



Missed Lessons of the Lungs: What Communities Don't Know about COPD and Asthma

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INTRODUCTION :

• Chronic obstructive pulmonary disease (COPD) and asthma are common, high-burden airway diseases. Their outcomes depend on medication but also on early recognition, vaccination, risk factor modification, and daily self-management.

AIM :

To investigate and assess community knowledge in order to develop educational and awareness programs.

METHODS AND RESULTS:

• A cross-sectional study was conducted among adults during a public event .
• Demographic data, smoking status, symptoms, and spirometry results (MIR Spirobank II) were collected.
• Knowledge about COPD and asthma was assessed, and responses were coded as correct or incorrect and compared across subgroups.

RESULTS:

Table 1. Demographic characteristics of the sample, N=77

Variable	Value
Study design	Cross-sectional survey
Setting	Public event
Sample size (n)	77 participants
Mean age (years)	50.2 ± 16.6
Sex (male)	57.0%
Data collected	Demographics, smoking, symptoms
Spirometry device	MIR Spirobank II

Table 2. Key symptom prevalences by diagnosis (selected thresholds)

Symptom (threshold)	Healthy (n=61)	Asthma (n=8)	COPD (n=8)	p-value
Sputum (>2)	21.3%	12.5%	62.5%	0.021
Chest tightness (>2)	18.0%	0.0%	37.5%	0.048
Low energy (>4)	11.5%	37.5%	12.5%	0.042
Low energy (>5)	4.9%	25.0%	0.0%	0.038
Sleep disturbance (>2)	36.1%	25.0%	25.0%	0.317

Table 3. COPD Knowledge Questionnaire

COPD Knowledge Questionnaire	% of correct answers
People with COPD should get a pneumonia shot.	16%
Using oxygen at home can help people with COPD live longer.	35%
COPD medicines prevent the disease from getting worse.	10%
Patients can stop taking their inhaled COPD medications when symptoms improve.	3%
People with COPD often have a chronic cough.	25%
COPD can be prevented.	27%
People with COPD should get a flu shot every year.	8%
Patients should use their COPD inhalers only when they cannot breathe.	0%
COPD can be reversed.	0%

Table 4. Asthma Knowledge Questionnaire

Asthma Knowledge Item	% of correct answers
Asthma is hereditary	24.7%
Allergies/eczema increase asthma risk in children	46.8%
People with asthma always have difficulty breathing	20.8%
Asthma can only be diagnosed with a breathing test	26.0%
Asthma can be diagnosed with a blood test	27.3%
Asthma medicines can cause dependence	26.0%
Inhaled steroids are dangerous	26.0%
Colds are a major cause of asthma attacks	32.5%
Cockroaches/mice in the home can trigger asthma attacks	29.9%
Children usually outgrow asthma	16.9%
If no asthma attacks, asthma is gone	31.2%

Note: In Tables 3 and 4, we present the items for which less than 50% of the total respondents provided incorrect answers.

DISCUSSION:

• This community-based survey demonstrates pervasive gaps in respiratory disease knowledge across the public, with a striking observation that people carrying a new diagnosis of asthma or COPD did not outperform healthy peers on core items.
• Our COPD findings accord with literature showing generally poor public awareness and persistent misunderstandings even among those with established disease

CONCLUSIONS :

• Critical misconceptions about COPD and asthma persist across the community, even among patients.
• Disease-specific, literacy-sensitive, co-produced education in community and primary-care settings isurgently needed.

References:

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