〔原著〕

南臺灣偏遠地區老年男性衰弱盛行率及相關危險因子

吳佩穎[1]　侯孟次[1]　張嘉凌[2]　張秦松[3]　陳全裕[4]
楊宜青[3]　張家銘[1,5]　吳至行[1,3,6]

摘　要

目的：衰弱已被證實是失能、住院、入住機構及死亡等不良預後的預測因子，但目前國內只有少數本土的老年衰弱研究。本研究進行台灣偏遠社區老年男性衰弱盛行率及相關危險因子調查，期盼能充實台灣本土資料。

方法：於2010年7月針對台灣南部高雄縣田寮鄉1,033位大於65歲老年男性進行橫斷式田野研究調查，其中排除臥床、行動不便、溝通障礙者，最終取得404位受測者完整資料。每位受測者皆接受面對面結構式問卷之詢問、身體功能測量及以雙能量X光吸收儀檢測骨密度值。本研究參照Fried等人於2001年提出評估衰弱的五個指標，以符合一至二項指標為衰弱前期，大於等於三項指標為衰弱。

結果：於404位受測者中，平均年齡為74.55± 6.14歲，無衰弱 / 衰弱前期 / 衰弱之盛行率分別為51.2%、37.1%、11.6%。在單變項分析中，發現衰弱程度與年齡、獨居、日常生活功能失能、工具性日常生活功能依賴、共病症數及骨質疏鬆症呈現正相關，而自覺健康狀況、身體質量指數、30秒坐站測試與30秒開眼單足立測試呈現負相關。進一步以邏輯斯複迴歸分析，僅身體質量指數、自覺健康狀況及30秒坐站測試為衰弱之獨立相關因子。

結論：台灣南部偏遠地區老年男性衰弱盛行率為11.6%。身體質量指數較高者較不易有衰弱問題，而自覺目前健康狀況不好、下肢肌力較差之老年男性容易有衰弱問題。

（*台灣老年醫學暨老年學雜誌* 2011；6(3)：161-175）

關鍵詞：田野研究調查、骨質疏鬆症、身體質量指數、下肢肌力

[1] 國立成功大學老年學研究所、[6] 行爲醫學研究所、[2] 國立成功大學醫學院醫學系、[3] 國立成功大學醫學院附設醫院家庭醫學部、[5] 老年醫學科、[4] 高雄縣田寮鄉衛生所
通訊作者：吳至行
通訊處：704 臺南市北區勝利路 138 號（國立成功大學醫學院附設醫院家庭醫學部）
電話：(886) 6-2353535 轉 5210, 5200　　傳真：(886) 6-2754243
E-mail: paulo@mail.ncku.edu.tw

Prevalence and Associated Risk Factors of Frailty in Elderly Male Rural Dwellers in Southern Taiwan

Pei-Ying Wu[1], Meng-Tzu Hou[1], Chia-Ling Chang[2], Chin-Sung Chang[3]
Chuan-Yu Chen[4], Yi-Ching Yang[3], Chia-Ming Chang[5], Chih-Hsing Wu[1,3,6]

Abstract

Objective: Frailty is a well recognized predictor of disability, hospitalization, institutionalization, or death. Only several frailty-related studies have so far been reported in Taiwan. This study was accordingly designed to investigate the prevalence and the associated risk factors of frailty in elderly male residents in a rural community with the hope to enrich and encourage studies on frailty in Taiwan.

Method: A cross-sectional epidemiological survey was performed in July 2010. Subjects were sampled from 1033 males aged 65 and over males, living in Tianliao Township of Kaohsiung County. After excluding residents who were bed-ridden, non-ambulatory, or difficult to communicate, the study enrolled a total of 404 subjects for formal analysis. Every participant received a face to face interview by structural questionnaires, physical function examination and bone mineral density measured by mobile dual energy X-ray absorptiometry (Hologic Explorer QDR). The five frailty criteria proposed by Fried in 2001 were applied. Subjects meeting three or more criteria were defined as frail while those meeting one or two criteria were considered pre-frail.

Results: The average age of the 404 subjects read 74.55± 6.14 y/o, and the prevalences of non-frailty/ pre-frailty/ frailty were 51.2% / 37.1% / 11.6% respectively. Univariate analysis found age, living alone, ADL disability, IADL dependence, more co-morbidities and osteoporosis positively correlated with frailty. Self-reported health status, body mass index (BMI), 30-second sit-to-stand test and 30-second one leg standing test with eye open emerged to be negatively correlated with frailty. Multiple logistic regression analysis identified BMI ≧25 kg/m2, self-reported health status, and 30-second sit-to-stand test as independent factors for frailty.

Conclusion: The prevalence of frailty among elderly males living in remote communities is 11.6% in Taiwan. The BMI≧25 kgm2 may be a protective factor for frailty. However, people with poor self-reported health status and weak lower extremity muscle are more likely to be frail.
(*Taiwan Geriatr Gerontol* 2011; 6(3): 161-175)

Key words: field survey, osteoporosis, BMI, lower extremity muscle strength

[1]Institute of Gerontology, National Cheng Kung University Medical College, Tainan, [6]Institute of Behavior Medicine, Taiwan; [2]Department of Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan; [3]Department of Family Medicine, National Cheng Kung University Hospital, Tainan, [5]Department of Internal Medicine, Tainan, Taiwan; [4]Public Health Center, Tianliao Township, Kaohsiung County, Kaohsiung, Taiwan.
Correspondence to: Chih-Hsing Wu
No. 138, Sheng Li Road, 70403 Tainan city. Taiwan R.O.C.
Tel: (886) 6-2353535 ext. 5210, 5200 Fax: (886) 6-2754243
E-mail: paulo@mail.ncku.edu.tw