藥師對門診病患進行口服抗凝血劑衛教之成效探討

Evaluation of a Pharmacist-Conducted Health Education Service for Outpatients on Warfarin

中文摘要

研究背景

在美國由藥師所主導之口服抗凝血劑服務，其優異的臨床貢獻已獲得證實。但就台灣而言，有關這方面之研究目前尚未十分充足；再加上台灣民眾自行服用中草藥的頻率頗高，所以對於使用口服抗凝血劑之病患而言，他們需要更完善的教育以期在藥物使用上能更安全、更有效。

研究目的

主要探討由藥師所主導之抗凝血劑病患教育是否能夠有效提升病患之用藥相關知識及其對此服務之態度及意見。並評估用藥指導對病患臨床結果之影響及衛教計劃是否符合經濟效益，同時評估在台灣建立抗凝血劑藥事服務所需克服的困難度及可行性。

研究方法

本研究之納入標準為至台北市立萬芳醫院門診藥局拿 Coumadin (warfarin)之病患，若願意接受衛教則簽署受試者同意書。整體衛教課程共分成二部份，採一對一教學方式。於用藥指導後贈送衛教手冊供病患研讀及參考。然後利用滿分一百分之知識問卷來評估衛教前後病患對此藥的認知度，且評估衛教後病患對整體衛教課程之態度及意見。病患接受衛教後，再繼續追蹤五個月，與接受衛教前對其發生出血或血栓次數之次數做一比較，並評估實際醫療花費，以計算其效益-費用比值。

研究結果

自一九九九年七月到一九九九年十月底共有六十位病患完成本研究。而衛教後知識得分較衛教前有明顯提升(所有人衛教後總分 2314 vs.衛教前 310 分, p value<0.001)。態度及意見方面，七成以上之病患較喜歡一對一教學方式。有 35(58.3%)位病人對此衛教計劃感到相當滿意，且高達 96%之患者希望往後能參與類似衛教課程。臨床結果方面，住院次數由衛教前 31 次降到衛教後 6 次(p value <0.001)，而急診次數也有相似情形(衛教前 21 次 vs. 衛教後 6 次, p value=0.006)，且衛教後可大幅降低血栓栓塞事件(thromboembolic events) (衛教前 52 次 vs. 衛教後 12 次, p value<0.001)。經費用-效益分析(cost-benefit analysis)發現"效益-費用比值"介於 3.16~6.2 之間，顯示本研究衛教計劃具備相當之經濟效益。

研究結論

從人性、臨床及經濟上三大結果而論，證實本研究衛教於臨床上實際可行。若將此模式擴展為完整之抗凝血劑藥事服務，相信會有更佳之成效。

英文摘要

Background

The clinical impact of pharmacist-managed oral anticoagulation clinic has been well documented in the United States but much less in Asian country. Due to the high

frequency of traditional Chinese herbal self-usage in Taiwan, these patients require more intensive education when they are undergoing oral anticoagulation therapy. The present study implanted a warfarin patient education program at the infancy phase of pharmaceutical care in Taiwan.

Purpose

The primary objectives of this study were to determine whether a pharmacist-conducted health education service improved the patient''s knowledge to warfarin use, and to measure patient''s opinion. The secondary objectives were to evaluate the clinical and economic impacts of the education service, and to build a preliminary model for anticoagulation management service in Taiwan.

Method

Patients who filled prescription with warfarin from the Outpatient Pharmacy at the Taipei Municipal Wang-Fang Hospital (TMWFH) were enrolled with written inform consent. Two sections of oral anticoagulation education program were completed individually and a 33-page education brochure was given. A 100-point questionnaire was used to evaluate the medication knowledge before and after accomplishment of the program. Patient''s opinion to education program was also evaluated. Patients were followed-up for 5 months after completing the education. The medical expenditure related to warfarin use before and after the education was recorded to calculate the benefit-cost ratio of the program.

Results

Sixty patients consented into the oral anticoagulation patient education program from July 1999 to October 1999 in TMWFH. Total knowledge score after education was significantly increased from 310 to 2314 ($p<0.001$). The surveillance after the program showed that more than 70% of patients preferred to be taught in detail individually. Thirty-five patients (58.3%) were very satisfied with this education program and fifty-eight patients (96.7%) expressed willingness to enroll similar patient education program later. The number of warfarin-related hospital admissions decreased significantly after education (31 vs. 6, $p<0.001$) and the number of warfarin-related emergency admissions was also lower after education than before education (21 vs. 6, $p=0.006$). The number of thromboembolic events was decreased obviously after education (52 vs. 12, $p<0.001$). The benefit-cost ratio was between 3.16 and 6.20, suggesting that the education program was economically valuable.

Conclusion

Current study demonstrated that this warfarin patient education program was clinically valuable with respect to humanistic, clinical and economic outcomes in Taiwan. A better effectiveness could be achieved by extending the range of service to anticoagulation clinic.