THE RELATIONSHIP OF ASTHMA AND GENERALIZED ANXIETY DISORDER IN ADULTS
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OBJECTIVE: To determine the association between asthma and generalized anxiety disorder for adults utilizing a PBM. METHODS: Adult participants (age 18–65 years) were retrospectively identified in Caremark’s PBM database and assessed for asthma and generalized anxiety disorder (GAD) from January 2002–September 2002. Using pharmacy algorithms, asthmatic participants and non-asthmatic participants were identified and compared as having GAD where anxiety medication supply exceeded 27 days. Sub-analysis of the asthma population compared the utilization of specific drug classes to the association of anxiety disorder. All populations were compared using odds ratio analysis. RESULTS: A total of 4,238,840 participants (58.5% female) were evaluated over the study period; 205,964 (4.86%) were identified as being asthmatic (60.2% female, mean age 51.5 years, std 15.7 years); 210,972 (4.98%) of the study population were being treated with anti-anxiety medications; and 16,912 (0.4%) of the participants were treated with both. Asthma was associated with a significant increased likelihood of anxiety disorder (OR: 1.77; 95% CI: 1.74 to 1.80). Treatment with steroid inhalants and/or leukotriene modulators was associated with a significant decrease in the likelihood of anxiety disorders among asthmatics (OR: 0.89; 95% CI: 0.87 to 0.92). While treatment with asthma combination medications was associated with a higher significant increased likelihood of GAD among asthmatics (OR: 2.22; 95% CI: 1.72 to 2.86). CONCLUSION: These findings are consistent with previously published self-reported data showing an association between asthma and GAD. In this study, participants treated for asthma were found to be 77% more likely to be treated for GAD than the general non-asthmatic population. Participants using steroid inhalants or leukotriene modulators were 11% less likely to be treated for GAD than other asthmatics. The use of asthma combination therapy was associated with 120% increased likelihood of GAD treatment, possibly indicating the severity of the asthma condition is correlated to an increased likelihood of GAD. Increased attention needs to be placed on the management of anxiety as a comorbidity of asthma.