Rooting out tuberculosis in homeless communities

If you happen to have a Lancet collection that stretches as far back as 1911, you can read the Editor of the day, Squire Sprigge, passionately looking forward to the day that the “demon of tuberculosis” is finally mastered. In 2011, that day still seems some way off. An article published last week in Emerging Infectious Diseases reported that in Toronto, Canada, about 20% of homeless people with tuberculosis die within 12 months of being diagnosed—the same proportion as 10 years earlier.

The problems in Toronto are mirrored in many modern metropolises. Tuberculosis finds its niche in poverty and social exclusion, with rates of disease in the most vulnerable and marginalised communities orders of magnitude higher than those in the general population. Homeless people are the engines of transmission because the two assumptions that hold true for the general population—that people with symptoms will seek medical help, and that they will take treatment as prescribed—simply do not hold in the homeless community. This can not only have catastrophic consequences for the individuals involved, but also means prolonged transmission in the community, and an increased incidence of acquired drug resistance.

Waiting in a hospital for the problem to come knocking on the door clearly does not work. But in New York City, a programme of active case finding, screening for latent disease, and access to intermediate care facilities that ensure treatment is adhered to, have helped to consistently reduce rates of active tuberculosis since the early 1990s. In London, the Find and Treat programme headed by Alistair Story has also made inroads. Since the programme started in 2005, Story and his team have screened over 60,000 people using their mobile radiography unit. That is 60,000 people who would otherwise have been invisible to health services. But funding for Find and Treat is precarious, and is likely to become even more so if the move to commissioning led by general practitioners goes ahead as planned. New York City has shown that where there is political will, there is a way to tackle tuberculosis in homeless communities. It is up to policy makers elsewhere to follow that lead.

Better spending needed for neglected diseases

Over the past decade, there has been a concerted effort, mainly by public and philanthropic organisations, to counter the neglect of developing world diseases by increasing funding for research and development. The Global Funding of Innovation for Neglected Diseases (G-FINDER) survey, now in its third year, does the valuable job of tracking this global investment. The latest survey covers 31 neglected diseases, including HIV, malaria, and tuberculosis as well as conditions such as leprosy and trachoma. It is the first to assess the effect of the global financial crisis on funding.

There is good and bad news. Overall, funding for research and development into neglected diseases increased to US$3.2 billion in 2009, up $239 million from 2008. Funding was also distributed more evenly between the 31 diseases than in 2007. But sources of funding shifted in 2009, changing the type of research funded. The amount given by philanthropic groups decreased by 9% in 2009 while public funding increased by 14%. This change led to a 21% increase in basic research (typically favoured by public funders), while spending on product development increased by only 5%. There was also a shift towards inhouse investment by public funders and a $50 million drop in funding for product development partnerships—non-profit organisations that drive product development in conjunction with the public and private sector.

Public funders might, understandably, want to invest in their own academic institutes and universities as their national economies try to recover from the global financial crisis. But basic research is being done whether it is needed or not; for many neglected diseases product development is a more urgent priority. Investment in product development partnerships that are performing well is crucial. These partnerships currently have more than 140 neglected-disease drugs, vaccines, and diagnostic products in the development pipeline. Patients have already seen payoffs, including the development of the first dispersible and palatable antimalarial drug for children.

Even in times of economic hardship, public funders must not lose sight of why they fund research into neglected diseases. The ultimate goal must always be to deliver products to patients to save lives.