

• 計畫中文名稱	失眠症之盛行率、測量、機轉及網路認知行為療法之成效評估		
• 計畫英文名稱	A Comprehensive Study of Insomnia---Prevalence, Measurements, Mechanisms and Cognitive-Behavioral Trial		
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• 研究領域	公共衛生學, 臨床醫學類		
• 研究人員	蔡佩珊,王美業,楊承憲,王淑怡		
• 中文關鍵字	失眠症; 網路調查法; 心理計量; 認知行為療法; 網路隨機臨床試驗		
• 英文關鍵字	--		
• 中文摘要	<p>一、利用網路問卷法調查原發性失眠症於不同社經階層之盛行率。 二、建立中文版匹茲堡睡眠量表在原發性失眠症患者之心理計量特性。 三、探討失眠症病人是處於生理過度興奮亦或是睡眠剝削的狀態。 四、採用隨機分配且控制組對照之實驗設計法，探討一個網路認知行為療法對於失眠症之治療成效。 本研究將利用一個創新的互動式網站來調查原發性失眠症之盛行率及其與社會經濟階層之關係，並實施實驗性的網路認知行為療法。匹茲堡睡眠量表之心理計量評估將包含再測信度、內在一致性、外在效度、區辨性及獨特性。為區辨原發性失眠症患者是處於生理過度興奮亦或是睡眠剝削的狀態，我們將比較失眠病患與健康對照組之心率變異性、敏感度、唾液可體松及認知功能。經網路施行之失眠認知行為療法的成效，將從實驗組相較於控制組，是否可降低焦慮、改善睡眠相關自我效能、改善生活品質、改善睡眠品質與型態等方面來評估。本計畫具有相當的創新性且廣泛的探討原發性失眠有關重要議題，研究成果將為未來之本土睡眠醫學相關研究奠定基礎。</p>		
• 英文摘要	<p>Individuals with chronic insomnia may be at risk for the development of disorders, such as hypertension, diabetes, or coronary artery disease. Thus, nurse scientists are in a unique position to conduct sleep-related research. This 3-year project will study individuals with primary insomnia to address the following aims: 1. To investigate the prevalence of insomnia in individuals with different socioeconomic levels with the use of Web-based survey through the internet; 2. To establish the psychometric properties of the Chinese version of the Pittsburgh Sleep Quality Index (PSQI); 3. To determine whether individuals with primary insomnia are</p>		

hyperaroused or sleep-deprived; and 4. To evaluate the efficacy of an internet-driven cognitive behavioral treatment (CBT) program to reduce insomnia in a randomized controlled trial (ICBT-Efficacy Trial). An innovative, interactive Internet site will be employed to investigate the prevalence of insomnia and its relationship with socioeconomic status, to recruit participants and deliver the experimental CBT treatment for the ICBT-Efficacy Trial. The psychometric properties that we hope to establish include test-retest reliability, coefficient alpha, external validity, sensitivity, and specificity. Heart rate variability, baroreceptor sensitivity, salivary cortisol, and cognitive performance will be compared between insomniacs and controls to determine whether individuals complaining of insomnia are hyperaroused or sleep-deprived. The ICBT-Efficacy Trial will examine the effect of a Web-based CBT program on anxiety, sleep-related self-efficacy, quality of life, and sleep quality and pattern (as determined by sleep diary and actigraphy) as compared to a waiting-list control condition. Outcome will be measured at 1- and 3-months after randomization. The possibility of conducting clinical trials or surveys on line is an attracting but relatively unexplored application of the Internet. The Internet has penetrated a great proportion of the population and thus offers the possibility of Web-based surveys and rapid recruitment of study participants for clinical trials. In addition, many components of a clinical trial, such as protocol-driven treatments, data collection, and evaluation of the treatment outcomes can be done with advanced technology via the Internet. This proposed study, including a Web-based survey, psychometric testing of a sleep questionnaire, determination of physiological mechanism for insomnia, and a self-help CBT clinical trial over the Internet, is a comprehensive study of insomnia. The current study is novel and addresses a wide range of important issues related to insomnia. Results of this study will pave the way for future research in sleep medicine in Taiwan.

Key Words: Insomnia, Web-based survey, Psychometrics, Cognitive-behavioral treatment, Internet-driven randomized controlled trial