

Quality of Life among People Living with Chronic Illness in a Selected Community of Ranipet District, Tamil Nadu: A Descriptive Cross-Sectional Study

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Abstract

Background: Chronic illnesses such as hypertension, diabetes mellitus, cardiovascular diseases, cerebrovascular diseases, asthma, and cancer are major public health concerns that require lifelong management and significantly affect individuals' health-related quality of life (HRQoL). Assessing quality of life among people living with chronic illness is essential for understanding the physical, psychological, social, and spiritual challenges associated with long-term disease management and for planning comprehensive community-based healthcare interventions.

Objectives: To assess the quality of life among people living with chronic illness and to evaluate the quality-of-life domains affected among adults residing in a selected community of Ranipet District, Tamil Nadu.

Methods: A community-based descriptive cross-sectional study was conducted among 200 adults aged 30 years and above living with chronic illnesses in V.C. Mottur, Ranipet District, Tamil Nadu. Participants were selected using a convenient sampling technique. Data were collected through face-to-face interviews using a structured questionnaire comprising socio-demographic variables and quality-of-life assessment. Data were analyzed using descriptive statistics, including frequencies, percentages, mean, median, and range.

Results: The study found that the overall quality-of-life score among participants was 56.63%, while the overall impact score of chronic illness on quality of life was 43.37%. Hypertension (34.5%), multiple chronic illnesses (31.5%), and diabetes mellitus (29%) were the most common chronic conditions. Female participants demonstrated slightly higher quality-of-life scores than males. Better quality of life was observed among participants with higher educational attainment and those receiving regular treatment. Among the quality-of-life domains, the physical domain was the most affected, highlighting the functional burden associated with chronic illness.

Conclusion: Chronic illnesses continue to adversely influence the quality of life of adults living in the community. Strengthening community-based health education, promoting treatment adherence, improving health literacy, and implementing nurse-led interventions may contribute to better quality-of-life outcomes. The findings provide valuable evidence for planning patient-centered chronic disease management programmes in primary healthcare settings.

BACKGROUND OF THE STUDY

Chronic diseases, including hypertension, diabetes mellitus, cardiovascular diseases, cerebrovascular diseases, asthma, cancer, and other long-term health conditions, are among the leading causes of morbidity, disability, and mortality worldwide. Advances in medical care have increased life expectancy and improved disease management; however, many individuals continue to live with chronic illnesses that require lifelong treatment and regular follow-up. Consequently, the impact of chronic diseases extends beyond physical symptoms to affect psychological well-being, social functioning, economic productivity, and overall quality of life.

Health-Related Quality of Life (HRQoL) has emerged as an important patient-centered outcome measure in the evaluation of chronic disease management. HRQoL reflects an individual's perception of how physical health, emotional well-being, social relationships, functional ability, and environmental factors influence daily life. Unlike traditional clinical indicators that primarily assess disease severity and treatment outcomes, HRQoL provides a comprehensive understanding of the burden of chronic illness from the patient's perspective. Therefore, assessing HRQoL enables healthcare professionals to identify unmet needs and develop holistic interventions that enhance overall well-being.

The growing prevalence of multimorbidity—the coexistence of two or more chronic conditions in the same individual—poses additional challenges for patients, families, and healthcare systems. Individuals with multimorbidity often experience greater functional limitations, polypharmacy, increased healthcare utilization, psychological distress, and poorer quality of life compared with those living with a single chronic disease. Primary healthcare professionals, particularly nurses, play a pivotal role in the early identification of these challenges, providing continuous care, promoting treatment adherence, and implementing interventions aimed at improving patients' quality of life.

In India, the epidemiological transition from communicable to non-communicable diseases has substantially increased the burden of chronic illnesses in both urban and rural communities. Despite improvements in healthcare services, many individuals continue to experience physical, emotional, social, and economic difficulties associated with chronic diseases. Community-based evidence on the quality of life of people living with chronic illness remains limited, particularly in rural settings where healthcare access, health literacy, and socioeconomic factors may influence health outcomes.

Assessing the quality of life of people living with chronic illness is therefore essential for identifying affected domains, understanding the influence of demographic and disease-related characteristics, and guiding patient-centered healthcare planning. The findings of the present study are expected to provide valuable evidence for nurses and other primary healthcare professionals to design comprehensive interventions that improve health-related quality of life and promote holistic management of chronic illnesses at the community level.

OBJECTIVES

The study was undertaken with the following objectives:

1. To assess the quality of life among people living with chronic illness in a selected community of Ranipet District, Tamil Nadu.
2. To assess the various domains of quality of life affected among people living with chronic illness.

METHODOLOGY

Study Design and Setting

A community-based descriptive cross-sectional study was conducted among people living with chronic illness in V.C. Mottur, Walajah Taluk, Ranipet District, Tamil Nadu, India. V.C. Mottur is situated approximately 5 km east of the Ranipet district headquarters, 1 km from Walajah, and about 112 km from Chennai, the capital city of Tamil Nadu. Tamil is the predominant language spoken in the study area.

Study Population and Sample

The study population comprised adults living with chronic illnesses in the selected community. Individuals aged 30 years and above who had been diagnosed with one or more chronic illnesses and were willing to participate in the study were considered eligible. Individuals who were unable to communicate effectively during data collection were excluded.

A total of 200 participants were recruited using a convenient sampling technique. Both male and female participants meeting the eligibility criteria were included in the study.

Data Collection Instrument

Data were collected using a structured interviewer-administered questionnaire developed by the researcher following an extensive review of the literature and expert guidance in community health nursing. The questionnaire consisted of two sections. The first section elicited socio-demographic information, including age, gender, educational status, occupation, marital status, religion, family type, monthly income, family history of chronic illness, type of chronic illness, and treatment pattern.

The second section assessed the quality of life of participants across multiple domains, including physical, psychological, social, and spiritual aspects. Responses were recorded systematically during face-to-face interviews.

Data Collection Procedure

Data collection was carried out over a period of three days from 28 November 2022 to 3 December 2022. Prior permission to conduct the study was obtained from the local community authorities. Eligible participants were approached in the community, informed about the objectives and purpose of the study, and invited to participate voluntarily. Written informed consent was obtained before data collection. Each participant was interviewed individually using the structured questionnaire, and all responses were recorded confidentially by the researcher.

Statistical Analysis

The collected data were entered and analyzed using Microsoft Excel (Microsoft Corporation, Redmond, WA, USA). Categorical variables were summarized using frequencies and percentages, whereas continuous variables were described using measures of central tendency and dispersion, including mean, median, and range. The findings were presented using appropriate tables and figures.

Ethical Considerations

Permission to conduct the study was obtained from the community authorities prior to data collection. Written informed consent was obtained from all participants after explaining the purpose and procedures of the study. For participants who were unable to read or write, the contents of the consent form were explained in the local language, and thumb impressions were obtained in the presence of a witness.

Confidentiality and anonymity of all participants were maintained throughout the study, and participation was entirely voluntary.

RESULTS

Socio-demographic Characteristics of the Participants

A total of 200 adults living with chronic illness participated in the study. Nearly half of the participants (46.5%) were aged between 45 and 60 years, while 32.5% were older than 60 years. Females constituted the majority of the study population (73%), whereas males accounted for 27%.

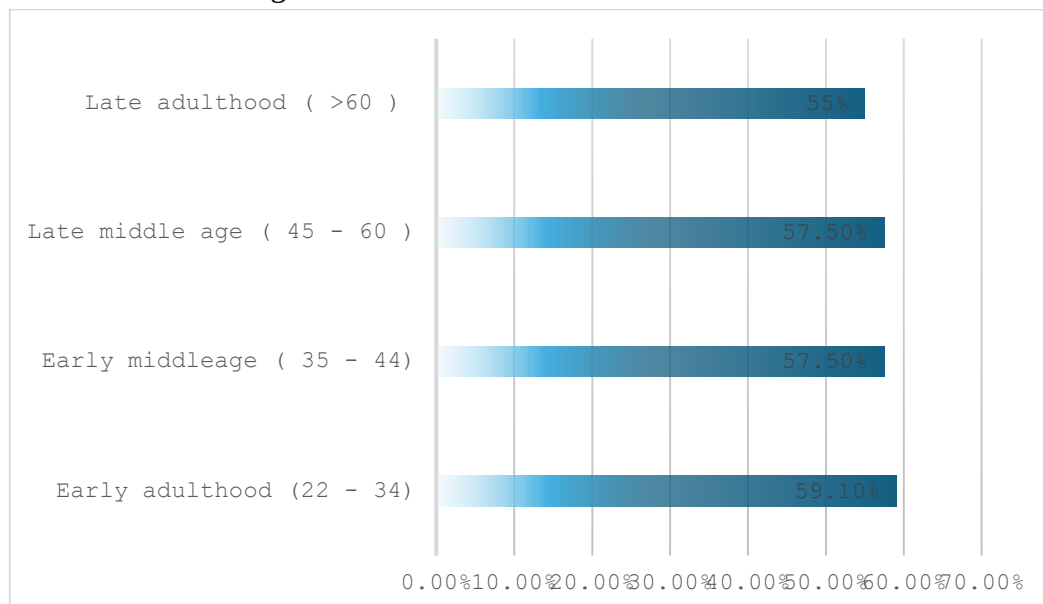
Regarding educational status, 40.5% of the participants had no formal education, 30.5% had completed primary education, 25.5% had completed high or higher secondary education, and only 3.5% were graduates. More than half of the participants (57.5%) were unemployed, followed by 26% who were engaged in skilled occupations.

Most participants were married (76%) and belonged to the Hindu religion (83%). A majority (61.5%) lived in nuclear families, while 22% reported a family history of chronic illness.

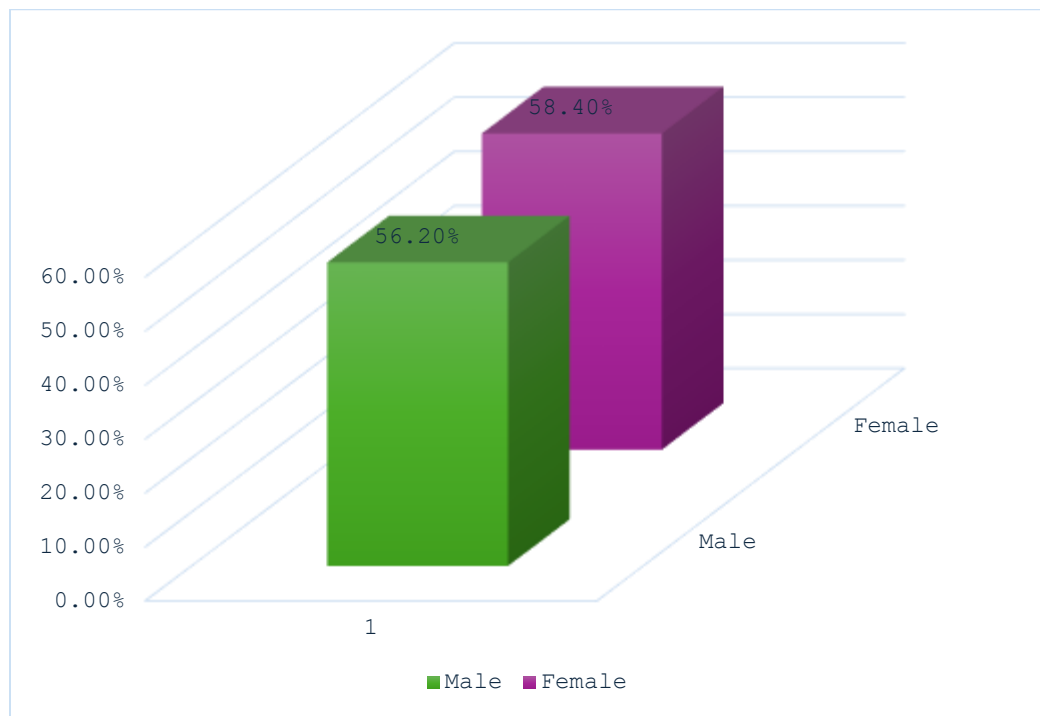
Hypertension was the most frequently reported chronic illness (34.5%), followed by multiple chronic illnesses (31.5%) and diabetes mellitus (29%). The majority of participants (90%) reported receiving regular treatment for their chronic illness, whereas 7% were on irregular treatment and 3% were not receiving any treatment. More than half of the participants (54%) reported a monthly family income of ₹2,000 or above.

Overall Quality of Life

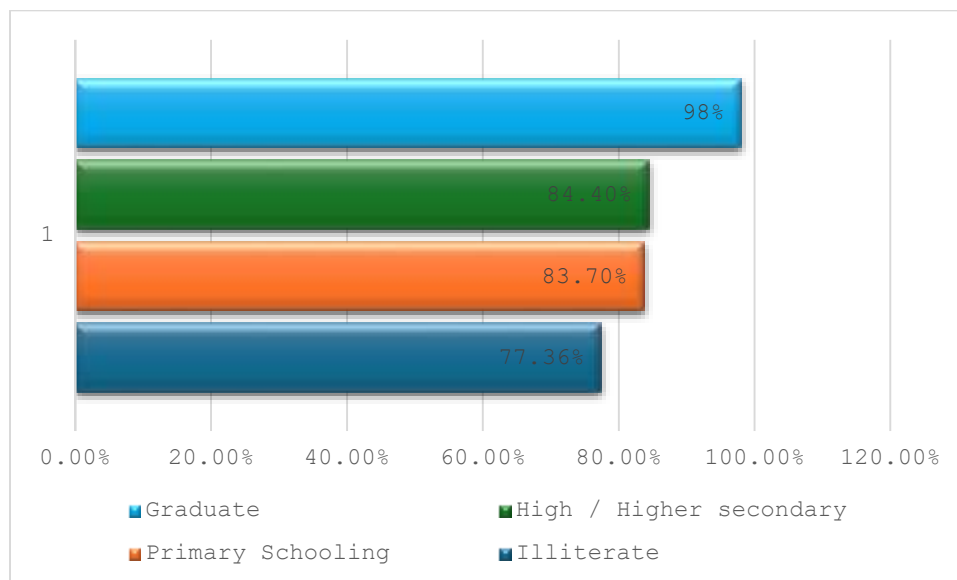
The overall quality-of-life assessment revealed that participants achieved a mean quality-of-life score of **56.63%**, while the mean impact score of chronic illness on quality of life was **43.37%**, indicating that although most participants maintained a moderate level of quality of life, chronic illness continued to influence their overall well-being.



From the above figure it is evident that the quality of life is more (59.1%) in the early adulthood (22 – 34) participants than the quality of life of Late adulthood (>60) participants (55%)



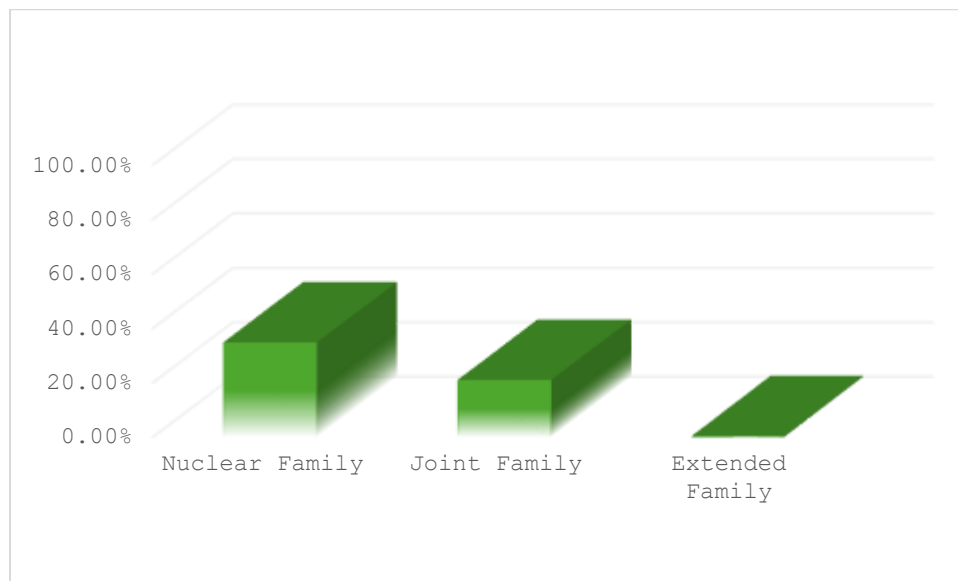
The above figure reveals that the Quality of life of Female (56.4) is better comparing the quality of life of males (56.8)



The above figure depicts that the quality of life of Graduate participants (98%) is better than the Illiterate (77.36%), primary Schooling (84.4%), High/Higher secondary (84.4%).

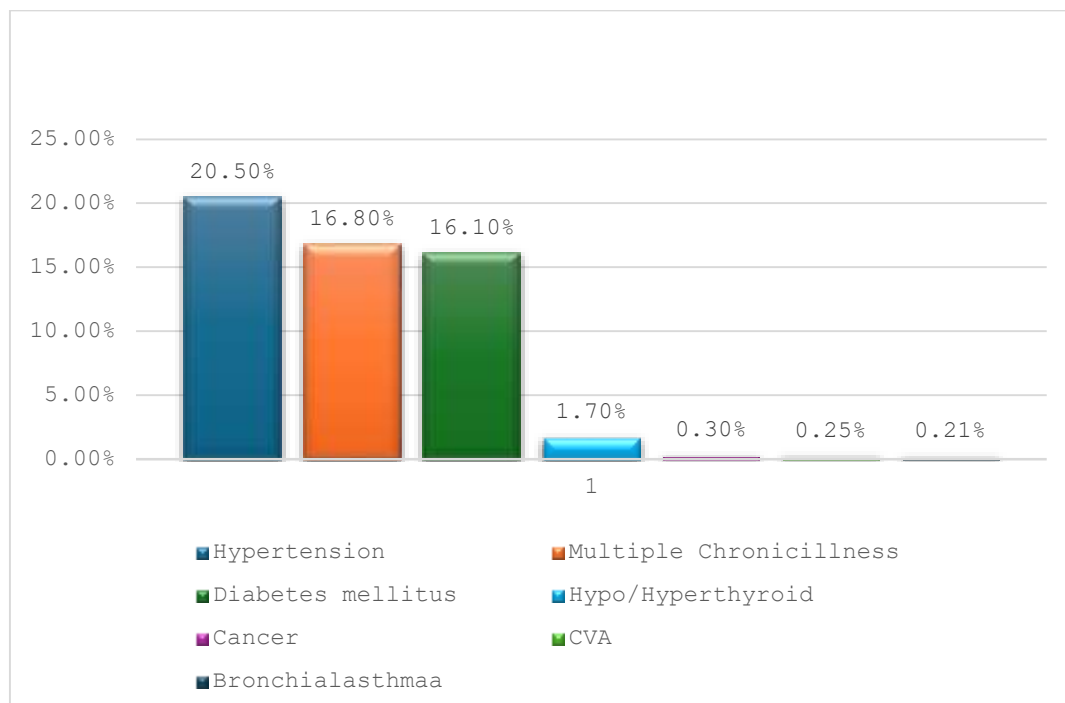
Quality of Life According to Participant Characteristics

Quality-of-life scores varied across different demographic characteristics. Participants aged 22–34 years demonstrated the highest quality-of-life score (59.1%), whereas those aged above 60 years had the lowest score (55.0%). Female participants had slightly higher quality-of-life scores than male participants.



The above figure reveals that the quality of life of participants who are in nuclear family (34.8%) is high whereas the participants who are in joint family (21%) and extended family (0.36%).

Quality of life improved with increasing educational attainment. Graduates reported the highest quality-of-life score (98%), while participants without formal education had comparatively lower scores. Similarly, professional workers demonstrated better quality of life than unemployed participants.



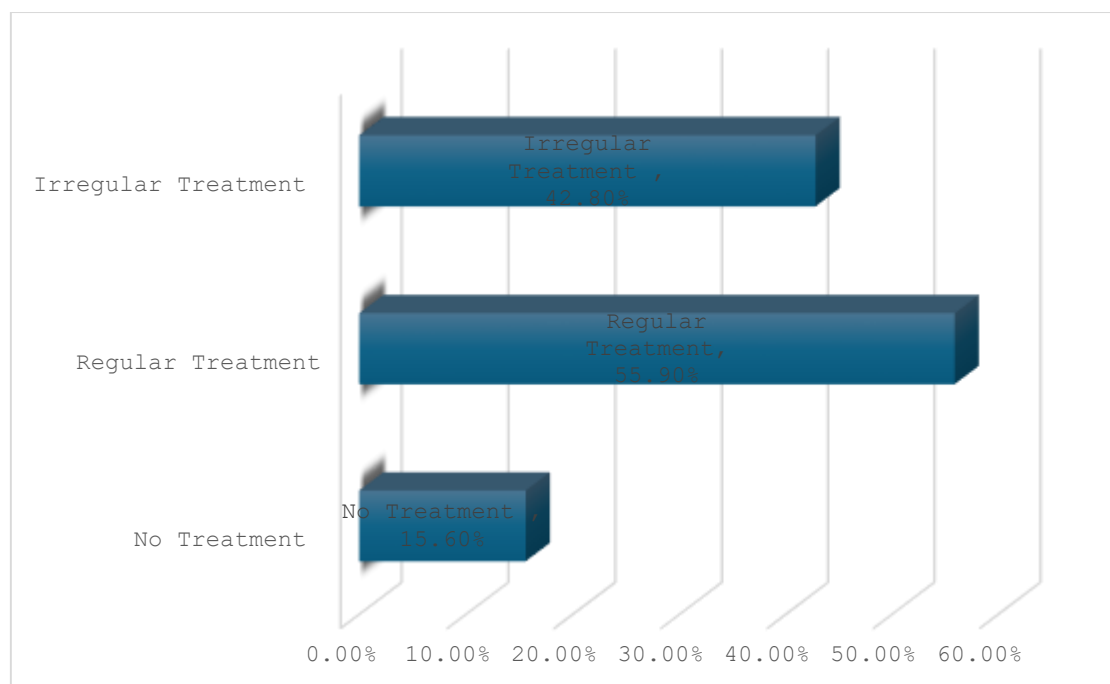
The above figure shows that the hypertension (20.50 %) is more impacted on quality of life of participants whereas the multiple chronic illnesses (16.8%) and diabetes mellitus (16.10%) are less impacted. Married participants reported higher quality-of-life scores than widowed participants. Participants belonging to nuclear families also demonstrated relatively better quality of life than those from joint or extended families.

Quality of Life According to Chronic Illness

Among the different chronic illnesses, hypertension showed the greatest influence on quality of life (20.5%), followed by multiple chronic illnesses (16.8%) and diabetes mellitus (16.1%). Lower proportions were observed among participants with thyroid disorders, cancer, cerebrovascular disease, and bronchial asthma.

Quality of Life According to Treatment Pattern

Participants receiving regular treatment demonstrated better quality-of-life scores than those receiving irregular treatment or no treatment. The physical domain of quality of life was also highest among participants adhering to regular treatment (55.9%), emphasizing the importance of treatment compliance in maintaining functional well-being.



The above figure reveals that the physical quality of life of the participants who are taking regular treatment is (55.9%) is more whereas the participants who are not taking treatment is less impacted (15.6%).

Spiritual Domain of Quality of Life

Assessment of the spiritual domain showed relatively high scores across all religious groups. Muslim participants demonstrated the highest spiritual quality-of-life score (89.2%), followed by Christian (87.4%) and Hindu (87.1%) participants.

DISCUSSION

The present community-based descriptive cross-sectional study assessed the quality of life among people living with chronic illness in V.C. Mottur, Ranipet District, Tamil Nadu. The findings indicate that chronic illnesses continue to influence the quality of life of affected individuals, although the extent of impairment varied according to socio-demographic characteristics, type of chronic illness, and treatment adherence. More than half of the participants (56.63%) demonstrated a fair overall quality of life, while the remaining participants experienced poorer quality-of-life outcomes. These findings suggest that although many

individuals are able to adapt to living with chronic illness, considerable challenges remain in maintaining optimal physical, psychological, social, and spiritual well-being.

The demographic profile of the participants revealed that the majority were females, middle-aged adults, and individuals with limited formal education. A large proportion of participants were unemployed and belonged to nuclear families. Hypertension, diabetes mellitus, and multiple chronic illnesses were the most prevalent conditions observed in the study population. These findings are consistent with the growing burden of non-communicable diseases reported in community-based studies conducted in India and other low- and middle-income countries, where hypertension and diabetes continue to represent the leading chronic health conditions among adults.

The present study further demonstrated that quality of life differed across socio-demographic characteristics. Female participants showed slightly higher quality-of-life scores than males, while participants with higher educational attainment reported better quality of life than those without formal education. Better educational status may contribute to improved health literacy, greater awareness regarding disease management, and increased adherence to treatment recommendations. Similarly, participants receiving regular treatment demonstrated better quality-of-life scores than those receiving irregular treatment or no treatment, emphasizing the importance of treatment adherence in chronic disease management.

The findings of the present study are comparable with those reported by Sharma and colleagues, who observed that a majority of people living with chronic diseases experienced fair quality of life, highlighting the need for community-based interventions to improve overall well-being. Similarly, Samiei Siboni and co-workers reported that quality of life differed according to the type of chronic disease and was significantly influenced by age, educational status, and socioeconomic conditions. These observations support the present findings that socio-demographic characteristics play an important role in determining quality of life among individuals with chronic illnesses.

Hypertension was the most common chronic illness identified in the present study and demonstrated the greatest reduction in quality-of-life scores, followed by multiple chronic illnesses and diabetes mellitus. This observation is consistent with previous evidence showing that hypertension and multimorbidity contribute substantially to reduced physical functioning, increased treatment burden, and diminished health-related quality of life. Individuals living with multiple chronic conditions often experience complex medication regimens, functional limitations, and frequent healthcare utilization, all of which may negatively influence their daily lives.

Assessment of the quality-of-life domains indicated that the physical domain was most affected among participants with chronic illness, whereas comparatively better scores were observed in the psychological, social, and spiritual domains. The greater impairment in physical functioning may be attributed to disease-related symptoms, reduced mobility, pain, fatigue, and dependence on long-term treatment. Similar findings have been reported in previous systematic reviews evaluating health-related quality of life among patients with hypertension and diabetes, where physical functioning consistently demonstrated the greatest decline compared with other quality-of-life domains.

The findings of the present study have important implications for community health nursing. Regular community screening, health education, promotion of healthy lifestyles, early diagnosis, treatment adherence, and continuous follow-up are essential strategies for improving quality of life among people living with chronic illnesses. Nurses working in primary healthcare settings are well positioned to identify

individuals at risk of poor quality of life and to implement patient-centred interventions that address physical, psychological, social, and spiritual needs.

Although the present study provides valuable insights into the quality of life of people living with chronic illness in a rural community, several limitations should be acknowledged. The study employed a convenient sampling technique and was conducted in a single community, which may limit the generalizability of the findings. Furthermore, the descriptive cross-sectional design precludes the establishment of causal relationships between participant characteristics and quality-of-life outcomes. Future multicentre studies using probability sampling techniques and analytical study designs are recommended to further explore determinants of quality of life and evaluate interventions aimed at improving long-term outcomes among people living with chronic illnesses.

CONCLUSION

The present community-based descriptive cross-sectional study assessed the quality of life among people living with chronic illness in a selected community of Ranipet District, Tamil Nadu. The findings indicate that chronic illnesses continue to influence the overall quality of life of affected individuals, particularly in relation to their physical, psychological, social, and spiritual well-being.

The study demonstrated that quality of life varied across socio-demographic characteristics. Female participants reported slightly higher quality-of-life scores than males, while participants with higher educational attainment and those receiving regular treatment generally demonstrated better quality-of-life outcomes. Hypertension, diabetes mellitus, and multimorbidity constituted the major chronic health conditions among the study population and were associated with reduced quality-of-life scores.

These findings highlight the importance of community-based strategies for the prevention and management of chronic illnesses. Strengthening health education, promoting treatment adherence, encouraging regular follow-up, and implementing nurse-led interventions may contribute to improving the quality of life of people living with chronic illnesses. The study provides useful evidence for healthcare professionals and policymakers to develop comprehensive, patient-centered interventions aimed at enhancing the overall well-being of individuals with chronic diseases.

NURSING IMPLICATIONS

The findings of this study have important implications for nursing practice, education, research, and community health. Community health nurses play a pivotal role in identifying individuals with chronic illnesses, promoting healthy lifestyles, improving treatment adherence, and providing continuous education on self-management practices. Special attention should be directed toward individuals with low educational status and those with poor treatment compliance, as these groups may be at greater risk of experiencing reduced quality of life.

The study also emphasizes the need to strengthen nursing education by incorporating evidence-based approaches to chronic disease management and health-related quality-of-life assessment into the curriculum. Furthermore, the findings provide a basis for future research evaluating interventions aimed at improving quality of life among people living with chronic illnesses in community settings. Healthcare administrators may utilize these findings to plan community-based screening programmes, health education campaigns, and nurse-led follow-up services that support holistic chronic disease management.

RECOMMENDATIONS

Based on the findings of the present study, the following recommendations are proposed:

1. Future studies employing analytical or longitudinal designs should be conducted to identify factors influencing the quality of life among people living with chronic illnesses.
2. Community-based intervention studies should be undertaken to evaluate the effectiveness of nurse-led health education and self-management programmes in improving quality of life.
3. Larger multicentre studies involving diverse populations are recommended to enhance the generalizability of the findings.
4. Regular community awareness programmes should be organized to promote early diagnosis, treatment adherence, and lifestyle modification for the prevention and management of chronic illnesses.
5. Training programmes for community health workers and primary healthcare professionals should be strengthened to facilitate comprehensive, patient-centered care for individuals living with chronic diseases.