



COLLABORATIVE PUSH TO ADDRESS TB CRISIS ON MINES



Dr Lindiwe Mvusi, Director of TB Control and Management in the national department of health and chairperson of the new 'TB in Mines Task Team'.

After a century of failed tuberculosis control strategies on South Africa's mines, and three major but ineffective enquiries and commissions, a government-led 'TB in Mines Task Team' is being set up to address the deepening HIV-driven crisis.

This was revealed by Professor Gavin Churchyard, CEO of the Aurum Institute for Health Research, a not-for-profit public benefit organisation with roots in the mining industry. He was addressing the annual Investigators Meeting of the international Consortium to Respond Effectively to the AIDS/TB Epidemic (CREATE) in Cape Town in mid-October.

Churchyard revealed that the HIV-fuelled TB epidemic, compounded by rising drug resistance, is now estimated at 3 500 per 100 000 mine workers, with 40% of all autopsies on

men who die working on the mines revealing they had TB.

Migration from rural areas throughout southern Africa to Gauteng and surrounding industrial areas to work in the mining, building and other dominant sectors is a major driver of the rampant TB epidemic.

Dr Lindiwe Mvusi, Director of TB Control and Management in the national department of health and chairperson of the new 'TB in Mines Task Team', said because the pandemic embraced all South Africa's neighbouring countries it demanded a regional, multi-stakeholder response.

A third delegate at the meeting, an 'anxious and concerned' Deputy Health Minister, Dr Molefi Sefularo, said national TB prevalence

had increased nearly threefold in the past decade. South Africa was now among the 10 worst performing countries on TB control, and Statistics SA had found that for every 100 deaths in 2006, 13 were from TB, making it the leading cause of death.

Churchyard said less than 1% of all HIV-infected individuals in this country were accessing proven safe and effective isoniazid preventive TB therapy (IPT), a situation he calls 'inexcusable'.

No longer acceptable not to offer IPT

'The take-home message for doctors country-wide is that it's simply no longer acceptable not to offer IPT,' he stressed.

In March last year Churchyard helped facilitate a pivotal petition appealing for urgent intervention to address TB on the mines to then national health minister Barbara Hogan and the Minister of Minerals and Energy Affairs, Buyelwa Sonjica. It was signed by the leading local and international TB control experts and led, he said, to the mining industry taking 'great offence'. The health policy committee of the Chamber of Mines in fact accepted the criticisms in the letter but noted that this

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was not true of the entire industry. The chamber wrote to the health minister outlining efforts its members were making to address the issues, emphasising that the issue of silica exposure was ‘really only true of the gold mines’.

Churchyard is the former director of Aurum Health Research, a wholly owned AngloGold Ashanti Health Services subsidiary which, by mutual agreement, was transformed into the independent Aurum Institute in 2003 to achieve arms-length credibility.

‘The take-home message for doctors country-wide is that it’s simply no longer acceptable not to offer IPT,’ he stressed.

As CEO of the new entity (to which Anglo American, now divested of Anglo Gold Ashanti, continues to provide unrestricted financial support), appending his signature to the petition was a risky political move, but one which paid off handsomely when Hogan ‘embraced the criticisms and engaged fully’.

A confluence of an existing Chamber of Mines TB task team, set up in February in response to an alarming South African Development Community (SADC) report on TB in miners – and the petition – led to the formation of the government mines task team in October.

Churchyard said the petition had ‘merely acknowledged a huge unprecedented public health disaster – nobody’s ever really reported on the magnitude of the problem’ and was not meant to point fingers at mine managements.

While implementing state-of-the-art models of TB control the industry was however failing to control the epidemic, most rampant among gold mine workers (who make up 32% of all miners).

Strategy failure

‘It’s a failure of strategy rather than implementation,’ Churchyard explained. He said the Chamber of Mines stopped collecting TB and health statistics in 1997, deeming this as ‘not a required central function’. This led to a paucity of data, which meant researchers had to rely on autopsy results and TB notification rates. ‘Basically what we told government (in the petition) was, ‘do your job as the regulator and hold the industry responsible,’ he said.

Chief Medical Officer for Anglo American, Dr Brian Brink, said his company last December amended its HIV/AIDS/TB policy to extend care, support and treatment to the dependents of all its employees. ‘The challenge now is to implement this in the outlying areas – it’ll take time,’ he said.

Uptake for this was by November 2009 at 10%, costing an additional R25 million per year.



Professor Gavin Churchyard, CEO of the Aurum Institute, a not-for-profit public health benefit organisation in the mining industry.

Picture: Chris Bateman

The definition of dependant allowed for more than one partner, so long as they were in a serious, committed relationship akin to a marriage based on mutual dependency and a shared household, irrespective of gender. Children were defined as either offspring of such a union or those legally adopted.

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Brink denied claims that ‘we just dump people back home’, saying Anglo American took full accountability for employees who had to return home due to AIDS/TB and made ‘proper arrangements for their continued care’. He said TB among Anglo American miners was ‘more in line with the national average’, and way below gold mine workers, while (their





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platinum mine workers had higher incidences than (their) coal miners.

‘A lot of TB we see is extra-pulmonary. For example, at Anglo Coal we had 67 new cases of TB (12 dependants), of which 33 were pulmonary and 34 were extra-pulmonary, this year. We cured 20 of the 31 who had positive sputum.’

Anglo Platinum figures were on average five times higher than this while TB in gold miners ‘runs into the thousands’.

Anglo American’s IPT uptake stood at 25% of eligible miners, Brink said. He described drug-resistant TB as ‘a function of failing (public) health systems’.

Stand-alone TB body needed

Churchyard called for a stand-alone national TB control body to enable a more focused response, adding that the South African National AIDS Council should still integrate TB into its HIV response – but that this was not enough.

‘We need a stand-alone body with all stakeholders that can hold government accountable,’ he stressed.

South Africa’s current cure rate of 65% is up from 51% in 2004 but still way below the World Health Organization (WHO) recommended cure rate of 85%. The WHO estimates nearly 1% (or 461 000 people) develop TB annually in this country.

Sefularo said South Africa was in danger of failing to reach the (Millennium Development) goal of halving prevalence and death rates by 2015. A change of mind-set and greater urgency were needed to go beyond merely ‘drafting crisis plans’.

National Treasury estimates about R1.8 billion is available to fight TB, well below the R4.5 billion needed.

Mvusi revealed that a multi-stakeholder national ‘Stop TB Forum’, aimed for launch on 1 December this year (World AIDS Day) would link up with the second national TB conference in Durban in June next year. ‘It’s a tight time line but we’re hoping for clear resolutions at the Durban TB conference to take things forward on partnerships,’ she said.

The national TB in Mines Task Team was however already set up and would be ‘up and running with terms of reference,’ this November. ‘Obviously we need to get this done by the end of this financial year so that in the coming year we can have implementation by all key partners,’ she added.

She agreed that government was ‘accountable’ but said this involved the department of Minerals and Resources (which has direct oversight on TB in the mines because it’s seen as an occupational health disease) and national health.

Miners sent home – where they die

A major hurdle was the lack of treatment co-ordination between the migrant miners and their distant families. ‘When they’re identified and start treatment we have to ensure their families are also treated, but the problem is we just don’t know. Most mines don’t have outreach programmes for miners’ families – we have to strengthen collaboration.’

Another problem area, particularly with multidrug-resistant TB (MDRTB) and extreme drug-resistant TB (XDRTB), was neighbouring countries not having adequate treatment facilities, drugs or laboratory capacity.

MDR or XDR were taken as second-degree impairment, meaning medical boarding for the worker because he could no longer work underground. This simply spread the disease wider as workers returned home.

Foreign mine workers were supposed to be compensated when they acquired silicosis or any other occupation-related impairment, but there were no follow-up systems after they returned home, let alone testing at regular intervals.

The Chamber’s own task team was developing a referral form and protocol for TB patients referred by mining houses to the various South African provinces and neighbouring countries.

If they died, families were supposed to send their heart and lungs to the National Institute for Occupational Health so they could be financially compensated, but this very seldom happened due to infrastructural weaknesses and ignorance.

Mvusi said the Southern African Development Community (SADC) countries were developing a policy framework to address migrant populations and communicable diseases – but an implementation plan was still ‘some way off’.

The Chamber of Mines, in its response to the petition, said its members digitally X-rayed all their workers upon being hired, once a year and when they left their employment. In July 2007 ‘several’ members decided to allow workers from contractor companies and small and medium sized mines to receive care from their TB health services, which in many respects surpassed WHO ‘best practice’, several with cure rates in excess of 85% .

The jointly-funded 5-year Thibela TB project offered IPT for 9 months in an ‘intervention shaft’ with 16 000 participants enrolled so far and results were ‘very positive’.

The Chamber was ‘committed to normalising’ staff accommodation by 2013 by purchasing land for low-cost housing near the mines and offered a ‘living out’ allowance.

The most recent (March 09) far-reaching decision taken by the Health Policy Committee of the Chamber was to pay out



benefits to workers based on a salary adjusted for CPIX, thus boosting compensation-related payouts.

Several outreach programmes also covering ex mineworkers in neighbouring countries identified former staff and ensured they were compensated. A Chamber project to identify former mine workers and offer them benefit examinations had begun with a pilot programme in the remote village of Nongoma, KwaZulu-Natal.

The Chamber's own task team was developing a referral form and protocol for TB patients referred by mining houses to the various South African provinces and neighbouring countries. This was still due for finalisation with the national department of health in South Africa and through visits to its counterparts in neighbouring countries.

Chris Bateman