The Hierarchical Relationship between Mobility Limitation and ADL Disability in Older Taiwanese Persons

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Background and Purpose: The disability domains of physical mobility, instrumental ADL, and basic ADL have been shown of a hierarchical relationship. Their detailed relationship, however, is yet unclear. This study aimed to describe the relationship between disabilities of physical mobility, IADL, and BADL. Methods: From a 2003 national representative database in Taiwan, 2626 community-dwelling samples aged over 65 were retrieved. We used descriptive analyses to study the sequential hierarchical relationship of the three disability domains, curve estimations to study the relationship between the number of summed disability items within each domain, and correlation tests to study the relationship between the score of single item of the mobility domain and the number of summed disability items of IADL and BADL. Results: Physical mobility is the first domain to appear during evolution of disability. Averagely when its number of summed disability items reaches four and seven, out of nine, respectively, one disability item in IADL and BADL starts to manifest. The nine mobility items have different correlations with IADL and BADL, and could be categorized into three - items requiring more leg strength and endurance, items such as walking and stairs climbing, and items relating to arms and hands. Conclusions: Disability of physical mobility has not only a sequential hierarchical relationship with ADL disabilities, but also overlaps with basic and instrumental ADL in different ways. The results may provide useful information for seamless care of older persons. The findings of three categories of physical mobility are valuable for categorization of disability severity. (FJPT 2010;35(1):1-7)

Key Words: Older, Disability, Physical mobility, Instrumental ADL, Basic ADL

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Received: July 30, 2009 Revised: November 18, 2009 Accepted: November 25, 2009