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A Study on Quality of Life of Elderly Population in Mettupalayam, A Rural Area of Tamilnadu

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Abstract:

Introduction: There are few studies in India dedicated to the wellbeing of elderly and their health problems, in particular to their mental health and their quality of life.

Aim: The aim of this study is to assess the quality of life among the elderly population residing in the rural area of Tamilnadu and also to find out the factors influencing their quality of life**.**

Material and Methods: All elderly people aged 60years and above residing in Mettupalayam, a rural area in Tamilnadu was involved in the study. With a non response rate of 6.2%, total of 476 elderly person's quality of life was studied using WHOQOL BREF questionnaire. The results were expressed in terms of mean and SE of mean. Student T tests and one way ANOVA were applied to compare the mean scores of different variables under the four domains**.**

Results: The mean QOL score for all the elderly persons put together was 47.59 ± 14.56, indicating that on an average, the population as a whole had moderate quality of life. The highest score was for the social relationship domain with mean 56.6 and standard deviation of 19.56 and the lowest was for physical domain with mean score of 45 and standard deviation 11.84.

Key Words: quality of life, elderly, well being, ageing

Introduction

Ageing is a normal, inevitable, biological and universal phenomenon. It is the outcome of certain structural and functional changes taking place in different parts of the body as the life years increases. United Nations though has not adopted a standard criterion to define the aged; generally use 60+ years to refer to the elder population[1]. It is the time the combined effects of ageing, social changes and diseases are likely to cause a break down in health and their wellbeing[2].

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There has been an increase in the number of old aged people in all the countries in both absolute and proportional terms. Share of the elderly population of the world was 13% around 2000 and in India as per 2001 census the population of elderly was 76.6 million[1] as compared to 20 million in 1951. Thus the elderly account for 7.5% of the total population, in which elderly male are 7.1% and elderly female are 7.8%[4]. This increasing number of elderly has a great demand on the health services and social security measures. At present the ageing has become a social problem as the socioeconomic shifts are affecting the family to continue with the care of their aged. Traditionally our Indian families had always borne the responsibility of looking after the aged, but the changing times and industrialization have threatened this yesteryear culture. As a result family care of the

elderly becomes more and more difficult leaving the aged feeling lonely, dependent and marginalized.

Objectives

1) To assess the Quality of Life of elderly aged 60 years and above in Mettupalayam, a rural area of Tamilnadu.
2) To study the various factors associated with their Quality Of Life.

Materials and Methods

The study is a descriptive cross sectional study, done from April 2010 to October 2010 in a rural area, Mettupalayam. It is a health sub center (HSC) under Minjur block primary health center (PHC) in Thiruvallur district of Tamilnadu. It includes 5 villages namely Mettupalayam, Vannipakam, Mudichampedu, Siruvakam, Elavambedu. The total population of the HSC is 6041 as per the sub center records.

The study population comprised of elderly aged 60 years and above. A complete enumeration of the total elderly population in the study area was done. As per the family register maintained by Mettupalaym health sub center (HSC), the total elderly population in Mettupalayam was 509 and all were included in the study. Out of this 509 elderly 8 persons were not willing to participate in the study, 13could not be contacted though repeated visits were made, 3were not able to respond due to their illness and 9 could not be interviewed for QOL assessment since they had hearing disability hence they were excluded. Therefore with 6.2% as non response rate, 476 elderly individuals were included in the study. A standardized questionnaire was used to obtain the information from the study population. The final questionnaire consisted of 2 parts, in part1 information regarding **socio demographic profile** and self reported co-morbid conditions were recorded. This was obtained from the personal health record maintained by the individual who were diagnosed and receiving treatment from the health facility.

In part 2 of the questionnaire, **Quality of life** was assessed using **WHO Quality of Life BREF** (WHOQOL BREF) questionnaire. The WHOQOL-BREF is an abbreviated version of the original WHOQOL- 100. The WHOQOL is the only quality of life instrument that has been developed for wide range of cultures in 15 international field centers simultaneously including the Madras center presently Chennai, Tamilnadu, India. In this study the Tamil version of the WHOQOL-BREF questionnaire was used with due permission from the division of Mental Health, WHO.

Data analysis: The information thus collected by the questionnaire, was converted into a spread sheet using Microsoft Excel® Software and analyzed with the help of SPSS version 7.5.

The results were expressed in terms of mean and SE of mean. Students T test and one way ANOVA were applied to compare the mean scores of different variables under the four domains. A p value of <0.05 is considered significant.

Results

Among the 476 elderly individuals studied 194(40.8%) were males and 282(59.2%) were females. The mean age of the study population was 68.32 ± 7.35. The proportion of young old (60-69yrs) were more (57.8%), than the old –old (70-79yrs) and the oldest –old (80 & above) being 33.4% and 8.8% respectively. Also it was seen that majority of the elders in the study area were illiterate (66%) and illiteracy was more among females (75.5%) than in males (51%). 199(41.8%) individuals of the study population were widowed, among them 42(21.6%) of the males and 157(55.6%) of the females were widowed. The living arrangements of this population shows majority of the female elderly (37%) lived with their children and among the male elderly majority stayed with their spouse and children (47.4%). It is interesting to note that more number of female elderly (16.3%) stayed alone when compared to the male elders (15.4%). 41% of the respondents were belonging to lower class (class V of B.G. Prasad scale) family. It was observed that 18% of the individuals did not have any source of income and only 19% of the elderly were receiving old age pension. And it was seen that 40% were economically dependent on their family members. It was seen from the table 1 that 59% of the individuals were suffering from arthritis. And more than one third of the elderly were diabetics.

It was observed that nearly 50% were falling under the second quartile score of Quality of Life (Table 2). And very few (3.8%) individuals were having a very good QOL as classified by their quartile scores.

Table: 1 Distribution of co morbid conditions

Co-Morbid Conditions	Numbers (n)	Percentage (%)
Hypertension	110	23.1
Diabetes Mellitus	183	38.4
Arthritis	281	59.0
Heart disease	53	11.1
Gastro intestinal disease	45	9.5
Respiratory disease	47	9.9
Dermatological disease	13	2.7
Injuries	6	1.3
Malignancies	3	0.6
Genito urinary disease	1	0.2
Anemia	6	1.3
Others	15	3.2

Table: 2 Quartile Distribution of Quality Of Life

Total QOL score	Number (n)	Percentage (%)	QOL
0-25 (i quartile)	20	4.2	Poor
26-50 (ii quartile)	236	49.6	Moderate
51-75 (iii quartile)	202	42.4	Good
76-100(iv quartile)	18	3.8	Very good

The mean QOL score for all the elderly persons put together was 47.59 ± 14.56, which was in the second quartile indicating that in general, on an average, the population as a whole had moderate quality of life.

In this population the highest score was for the social relationship domain with mean 56.6 and standard deviation of 19.56 and the lowest was for physical domain with mean score of 45 and standard deviation 11.84(Table 3).

The mean Perceived Overall Quality of Life scores in the study population were 49.1 with a standard deviation of 21.56. The mean Perceived Overall Health Status scores in the study population were 39.8 with 21.56 as standard deviation.

Table: 3 Domain-wise mean QOL scores

Quality of life domains	N	Mean	S.D
Physical domain	476	45.0	11.84
Psychological domain	476	45.5	16.08
Social relationship domain	476	56.6	19.56
Environmental domain	476	49.7	16.78

The young old (60-69yrs) have better QOL scores when compared to the old-old (70-79yrs) and the oldest-old (80 and above). The elderly male had better QOL scores than the elderly female. The least score for male elderly was obtained in the physical domain 48.8 and for the elderly female it is the psychological domain 41.64. Literate elderly had better mean QOL domain scores than the illiterates. Married elderly had better mean QOL score in the domains except psychological domain. It was interesting to find that the unmarried had better psychological domain score 56.25 than the married 51.429. Married elderly had better mean QOL score in the all the domains except psychological domain. It is interesting to find that the unmarried had better psychological domain score 56.25 than the married 51.429. Also it was seen that the elderly who lived alone had the least psychological quality of life scores than the others including those who lived with other relatives. Economically independent elderly had better QOL when compared to the dependent elderly. The mean QOL domain scores were high for Socio economic Class I (monthly per capita Rs.2696 & above) elderly than the others. Elderly in class V socioeconomic status have the least mean QOL scores in all the domains. Co morbid illness has great influence on the QOL of the elderly as individuals without any co morbidity had better scores in all the four domains - physical(49.2347), psychological(62.5000), social(63.6905), environmental(60.0446).

Discussion

In this study the proportion of young old (60-69), old-old (70-79), oldest- old (80 and above) were 4.5%, 2.6% and 0.6% of the study population which is in accordance with the national figures 4.7%, 2.5%, 0.8%[3] and but less than that of Tamilnadu - 5.48%, 2.45%, 0.88% [4,5] respectively.

The female elderly (59.2%) in this population outnumber the male (40.8%) similar to the findings of the study conducted by Anil Jacob Purty, et al. wherein females formed 58.8% and males 42.2% of the study subjects[6].

The highest mean QOL score was seen in the social relationship domain indicating that their social contacts and the support they derive from their personal relations and peer group has great influence on their quality of life. This is similar to the result obtained in the study conducted by Ankur Barua et al. among 70 geriatric individuals in Karnataka using the Kannada version of WHOQOL-BREF wherein the highest QOL score was obtained in the social relationship domain[7].

Factors affecting quality of life (QOL):

The present study shows that the mean QOL scores decrease with increasing age, indicating that the despair of ageing greatly affect their quality of life. This situation also prevails in other countries where similar results are seen in the study conducted in Brazil by Helena A. Figueira where the young old (60-69yrs) have better QOL scores than the old- old (70-79yrs) and the oldest -old (80&above)[8]. Study conducted by Ibrahim T M et al. on elderly in Iraq[9] showed that the QOL of men was in general is better than women in all age groups which were similar to the results of my study.

The relation between marital status and wellbeing of the elderly has been widely studied especially in the western societies. These studies have shown that widowed elderly have poor health and wellbeing than the currently married. The divorced appear to be least healthy followed by widowed and single elders, while the married appear most healthy. Thus they take marital status as one of the key variable in determining their quality of life[10,11]. Similar results were seen in my study where the married elders had better mean QOL scores in physical, psychological, social relationship and environmental domains. The currently married had better quality of life scores than the widowed and single elders, which was statistically significant. Hence living with their spouse in general improved their quality of life and wellbeing.

Various researchers have examined the effects of living arrangement on the quality of life of the elderly. According to them the changes in living arrangement and family structure have great impact on their physical and psychological wellbeing[12]. The present study also gives similar picture wherein the elderly living with their family have better QOL scores than the others. Hence it is clear that family has a great impact on their life satisfaction and so in their quality of life.

Presence of one or more morbidity gives poor mean QOL scores in all the domains of quality of life when compared to elderly without any morbidity. And this result is found to be statistically significant. Similar results are seen in the study conducted at Trivandrum by Vijayakumar et al. they found that poor health in the presence of morbidity and dependence in ADL greatly lowered their quality of life[13]. In the study conducted by Kumar R et al. found that health status was an important factor that had a significant impact on the quality of life of the elderly population[14]. Canbaz S et al. showed that those who were suffering from chronic diseases had a lower Quality of Life than those who were without any chronic disease[15].

Recommendations

Although the process of ageing, disorders and disabilities of old age cannot be totally prevented, suitable measures can be taken that would retard this progress thereby leading to a longer period of health and thus preserving their quality of life. Living arrangement, financial position and well being would undergo change in old age. Therefore in-depth studies through multidisciplinary assessment on issues like socioeconomic problems, morbidity pattern, quality of life and social security needs of the elderly should be done nationwide.

Traditional role of respecting and caring elders should be reinforced at school level and interventions from the primary level. The

experiences and expertise of the elderly should be utilized for the society.

Elderly should be given legal security against abuse and harassment. Policy makers should evaluate successful programmes for the elderly of other countries and adopt them to suit local conditions and economic viability. Separate processing schemes for the elderly should be organized to meet their needs of reduced mobility and safety precautions. Our "Womb to Tomb" social security policy should be strengthened.

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Conflict of Interest: Nil