

The Stratera Retreat

A Proposal to Improve Respiratory Manifestations and Quality of Life for 9/11 First Responders

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Introduction and Selection of Community

- The attacks of September 11th, 2001, had health impacts on first responders that continue today.
- Particularly, the Ground Zero first responders, which included firefighters, police officers, paramedics, EMTs, and military personnel, have experienced widespread health issues related to debris exposure.
- Some of the illnesses include respiratory-related illnesses like pulmonary fibrosis, asthma, reactive airways dysfunction syndrome (RADS), lung cancer, WTC-exacerbated COPD, new onset of COPD, chronic cough syndrome, chronic laryngitis

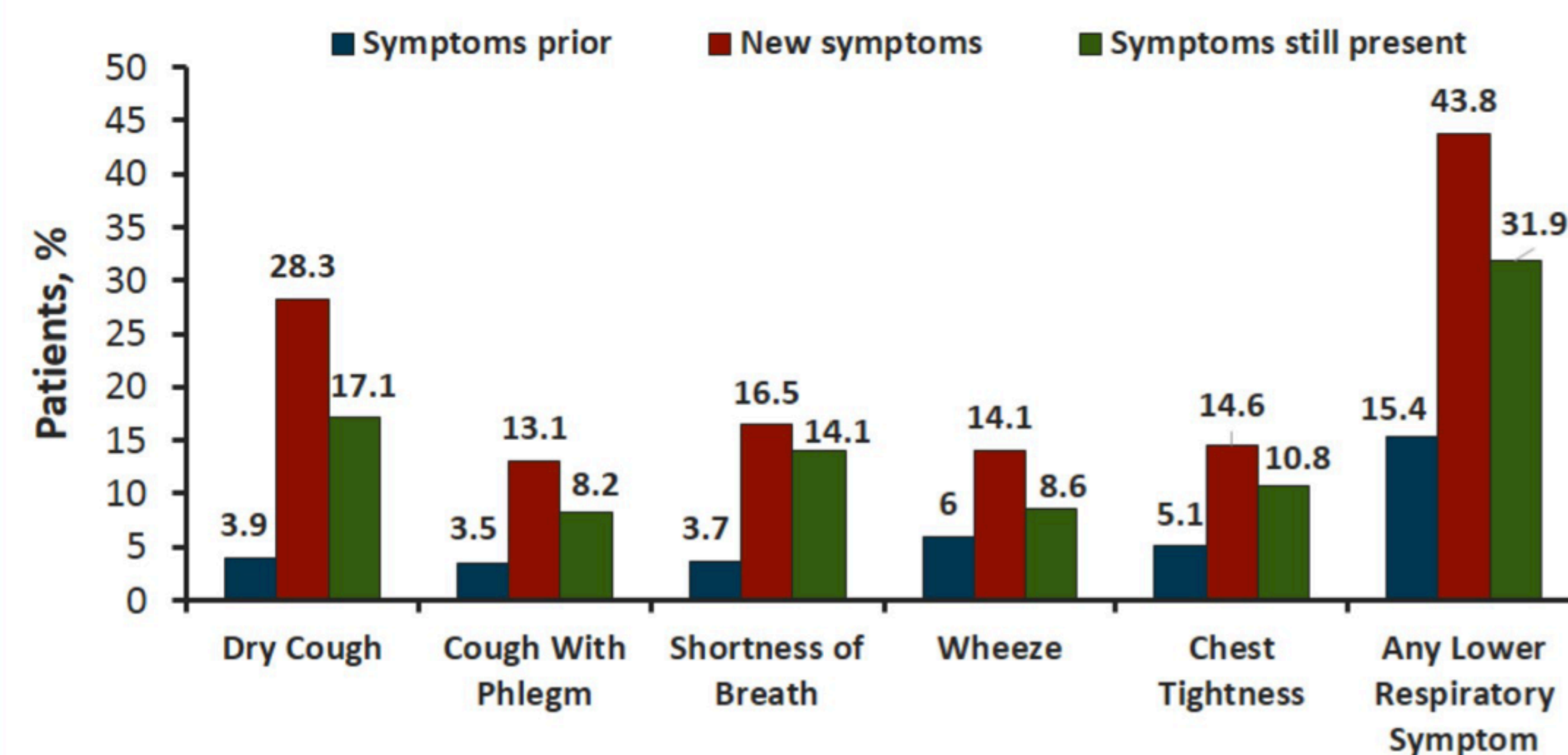
Community Assessment and Analysis

- Lower Manhattan is the southernmost part of Manhattan encompassing neighborhoods including the Financial District, Midtown, Battery Park City, and Ground Zero.
- Today, the overall population size of Lower Manhattan is 171,103.¹
- Approximately 43,000 first responders were present at Ground Zero participating in rescue efforts.²
- The density of residents per sq. mile at the time of 9/11 was 97,333. The density of employees per sq. mile at the time was 188,667. There were approximately 566,000 workers in the area at the time of the attacks.³

Problem in the Community

- First responders were exposed to “World Trade Center dust,” and the pollutants in the air following the attacks.³
- The 9/11 attack also included toxins not just from fire, but also a mixture of chemicals and debris from the structural material of the buildings and aircrafts.
- Exposure to pollutants can extensively affect the body and irritate the respiratory system, resulting in coughing, wheezing, shortness of breath, phlegm, and bronchitis (short term), as well as respiratory cancer or COPD (long term).⁴
- Most recently, the current data (2020) from the CDC shows that the following number of first responders suffer from the following illnesses:
 - Chronic Rhinosinusitis - **26,559**
 - Asthma - **13,082**
 - Sleep Apnea - **13,999**
 - Chronic Respiratory Disorder - **7,463**
 - WTC-Exacerbated Chronic Obstructive Pulmonary Disease COPD - **3,205**⁵

Prevalence of Respiratory Symptoms Among WTC Responder Population



Proposed Solution

- Stratera Retreat** aims to improve these respiratory illnesses.
- It will utilize a **holistic approach**
- Activities will include yoga, meditation, swimming, group/individual counseling, and respiratory therapy, along with other therapies for other disorders.
- The focus of this solution is to improve overall quality of life and wellness for these 9/11 responders.
- The retreat created follows the theory of Faye Abdellah, who believed that nursing care is not just science, but an interpersonal relationship between the nurse and the patient.⁶
- We will not only care for the patient’s **body**, but for the **mind** and **soul** too, in which it will heal the patient as a whole rather than just to focus on the respiratory symptoms.
- The three points the responders will learn are:
 - Using breathing techniques to ease their respiratory symptoms; *nonpharmacological* interventions
 - Maintaining a *healthier lifestyle* (sports, hobbies), including eating cleaner foods
 - Effectively learning and utilizing *relaxation techniques* (mediation, yoga)

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