

## 某偏遠社區老年居民跌倒與相關危險因子的 流行病學調查

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### 摘要

**背景：**跌倒是老年人重要的健康問題。有關台灣地區老年人的跌倒相關研究仍有所不足，尤其是在偏鄉地區之流行病學研究。本研究之目的為評估偏遠社區老人跌倒盛行率及相關危險因子，以供臨床照護參考。

**方法：**於2012年針對高雄市田寮區1,966位老年居民進行全鄉隨機抽樣流行病學調查。經排除空戶、死亡、行動不便與拒訪等因素，總計有549位65歲以上老年男女接受調查，粗回覆率為50%。由訪員以面對面的結構式問卷調查個案基本資料、生活型態、跌倒史與疾病史，並配合國際身體活動量表、簡易營養評估及認知功能量表等評估工具。最後以527位(274位男性及253位女性)有完整資料者進行統計分析跌倒盛行率及相關危險因素。

**結果：**於527位老年居民(平均年齡為75.9±6.1歲)中，過去一年曾經跌倒者有64位(12.1%)，其中重覆跌倒者有35位(6.6%)，共計162次跌倒，發生跌倒地點以戶外為主(149次，92.0%)。以複邏輯斯回歸分析顯示，現在仍飲酒者(勝算比=3.196, 95%信賴區間=1.166-8.760,  $p=0.024$ )、具營養不良風險者(勝算比=3.192, 1.440-7.072,  $p=0.004$ )、自評健康狀況不佳者(勝算比=4.349, 1.428-13.239,  $p=0.020$ )及平地走路時下肢疼痛者(勝算比=2.973, 1.452-6.085,  $p=0.003$ )為跌倒之獨立性正相關危險因子。

**結論：**偏遠地區老年居民於過去一年內有跌倒經驗者仍不在少數，且以戶外跌倒為主。本研究結果建議宜提醒老年居民多注意戶外環境安全，並針對仍有飲酒習慣者、具營養不良風險者、下肢疼痛者及自評健康不佳者等高風險族群及早評估跌倒之風險。

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**關鍵詞：**老年人、偏遠社區、跌倒、營養評估、身體活動

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# Epidemiological Survey of Falls and Associated Risk Factors in the Elderly Living in a Remote Community

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## Abstract

**Background:** Fall is an important health issue in the elderly; however, fall-related studies focusing on older Taiwanese, especially those in rural communities, remain limited. The purpose of this study is accordingly to evaluate the prevalence and associated risk factors of fall in a remote, aged community so as to help promote more effective prevention of falls.

**Method:** In 2012, an epidemiological survey by whole-district random sampling was conducted for 1,966 elderly community dwellers in Tianliao district, Kaohsiung City. After exclusion due to empty houses, death, non-ambulation, and refusal, 549 elderly residents above 65 years old participated in the study (response rate=50%). A structured questionnaire including essential demographic information, life style, history of fall, medical history along with non-invasive assessment tool such as *International Physical Activity Questionnaires*, mini-nutrition assessment and mini-mental status examination, was used during a face-to-face interview performed by well-trained staffs for each subject. Finally, a total of 527 subjects (274 males, 253 females) with complete data were enrolled for final statistical analysis.

**Results:** Of the 527 subjects (mean age=75.9±6.1 y/o), 64 (12.1%) experienced at least one episode of fall within the previous year, and 35 (6.6%) were recurrent fallers. Of the 162 falls, 149 (92.0%) episodes happened outdoors. Based on the results of logistic regression analysis, current drinking habit (OR=3.196, 95%CI=1.166-8.760,  $p=0.024$ ), at risk of malnutrition (OR=3.192, 95%CI=1.440-7.072,  $p=0.004$ ), poor self-perceived health status (OR=4.349, 95%CI=1.428-13.239,  $p=0.020$ ), and lower extremity pain (OR=2.973, 95%CI=1.452-6.085,  $p=0.003$ ) were revealed to be positive

independent risk factors of falls.

**Conclusions:** Falls, especially those occurring outdoors, in the previous year are not uncommon in the elderly living in remote areas. Attention to outdoor environment safety remains a top priority in fall prevention, and assessments on high-risk populations, notably those with current drinking habit, pain in lower extremity, poor self-perceived health status or at risk of mal-nutrition, are recommended.

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**Key words:** Elderly, Remote areas, Fall, Nutritional assessment, Physical activity

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