Profile

Jane Carter: at the frontline of tuberculosis care

When the young Jane Carter accompanied her father John Carter on his visits to various hospitals in Chattanooga, TN, USA—where he worked as a thoracic surgeon—the one place she was never allowed in was the tuberculosis hospital. This arose a curiosity in this disorder that led Jane on a fascinating path to her present role as President of the International Union Against Tuberculosis and Lung Disease (The Union).

Her now late father’s earliest gifts to her, including the book Doctors in Petticoats, about female doctors, and the biography of Elizabeth Blackwell, America’s first female doctor, set Carter on a clear path to medicine herself. After majoring in Chemistry in Wellesley College near Boston, MA, USA, she followed in her father’s footsteps with a medical degree at George Washington University in Washington, DC, USA, and then her residency in internal medicine at Brown University, RI, USA, where she remains today as an Associate Professor of Medicine. After spending time teaching intensive care medicine at Brown, she took a fellowship in pulmonary medicine and her supervisor, wanting to keep her busy, sent her off to see the “roots of pulmonary medicine” by working at the city’s only remaining tuberculosis clinic under her old friend and mentor Susan Mates. The clinic ran just one half day a week, but the HIV epidemic, increased immigration, and decreased funding for public tuberculosis control programmes contributed to a resurgence in the number of cases in the late 1980s. The clinic became a full-time operation once more, and Carter suddenly found herself running it. “The chairman of pulmonology at Brown, who had originally said I was wasting my time focusing on tuberculosis, admitted he was wrong”, says Carter.

Carter’s passion for tuberculosis comes from long-term contact with various patients, learning epidemiology in different cultures, and the Sherlock Holmes-style detective work involved in contact tracing to prevent further transmission. Although mindful of tuberculosis resurgence in high-income countries, Carter knew that the major challenge lay in the developing world. She accompanied a fellow fledgling expert Rod Romulo on a mission to the Philippines where together they set up a programme dealing with multidrug-resistant tuberculosis. She then learned from another colleague Charles Sherman of a partnership between Indiana University and Moi University School of Medicine, Eldoret, Kenya. Together they set up a similar collaboration between Brown and Moi known as AMPATH (Academic Model Providing Access to Healthcare). This initiative has grown to include more than a dozen North American university partners with Moi University and the Government of Kenya, focused on the provision of medical care and training programmes.

Carter’s team in Kenya discovered that because of the cost of registering at medical centres, people with tuberculosis would not register for examination until they were extremely ill, despite treatment being free. Thus, the team trained community workers to take sputum samples and thereby confirm the presence of tuberculosis without paying the registration fee. Today, this system still operates across the western regions of Kenya and is supplemented by technology such as the Gene Xpert test to identify drug-resistant forms of tuberculosis. Carter has also spearheaded efforts to ensure young children get access to tuberculosis care. She underscores that none of this work would be possible without the support of Kenya’s National Tuberculosis Director Joseph Sitienei: “Sustainability cannot be achieved without working hand in hand with national programmes”, she says.

On a global scale, Carter says today’s landscape of widespread travel means improved diagnostics, vaccines, and shorter regimens will all be key in the war against tuberculosis. In 2011, Carter was nominated as the next President of The Union. A surprise to her, but not the many global experts who had admired her years of dedication to fighting tuberculosis and lung disease. “As president, my focus has remained on improving lung health in the world’s poorest populations”, says Carter. The task ahead of her is a monumental one, with predicted global epidemics of tuberculosis and chronic obstructive pulmonary disease. Perhaps unsurprisingly, Carter spends much of her free time focused on her own lungs and is now a seasoned marathon runner with 26 long-distance events under her belt.

“The battle against tuberculosis has over the years seen individuals who have displayed a great deal of passion, dedication, and zeal to remain in the trenches and get the hard work done. One such person is Dr E Jane Carter”, says Chakaya J Muhwa, Chief Research Officer, Kenya Medical Research Institute and Technical Director, Kenya Association for the Prevention of Tuberculosis and Lung Disease. “With her experience, Jane Carter put tuberculosis on the map for educators and, subsequently, donors, at a time when it really was not considered sexy in the 1990s,” says Lee B Reichman, Executive Director at New Jersey Medical School and the Global Tuberculosis Institute at Rutgers University, Newark, NJ, USA. “Her pioneering work in Kenya often meant every time I wanted to contact her, she seemed to be in Kenya, highlighting that country’s plight with tuberculosis and ensuring that students and doctors worldwide saw this firsthand.”

Tony Kirby