

Correlation of Psychological Status with Quality of Life in Patients with Chronic Obstructive Pulmonary Disease

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PURPOSE: This study investigates the relationship of demographic characteristics, anxiety, depression and quality of life (QOL) in Taiwanese patients with chronic obstructive pulmonary disease (COPD). **METHOD:** Outpatients with a primary diagnosis of COPD (N = 94) were recruited from two teaching hospitals in Taipei, Taiwan. Patients were interviewed to obtain information about demographic characteristics, psychological status, and QOL. Pulmonary function (FEV₁/FVC) was obtained from medical records. The Symptom Checklist 90 Chinese version (SCL-90R) was used to measure anxiety and depression and the Medical Outcome Study Short Form (SF-36) to measure psychological well-being (MCS) and physical function (PCS) QOL. Patients were 20-89 years old (x=64.4, SD=13.02); 83.1% male; 71.3% had moderate to severe pulmonary obstruction. **RESULTS:** The mean anxiety score was 15.57 (SD= 4.49) and depression score was 30.86 (SD= 5.77). According to SCL-90R scores, 16% of the patients were anxious, and 66% of the patients were depressed. Anxiety and depression differed among the four educational groups [F(3, 90)= 3.64, p= .02; F(3,90) = 4.06, p< .05]. Patients with no formal education had significantly higher depression and anxiety scores than those with college education (Scheffe's test, p's< .04). Depression was greater among those who did not work [F (1, 92) = 12.31, p< .05]; anxiety did not differ between the groups. Age was not related to anxiety [r(94) = -.132] or depression [r (94) = -.110] scores. Age, education, and working status predicted 9.6% of the variance in anxiety [F(4,89) = 3.47, p=.011]. and 22% of the variance in depression [F(4, 89) = 7.55, p < .001]. Anxiety and depression were negatively related to MCS [r's (94)= -.41, -.49, p's< .01]. Depression was negatively associated with PCS [r(94) = -.23, p<.05]. Age, education, and work status predict 1% of the variance in MCS [F(4,89) = .734, p .57] and 15% of the variance in PCS [F(4,89) = 5.226, p = .001]. Depression and anxiety added to the prediction of MCS beyond the effects of work status, education, and age but not of PCS [MCS: F change=16.64, p< .001; PCS: F change= .33, p= .722] explaining 25% of the variance in MCS and 14% (adjusted R²) of the variance in PCS. **CONCLUSION:** Many of the COPD patients experience depression an/or anxiety. Low education, older age and not working predict anxiety and depression among Chinese COPD patients. Anxiety and depression add to the prediction of MCS beyond the effects of these demographic characteristics. In Taiwan it is important to look for depression and anxiety among older COPD patients, especially those who are uneducated and do not work. Interventions to decrease anxiety and depression may improve QOL in this population.

