

某偏遠地區老年居民慢性腎臟病與 相關危險因子的流行病學調查

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摘要

背景：慢性腎臟病及透析等相關問題已經造成台灣沉重的醫療負擔。偏遠地區可能因人口高齡化的趨勢及醫療可近性較低使慢性腎臟病的易感性增加，然而相關文獻仍顯不足。本研究即針對某偏遠社區老人評估慢性腎臟病之盛行率、知情情況及相關危險因子。

方法：於2012年針對高雄市田寮區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%。由專業訪員以面對面的結構式問卷調查個案基本資料、生活型態、疾病史、國際身體活動量表並檢測手握力。另一方面，受檢者均於空腹狀態抽取血液樣本測量血清肌酸酐。進一步由MDRD 4-變項公式估計其腎絲球濾過率，並以小於60毫升/分/1.73公尺²者為慢性腎臟病第三期以上。最終以具有完整資料之274位男性及255位女性進行統計分析。

結果：受檢者平均年齡為76.0±6.2歲，符合慢性腎臟病第三期以上者有121位(22.9%)，其中有知情的比例為22位(18.2%)。以複邏輯斯迴歸模式分析，抽菸習慣(勝算比=2.22, 95%信賴區間=1.20-4.12, $p=0.011$)、較高的社會經濟地位(勝算比=2.00, 95%信賴區間=1.21-3.30, $p=0.007$)、糖尿病病史(勝算比=1.99, 95%信賴區間=1.13-3.51, $p=0.018$)及高尿酸血症病史(勝算比=7.38, 95%信賴區間=3.70-14.72, $p<0.001$)為慢性腎臟病的獨立正相關因子。身體活動量(勝算比=0.77, 95%信賴區間=0.63-0.96, $p=0.018$)和手握力(勝算比=0.96, 95%信賴區間=0.93-0.99, $p=0.01$)則為獨立負相關因子。

結論：約四分之一的偏鄉老人患有慢性腎臟病，但疾病知情比例仍僅有18.2%。抽菸、相對較高社經地位、糖尿病病史、高尿酸血症病史、身體活動量較低及握力較差者為慢性腎臟病的相關因子。本研究認為慢性腎臟病在偏鄉老人為一重要健康議題並有必要進行篩檢以提高病患知情比例。

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關鍵詞：慢性腎臟病、腎絲球濾過率、高尿酸血症、知情

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Epidemiological Survey of Chronic Kidney Disease and Associated Risk Factors in the Elderly Living in a Remote Community

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Abstract

Background/Purpose: Medical burden of chronic kidney disease (CKD) and end-stage diseases / dialysis is heavy in Taiwan. Moreover, studies concerning remote communities, which may be at greater vulnerability to CKD because of advanced aging process and medical disparity, remain limited. This study investigates the epidemiology, patient awareness and associated risk factors of CKD in the elderly residents of a remote, rural community.

Method: This is a cross-sectional survey. In 2012, 1,966 elderly community dwellers in Tian-liao district, Kaohsiung were sampled by whole-district random sampling method. After excluding the empty houses, death, non-ambulation, and refusal, 549 elderly residents above 65 years old participated in the study (response rate=50%). Structured questionnaires were inquired during face-to-face interview to collect essential demographic information, life style, medical history and physical activity (IPAQ) of each subject. Grip strength were also measured. The estimated glomerular filtration rate (eGFR) was calculated from fasting serum creatinine using the 4-variable Modification of Diet in Renal Disease (MDRD) study equation. CKD was defined as an eGFR < 60 ml/min/1.73 m². Finally, 529 subjects (274 males, 255 females) with complete data were enrolled for statistical analysis.

Results: Study subjects had a mean age of 76.0±6.2 y/o. 121 (22.9%) of them had CKD but only 22 (18.2%) were aware of it. In multiple logistic regression model (Nagelkerke R square=0.218), smoking habit (OR=2.22, CI95=1.20-4.12, *p*=0.011), higher social economic status (OR=2.00, CI95=1.21-3.30, *p*=0.011), history of Diabetes Mellitus (OR=1.99, CI95=1.13-3.51, *p*=0.018) and history of hyperuricemia (OR=7.38, CI95=3.70-14.72, *p*<0.001) were positive independent associated factors of CKD. Physical activity (OR=0.77,

CI95=0.63-0.96, $p=0.018$) and grip strength (OR=0.96, CI95=0.93-0.99, $p=0.01$) were negative independent associated factor of CKD.

Conclusions: Nearly one-fourth elderly residents of remote rural community had CKD, but the awareness is still low. Smoking habit, higher Social-economic status, history of DM, history of hyperuricemia, low physical activity and low gripping force are the associated factors of CKD. These findings address the importance of CKD in elderly residents of remote rural communities and necessity of disease screening to raise patient awareness.

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Key words: CKD, eGFR, hyperuricemia, awareness

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