Tuberculosis Control in Acute Disaster Settings: Case Studies from the 2010 Haiti Earthquake

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TO THE EDITORS:

Morbidity and mortality occur in natural disasters, and acute-phase responses focus on search, rescue, and immediate medical needs.[1] Many natural disasters often co-occur in settings of chronic disease, especially tuberculosis (TB).[2,3] Providing TB services is usually considered a second-phase response,[4] and policy makers recommend "stabilization" of the situation before addressing TB.[5,6] In the massive mobilization of resources that occurred in response to the January 12, 2010, earthquake in Haiti, no coordinated TB control response was present. This letter describes 3 situations at a field hospital immediately after the earthquake in which such a response was needed.

Situation 1: "Start Them All on TB Therapy"

On the third day after the earthquake, field hospital personnel expressed concern about the high percentage of patients complaining of cough and respiratory symptoms. US-based practitioners who had little experience in managing TB noted the high rates of TB in Haiti, and believed a "massive outbreak" of TB was at risk of occurring. A recommendation was made to move all patients with cough into 1 corner of the hospitals (which housed more than 500 individuals in a single structure with no ventilation) and "start everyone with a cough on TB treatment."

Concern was raised by a practitioner of infectious diseases, however, about that strategy. The earthquake generated a great deal of concrete debris, and many patients were thought to be coughing because of their exposure to dust from collapsed buildings. Concern also was raised about the supply of drugs and the ability to follow up patients who are started on TB treatment. A great deal of discussion ensued, but no formal resources with authority were available for the providers to consult in the field.

Situation 2: "Transfer Denied"

On postearthquake day 5, a patient with multiple open fractures was accepted for transfer to the United States for surgery. He reported that he was in his 5th month of TB treatment, but because he had fled his home in terror, he did not have his TB treatment card or his health record. The hospital in the United States denied the transfer, refusing to accept the patient until the patient was given TB therapy or had a negative finding on a sputum specimen. No diagnostic TB services were available in Port-au-Prince, Haiti, and providers in Haiti were unable to locate any TB treatment. The patient died 4 days later.

Situation 3: "Coughing Blood"

On postearthquake day 5, an injured patient developed massive hemoptysis. No diagnostic tests for TB were available in Port-au-Prince at the time. On physical examination, the patient had massive cervical lymphadenopathy and was febrile (38.5 C). Rapid tests for human immunodeficiency virus (HIV) were available at the hospital as part of a postexposure prophylaxis program for US care providers. The patient underwent HIV counseling and testing and was found to be positive for HIV.

The patient's clinical picture was consistent with active TB, but diagnosis could not be confirmed. An attempt was made to administer anti-TB therapy to her, and she continued to decline clinically. In the meantime, she was given a surgical mask to wear and was moved near a tent flap that served as a door. Patients and providers in the hospital were concerned about their exposure to TB, and 3 physicians refused to provide care for this young woman during the days she was in the hospital once a presumptive diagnosis of TB was made.

These cases illustrate major clinical and public health issues that can occur in a postdisaster setting in which TB is endemic. In each case, no formal resources were available to consult concerning TB prevention and control practices, and a majority of the responding medical providers had no experience in working with TB.

These cases call into question the conventional wisdom of addressing TB control only in the stabilization phase of disasters, particularly in countries where

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TB is endemic. They demonstrate the possible need for TB expertise on the ground in the immediate postdisaster phase. This approach could be accomplished by (1) having a designated "field expert" in TB control in postdisaster sites, (2) working closely with local nongovernmental organizations that have TB expertise, and (3) providing education on TB and infection control at all field hospital sites. The World Health Organization should also consider strengthening policies for TB control in emergency settings.

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