Social and health concerns of elderly women in rural area in Tirupur District, Tamil Nadu

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ABSTRACT

Background: Population ageing is a major challenging demographic transition with socioeconomic and health issues. Women constitute 55% of all older persons facing a lot of ill-health, social deprivation, etc. Globally various studies have reported the health issues in men and women as a whole. This study is done to explore out the social and health concerns particularly in elderly women in rural setting in Tiruppur District, Tamil Nadu. Methods: A cross-sectional study was conducted in Dharapuram Block, Tiruppur District by Multistage Random sampling during November 2019–February 2020. About 250 elderly women were interviewed for sociodemographic details, comorbidities, quality of life (QOL), and health seeking behavior. Descriptive statistics, Chi-square test, and logistic regression were used for analysis. P < 0.05 was considered statistically significant. Results: Mean age of the participants was 65.59 ± 5.92. Only 27.6% were literate. 158 (63.2%) were widow, 43.2% living alone and 65% have more than 2 comorbidities. Majority had vision problem, hearing problem, and hypertension. About 61.2% consumed tobacco and 48% had sleep disturbances. In QOL, overall mean score was poor. Factors like illiteracy, poverty, poor awareness on health services, social factors like loneliness had negative impact on QOL. Conclusions: There is a high prevalence of social and health issues in the elderly women associated with poor QOL. Determinants like poverty, loneliness, poor awareness on health services have to be addressed at the level of primary healthcare to improve their QOL and reduce the burden of non-communicable diseases.

Keywords: Elderly women, health concerns, rural, social

Introduction

Population ageing is often called a silent revolution which is a compelling demographic phenomenon with several implications to socioeconomic, cultural aspects influencing the quality of life of older persons in general and particularly of older women. Globally, the older population 60 years and above is expected to increase from about 810 million (2012) to over 2 billion by 2050, thus representing an increase from 11.9% to 22% of the total population during the period. In India, there has been a sharp increase in the number of elderly people between 1991 and 2001 and it has been projected that the number of elderly people would rise to about 324 million by 2050. Further, the governments of newly ageing countries are much less prepared to address this rapid and significant shift in age structure and are also somewhat slower in recognizing as well as responding to the significant demographic shift and implications to both socioeconomic and health issues.

Many challenges faced by an elderly population are generally related to two common features across almost all countries: (i) ageing of the elderly people, resulting in a large increase of population of age 80 years and above and (ii) feminization of ageing as women live longer than men. It is estimated that...
women constitute 55% of all older persons and a majority (58%) of them live in developing countries. In reality such late life transition in marital status not only affects older women’s living arrangements but also economic and emotional well-being, particularly when they carry higher burden of ill-health and disability. Xiaoming Sun et al[9] reported high degree of unmet needs in women of post-menopausal age group, poor access to health services, and lack of awareness on health services in China. Bhupinder Chaudhary et al[10] reported that 33.1% of the elderly women in rural areas in India had unmet needs with regard to utilization of health services, poor socioeconomic status, financial constraints, and disability. Sreerupa et al[11] also reported a high prevalence of poor utilization of health services, ill-health, and socioeconomic dependence among the elderly women in North India.

There is a need to explore the social and health concerns among the women particularly above the age of 60 years in rural setting in Tamil Nadu and the factors associated with quality of life, awareness, and extent of utilization of health services. It is indeed a challenge to the primary healthcare system in the form of increasing burden of non-communicable diseases and disability affecting the quality of life in this vulnerable age group. Hence, this study was conducted among women of age above 60 years living in rural setting of Tamil Nadu.

**Material and Methods**

This community based cross-sectional study was conducted in Alangayam Health subcentre in Dharapuram Block of Tirupur District in Tamil Nadu which was chosen by multistage random sampling method from November 2019 to February 2020. Aparajita Dasgupta et al[8] had reported the prevalence of ill-health and morbidity to be 76.4% among the elderly women, so the sample size was calculated to be 250 (alpha at 5 and absolute precision of 6). The elderly women of age 60 years and above were added in the sampling frame from the family register maintained by the village health nurse and using simple random sampling method, the subjects were interviewed house to house after the informed consent. Institutional Ethical Committee approval was obtained and a semi-structured questionnaire in Tamil which included sociodemographic details, lifestyle factors, quality of life (WHOQOL BREFF), details of co-morbidities, and utilization of health services was used. The data were entered in SPSS software version 16 and analyzed. Descriptive statistics, Chi-square test and logistic regression were used for statistical analysis. P value of <0.05 was considered as statistically significant.

**Results**

The mean age of the study participants was 65.59 ± 5.92. Majority of the participants were illiterate 165 (66%). Among the literate, 69 (27.6%) had studied in primary school (14%) studied up to middle school and only 2 (0.8%) had studied up to high school. Majority of the women were working and around 125 (50%) were doing unskilled work, 6 (2.4%) doing semiskilled and 6 (2.4%) were doing clerical work. 158 (63.2%) were widow and most of them are living alone 108 (43.2%) and most of them are satisfied with it. Majority are living in the nuclear family type 236 (94.4%). Among the women only 28 (11.2%) were receiving the old age pension whereas others do not. Majority 238 (95.2%) belonged in lower socioeconomic status [Table 1].

Majority of the study participants have more than two comorbidities 163 (65%). The first most common problem faced by them is vision problem [Figure 1]. Nearly 200 (80%) suffering from this problem. Next to that vast number of them are suffering from hearing problem 102 (40.8%). The third common problem faced by this study group was hypertension. Around 96 (38.4%) were having hypertension and taking medications for it. Following which, elderly women also suffered from diabetes which is 66 (26.4%), musculoskeletal problem in 73 (29.2%), asthma 43 (17.2%), while 8 (3.2%) suffered from coronary artery disease and 2 (0.8%) had chronic kidney disease. Among the study participants, nearly half 119 (47.6%) reported features of dementia and around 4 (1.6%) reported of severe dementia. Moreover 120 (48%) reported of insomnia which worsens their day activities and 12 (4.8%) had stress. Dependency, Loneliness

| Table 1: Sociodemographic profile of the study participants |
|----------------------------------------------------------|
| **Sociodemographic factors** | **Frequency (n)** | **Percentage** |
| Age | | |
| <70 years | 210 | 84 |
| >70 years | 40 | 16 |
| Education | | |
| Illiterate | 165 | 66 |
| Literate | 85 | 34 |
| Occupation | | |
| Currently working | 141 | 56.4 |
| Retired | 109 | 43.6 |
| Marital status | | |
| Married | 92 | 36.8 |
| Widow | 158 | 63.2 |
| Family type | | |
| Nuclear | 236 | 94.4 |
| Joint | 14 | 5.6 |
| Living arrangement | | |
| Alone | 108 | 43.2 |
| With family | 142 | 56.8 |
| Living Satisfaction | | |
| Yes | 185 | 88.8 |
| No | 28 | 11.2 |
| Source of income | | |
| Dependent | 148 | 59.2 |
| Independent | 102 | 40.8 |
| Pension | | |
| Old age pensioner | 28 | 11.2 |
| No pension | 222 | 88.8 |
| Socioeconomic status | | |
| Class 1, 2, 3 | 12 | 4.8 |
| Class 4, 5 | 238 | 95.2 |
and necessity to work at this age were the major social problems identified in this group. For making income they have to do unskilled work from the morning till the evening.

Around 175 (70%) had sought the medical services from the nearby primary health centre particularly for drugs for diabetes and hypertension. They also availed the services like treatment of minor ailments like myalgia, acute peptic ulcer, respiratory infections, etc. whereas nearly 30% had approached the private practitioners in case of emergencies. Mostly, the study participants preferred Allopathic and only negligible preferred the Indian medicine. Majority of the study participants reported that they do moderate physical activity 175 (70%) like gardening, doing household chores, etc. Many of them reported that they have 120 (48%) sleep disturbances which in turn affects their day activities and creates irritability. Majority of the study participants about 61.2% had the habit of tobacco consumption with betel nut [Figure 2]. With respect to quality of life, concerning various domains, the mean score of the social domain was 48.05 ± 21.13, followed by environmental domain which is 45.52 ± 17.28 followed by physical and psychological domain which were 44.92 ± 21.85 and 43.58 ± 20.60, respectively [Table 2]. Overall, the quality of life among the elderly women was observed to be poor. Factors like advancing age, lower socioeconomic status, social factors like loneliness, dependency, low awareness on health services and benefits given by the Government were important factors that had a negative impact on the overall quality of life in this age group. Sreerupa et al.[7] had reported similar social issues and poor utilization of health services among the elderly women in rural part of North India. Aparajita Dasgupta et al.[8] had also reported the prevalence of dependency, ill-health, and morbidities among the elderly women to be high. Arun N. Bhatt, et al. also highlighted

**Discussion**

Population ageing, a significant demographic shift is a real challenge to socioeconomic and health outcomes of both developed and developing countries. The health needs in this vulnerable sector is indeed an important concern to the universal health coverage in the health sector of all countries particularly India. In this vulnerable age group, women outnumber men in longevity of life and health related issues. This study has explored the social aspects and health related challenges in the elderly population particularly in elderly women in rural setting of India. In this study, mean age of subjects was 65 years with upper limit of 83 years whereas Xiaoming Sun et al.[5] reported that in China, the upper limit range of age had reached 92 years. Thus, the health needs increases as the longevity of life increases which is indeed a significant public health issue. Bhupinder Chaudhary et al.[6] also reported based on situational analysis, there is a strong need to plan for future health needs and eliminate disparities, constraints in healthcare delivery for this vulnerable sector as the longevity of life extends.

Majority of the study participants had social issues like Illiteracy, working even in the elderly age for livelihood, loneliness, dependency, and non-utilization of Social security schemes provided by the Government were important factors that had a negative impact on the overall quality of life in this age group. Steerupa et al.[7] had reported similar social issues and poor utilization of health services among the elderly women in rural part of North India. Aparajita Dasgupta et al.[8] had also reported the prevalence of dependency, ill-health, and morbidities among the elderly women to be high. Arun N. Bhatt, et al. also highlighted

### Table 2: Quality of life among the study participants

| Quality of life domain | Mean (M) | Standard Deviation |
|------------------------|---------|--------------------|
| Physical Domain        | 44.92   | 21.85              |
| Psychological Domain   | 43.58   | 20.60              |
| Social Domain          | 48.05   | 21.13              |
| Environmental Domain   | 45.52   | 17.28              |

### Table 3: Determinants of Quality of life among the Elderly women

| Determinants                          | OR     | CI ('95% Confidence Interval') |
|---------------------------------------|--------|--------------------------------|
| Advancing age                         | 2.13   | (1.453-3.163)                  |
| Illiteracy                            | 3.18   | (1.282-5.443)                  |
| Lower socioeconomic status            | 2.51   | (1.714-3.687)                  |
| Co-morbidities                        | 6.43   | (4.253-9.712)                  |
| Social factors (Dependency)           | 2.83   | (1.918-3.914)                  |
| Awareness on health services and benefits | 1.92   | (1.023-2.832)                  |

**Figure 1:** Comorbidities among the Elderly women

**Figure 2:** Life style factors among the Elderly Women
the co-existence of social factors like dependency, lack of personal income, and neglect by the family members playing a significant role in health issues and quality of life among the elderly population as a whole in our society. In our study also, it was observed that there was a significant association between factors like age, socioeconomic constraints, and social deprivation with regard to health issues in this elderly population. The marital status has a significant role in quality of life among the elderly wherein widows had a negative impact of loneliness on the health and quality of life as compared to those with husband. Sowmiya et al. also reported that widows and separated elderly women had poor quality of life along with health problems as compared to those living with husband.

Overall quality of life in this study among the elderly women was observed to be mean score of 53.7 with major dip in physical and psychological domain of assessment. Sowmiya et al. also reported that overall quality of life was 47.56 with physical domain toward the lowest quality. Majority in this study had non-communicable diseases like vision, hearing defects, hypertension, osteoarthritis, etc. which had significant impact on the overall quality of life in this age. Kumar S G et al. also reported that non-communicable diseases in this elderly were the major challenge for the health sector to match demand and services in urban area of Pondicherry for continuum of care. Kritika et al. reported the importance to focus on co-morbidities during assessing the healthcare services for the elderly population in Dehradun addressing the major challenge in it.

In this study also, seeking health services in primary healthcare for the co-morbidities like hypertension, diabetes, and musculoskeletal issues was observed to be overall not satisfactory and compliance also was average leading on to negative impact on the quality of life in this age group. Purty AJ, et al. also highlighted the challenges in achieving compliance in treatment of various non-communicable diseases in this age group in rural area of Tamil Nadu. Kaur P, et al. reported high prevalence of tobacco usage among the elderly population which in turn adversely affect the health and quality of life in rural area of Tamil Nadu. In this study, it was also observed that majority of women had used tobacco products along with betel nut which was a negative lifestyle factor affecting the quality of life. Also there is poor awareness on the health schemes for the elderly provided by the Government in this study as reported by Sowmiya et al. in their study on the quality of life in elderly in rural setting. Although the process of ageing, health problems, and disabilities of old age cannot be prevented totally, appropriate measures should be taken that would retard this progress at primary healthcare level, thereby leading to a longer period of health as well as preserving their quality of life. de Lima et al. had emphasized the burden of chronic diseases and polypharmacy among this vulnerable population which is a challenge to healthcare delivery. Sharad Philip et al. had stressed the need of special focus on Geriatric health at primary health centres and community health centres to strengthen screening of diseases, early intervention, and improvement in the quality of life.

This study has identified the factors like loneliness, poverty, substance abuse like tobacco usage, Co-morbidities like NCDs as major determinants of the quality of life of elderly women in rural setting which is a real challenge for healthcare delivery at the level of primary healthcare. Improvement in educational and socioeconomic status, health education on positive lifestyle factors like physical activity, avoiding tobacco to improve the quality of life should be focused at the level of primary healthcare.

There is an emphasis to educate on schemes offered by the Government for social security and health services for the elderly population to reduce the burden of disability and non-communicable diseases which is a real challenge to primary healthcare services. Further studies are needed to recommend on implementation of Geriatric clinic with counseling services at the level of primary healthcare for better quality of life in this vulnerable age group.

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**Conflicts of interest**

There are no conflicts of interest.

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