整合糖尿病照護及病患教育系統之建置與評估

Integrating Patients Education into Diabetes Shared Care

中文摘要

隨著台灣地區醫療與公共衛生進步、平均餘命延長、人口高齡化，導致慢性病急速增加，而糖尿病更高居十大死因的第四名。糖尿病屬於不可逆之疾病，需要終生照護與復健，持續追蹤和監測，並給予適切的衛生教育(簡稱衛教)，才能防止糖尿病的惡化。所以，依病患個別病程發展的不同，分別給予相關的衛教和提醒機制是影響治療成效的重要因素之一。醫療院所一般會擔負民眾衛教的責任，但礙於人力與資源的不足，導致未能提供充分的衛教。因此本研究主要建置個人化糖尿病衛生教育網路輔助系統，利用資訊及網路科技，自動擷取醫院資訊系統的病患就醫資料，依據個別病情提供衛教，建立病患個人紀錄檔案。並透過行動電話簡訊服務在特定事件提醒病患採取適當的醫療措施，且提供自我管理機制，協助病患管理自我病情與監控。本研究發現衛教教材的多樣化，搭配多媒體動畫的說明，患者更易了解，也可減少衛教師重複性衛教的時間；病患可透過網路隨時查詢自我照護相關衛教與臨床就醫資料。而提醒機制的啟動，也使逾期未返診追蹤的病患人數減少，提高病患持續性的追蹤率。本研究亦透過實驗方法，共收案274位個案，分為實驗組及對照組，並透過病患平均就診次數與間隔次數了解糖尿病病患是否因為系統介入而發生行為的改變，以及藉由統計軟體分析兩組間醣化血色素及空腹血糖教是否有差異存在，以了解系統介入的實際功效。

英文摘要

Diabetes is the fourth leading causes of death in Taiwan. This indicates severely threatening our health. However the current reimbursement policy of the Bureau of National Health Insurance is based mainly on the volume of medical services, and not on the quality of care or patient education service. As a result healthcare providers do not devote significant resources to educating or informing patients. Empowering diabetes with self-care knowledge is therefore desirable. In this paper we describe a web-based diabetic education assistant system that can facilitate diabetic education, and remind patients to take appropriate actions on predefined conditions by sending them short messages through their mobile phones.

This research also has recruited total of 274 subjects, in which each subject has been assigned to either the control or the experimental group randomly. The study is monitored via number of hospital visits and average days between each visit for all patients to show whether diabetic patients have changed their life styles and attitudes after web-based diabetic education assistant system implementation. Moreover, the difference between the control and experimental groups can also be

seen in the difference of HbA1C and glucose AC analyzed by statistical programs. In short, the purpose of the research is to further prove the effectiveness of the web-based diabetic education assistant system.