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[American Thoracic Society](#)

Study links asthma and post-traumatic stress disorder

For the first time, a study has linked asthma with post-traumatic stress disorder (PTSD) among adults in the community. The study of male twins who were veterans of the Vietnam era suggests that the association between asthma and PTSD is not primarily explained by common genetic influences.

The study included 3,065 male twin pairs, who had lived together in childhood, and who had both served on active military duty during the Vietnam War. The study found that among all twins, those who suffered from the most PTSD symptoms were 2.3 times as likely to have asthma compared with those who suffered from the least PTSD symptoms.

The research was published in the first issue for November 2007 of the American Journal of Respiratory and Critical Care Medicine, published by the American Thoracic Society.

The study included both monozygotic (identical) twins, who share all the same genetic material, and dizygotic (fraternal) twins, who share only half of the same genetic material. “If there had been a strong genetic component to the link between asthma and PTSD, the results between these two types of twins would have been different, but we didn’t find substantial differences between the two,” said lead researcher Renee D. Goodwin, Ph.D., M.P.H., Assistant Professor of Epidemiology at the Mailman School of Public Health at Columbia University in New York City.

Several other studies have found a relationship between asthma and other anxiety disorders, Dr. Goodwin noted. This new research also confirmed previous findings that linked asthma with a higher risk of depression. No one knows the reason for the association between asthma and mental disorders, she said. Asthma could increase the risk of anxiety disorders, or anxiety disorders might cause asthma, or there could be common risk factors for both asthma and anxiety disorders. Our study found the association between asthma and PTSD does not appear to be primarily due to a common genetic predisposition.

The researchers found the association between asthma and PTSD existed even after they took into account factors such as cigarette smoking, obesity and socioeconomic status, all of which are associated with both anxiety disorders and asthma.

It is conceivable that traumatic stress, which has been associated with compromised immune functioning, leads to increased vulnerability to immune-system-related diseases, including asthma, Dr. Goodwin and colleagues wrote. Alternatively, it may be that having asthma places adults at increased risk for PTSD as it increases the likelihood that they will be exposed to a traumatic situation because they have a life-threatening chronic medical condition.

The findings suggest that a person with asthma who experiences a traumatic event may benefit from seeking professional help, because they could be more vulnerable to developing post-traumatic stress disorder, Dr. Goodwin said.

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