Supervising TB treatment

Courtenay Singer

Nourta Hussein, a 29-year-old Somali woman, was forced to leave her village because of the civil war. Months before her village was evacuated, she had been severely ill and was coughing up bloody sputum. Her doctor had diagnosed her as having tuberculosis and immediately started her on a combination of medicines known as short-course chemotherapy. Just as she was beginning to feel better, her village was raided. She fled to a refugee camp and stopped taking her medicines. She began coughing again and became increasingly ill; when treatment resumed, the drugs which had made her feel better before no longer worked. Nourta now might not live to see her thirtieth birthday.

Sally Martin lives in Washington, DC, USA, and can always be found in a neighbourhood park near Dupont Circle. The park bench is her home, and has been for over seven years. Her rasping cough makes onlookers wince; she has contagious tuberculosis, but does not know it. The hundreds of people who walk past Sally each day also do not suspect that her cough is a symptom of tuberculosis. Many people in wealthy countries wrongly believe that this disease no longer threatens them when, in fact, it kills three million people every year.

Nisit Kahwinchan is from Chiang Mai in northern Thailand. He earns his living as a construction worker, travelling around the country to find work. At present he is helping to build a new commercial centre in Bangkok. He sometimes has trouble working because he does not feel well. Like some of his co-workers, Nisit is sick with tuberculosis which was diagnosed at his previous job in Chonburi. Now, far from home and living in a small room with three other men, Nisit coughs through the night and burns with fever. He fears that he is contagious to those with whom he works, eats and lives.

Living on the margins

Nourta, Sally and Nisit have more than tuberculosis in common. They all belong to marginalized, transient groups; people who often "slip through the cracks" when tuberculosis treatment is administered. Refugees, migrant workers and homeless people present a special challenge for tuberculosis control because they often do not have easy access to health care systems. Perhaps the greatest challenge is finding ways to supervise the treatment of mobile populations.

The World Health Organization believes that supervised treatment is essential for controlling the tuberculosis epidemic. This strategy is known as "directly observed treatment, short-course" (DOTS), a 6-8 month course of medication administered by health workers who watch patients to ensure that they take and actually swallow their medicine. In stable populations, the DOTS strategy is easier to use because the patients can be located to be given their medicines. With marginalized people this is not so easy. How do health workers ensure that sick
people take their medicine in a consistent manner when their daily life is in upheaval? How can home treatment be provided for those without a home?

Fortunately, DOTS allows people to be treated not only in clinics and hospitals, but also in the home, at work – or even under a tree. The key is creativity: with it the fundamental DOTS strategy can be applied to suit the needs of a wide range of patients, and still be successful in curing the patient nearly 100% of the time.

Two programmes illustrate how DOTS can be used in different settings to treat marginalized individuals. In New York City, the Public Health Department has begun to control tuberculosis successfully among the city’s homeless population by using an innovative DOTS strategy. The Department created an army of DOTS workers who took to the streets to track down patients who failed to show up for their medicines. For the most difficult-to-supervise cases, the Department provides patients with lunch vouchers, subway tokens and other incentives, to encourage them to come to the clinics for treatment. This programme has managed to reverse a frightening and rapidly increasing tuberculosis epidemic in New York City.

The creativity of health workers has also been called for when they are required to treat tuberculosis in Kenya’s nomadic people. Only 30% of Kenyan nomads with tuberculosis were completing their treatment a number of years ago. To keep patients in one place long enough so that they would finish treatment, the Kenyan programme set up tuberculosis manyatta (Masai for “homesteads”). These manyatta are simple shelters in which the nomads voluntarily stay for the crucial first four months of treatment. Both lodging and food are provided. The patients can leave during the day, but they sleep at the manyatta and receive their daily medication under supervision. Now, nearly 85% of the nomadic tuberculosis patients are being cured in this way.

Currently, the majority of uprooted and displaced people who have tuberculosis are not being given complete, supervised treatment. Health workers can do more harm than good by administering incomplete or unsupervised treatment, since this only serves to encourage the development of drug resistance, making the disease incurable.

Research and innovation will continue to be vital for developing new ways to adapt the DOTS strategy to displaced populations, so that even higher cure rates can be achieved.

An article on cocaine in our July-August 1995 issue included a picture which could give the impression that Coca-Cola contains cocaine. We regret that this occurred and wish to make clear that this was never our intention. We are informed that Coca-Cola has been analysed many times and has been found to be free of cocaine.