DONALD AND BARBARA
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AT HOFSTRA/NORTHWELL

The 2003 invasion of Iraq, and resulting conflicts in the Middle East, have led to the longest, prolonged military deployment in U.S. history. One million troops have served in Iraq and Afghanistan during the eighteen-year conflict. Now, 26% of 150,000 military personnel in the VA Burn Pits Registry self-report new onset respiratory symptoms. We noted 14.5% of New York-based soldiers developed new onset asthma post deployment.

Airborne hazards may account for new onset lung diseases. Soldiers inhale dust storms, pollen, mold, and improvised explosive devices leading to shock waves in the lung and metal deposition. Blast overpressure from shock waves induces traumatic brain injury and post-traumatic stress disorder, PTSD, which, by itself is linked to asthma. Most importantly, these troops are exposed to burning trash in open air "burn pits." Uniformly, trash was lit on fire with jet fuel, JP-8, which contains benzene, a carcinogen. Burn pits burn at low heat generating more particles than incinerators. More particles are associated with increased all-cause mortality, cardiovascular diseases such as heart attacks and strokes, and lung diseases like asthma and COPD.

Military personnel often do not have pre-deployment lung testing other than a 2-mile run time. If a soldier returns with a cardiopulmonary exercise test that is 80% predicted post deployment, which would be considered within normal limits, if in fact pre-deployment she or he was 120%, then this is a significant decrease.

We propose NIH or NIOSH funded monitoring centers for affected patients analogous to World Trade Center Monitoring Programs, since in the greater NY area, for instance, most veterans are not seen in the VA, since they exceed income limits, are young with civilian jobs, and have commercial health insurance. We envision centers studying basic animal models, investigating therapeutic agents, clinically monitoring patients and conducting clinical trials.

The consultative National VA War Related Illness and Injury centers are few and neither monitor patients nor perform biopsies. We conceptually agree with 2020 bipartisan bill HR 8261 in the House and S. 4572 in the Senate which proposed to grant presumption of medical claims for all troops who were deployed to Iraq and Afghanistan since 2003. We agree with the concept that President Biden should propose for consideration in his first 100 days, presumption of care for war fighters with subsets of lung diseases post-deployment.

Even in 2020, 77% of veterans requesting compensation and pension medical exams for maladies beginning in Iraq and Afghanistan were denied medical benefits. The American Thoracic Society 2019 workshop argued for more research. The National Academy of Medicine encouraged continued research through a consensus platform for biomarkers and pre-deployment pulmonary diagnostic monitoring.

Not only should we honor the dead who have made the ultimate sacrifice in war, but we also should provide for the living: brave women and men who sacrificed their health for freedom.

Anthony M. Szema, M.D., FCCP, FACAAI, FAAAAI, FACP, ATSF
Co-Investigator and Member, Columbia University Global Psychiatric Epidemiology Group
CDC NIOSH U01 OH011308 "9/11 Trauma and Toxicity in Childhood: Longitudinal Health and Behavioral Outcomes"
Consultant, NIH R01 HL152385 "Childhood Mass Trauma Exposure, Inflammatory Programming and Psychopathology in Young Adulthood"
Clinical Associate Professor of Medicine, Divisions of Pulmonary/Critical Care and Allergy/Immunology
Clinical Associate Professor of Occupational Medicine, Epidemiology, and Prevention
Director, International Center of Excellence in Deployment Health and Medical Geosciences, Northwell Health Foundation
Donald and Barbara Zucker School of Medicine at Hofstra/Northwell