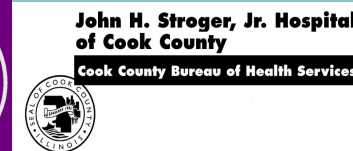


Predictors of depressive symptoms in an urban community-based adult asthma cohort

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Abstract

Rationale: There is emerging evidence of an association between depressive symptoms and asthma. We sought to characterize sociodemographic predictors of depressive symptoms in an urban adult cohort of asthmatics.

Methods: Adults aged 18-40 with persistent asthma were enrolled at community sites following an elementary school-based screening of families for asthma using population-proportionate sampling. Sociodemographic variables including self-reported education and annual household income (<\$15K, \$15-30K, \$30-50K and >\$50K), and responses to the Center for Epidemiologic Studies Depression scale (CES-D) were obtained from a baseline face-to-face interview. A CES-D > 16 is commonly used as a cut-point to describe individuals with a higher likelihood of clinical depression.

Results: 353 adults were enrolled, predominantly women (78%) with a mean age of 30.9 years (SD 6.1). Self-reported race-ethnicity was African American (52%), Hispanic (28%), Caucasian and Asian (15%), and mixed (4%). Most graduated from high school (83%). Depressive symptoms were common: the average CES-D was 16 (SD 11). Lower income was independently associated with a higher odds of CES-D score >16 (AOR 1.5, 95% CI 1.2-1.8, p=.001), as was female gender (AOR 2.1, 95% CI 1.2-3.8, p=.01). Education level and race were not independently associated with higher depressive symptoms. The effect of income on CES-D scores was particularly pronounced in men.

Conclusions: Depressive symptoms are common in adults with asthma, and more common in women and people with lower incomes. It is likely that depressive symptoms play a significant role in lower quality of life in adult asthmatics. Research to explore the direction of the relationship between associates of depressive symptoms is needed.

NB: The data presented on this poster are from analysis of a complete dataset

Background and Objectives

Depressive symptoms:

- are common in adults,
- more common in those with chronic illness and the poor,
- and are often associated with poorer health status.

In a cohort of community-derived adult asthmatics, we sought to determine the socioeconomic and psychosocial predictors of depressive symptoms.

Methods

Setting and Design:

- Cross-sectional survey, face-to-face interviews
- Population proportionate sampling of Chicago elementary schools to identify children and adult household members with asthma

Eligibility:

- 18-40 years, English language, agree to periodic interviews over 2 years
- Physician-diagnosed asthma requiring medication use >8 weeks in the past 12 months

The Chicago Initiative to Raise Asthma Health Equity (CHIRAH) is funded by: NHLBI 1 U01 HL072496-04

Methods-continued

Predictors:

- Demographics-age, sex, self-described ethnicity
- Education/literacy: ordinal variable from 1 (less than high school education and low score on Rapid Estimate of Adult Literacy in Medicine {REALM}) to 4 (college graduate with highest REALM score)
- Household size-number of people living in house past 6 months
- Work for pay-dichotomous yes/no
- Income: pre-tax household income: <\$15K, \$15-30K, \$30-50K, >\$50K
- Insurance status-private, Medicaid, self-pay
- Psychosocial:
 - racial discrimination-sum of affirmations on 6-item modified Experience of Discrimination Questionnaire (EDQ, Krieger N)
 - social support (average score on 8-item asthma-specific support scale created by our team by Delphi process, ascertaining how often a person has support needed)
 - negative life events in past 6 months (from 63-item CRISYS, Shalowitz M)

Outcomes:

- depressive symptoms (score on 60-point Centers for Epidemiologic Studies-Depression scale {CES-D})

Results: Sample Characteristics of 353 adults

	N (%)
Female	276 (78)
Race/Ethnicity: African-American	184 (52)
Hispanic	99 (28)
Other	54 (12)
Education: < High School	60 (17)
High School graduate	236 (67)
College Graduate	56 (16)
Household Income: < \$15K	86 (24)
\$15-30K	84 (24)
\$30-50K	64 (18)
>\$50K	97 (28)

	N (%)
Age: median in years (range)	32 (18-41)
Insurance status: Self pay	45 (13)
Medicaid	145 (41)
Private	159 (45)
Severity:	
Hospitalized with asthma, past 12 m	46 (13)
Emergency room visit, asthma, past 12m	143 (41)
Use of inhaled corticosteroids	178 (50)

Results

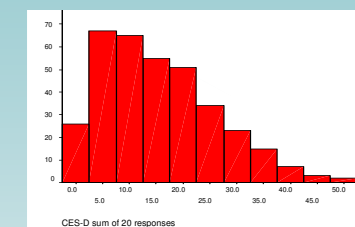
CES-D: 20 questions about depressive symptoms in past 14 days

responses 0 (rarely) to 3 (feel that way most days)

16 often used as cut-point;

22 for major depression

CHIRAH ADULTS: mean 15.8, sd 10.9



Socioeconomic/psychosocial predictors of CES-D (model R²= .34)

predictor	P	Coefficient
Female	<.01	+3
Negative life events past 6 months	.02	+1/event
Lower social support	<.01	+2.5/point decrease on 5-point scale
Not working for pay	<.01	+3

Conclusions

In this community-derived cohort of adult asthmatics:

-depressive symptoms were common

-they were more frequently experienced by

women and the unemployed

those who experienced more negative life stressors

and those with less perceived asthma-specific social support.