INTERACTIVE SMALL-GROUP ASTHMA EDUCATION IN THE COMMUNITY PHARMACY SETTING: A PILOT STUDY

V Kritikos, CL Armour, SZ Bosnic-Anticevich
Faculty of Pharmacy, University of Sydney, Sydney, New South Wales

Purpose: To date, no small-group asthma education provided by pharmacists in the community pharmacy setting has been implemented and evaluated in Australia. The aim of this study was to implement and compare the effects of two small-group asthma education interventions (one delivered by specially trained community pharmacists (Group A) and one delivered by a pharmacist researcher trained as an asthma educator (Group B)) with usual care provided by community pharmacists (Group C) on clinical and humanistic outcomes for people with asthma.

Methods: Three pharmacies, in two distinct locations in the Sydney Metropolitan area were randomly selected to provide either Group A, B or C interventions. Pharmacists in Group A were trained and provided a small-group (5-8) asthma education program, which consisted of a single interactive educational session of 150mins duration and focused on appropriate use of medication and included 2 follow-up visits over 12 weeks. A pharmacist researcher trained as an asthma educator provided the same program (Group B) to small groups of people with asthma (5-8) in the community pharmacy. Group C pharmacists did not receive specific training and provided usual care to people with asthma, supplemented with written information. Patient data were collected for Groups A, B and C at baseline and at 6 and 12 weeks (final visit). Data for Groups A and B were also collected immediately after the education.

Results: Forty-eight people with asthma were recruited into Groups A (n=16), B (n=16), and C (n=16) and there were no significant differences between the groups at baseline. At 12 weeks follow-up there was a significant decrease in the proportion of patients with severe asthma/poor control in Groups A and B compared with Group C (56%, 44% and 50% to 25%, 13% and 50% (n=48, $p<0.05$) respectively). In Group A, the proportion of patients with optimal MDI and DPI technique improved from 9% and 0% respectively at baseline to 82% and 86% (n=11, $p<0.001$; n=7, $p=0.002$) respectively at 12 weeks. In Group B, optimal MDI and DPI technique improved from 14% and 8% respectively at baseline to 93% and 92% (n=14, $p<0.001$; n=13, $p<0.001$) respectively at 12 weeks. No change in inhaler technique was observed for Group C. At 12 weeks follow-up there were significant improvements in asthma knowledge scores (maximum score 12) in Groups A and B compared to Group C (6.0 $\pm$ 2.4, 5.9 $\pm$ 2.1 and 7.3 $\pm$ 1.4 to 10.4 $\pm$ 1.1, 10.3 $\pm$ 1.0 and 7.4 $\pm$ 1.5 (mean $\pm$ SD, n=48, $p<0.001$) respectively).

Conclusions: Small-group asthma education delivered by specially trained pharmacists is more effective then usual care in improving clinical and humanistic outcomes for people with asthma. Specially trained community pharmacists are as effective as an asthma educator in delivering small-group education.

Key Issue: The importance of effective and appropriate asthma management