

**Examining the disability model from the International Classification of Functioning, Disability, and Health using a large data set of community-dwelling Malaysian older adults**

ABSTRACT

Objective: This study examines the International Classification of Functioning, Disability, and Health model (ICF) using a data set of 2,563 community-dwelling elderly with disease-independent measures of mobility, physical activity, and social networking, to represent ICF constructs. Method: The relationship between chronic disease and disability (independent and dependent variables) was examined using logistic regression. To demonstrate variability in activity performance with functional impairment, graphing was used. The relationship between functional impairment, activity performance, and social participation was examined graphically and using ANOVA. The impact of cognitive deficits was quantified through stratifying by dementia. Results: Disability is strongly related to chronic disease (Wald 25.5,  $p < .001$ ), functional impairment with activity performance ( $F = 34.2$ ,  $p < .001$ ), and social participation ( $F = 43.6$ ,  $p < .001$ ). With good function, there is considerable variability in activity performance (inter-quartile range [IQR] = 2.00), but diminishes with high impairment (IQR = 0.00) especially with cognitive deficits. Discussion: Environment modification benefits those with moderate functional impairment, but not with higher grades of functional loss.

**Keyword:** Chronic disease; Disability evaluation; Rehabilitation; Malaysia; Social participation