## 藥師走入社區對國小哮喘學童進行藥事照顧之成效探討

## **Outcomes of Pharmaceutical Care in School-Age Asthmatic Patients in Community Setting**

## 中文摘要

根據調查,民國 63 年及民國 74 年,台北市 7-15 歲中小學學生哮喘盛行率分別為 1.3 %及 5.1 %;至民國 87 年,台灣北部地區國中生哮喘盛行率為 10.2%,台北市更高達 13.0%,可 見哮喘盛行率有逐年增加的趨勢。本研究希望探討由藥師主動走入社區對學齡哮喘病患提供藥事 照顧之成效。

本研究之對象爲6至12歲患有哮喘的國小學童,收案期間爲89年5月至89年6月,由藥師主動至國小(松山區與信義區各一所小學)徵求願意參加本計劃之病患及家長,結果共收入28位病患。研究期間預計爲一年(89年6月至90年5月底),前六個月每個月定期見面追蹤,後六個月爲每兩個月以電話追蹤。研究中教導病患及家長有關哮喘疾病與用藥、吸入器使用技巧及如何使用尖峰呼氣流速計監測哮喘疾病,藉此了解病患家長對哮喘疾病與用藥認知是否提升、病患吸入器的使用技巧是否更正確、服藥配合度是否更好、病患的哮喘發作次數是否降低、病患的生活品質是否提升及病患家長對藥師所提供之服務滿意度如何。

研究期間,共有20位病患完成本研究。相較教育前,哮喘疾病與用藥認知在教育後六個月及一年都有顯著提升(P<0.001)。在定量噴霧吸入器與乾粉吸入器使用技巧方面,與教育前相較,教育後六個月明顯提升使用技巧(前者P=0.048,後者P=0.006),但追蹤一年則無顯著差別(前者P=0.104,後者P=0.136)。另外病患服藥配合度亦有明顯增加(P=0.008)。相較於教育前一年,哮喘發作次數有明顯下降(P=0.030);生活品質則也明顯提升(P=0.040)。病患家長對藥師所提供之服務滿意度在追蹤六個月及一年時,平均分數分別爲39.7±2.7分及39.4±3.4分(滿分45分),83%家長表示對藥師提供之服務感到滿意,17%家長表示可以接受。

本研究由藥師主動走入社區對學齡哮喘病患提供藥事照顧,結果顯示藥師所提供之藥事照顧是有成效的。另一方面,大部分病患家長也認爲他們更了解哮喘藥物的使用、對哮喘疾病的控制更有信心,同時也覺得受到醫療人員的尊重。

## 英文摘要

The incidence of asthma in students aged from 7 to 15 rose from 1.3% in 1974 to 5.0% in 1985 in Taiwan. Among students of junior high schools in cities of northern Taiwan, the average incidence was 10.2% in 1998, of which, it was higher in Taipei city( 13.0%).

It has been shown that pharmaceutical care provided by pharmacists is beneficial to both asthmatic inpatients and outpatients. The objective of this study is to evaluate the outcomes of pharmaceutical care in school-age asthmatic patients in community setting.

The study population of this open and self-compared study is 6 to 12 years old

elementary students with confirmed diagnosis of asthma. Information regarding disease and medications were given and techniques for proper use inhaler devices and peak flow meter were taught by the pharmacist in every visit as well. The knowledge of the disease and medications, techniques for using inhalers and parents' satisfaction of pharmaceutical care were evaluated by specific scoring systems and were statistically. Adherence to medications and the numbers of asthma attack were evaluated at the end of study as well.

Twenty-six students were eligible for this one-year study from June of 2000 to May of 2001. Only twenty students have completed six monthly follow-up visits and six monthly telephone follow-ups. Knowledge about the disease and medications improved significantly after evaluation both at six months and one year (P<0.001). Techniques for metered-dose inhalers and turbuhalers also improved significantly at sux months follow-ups (P=0.048 and P=0.006, respectively), the improvement become nonsignificant at one year (P=0.104 and P=0.136, respectively). Adherence to medications also improved significantly (P=0.008). The numbers of asthma attack reduced from 2.8 times per patients the year before the study to 1.6 times per patients at one year (P=0.030). Compared to the year before study, health-related quality of life also improved at the end of study (P=0.040). Eighty three percentage parents satisfied with the pharmaceutical care provided by the pharmacist after one year follow up.

In conclusion, the outcomes of the pharmacist-provided pharmaceutical care were beneficial to these school-age asthmatic patients in community setting. In addition, most parents have more understanding of the disease as well as feel more comfortable about the disease and more respected by the pharmacist.