臺北醫學大學 101 學年度博士班招生入學考試

研究法試題

注意事項	一、本試題共五大題，共計 100 分。 二、請將最適當的答案依題號作答於答案用卷本上。 三、試題答錯者不倒扣；題次號碼錯誤或不按順序或鉛筆作答，不予計分。

一、 在臨床試驗中，常運用到下列概念，請分析下述二子題：(30%)

1. 在隨機分配方法中，請說明，simple randomization, block randomization, stratified randomization 以及 adaptive randomization 各為何？並比較之。(20%)
2. 請說明 single-blind, double-blind, triple-blind 各為何？並比較之。(10%)

二、 在實證研究中，試說明分析下列二子題：(20%)

1. 實證研究依據美國健康照護政策及研究部(US Agency for Health Care Policy and Research Classification)之實證級別中，屬於 Ia 及 Ib 的研究類型各為何？(10%)
2. 實證研究之主要步驟為何？(10%)

三、 請詳細閱讀本研究摘要，並回答下列有關研究工具效度之相關問題。(30%)

Title: An investigation of the validity of six measures of physical function in people awaiting joint replacement surgery of the hip or knee.

Objective: To assess and compare the validity of six physical function measures in people awaiting hip or knee joint replacement.

Method: Eighty-two people awaiting hip or knee replacement were assessed using six physical function measures including the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) Function scale, SF-36 Physical Function scale, SF-36 Physical Component Summary scale, Patient Specific Functional Scale, 30-second chair stand test, and 50-foot timed walk.

Results: Convergent validity was demonstrated with significant correlations between most measures (Spearman's rho 0.22 to 0.71). The Patient Specific Functional Scale had the lowest correlations with other measures of physical function. Discriminant validity was demonstrated with low correlations between mental health and physical function scores (Spearman's rho -0.12 to 0.33). Only the WOMAC Function scale, 30-second chair stand test, and 50-foot timed walk demonstrated known groups validity when scores for participants who walked with a gait aid were compared with those who did not.

Conclusions: For those awaiting joint replacement surgery of the hip or knee, the current investigation found that the WOMAC Function scale, 30-second chair stand test, and 50-foot timed walk demonstrated the most evidence of validity. The Patient Specific Functional Scale might complement other measures by capturing a different aspect of physical function.

1. 根據上述研究摘要，請定義該研究中建構量表效度所採用之方法，包括(1)聚合效度法(convergent validity)、(2)區別效度法(discriminant validity)或稱分歧效度法(divergent validity)及(3)已知族群檢測法(known groups techniques)。(15%)
2. 請評述此研究對上題中三種建構效度檢測之進行方式及研究結果。(15%)

四、 請解釋 case controlled studies 和 cohort studies，並比較兩者之間的異同。(10%)

五、 請說明雙組、平行對照臨床試驗中，採隨機分配組別(randomization or random assignments)之意義與目的。(10%)