

**Association Between Symptoms of Anxiety and Depression and BMI in Primary Care Patients: a Cross Sectional Study.**

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**INTRODUCTION** - Recent research exploring the relationship between BMI and symptoms of anxiety and depression have reported conflicting results. Changes in common molecular pathways could be the basis of this association. Primary care represents an interesting setting for exploring this comorbidity, given the high prevalence of psychiatric symptoms displayed by patients.

**AIM** - To measure the association between BMI and symptoms of anxiety and depression in primary care patients.

**METHODS** - Cross-sectional study. Evaluation of all consecutive women undergoing a GP consultation in a Northern Italy practice. Exclusion criteria: age <40 or >80; use of antidepressants or antipsychotics medication; previous stroke or heart attack; psychosis or major depression; obesity due to hereditary. Psychometric assessment: HADS (Hospital Anxiety and Depression Scale). Anthropometric measures: weight and height. Statistical analysis: SPSS. Whole sample stratified by age on the basis of literature data about the prevalence of obesity.

**RESULTS** - 209 subjects examined (84 men and 125 women). Of those, 76 (36.7%) were overweight and 60 (29.1%) obese. BMI statistically correlated with anxiety ( $\beta$ (SE)=.54(.12),  $p$ =.00) and depressive symptoms ( $\beta$ (SE)=.32(.09),  $p$ =.03), also after stratification by age, especially in females.

| Female Sample | Statistically significant associations between BMI and.. |                                 |
|---------------|--|---------------------------------|
|               | HADS-Anxiety subscale score                              | HADS-Depression subscale score  |
| Age Group     |  |                                 |
| 40-80 years   | $\beta$ (SE)=.56(.14), $p$ =.00                          | $\beta$ (SE)=.4(.11), $p$ =.03  |
| 40-70 years   | $\beta$ (SE)=.67(.19), $p$ =.01                          | $\beta$ (SE)=.64(.1), $p$ =.01  |
| 40-65 years   | $\beta$ (SE)=.67(.2), $p$ =.02                           | $\beta$ (SE)=.71(.12), $p$ =.02 |
| 40-60 years   | $\beta$ (SE)=.78(.16), $p$ =.01                          | $\beta$ (SE)=.71(.09), $p$ =.02 |

**CONCLUSION** - BMI has a critical value in predicting the presence of anxious and depressive symptoms, especially in females. Further studies could examine the pathophysiological reasons for such association.