9] found that majority (68.2%) of elderly enjoyed a good QOL, while those having a fair/poor QOL were \leq 15%. QOL was better in males in physical, psychological, social, and environmental domains. Similarly, Raj *et al.*[10] found that majority (61.45%) of elderly had an average QOL; whereas 24.10% and 14.45% elderly had a poor and good QOL respectively.

Social support contributes to individuals' feeling about themselves and the world around them. It is generally viewed that during old age there is gradual shrinking of the social network and reducing social support. Because social relationships are associated with a subsequent physical and psychological change in the elderly, it is important to assess, understand, and strengthen the social network and support of the elderly. The available literature indicates that there

is hardly any effort made to understand the psychiatric morbidity, QOL, perceived social support among elderly people, especially in northeastern part of India. Less is known how the elderly of the northeast perceive about the availability of social support and QOL, and how these perceptions relate to their physical and mental health. The present research explores the psychiatric morbidity, QOL, and perceived social support among elderly population in rural Assam of northeast India. The present study will help us to address current mental health problems of the geriatric population. The rural India faces several barriers in accessing services. Most of the elderly people with depression and cognitive impairment remain undiagnosed and untreated due to the lack of adequate knowledge of these disorders in the public and as these symptoms are considered to be a part of normal ageing. The stigma of mental illnesses and the lack of understanding to these problems keep many elderly from seeking the help they need.

Aim of the study: The present study aimed to examine psychiatric morbidity, QOL, and perceived social support among elderly population, as well as the relationship between perceived social support and QOL.

Methods

Research design: A cross-sectional community-based study was conducted. People in age group of 60 years and above, who were permanent member of their respective households of Ranga Pukri Para and Dekargoan village of Tezpur, Sonitpur district of Assam, were the sample for the present study. Fourteen hundred and ninety adult populations had been identified as sample frame from the electorate list. Hundred and four people of age 60 years and above had been identified from the list for the study purpose. Random sampling method was used for selection of the sample. People of age 60 years and above and willing to participate in the study were included in the study. Non-cooperative respondents, severe behavioural or cognitive impairment, if the designated house was found to be locked after two successive re-visits, and who were institutionalised during the survey period were excluded.

Tools for data collection

Semi-structured socio-demographic datasheet: Relevant socio-demographic details were collected using this proforma. It consists of age, gender, education, marital status, religion, community, occupation, family type, socioeconomic status.

The Multidimensional Scale of Perceived Social Support (MSPSS):[11] It is a 12-item scale, divides perceived social support from family members, friends, and from significant others. Norms for the general population have been published with higher scores indicating more social support. Its internal consistency reliability is 88.

General Health Questionnaire-12 (GHQ-12):[12] It is a self-report instrumental questionnaire to screen psychiatric morbidity in normal subjects. It consists of 12 items, each assessing the mental problem over the past few weeks. The original consists of 60 items. The items have been scored as zero or one. The higher the scores, the higher is the distress.

The instrument has been translated into Hindi, Bengali, and Kannada.

The World Health Organization WHOQOL-BREF quality of life assessment: [8] WHOQOL-BREF is a short version of WHOQOL-100. It has been developed and field-tested in 15 centres all over the world, including New Delhi and Chennai. It is available in 19 different languages. It looks at four domain level profiles, using data from the pilot WHOQOL assessment. It contains a total of 26 questions. There are four domains in WHOQOL-BREF. Domain one is regarding 'physical health', domain two is concerned with the 'psychological' aspect, domain three is about 'social relationships', and domain four is concerned with questions regarding the 'environment'. In addition, two items from the 'overall QOL' and 'general health' facet have been included.

The CAGE questionnaire:[13] The CAGE questionnaire was developed as a brief screen for significant alcohol problems in a variety of settings, which then can be followed up by clinical enquiry. Two or more positive responses indicate misuse or dependence and suggest patients need further assessment. The CAGE achieves excellent sensitivity and fair to good specificity.

All tools were translated to the local language (Assamese) as per the standard translation procedure.

Process of data collection: Informed consent was taken from the respondents before eliciting relevant information. The nature and purpose of the study was explained. Firstly, respondents were interviewed and assessed with the help of semi-structured socio-demographic datasheet. Thereafter, GHQ-12, CAGE, MSPSS, and WHOQOL-BREF were administered to the respondents.

Statistical analysis: Data was coded and entered into a master chart. With the help of Statistical Package for the Social Sciences (SPSS) 16, data was analysed. Then, frequency, mean, standard deviation, and Pearson's correlation coefficient were determined.

Results

Table 1 shows that majority (53.8%) of the respondents was female and 41.3% of the respondents were illiterate. Majority (85.6%) of the respondents in this study were married, while the rest (14.4%) were widow. Majority (97.1%) of the respondents belonged to Assamese community, followed by Bengali (1.9%), and the rest one per cent of the respondents belonged to Nepali community. Majority of the respondents (46.2%) were homemaker and 23% of the respondents were agriculture worker, unskilled or semi-skilled, followed by 19.2% retired/pensioner, and 11.5% were engaged in some other occupation (owning shop, tea stall, involve in social activity). More than half (80.8%) of the respondents belonged to nuclear family. More than half (56.7%) of the respondents belonged to upper lower middle socioeconomic status, followed by low socioeconomic status (42.3%), and the rest (one per cent) of the respondents belonged to the upper middle socioeconomic status.

The result indicates that the mean score was high in the domain of family social support (19.9 ± 5.2) , followed by friends (19.4 ± 6.0) and significant others (18.9 ± 5.3) (Table 2).

The result indicates that the mean score was low in the domain of social relationships (34.2 \pm 13.6). Environment domain was high (53.7 \pm 12.7), followed by physical health (52.8 \pm 10.0) and psychological (52.7 \pm 12.2) domains of WHOQOL-BREF (Table 3).

Table 4 shows that 24% of the respondents scored more than two in GHQ and 76% of the respondent scored less than two. It suggests that 24% of the respondents showed an indication of mental health problems.

Table 5 shows 13% of the respondents had scored more than two and 87% of them had scored less than two in CAGE. It shows that 13% of the respondents indicated misuse or dependence.

Table 1: Socio-demographic profile of the respondents

Variables	N=104	Percentage
Gender		_
Male	48	46.2
Female	56	53.8
Education		
Illiterate	43	41.3
Literate	61	58.6
Marital status		
Married	89	85.6
Widow	15	14.4
Religion		
Hindu	104	100.0
Community		
Assamese	101	97.1
Bengali	2	1.9
Nepali	1	1.0
Occupation		
Home-maker	48	46.2
Agriculture worker, unskilled or semi-skilled	24	23.1
Retired/pensioner	20	19.2
Others	12	11.5
Family type		
Nuclear	84	80.8
Joint	20	19.2
Socioeconomic status		
Low	44	42.3
Upper lower middle	59	56.7
Upper middle	1	1.0

Table 2: Perceived social support among respondents

Domain of perceived social support	Mean	SD
Family social support	19.9	5.2
Friends social support	19.4	6.0
Significant others	18.9	5.3

SD=Standard deviation

Table 6 shows the correlation analysis of various domains of QOL with the MSPSS domains. In the physical health domain of WHOQOL-BREF, statistically significant correlation with the family (r=.151), friend (r=.110), and significant others (r=.176) was not found. Psychological domain had a significant positive correlation with family (r=.426, p<0.01), friends (r=.293, p<0.01), and significant others (r=.420, p<0.01) domains of the MSPSS. In social relationships domain of WHOQOL, there was a significant positive correlation with family (r=.602, p<0.01), friends (r=.567, p<0.01], and significant others (r=.666, p<0.01) domains of the MSPSS. The environment domain of WHOQOL-BREF had a significant positive correlation with family (r=.423, p<0.01), friends (r=.325, p<0.01), and significant others (r=.444, p<0.01) domains of the MSPSS.

Table 7 shows the correlation analysis of various domains of WHOQOL-BREF with the GHQ of the respondents. It

Table 3: Quality of life (WHOQOL-BREF) among respondents

Domain of quality of life	Mean	SD
Physical health	52.8	10.0
Psychological	52.7	12.2
Social relationships	34.2	13.6
Environment	53.7	12.7

WHOQOL-BREF=World Health Organization Quality of Life-BREF, SD=Standard deviation

Table 4: General Heath Questionnaire (GHQ)

Variables	N=104 (%)
GHQ score <2	79 (76)
GHQ score >2	25 (24)

Table 5: CAGE score among respondents

Variables	N=104 (%)
CAGE score >2	13 (12.5)
CAGE score <2	91 (87.5)

Table 6: Correlation between domains of quality of life and domains of the multidimensional scale of perceived social support (MSPSS)

Domain quality of life	Family	Friends	Significant others
Physical health	0.151	0.110	0.176
Psychological	0.426**	0.293**	0.420**
Social relationships	0.602**	0.567**	0.666**
Environment	0.423**	0.325**	0.444**

^{**}Correlation is significant at the 0.01 level

Table 7: Correlation between GHQ and WHOQOL-BREF

Variables	Physical health	Psychological	Social relationships	Environment
GHQ	-0.134	-0.469**	-0.459**	-0.427**

GHQ=General Health Questionnaire, WHOQOL-BREF=World Health Organization Quality of Life-BREF, **Correlation is significant at the 0.01 level

indicated that GHQ had a significant negative correlation with physical health (r=-.134), psychological (r=-.469, p<0.01), social relationships (r=-.459, p<0.01), and environmental (r=-.427, p<0.01) domains of WHOQOL-BREF.

Discussion

The available literature indicates that there is hardly any effort made to understand the psychiatric morbidity of elderly people, especially in northeastern part of India. Based on the GHQ score, it was found that 24% of the respondents had indication of mental health problems and based on CAGE score, 13% of the respondents indicated misuse or dependence in alcohol in the present study. Shivakumar et al.,[14] in a retrospective analysis of screening data of psychological distress using GHQ-12 in the elderly seeking care for neuropsychiatric conditions, found that 2443 (50%) of the elderly screened were recognised to be psychologically distressed (≥two). Using a Receiver Operating Characteristic (ROC) and optimum sensitivity and specificity measures, a cutoff score of ≥four was observed to detect 30% of the elderly who had diagnosable mental health disorders. They found that there was greater psychological distress among the elderly seeking healthcare. Further, Goswami et al.,[15] in rural population, found that about 16.3% of males were taking alcohol regularly. In a study conducted by Radhakrishnan and Nayeem,[16] in a rural population of Tamil Nadu, it was found that of the total population, 41.2% were normal, 37.8% were having mild depression, and 21% were severely depressed. Similarly, Bodhare et al.[17] conducted a study to find out the prevalence and risk factors of depression among elderly population in a rural area of Andhra Pradesh and it was found that as far as severity of depression was concerned, 34 (17.9%) scored for moderate depression, 27 (14.2%) for moderately severe depression, and two (1.1%) for severe depression.

The result from the present study indicates that elderly population is getting more family social support, followed by friends and from significant others. Minhat and Amin[18] found that majority perceived they received higher social support from family members compared to social support from friends similar to our findings. Social contacts and perceived social support from family members, friends, and acquaintances is important for fulfillment of different social needs. Social support has been found to be predictive of functional ability levels as well as hospital admission rates. Sinha[19] found that individuals with high level of social support appeared to be more resistant to the adverse psychological effect to environment stressors than individuals with relatively low level of perceived support. Social supports represent a main source of personal care and wellbeing among the elderly, and the social supports are considered to an important indicator in an ageing population. Okabayashi et al.[20] concluded that social support has a positive influence of the health of the elderly.

The result from the present study indicates that the mean score was low in the domain of social relationship. Environment domain was high followed by physical health and psychological domains of WHOQOL-BREF. The result indicates that the respondents were having low QOL in the

domain of social relationship. Similar finding was reported by earlier studies where QOL score among elderly in social relationship domain was found to be low.[21,22] In the correlation analysis of various domains of QOL with perceived social support domains, it was found that psychological, social relationships, and environment domains had a significant positive correlation with family, friends, and significant others domains of the MSPSS. Naz et al.[23] investigated the relationship of social support and QOL among elderly people, and found that social support was positively correlated with QOL. Fernández-Ballesteros[24] states that social support is a key concept in social gerontology; there is empirical evidence of its relationships with health, wellbeing, and QOL in old age. The present study indicates that GHQ had a significant negative correlation with physical health, psychological, social relationships, and environmental domains of WHOQOL-BREF. In an Indian study, it was found that elderly subjects with higher morbidity had increasing disability and distress.[25] Many researchers have concluded that decreasing health status is associated with increasing psychological distress or mental health symptoms. [26-28]

Interestingly, Panday et al.[29] found that elderly people living in old age home had better QOL when compared with those with family setup. Cognitive status of elderly inmates from a welfare institution was estimated by Karličić et al.[30] and compared to subjects under legal guardianship, the Mini Mental State Examination (MMSE) score was higher in subjects with no legal guardian. Efficacy of music therapy in reducing depressive symptoms of institutionalised elderly persons was proven by Dev et al.[31]

There were certain limitations of the present study. Firstly, sample size was small. The study population consisted of one village with only 104 respondents in rural areas being included in the study, which may make it difficult for conclusion to be reached about the psychiatric morbidity, QOL, and perceived social support in community-based study. Secondly, only rural population was included in the present study. Comparative study could have been done between urban and rural population, as well as gender comparisons, for better generalisation of results.

Conclusion

There is presence of psychiatric morbidity among older population. QOL among older population was found to be average, while social relationship domain of QOL score was found to be low and domain of environment was high among the elderly population. QOL has a positive correlation with family, friends, and significant others perceived social support. The result from the present study indicates that elderly population is getting more family social support, followed by friends and from significant others. In the light of the above, it is quite clear that the older population require more specialised services and psychosocial care. There is need for programmes and policies based on the needs of this population, and community-based services should be provided to promote and enhance psychological wellbeing in the older population. The mental health professionals can provide resources, services, treatment, and adequate psychosocial care for the older population and their families.

It can provide adequate psychosocial intervention to enhance their self-esteem and social support.

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