

**Title of Intervention:** Community Pharmaceutical Asthma Care Program

**Intervention Strategies:** Individual Education

**Purpose of the Intervention:** To increase understanding of asthma and treatment for people with asthma

**Population:** Adults with asthma

**Setting:** Community pharmacies in British Columbia; health care facility-based

**Partners:** Pharmacists

**Intervention Description:**

- Individual Education: The enhanced care (EC) group received the same basic information as the usual care (UC) group, which included proper inhaler technique and a monthly asthma calendar/diary. The EC group also received an education session about asthma self-management as outlined in Health Outcome Pharmacists (HOP) Asthma Care Module. This involved instruction on the basic concepts of the disease, the medications being used and trigger identification and avoidance. An asthma action plan was also developed. The use of a peak flow meter was taught, calendars/diaries were provided and the participants were asked to record their peak expiratory flow rates regularly.

**Theory:** Transtheoretical Model of Change

**Resources Required:**

- Staff/Volunteers: Pharmacists, facilitators
- Training: Not mentioned
- Technology: Spacer devices, peak flow meters
- Space: Meeting space
- Budget: Pharmacists were paid \$75 for each usual-care participant and \$300 for each enhanced care participant
- Intervention: Peak flow meters, spacer devices, HOP Asthma Care Module, diaries
- Evaluation: Questionnaires

**Evaluation:**

- Design: Experimental
- Methods and Measures:
  - Questionnaires assessed quality of life and knowledge.
  - Peak flow meters measured peak expiratory flow rate.
  - Asthma diaries/calendars recorded changes in medication, days missed from work/school, emergency room visits and hospitalizations.

**Outcomes:**

- Short Term Impact: Participants in the EC group had a significant increase in knowledge.
- Long Term Impact: A significant improvement was found in the EC group for peak expiratory flow rates, asthma symptoms, drug utilization, quality of life and emergency room visits. No significant change between EC and UC was found in hospitalizations and days off of work/school.

**Maintenance:** Not mentioned

**Lessons Learned:** Specially trained community pharmacists in Canada, using a pharmaceutical care-based protocol, can produce impressive improvements in clinical, economic and humanistic outcome measures in asthma patients.

**Citation(s):**

McLean, W., J. Gillis, et al. (2003). " A study of clinical, economic and holistic outcomes influenced by an asthma care protocol provided by specially trained community pharmacists in British Columbia." *Can Respir J* 10(4): 195-202.