UNIVERSITI TEKNOLOGI MARA

# FRAILTY AND ITS ASSOCIATION WITH QUALITY OF LIFE AMONG COMMUNITY-DWELLING OLDER ADULTS ATTENDING A PRIMARY CARE CLINIC IN MALAYSIA

**EZA AZFARINA BINTI**
**KAMAL BAHARIN**

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# ABSTRACT

**Background:** Frailty is a geriatric syndrome that is commonly associated with quality of life (QoL) in the older adult population. With the growing number of older people worldwide, improving and maintaining QoL during the extended years of life has become a major focus for healthcare providers and policymakers. Despite its importance, there is limited research on frailty and its impact on QoL in the Malaysian context, particularly among those attending primary care clinics. This study aimed to determine the prevalence of frailty and explore its association with QoL among community-dwelling older adults attending a university public primary care clinic.

**Methods:** We conducted this cross-sectional study at a university-based primary care clinic in Selangor, Malaysia, from December 2023 to March 2024. A total of 230 older adults aged 60 and above who could provide informed consent and complete the study questionnaires were recruited consecutively. We excluded participants with moderate to severe cognitive impairment, those who were wheelchair-bound, or those with acute illness. Frailty was assessed using the Fried Frailty Phenotype (FFP), which classifies participants into three categories: frail, pre-frail, or robust. QoL was evaluated with the World Health Organization Quality of Life - BREF (WHOQOL-BREF) questionnaire. The FFP is one of the most widely used criteria for frailty assessment, focusing primarily on physical components such as unintentional weight loss, self-reported exhaustion, muscle weakness, reduced walking speed, and low physical activity levels. We performed a multiple linear regression analysis to identify factors associated with QoL.

**Results:** The mean age of participants was 67 years, with a standard deviation (SD) of 5.05, with 115 males (50.0%) and 115 females (50.0%). Most participants were Malay (80.4%), married (71.3%), and resided in urban areas (99.6%). In terms of education, 51.3% completed secondary education. Nearly half of the participants belonged to the lower-income group [RM2,500-RM4,849] (48.7%). Regarding clinical characteristics, 49.6% had polypharmacy (≥5 medications), 14.8% had a history of falls, 7.8% were current smokers, and 4.3% consumed alcohol. For comorbidities, dyslipidemia (92.2%), hypertension (80.4%), and diabetes mellitus (47.4%). The prevalence of frailty among participants was 30.9% (n=71), with 52.2% (n=120) classified as pre-frail and 16.9%

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# CHAPTER ONE
# INTRODUCTION

The global population is aging rapidly, with significant implications for public health systems worldwide [1]. Aging is typically measured by chronological age, with individuals over 65 often referred to as "older adults" [2]. While definitions of old age vary across cultures and times, Malaysia has adopted the United Nations' definition of older adults as those aged 60 and above [3]. In Malaysia, the proportion of older adults is increasing, leading to heightened concerns about age-related conditions that affect this population's well-being [2]. The term "community-dwelling" describes individuals living independently at home or in residential communities, as opposed to institutional settings. This distinction is crucial for developing community-based health policies and interventions aimed at supporting independent living and addressing specific health needs within the community [4].

QoL is a complex concept with various definitions. According to the World Health Organization (WHO), QoL is an individual's perception of their position in life within the context of their culture and value systems in relation to their goals, expectations, standards, and concerns [5]. QoL is a multidimensional construct encompassing physical health, psychological state, level of independence, social relationships, and environmental factors. For older adults, maintaining a high QoL is paramount for independent and dignified aging. QoL in older adults is shaped by the unique challenges of aging, such as managing chronic diseases, maintaining independence, coping with social isolation, and addressing mental health issues, all of which play a more prominent role compared to younger individuals. QoL is often preferred over the concept of "healthy aging" because it provides a broader measure of well-being that includes not only physical health but also psychological, social, and environmental aspects [4]. Previous studies have shown that various factors, such as physical health, mental well-being, social support, and socioeconomic status, influence QoL in the elderly [6]. In Malaysia, studies have also reported varying levels of QoL among community-dwelling older adults, with most indicating that physical, socioeconomic, and social factors play critical roles in determining QoL outcomes [7]. For instance, a study in Sarawak reported an overall QoL mean score of 90.17 (SD = 11.32), with the environment domain scoring the highest and the social relationship