Occupational Health

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TB, occupational illnesses still killing SA's workers

World Day for Safety and Health at Work is cause for introspection on occupational health

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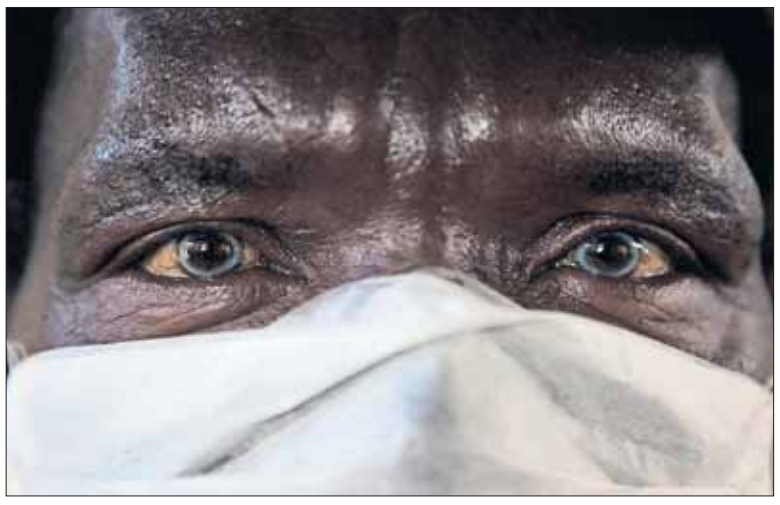

Workers are especially vulnerable to respiratory illnesses as a result of their environment. Photo: Finbarr O'Reilly/Reuters

Workers in South Africa are exposed to large numbers of occupational and environmental health and safety hazards in their workplaces. This exposure can result in a multitude of adverse health outcomes including tuberculosis (TB), HIV and occupational respiratory diseases, and can precipitate or worsen noncommunicable diseases such as diabetes, hypertension, work-related stress and cancer.

Around the globe, many workplaces strive to prevent or manage occupational and non-occupational diseases through wellness and other programmes that help to support a healthy, safe and productive workforce. There are many workplaces in South Africa that certainly adhere to national and international best practice, but it is imperative that there is a mind-set change towards greater prevention, and there is an urgent need to reduce the heavy burden of work-related diseases and related deaths in South Africa.

Tuberculosis and HIV

The dual epidemics of TB and HIV continue to have far-reaching consequences for the South African workforce, particularly in the mining, construction and health sectors. In the late 19th Century, Robert Koch, a German microbiologist who identified the specific causative bacteria for tuberculosis, said: "If the importance of a disease for mankind is measured by the fatalities it causes, then tuberculosis must be considered much more important than those most feared infectious diseases, plague, cholera and the like …"

It's unthinkable that in the 21st century TB is still in the top 10 causes of death globally, and is the leading cause of death in South Africa, according to the World Health Organisation (WHO) and Statistics South Africa respectively.

TB in the mining, construction and health sectors can occur as a result of occupational activity, while HIV can be occupationally acquired in the health workforce, for example through needle-stick injuries. Workers exposed to silica dust in the mining and construction sectors are almost three times more likely to develop TB while workers with HIV are at least four-and-a-half times more likely to develop TB. Furthermore, HIV and silicosis combine multiplicatively to further increase the likelihood of developing TB in workers with both exposures.

For health workers, the exposure risk for occupational TB and HIV is greater, acquired from patients living with TB and HIV who seek healthcare. A study conducted by Dr Iacopo Baussano of the WHO in 2011 found that: "Tuberculosis among health workers in the countries with the highest tuberculosis burden, including South Africa, is at least 8.4% greater than [thatof] the general population." At least 11.5% of health workers in South Africa are living with HIV, according to the Human Sciences Research Council.

There are multiple efforts to improve the situation with regard to TB among mineworkers exposed to silica dust. In 2014 minister of health Dr Aaaron Motsoaledi said the problem requires dedicated human and financial resources, especially the imperative to lower silica dust levels: "There are 41 810 cases of active TB in South African mines every year. It is 8% of the national total, and 1% of the population. It is the highest incidence of TB in any working population in the world. It affects 500 000 mineworkers, 230 000 of their partners, and 700 000 children."

The dual epidemics of TB and HIV sadly have negative implications for workers, their families and the general economy. Highly skilled workers become sick and take time off work, and in the worst case scenario, they die. In addition to the enormous personal and family cost of poor health and death, the cost to our economy comes through medical and funeral benefits, loss of productivity, and the training of new workers.

It is, however, not all doom and gloom, as the South African government, worker and employer representatives, and civil society are working tirelessly through the South African Aids Council and other forums to develop and implement policies and raise resources to tackle the dual epidemics of TB and HIV. This is in line with the United Nations' Sustainable Development Goals (SDGs) and the WHO's End TB Strategy.

Occupational disease

The respiratory system is open to the atmosphere and as a result, numerous agents in workplace air have easy entry. These substances include dust, gases, fumes, vapours, metals, smoke and infectious agents. Workers exposed to these dangerous substances are at a risk of acquiring occupational respiratory diseases, for example, allergens in bakeries (such as flour) cause rhinitis and asthma, wood dust can cause sinus cancer and inorganic acid mists result in cancer of the larynx. Many agents produce a chronic cough and phlegm (chronic bronchitis) and a chronic lung disease very similar to that found in smokers: Chronic Obstructive Pulmonary Disease (COPD) and emphysema.

Fine dust causes scarring of the lung (known as silicosis if silica dust is inhaled, and as asbestosis if too many asbestos fibres reach the deep parts of the lung). Asbestos and metals such as chrome and nickel are among the many agents associated with lung cancer. In addition, asbestos causes mesothelioma, an extremely virulent cancer for which there is, as yet, no effective treatment. Other respiratory diseases caused by workplace exposures are TB, COPD and occupational asthma, to mention just a few.

It is important to establish the link between occupation and lung disease, especially for prevention and compensation purposes. All occupational lung diseases are preventable. Thus, employers have a legal responsibility to ensure a healthy and safe working environment for all employees, including contractors. Employees, on the other hand, depending on their line of duty, can quit smoking and follow workplace safety precautions.

The state, through the departments of labour, health and mineral resources, has a duty to ensure employers comply with and implement occupational and environmental health and safety hazard laws. It is also responsible for setting standards for prevention and control of occupational diseases and ensuring safe and healthy workplaces for workers and people affected by work activities.

There have been several efforts to reduce dust exposure through agreements with international bodies such as the International Labour Organisation. Occupational exposure limits are being amended locally to match international standards. Inspectors from the department of labour utilise these levels to enforce legislation. Employees can contribute to this process by reporting dangerous working conditions anonymously to the department. Doctors are required to report suspected occupational diseases.

As we commemorate this year's World Day for Safety and Health at Work (April 28 every year), it's important that the three government departments consider systematically collecting health and safety information and analysing it to identify appropriate preventive interventions. Currently, in South Africa, the different departments manage their own databases, resulting in fragmented pieces of information, which are difficult to synthesise collectively into one set of data. The development of a national database would inform relevant research and help prevent workplace-related illnesses.

South Africa also faces a heavy burden of noncommunicable diseases such as diabetes, hypertension, work-related stress and increasingly, occupational asthma and cancer. The underlying causes include unhealthy diets, inadequate physical activity, smoking, poor conditions at work and transport challenges, and the world of work should be targeted with greater urgency. Risk factors and hazards at the workplace including sedentary work and/or low paid work, work stress, exposure to carcinogens, shift work, inadequate social security, job insecurity and provision of unhealthy food.

The SDGs which inform the development agenda until 2030 provide a golden opportunity for South Africa to find inclusive processes to help address, among others, the vexing challenge of our heavy burden of disease, which a mere 9% of our GDP cannot adequately address. Countries have to report on the 17 goals through various key performance indicators and Stats South Africa will assist in this reporting process.

This will provide us with the opportunity to build on the synergies of the goals on health, decent work, youth employment, gender equality and sustainable environments and economies.

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