

Title of Intervention: Community Pharmacy Asthma Education Program

Intervention Strategies: Provider Education, Individual Education

Purpose of the Intervention: To increase pharmacists' knowledge of asthma and improve the quality of life for people with asthma

Population: People with asthma over the age of 14 and pharmacists

Setting: Community pharmacies in Malta; health care facility-based

Partners: Community pharmacies

Intervention Description:

- **Provider Education:** Pharmacists attended training over two evenings. They were given a self-study manual that contained the pathophysiology of asthma and its treatment and the details of the study. This manual was to be completed before the training sessions. Pharmacists were shown samples of educational videos on the use of inhalers.
- **Individual Education:** The interventions implemented by pharmacies focused on two issues: patient education and patient monitoring. Education addressed asthma pathology, including avoidance of triggering factors and use of inhaled drugs and peak flow meters. Verbal education and demonstration of inhaler technique were supported by written information and provision of a short videotape for home viewing. Patients recorded peak expiratory flow rate and asthma symptoms in the morning and evening on a diary card.

Theory: Not mentioned

Resources Required:

- **Staff/Volunteers:** Educators, pharmacists
- **Training:** Pharmacists received education
- **Technology:** Peak flow meters
- **Space:** Meeting space
- **Budget:** Not mentioned
- **Intervention:** Peak flow meters, diary cards, educational materials, videos, self-study manual
- **Evaluation:** Questionnaires

Evaluation:

- **Design:** Randomized controlled trial
- **Methods and Measures:**
 - A Quality of Life questionnaire was administered to participants.
 - Peak flow meters measured participants' peak expiratory flow rate.
 - Structured participant interviews assessed hospitalizations and drug utilizations.
 - Observations were made of inhaler techniques.

Outcomes:

- **Short Term Impact:** The intervention group indicated an improvement in inhaler technique and relationship with pharmacists over the intervention. However, the peak expiratory flow rate, number of days missed of work, and self reported compliance with inhalers was not significantly different.
- **Long Term Impact:** The intervention group reported an improvement in frequency of symptoms. There were significantly fewer self-reported hospitalizations in intervention participants. There was also an improvement in quality of life in the intervention group.

Maintenance: Not mentioned

Lessons Learned: Pharmacists need to become more proactive in terms of integrating themselves more fully into chronic disease management. A community-based pharmaceutical care program was appreciated by the

participants and had a positive impact on the vitality of people with asthma, inhaler technique and peak expiratory flow.

Citation(s):

Cordina, M., J. C. McElnay, et al. (2001). "Assessment of a community pharmacy-based program for patients with asthma." *Pharmacotherapy* 21(10): 1196-203.