不同預期餘命長度對創傷性脊髓損傷時間交換與標準賭博偏好之影響

Effect of Different Length of Life Expectancy on Time Trade-off and Standard Gamble after Traumatic Spinal Cord Injury

中文摘要

目的：以時間交換法與標準賭博法來探討不同預期餘命長度對創傷性脊髓損傷者健康效用值之影響。

方法：研究樣本為 1999/7/1 至 2004/6/30 五年期間發生創傷性脊髓損傷且至五家醫學中心就醫的患者共 713 位，其中有 270 位完成電話訪談。資料收集內容包括：社會人口學資料、受傷情形、冒險行為及預期餘命分別為 10 年、20 年及 30 年的時間交換及標準賭博法的健康效用值。

結果：時間交換法的效用值會隨預期餘命長度的改變而不同，其預期餘命愈長則效用值愈低，且達到統計上顯著差異；標準賭博法的效用值在不同預期餘命中並無統計上顯著差異。另外，對時間交換法的偏好改變方面，當預期餘命 10 年增加為 20 年時，年輕人、受傷時間較短及低度冒險者，效用值改變量更低，代表願意交換的預期餘命愈多；當預期餘命 20 年增加為 30 年時，則傷害嚴重度高的效用值改變量更低。

結論：本研究結果顯示時間交換法違反固定交換比率（constant proportional tradeoff）的假設，健康效用平均值受到預期餘命長度影響產生時間偏好的問題。而在標準賭博法中，健康效用值在不同預期餘命仍然維持相同的健康效用值。

英文摘要

Purpose: This study was to evaluate the effect of different length of life expectancy on health utility, measured by time trade-off (TTO) and standard gamble (SG) methods in patients with traumatic spinal cord injury (SCI).

Methods: Patients with SCI were recruited in a 5-year period of from July, 1999 to June, 2004 by reviewing hospital records of 5 medical centers, with codes of International Classification of Diseases. Of 713 subjects who were registered, 270 completed the telephone interview. A structured questionnaire was used to collect demographics, injury-related characteristics, risk-taking propensity, TTO and SG. The TTO and SG were evaluated under three conditions of life expectancy of 10, 20 and 30 years, respectively.

Result: TTO values were significantly different among the three conditions of life expectancy and they were lower at longer life expectancy than at shorter life expectancy. On the other hand, SG values were not significantly different among the

three conditions of the life expectancy. When the life expectancy increased from 10 years to 20 years, subjects who were young people, sustained injury less than one year, and had lower risk taking levels were significantly association with lower TTO values. When the life expectancy increased from 20 years to 30 years, higher Injury Severity Score values were independently associated with more changes in TTO scores.
Conclusion: Our study suggests that proportional trade-off assumption for the TTO is violated, i.e. people may change their TTO values when life expectancy changed. On the other hand, SG values may be indifferent between different lengths of life expectancy.