

PREVALENCE OF DEPRESSIVE SYMPTOMS AMONG ADULTS WITH ASTHMA.  
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**Background:** The prevalence of depression is increased in certain chronic conditions but has not been well studied in asthma. We estimated the prevalence of depressive symptoms (DEP\_SX) among a group of adults with asthma. **Methods:** We analyzed cross-sectional data from an ongoing study of adults with asthma surveyed by telephone (n=439). The CES-D (score range 0-60) was used to measure depressive symptoms. Individuals with DEP\_SX (CES-D  $\geq 16$ ) were identified. To identify independent risk factors for DEP\_SX, we used multivariate regression analyses with the following independent variables: age, sex, race, education, # comorbid conditions, and severity of asthma score. A second set of analyses was conducted adding the Physical Component Score (PCS) of the SF-12, a measure of physical functioning, as an independent variable. **Results:** 29% (n=129) had DEP\_SX (CES-D  $\geq 16$ ). Based on multivariate analyses, risk factors for DEP\_SX were current smoking (OR=3.0 [95% CI 1.3, 7.3]), more severe asthma (OR=1.06 [1.02, 1.11] per 1-pt increase), presence of  $\geq 2$  comorbid conditions (2.4 [1.2, 4.7]), female gender (1.8 [1.1, 3.2]), and age < 45 years (2.0 [1.2, 3.3]). Adding PCS-12 improved the predictive model significantly ( $\chi^2$  for difference in models = 22.9, p < .001). In the model with PCS, only lower PCS (poorer function; OR=0.94 [0.91, 0.96] per 1-point decrease in PCS), current smoking (3.0 [1.2, 7.4]), and younger age (2.1 [1.2, 3.6]) were significant predictors of DEP\_SX. In this model, asthma severity was not significantly related to DEP\_SX. **Conclusions:** DEP\_SX appear to be significantly more common among adults with asthma than among the general population. Severity of asthma is a significant risk factor for DEP\_SX, although the effect of severity is mediated by physical functioning. Smoking and younger age are also independent risk factors for DEP\_SX. Health care providers should consider screening their patients with asthma for depression.

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#### CHARACTERISTICS OF STRESS-COPING ON ALS, ASTHMATICS, COPD AND OLD TUBERCULOSIS

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**Purpose:** The purpose of this study was to identify characteristics of cognitive appraisal of stress and coping responses on ALS, Asthmatics, COPD and Old Tuberculosis. **Methods:** Data from 112 outpatients from one respiratory facility and one Hospital for Neurology in Tokyo JAPAN were analyzed. Cognitive Appraisal of Stress was measured by the Cognitive Appraisal of Stress for Respiratory Care (CASR)(Konishi, 2000). Coping Responses were measured by the Jalowiec Coping Scale (JCS)(Jalowiec, 1988). **Results:** "Restrictions" Stress was significantly higher on ALS and Old Tuberculosis. "Changes in Situation" Stress was significantly lower on Asthmatics. "Beliefs of Self-Management" Stress was significantly lower on ALS. "Estimation by Others" Stress was significantly higher on ALS. **Conclusions:** Findings indicated differences of Stress-Coping characteristics in respiratory care between Motor Neuron Disease and Lung Diseases.

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#### THE EFFECT OF PSYCHOLOGICAL PROFILES OF ASTHMATIC SOLDIERS ON THEIR MILITARY PERFORMANCE

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Six percent of the soldiers enrolled in military service in Israel suffer from asthma. Military service exposes soldiers to various physical and psychological stresses that can affect asthma severity. This study aimed to identify which personality profile predicts successful completion of military duty among 206 asthmatic soldiers with an average of 14 years' disease history. Two years after enrollment, and after having been medically evaluated at the time of recruitment for mandatory military service, they all completed a battery of psychological questionnaires for evaluating their mental stability and attitudes toward health (by self-esteem, copers vs. avoiders - Miller et. al., Total pessimism, Attitude/Adaptation to the disease questionnaires), a clinical profile questionnaire and a questionnaire for self-evaluation of their military medical profile once at recruitment and again after 2 years of service. **Results:** Before enrolment the distribution of asthma severity self-perception was mild 8.1% (Mi.), moderate (Mo.) 48.4 %, and severe (S.) 43.5%. After two years of active duty, the distribution was Mi-22%, Mo-35%, and S-43%. Significant correlation between an "avoider" personality (high self-esteem and low pessimism) and improvement of clinical state showed Mo. (P<0.005). The incidence of "avoider" personality was significantly higher in Mi. (73%) compared to Mo. (58%) and S. (39%)(P<0.005). The subjective belief of an association between psychological stress and the appearance of an asthmatic attack was low in Mi.-13% compared to Mo.-42% and S.-68%(P<0.005). **In conclusion,** an "avoider" personality profile have a better initial advantage that contribute to the ability of the asthmatic soldiers to adapt to stressful military duties without clinical deterioration.

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CONTROLLING ASTHMA SYMPTOMS TO CONTROL ANXIETY  
Renata A.Laurino; Viviane Barnabe, Cristina H.F. Fonseca-Guedes, N Alberto Cukier, Milton A. Martins, Rafael Steilmach., Maria P. T. N. Assistance and Research in Asthma, School of Medicine, University Brazil

**Rationale:** Uncontrolled asthma increases anxiety symptoms. To modulate asthma symptoms.

**Objective:** To correlate asthma treatment with panic and agoraphobia. **Methods:** 20 clinically persistent asthmatic patients were prescribe treatment of asthma, preconized from EPR2 (corticosteroid and long acting beta2 agonist). Before (T=0) and after (T=3 months) treatment, patients were quality of life (QoL Junnipers' questionnaire), in psychological parameter Anxiety Scale(SAS) and diagnostic criteria of the DSM-III-R, in Asthma Diary Evaluation (AE), Lung Function and Clinical Evaluation (GIN Way ANOVA and Paired t test were used to analyze the data.

**Results:** A significant remission of anxiety symptoms (p=0.007) was observed. The DSM-III-R variability showed an improvement in status of anxiety (p results showed a clinical. VEF1(p=0.002), CVF (p=0.001), VEF1/CVF (p=0.003) improvement. Patients show reduction in nocturnal cough (p<0.001), use of  $\beta_2$ -agonist (p=0.018) and increase in peak-flow value. The QoL showed improvement in all domains after treatment (p<0.05)

**Conclusion:** Asthma clinical improvement leads to remission of anxiety symptoms. FAPESP, Laboratory of Medical Investigation

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#### PSYCHIATRIC ILLNESS AND MECHANICAL VENTILATION

Murali G, Goldberg S, Walkenstein M, Lippmann M. Pulmonary-Critical Care Unit, Albert Einstein Medical Center, Philadelphia PA. **Introduction:** The impact of underlying psychiatric illness on acute respiratory failure has not been characterized. We hypothesize that patients with psychiatric disorders may have prolonged mechanical ventilation (MV) and weaning periods along with a longer ICU length of stay. **Methods:** Retrospective analysis of 73 patients with acute respiratory failure requiring MV between Nov 2000 and May 2001 was conducted. 35 patients (Group A) with respiratory failure and psychiatric illness such as schizophrenia, bipolar disorder, depression / anxiety were studied. 38 patients without psychiatric illness (Group B) were the control group. Reasons for ICU admission for all patients were acute exacerbation of COPD, pneumonia or pulmonary edema. Simplified Acute Physiology Score II was assessed for patients upon admission to the ICU. Patients with drug-overdose, stroke, dementia and delirium were excluded. Cox proportional hazard model was used for regression adjusted for sex, age and SAPS II were employed for data analysis

	Group A n=35	Group B n=38
Median ICU LOS, days	6	5
Mean SAPS II score	36.8	37.5
Median MV days	3	4
Median wean days	1	1
Total self extubations	10	10
Total reintubations	11	12
Total deaths	1	4

**Conclusions:** No significant difference was noted when compared for ICU length of stay, ventilator days, weaning periods, self-extubations or mortality in patients with psychiatric disorders compared to control subjects

This abstract is funded by:

#### THE IMPACT OF A COMBINED COGNITIVE-BEHAVIOURAL TREATMENT AND ASTHMA EDUCATION PROGRAM FOR WOMEN WITH ASTHMA AND CO-EXISTING PANIC DISORDER

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The results of studies have shown a higher than normal prevalence rate of panic disorder (PD) in adults with asthma. There is strong research evidence to suggest that the autonomic arousal associated with high anxiety and PD can exacerbate or worsen asthma symptoms in many people with asthma. The overlap of symptoms common to both asthma and PD makes it difficult for asthmatics with PD to self-monitor and manage their asthma. The purpose of the study was to examine the impact of a combined cognitive-behavioural treatment and asthma educational intervention (CBAE) for adults with asthma and PD. Twenty women, mean age 39 years ( $\pm 11.2$  years) with confirmed diagnosis of asthma were assigned to a treatment condition (n=15) or a delayed treatment control condition (n=10). The results of a series of repeated measures analysis of variance procedure with post-hoc Tukey Tests showed statistically significant improvement in mean scores only after treatment for three asthma outcomes: symptoms attributed to asthma episodes, peak flow, and asthma specific quality of life (p<0.05). Also, significant improvement only after treatment was shown on the mean scores for PD outcomes: anxiety, and number of panic attacks (p < 0.05). Compared to pre-treatment scores at 6 month follow-up, all of the treatment gains remained statistically significant for peak flow and asthma specific quality of life. None of the comparisons between treatment scores and 6 month follow-up were statistically significant on any of the other variables. Further study is needed, using longer term follow-up, and a broader spectrum of physiological and psychological measures to determine long term impact of this CBAE on asthma and PD outcomes.

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ABSTRACTS

2002 International Conference

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This special supplement of the *American Journal of Respiratory and Critical Care Medicine* contains abstracts of the scientific papers to be presented at the 2002 International Conference. The abstracts appear in order of presentation, from Sunday, May 19 through Wednesday, May 22 and are identified by session code numbers. To assist in planning a personal schedule at the Conference, the time and place of each presentation is also provided.

## Adult Asthma as a Predictor of Work Loss and Disability

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*Social and Economic  
Consequences of Workplace Illness  
and Injury*  
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### Publications

Eisner MD, Yelin EH, Henke J, Shiboski SC, Blanc PD: Environmental Tobacco Smoke and Adult Asthma: The Impact of Changing Exposure Status on Health Outcomes. *Am J Respir Crit Care Med*, in press, 1998

Eisner MD, Yelin EH, Smith S, Henke J, Blanc PD: Impact of Environmental Tobacco Smoke on Asthma Severity. *J Invest Med* 46:97a, 1998 (Abstract)

Eisner MD, Katz PP, Yelin EH, Henke J, Smith S, Blanc PD: Assessment of asthma Severity in Adult Asthmatics Treated by Family Practitioners, Allergists, and Pulmonologists. *Am J Respir Crit Care Med* 157:164, 1998

Blanc PD, Katz PP, Henke J, Smith S, Yelin EH: Pulmonary and Allergy Subspecialty Care in Relation to Treatment, Services Utilization, and Health Outcomes among Adults with Asthma. *West J Med* 167:398-407, 1997