

HIV/AIDS AND TUBERCULOSIS IN THE GOLD MINING INDUSTRY IN SOUTH AFRICA

Rt Hon Peter Hain MP and Martin Caton MP

Rt Hon Peter Hain MP and Martin Caton MP co-chaired a meeting held by the All-Party Parliamentary Groups on HIV/AIDS, Global Tuberculosis (TB), and Earth and Environmental Sciences, to discuss the issue of HIV/AIDS and TB in the Gold mining industry in South Africa.

Martin Caton opened the meeting, noting that both his constituency and Peter's neighbouring constituency in South Wales share a nickel mining history. Referring to the nickel mining and associated illnesses, he appreciated the need to ensure that the wellbeing and health of mine workers is paramount, no matter where they are. Martin introduced presentations by Peter Hain, Jonathan Smith (Yale University, Director of 'They Go to Die') and Dr Sahu (Director of TB REACH, Stop TB Partnership, Geneva). Discussion followed.

Peter Hain had recently visited South Africa with a delegation organised by Advocacy to Control TB Internationally (ACTION) partner



From left to right – Dr Sahu Suvanand (Stop TB Partnership), Martin Caton MP (Chair, APPG Earth and Environmental Sciences Group), Rt Hon Peter Hain MP, and Jonathan Smith (Epidemiologist, researcher and film-maker)

RESULTS UK to look at the TB/HIV epidemics in South Africa, the steps being taken to address them and the challenges currently faced, including TB/HIV in gold mining. He spoke about the scale and scope of the problem and his experiences: during a site visit he learnt about the relationship between HIV and TB and was shocked to learn that South Africa has the highest rates of TB anywhere in the world, and accounts for 25% of the world's population living with HIV. Drug resistant strains of TB also present worrying challenges to TB control.

South Africa is at the centre of this dual TB/HIV epidemic and data show that TB and HIV in the region are further exacerbated by conditions associated with gold mining. Despite a TB control programme in the mines following international guidelines, a significant number of mine workers develop TB every year. This is due both to the

conditions in which miners live and work, and more specifically the silica content of the rocks and soil from which gold in South Africa is mined at depth rather than the more common surface mining. When silica dust is inhaled, it causes damage to the worker's lungs, which are then more susceptible to infection by TB. With the introduction of HIV amongst

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The Stop TB Partnership is leading the way to a world without tuberculosis (TB), a disease that is curable but still kills three people every minute. Founded in 2001, the Partnership's mission is to serve every person who is vulnerable to TB and ensure that high-quality treatment is available to all who need it. <http://www.stoptb.org/about/>

many of the gold mine workers, their immune systems are further compromised allowing their bodies to be more easily affected by TB/HIV co-infection. HIV sufferers die more quickly when they also have TB and most die within 6 months of contracting TB. TB is the largest killer of people living with HIV in developing countries, accounting for 25% of all deaths.

Migrant workers all too often return to their communities without treatment, both sealing their fate and leaving their friends and families exposed to a high risk of contracting TB. The process of returning home has been titled 'being sent home to die'.

Jonathan Smith (lecturer in Global Health and Epidemiology of Microbial Diseases at Yale University) studies the epidemiology of TB and HIV in the context of migrant populations. After his presentation he showed part of his documentary film 'They go to die' (<http://twitter.com/#!/TheyGotoDieFilm>). The film investigates the life of four former migrant

... Many mine workers are migrant workers ...

gold mineworkers in South Africa and Swaziland, who contracted drug-resistant TB/HIV while working at a gold mine, and follows the workers as they return home to their villages.

With or without silica, someone with HIV is more likely to contract TB as the risk factors are multiplied. HIV+ increases the affected person's risk of contracting TB four fold; Silicosis increases the affected person's risk of contracting TB four fold; Silicosis and HIV together have a multiplicative effect of 16.

... TB is the largest killer of people living with HIV ...

Many mine workers are migrant workers from neighbouring countries, from all over Southern Africa, and also from as far as Madagascar. Mine workers, once diagnosed with TB, are deemed unfit to work and are then sent home to their communities, often without proper access to medicines and health care.

An estimated 760,000 cases annually of incident TB in the general population of sub-Saharan Africa is directly attributable to the mining industry. Each year South Africa has about 350,000 cases of TB where there is no continuation of care. TB kills with alarming efficiency, though it is fortuitous in that a quick death means that there is less time to infect others. Without treatment HIV+ patients that contract TB have an 83% fatality rate within 6 months.

Dr Sahu Suvanand (Team Leader, TB REACH, Stop TB

some of the challenges that remain including: 8.8 million incident cases of TB and 1.1 million deaths; a further 0.35 million deaths in those who are HIV-positive; a million TB sufferers whose whereabouts are unknown; and Millennium Development Goals (MDG) targets for TB that are unlikely to

Community (SADC) on 27 April 2012 in Angola, National TB Managers agreed that this issue must be addressed, and began by drafting a declaration to be signed by SADC minister of health in August 2012. He stressed that this is an issue that affects multiple stakeholders and we must therefore strive to work

RESULTS' particular focus is unique: working at a grassroots, national and international level to create the political will to end hunger and the worst aspects of poverty. At the heart of RESULTS is a network of volunteers who work together in local groups to become effective advocates for change. The RESULTS network is supported by a small staff working in coalition with parliamentarians and organisations around the world to advocate on global poverty issues. <http://www.results.org.uk>

be met by the African Region. Dr Sahu Suvanand went on to explain TB REACH project funding opportunities and the benefits of fast-track short term funding and shared results of some of the projects including: 33% increase in patients detected with TB; and some plateau areas in Asia. He stressed that if innovative approaches are implemented quickly, good results can be achieved and documented.

Peter Hain ended the meeting by noting that there are signs of recognition of this problem. At a meeting of the Southern African Development

together to address the problem with large as well as smaller to medium-sized mining companies, the private sector, public sector and government.

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