



A STUDY ON QUALITY OF LIFE IN ELDERLY WITH OSTEOPOROSIS: A DESCRIPTIVE STUDY

Physiotherapy

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ABSTRACT

Background: Osteoporosis is a progressive skeletal disorder that leads to decreased bone strength and an increased risk of fractures. As the aging population rises, its impact on the quality of life (QoL) among the elderly is becoming a major health concern. **Objective:** To assess the quality of life among elderly individuals diagnosed with osteoporosis using the 41-item Quality of Life Questionnaire of the European Foundation for Osteoporosis (QUALEFFO-41). **Methods:** A descriptive observational study was conducted among 271 elderly participants (≥ 60 years) in the Mumbai metropolitan region. Data were collected using the QUALEFFO-41 questionnaire. Statistical analysis was performed to determine prevalence patterns across various QoL domains. **Results:** Nearly half of the participants (49%) demonstrated moderate-to-severe impairment in QoL. The physical, psychological, and social aspects of life were significantly compromised. **Conclusion:** Osteoporosis adversely affects multiple dimensions of life in the elderly. Integrating physiotherapy-led interventions focusing on pain management, mobility training, and psychosocial support can substantially enhance functional independence and life satisfaction.

KEYWORDS

Osteoporosis, Elderly, Quality of Life, QUALEFFO-41, Physiotherapy

INTRODUCTION

Osteoporosis is defined as a skeletal disorder characterized by compromised bone strength that predisposes individuals to an increased risk of fractures. With the growing aging population, it poses a significant global health burden. Studies have consistently shown that osteoporosis prevalence is higher among individuals aged 60 years and above compared to younger adults. Quality of life (QoL) encompasses an individual's overall well-being and satisfaction across physical, psychological, and social domains. In elderly osteoporotic individuals, factors such as chronic pain, reduced mobility, and functional limitations can markedly impair QoL. Understanding this relationship is crucial for effective rehabilitation planning and multidisciplinary intervention.

Need Of The Study

Osteoporosis remains one of the leading causes of disability in India, impacting physical, psychological, functional, and economic aspects of health. Assessing QoL among elderly osteoporotic patients will provide valuable insights for targeted physiotherapy interventions and healthcare strategies.

Aim And Objectives

Aim: To determine the quality of life in elderly individuals diagnosed with osteoporosis.

Objectives: To assess the QoL using the 41-item Quality of Life Questionnaire of the European Foundation for Osteoporosis (QUALEFFO-41).

Methodology

Study Design: Observational descriptive study

Setting: Mumbai metropolitan region

Sample Size: 271 participants (calculated with 90% confidence using OpenEpi)

Sampling Method: Convenience sampling

Inclusion Criteria: Age ≥ 60 years, both male and female participants, diagnosed cases of osteoporosis, willingness to participate.

Exclusion Criteria: Age below 60 years, genetic bone disorders, other musculoskeletal, neurological, or systemic conditions, unwilling

participants.

Procedure: Institutional ethical approval was obtained prior to data collection. Written informed consent was taken from all participants. Subjects were screened according to inclusion and exclusion criteria. The QUALEFFO-41 questionnaire was administered individually, and responses were analyzed quantitatively to assess domain-wise QoL status.

RESULTS

A total of 271 elderly participants were included (146 males, 125 females).

Key Findings:

Overall QoL: Nearly half (49%) of participants had moderate-to-severe QoL impairment.

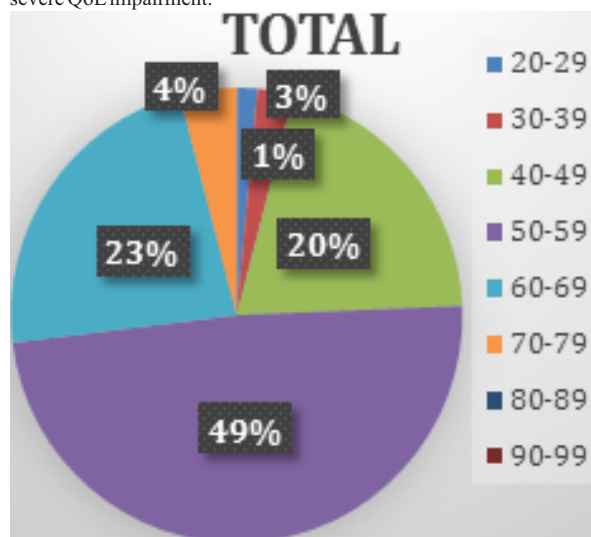


Figure No. 1

DISCUSSION

This study highlights a significant decline in QoL among elderly individuals with osteoporosis, primarily due to pain, restricted mobility, and psychosocial distress. The findings align with prior

research by Stanghelle et al. (2021), who reported strong associations between pain, physical ability, and QoL in osteoporotic women. Mobility impairment was prevalent among 80% of participants, similar to Ackerman et al., who observed declines in health-related QoL among patients awaiting joint replacement surgery. Mental health deterioration, seen in 86% of participants, reinforces the importance of psychosocial components in osteoporosis management. The results support Bennell et al. (2000) and Swanenburg et al. (2003), who emphasized the pivotal role of physiotherapy in improving balance, mobility, and psychological well-being. Hence, physiotherapy should incorporate pain reduction, gait training, postural correction, and fall prevention strategies to enhance QoL outcomes.

CONCLUSION

Osteoporosis substantially reduces the quality of life among the elderly, affecting physical, social, and emotional dimensions. Physiotherapy-led rehabilitation focusing on pain management, mobility restoration, and psychosocial support is essential for improving independence and overall well-being.

Clinical Implications

Pain Management: Use of electrotherapy, manual therapy, and relaxation techniques.

Mobility Training: Emphasis on balance and gait retraining, fall prevention, and strengthening.

Psychological Health: Patient education, motivation, and community exercise programs.

Functional Independence: Task-specific training and adaptive techniques.

Multidisciplinary Care: Collaboration with orthopedicians, dietitians, and psychologists.

Limitations

Convenience sampling limits generalizability.

Data restricted to Mumbai region.

Self-reported psychological measures not clinically verified.

Observational design prevents causal inference.

Future Scope

Further research with larger, diverse samples and longitudinal designs should explore intervention outcomes, particularly the role of physiotherapy in enhancing QoL among osteoporotic patients.

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