



Asthmatic Patients and Compliance with Chronic Medications



RMED COPC

Background

According to the American Lung Association, the prevalence of asthma has grown from 34.8 persons per thousand in 1982 to 55.2 persons per thousand in 1996 – a 59% increase. It now ranks as the eighth most prevalent chronic disease in the US. If not managed carefully and treated quickly, the disease can be fatal.

Background

There were 5,438 deaths from asthma recorded in 1998, up from 2,598 in 1979. Many of these deaths could have been prevented with strict adherence to chronic medications with follow-up and education by health professionals. The purpose of this research was to explore the realm of compliance with chronic asthma medications and patient education in regard to their asthma.

Methods

- Research took place in the community of Belvidere, Illinois
- A survey was utilized for data collection (English and Spanish versions were available)
- Patients with a prior diagnosis of asthma were presented the survey on the day of their appointment
- If the survey was completed, they placed it in an envelope at the front desk
- There were no identifiers on the survey, and the patients assumed no risk

Demographics

- Age – mean 43.5 years (sd = 16.9)
- Gender – 87% Female : 13% Male
- Race – 71% White : 26 % Hispanic : 3% African-American
- Education – mean of 12.0 yrs in school (sd = 2.2)
- Marital Status – 61% married : 19% single
13% divorced : 7% widowed

Asthma Characteristics

- On average, length of time with diagnosis of asthma: **5 – 10 yrs**
- **81%** were on daily asthma meds
- Average number of hospitalizations related to asthma: **1.0 (sd = 1.4), range 0 - 5**
- **16%** measured peak flows at home
- Perception of asthma control was **between adequate and good**
- Perception of overall health status was **between good and very good**

Comparison of number of hospitalizations with medication use and education

Med use vs. # of Hosp *	N	Mean # of Hosp	sd
Never miss doses	6	0.2	0.4
Occas miss doses	13	0.9	0.9
Often miss doses	6	2.8	1.8

Educ vs. # of Hosp **	N	Mean # of Hosp	sd
Pts with ≤ 12 yrs educ	22	1.4	1.5
Pts with > 12 yrs educ	9	0.2	0.7

* p = 0.001

** p = 0.027

Discussion

- Lack of adherence to chronic medications with regard to asthma increases number of hospitalizations resulting in lower quality of health and well-being and higher medical care costs
- Patients with lower levels of education may need more information and counseling regarding their asthma and its impact on overall health

Discussion

- Although patients saw their asthma control as adequate to good, they saw their health status as good to very good, thus patients may not understand the implication of asthma on their health
- Since the use of peak flow meters in this population was only 16%, more widespread monitoring may lead to better asthma control

Future Directions

- It may prove useful to replicate this study in other settings including making comparisons between rural and urban populations
- The introduction of community support groups for patients with asthma may greatly increase education with regard to their disease