Physical and Mental Comorbidities of PTSD in WTC Responders

Potential Impact: This study brings us closer to understanding how chronic posttraumatic stress disorder (PTSD) might cause lasting changes to the body and mind. Understanding comorbidity (when two diseases are present) can be important when managing care and providing treatment. This study may help to find negative and positive side effects of some treatments, and may also help responders and their caregivers determine what to plan for in their future. Our study may help to get responders to engage in health-beneficial behaviors as they age.

Research: There is a lot of evidence to suggest that what we do throughout our lives ripples out and changes what we can expect to happen later in life. The men and women who responded to the World Trade Center (WTC) events were physically and psychologically battered by their experiences. Some have developed chronic PTSD. We think that PTSD may have impacts on physical health. This research seeks to examine whether PTSD might play some role in harming the body and mind. We also seek to understand what it means to be an aging WTC responder.

Population: We work closely with the men and women who responded to the WTC events of 9/11 and attend monitoring at the Stony Brook University clinics.

Findings: Symptoms of PTSD can increase over time among some responders experiencing aging-related problems. Diagnoses of WTC-related conditions can worsen PTSD symptoms. WTC responders are more likely to have worse memory than others of the same age and sex. We linked chronic PTSD with changes to changes in how cells function at the RNA level. Symptoms of PTSD are often comorbid with symptoms of breathing conditions like cough and acid reflux. PTSD was also linked with changes in personality. PTSD symptoms have had a fairly devastating impact on family functioning for some responders. Some responders with PTSD appear to be walking slower and having more difficulties getting out of a chair, which may continue to get worse as people get older.

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