

Monday, 21 March 2011 HOUSE OF REPRESENTATIVES

World Tuberculosis Day

Debate resumed, on motion by **Mr Laurie Ferguson**:

That this House:

(1) recognises that 24 March is World Tuberculosis Day, in observance of a disease that still claims the lives of 1.7 million people every year, and which:

(a) is currently the leading killer of people living with HIV and the third leading killer of women;

(b) has the highest growth in the South East Asian region, which accounted for the largest number of new Tuberculosis cases in 2008; and

(c) could be dramatically reduced by improved detection and diagnosis;

(2) recognises that the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) currently provides more than two thirds of the global funding to combat Tuberculosis, and that:

(a) Australia could supplement its recent pledge to the Global Fund to ensure that the resources for Tuberculosis as well as AIDS and Malaria are sufficient to achieve the goal of significantly reducing the number of people suffering from these diseases; and

(b) action by Australia to supplement its pledge would influence other donor countries to increase their pledges;

(3) acknowledges that the widespread adoption of the new Xpert diagnostic tool, which cuts the time for diagnosis from several weeks to two hours, would lead to significant improvements in the detection and treatment of Tuberculosis; and

(4) requests the Government facilitate the adoption of Xpert in South East Asia.

Mr SIDEBOTTOM (Braddon) (7.35 pm)—I am very happy to support this motion moved by my good friend Laurie Ferguson. I remind everyone that one of the reasons that we are discussing it is that 24 March is World Tuberculosis Day. I would like to use this as an advertisement to remind us that together we can stop TB. We will be wearing our badges on 24 March, but we need to do more than wear a badge, I suggest. I was looking at the figures for tuberculosis around the world. Maybe I should not have been, but I was surprised to see that even in the United States TB is a killer. It is a very serious disease and health issue for many communities. In actual fact, it forms part of goal 6 of the Millennium Development Goals, which is to combat three of the most debilitating diseases across the globe: HIV-AIDS, tuberculosis and malaria.

Ms Saffin—The three Ds.

Mr SIDEBOTTOM—One of the foundation stones of the Global Fund to Fight AIDS, Tuberculosis and Malaria, which was established recently, was to make a difference by tackling head on three of the diseases that my colleague the member for Page quite rightly pointed out are called the three Ds. They condemn vast numbers of people to ill-health, discrimination and other human rights abuses, poverty and preventable early death. That is the sad thing about this: they are preventable. We, on our side of the economic ledger in the world, can do a hell of a lot more to help to combat these terrible preventable diseases. TB kills someone approximately every 20 seconds. That is nearly 4,700 people every day or 1.8 million people alone, according to the latest estimates from the World Health Organisation. TB is second only to HIV-AIDS as the leading infectious killer of adults worldwide. It is among the three greatest causes of death in women aged 15 to 44 and is the leading infectious cause of death among people with HIV-AIDS. It is preventable. We can do something about it. We need to do something about it. On a global

scale, although we are doing some things and there have been advances, we are not doing nearly enough.

Tuberculosis is global. The World Health Organisation estimates that two billion people—that is, one-third of the world's population—are infected with TB. Mycobacterium tuberculosis is the official title of the bacillus that causes the disease. Mycobacterium TB's unique cell wall, which has a waxy coating primarily composed of mycolic acids, allows the bacillus to lie dormant for many years. The body's immune system may restrain the disease but it does not destroy it.

While some people with this latent infection will never develop active TB, particularly in more advanced countries—and, in a discriminatory way, it develops in males more than females—five to 10 per cent of carriers will become sick in their lifetime. So, effectively, if 9.4 million new cases of TB per year are diagnosed, how many are not diagnosed? It is very sad. Once active, TB attacks the respiratory system and other organs, destroying body tissue. The disease is contagious, spreading through the air by coughing, sneezing or even talking.

Mr McCormack—Stop talking then!

Mr SIDEBOTTOM—Not about this, though, my good friend from Riverina. An estimated nine million new active cases develop each year, as I mentioned. At any given moment, more than 13 million people around the world are suffering from an active infection, and we know that there are many more millions with inactive, latent TB. As I also said, it is the third leading cause of death for women of reproductive age, from age 15 to 44, worldwide. In 2008, for example, 3.6 million women developed TB and approximately another 500,000 died as a result.

Again, the sad thing is that it is preventable and we can do something about it, but we just do not do enough.

Despite enormous advances in the provision of services in recent years—and there have been—TB's deadly synergy with HIV-AIDS and a surge in drug-resistant strains are threatening to destabilise gains in TB control.

From my research, I understand that if you do not take the full suite of drugs and remedies that you are prescribed, if you miss any, then it is too late; it becomes worse. I note my good friend Dr Washer, who knows a lot more about this than I do, is agreeing. So not only must we have the proper medicines and the proper diagnostic tools on the job and in situ but also the treatment has to be carried out totally and comprehensively. Again, that is the great challenge that faces us.

While the incidence of TB is stable or falling in many regions of the world, global rates of new infections are still rising in many endemic areas where TB goes hand-in-hand with HIV-AIDS and the effects of poverty. There they are together, the triangle of poverty, disease and suffering. And, of course, without tackling health, which is concomitant with poverty, that leads unfortunately to very serious economic, social and political consequences, which we all know about. There are dreadful instances of communities suffering because there is no peace; where there is no peace, it is difficult to provide health care; without that health care, the poverty continues; and so the cycle goes on.

TB, I understand, will rob the world's poorest countries of an estimated \$1 trillion to \$3 trillion over the next decade. So, apart from the purely individual health, and social and political problems, there are economic implications.

These are the terrible consequences of not being able to tackle TB. In some countries, lost productivity attributable to TB approaches seven per cent of gross domestic product—seven per cent.

I understand that there is a new test that can accurately diagnose tuberculosis in people within 90 minutes, compared to the six weeks needed for the current standard test—90 minutes

compared to six weeks. It is called the Xpert MTB/RIF test, and I do not pretend to understand enough about it, but it can identify TB in 98 per cent of active cases. That is an improvement of more than 45 per cent on one of the current most commonly used techniques. It also, I understand, detects whether the TB-causing bacteria are resistant to rifampicin, a first-line drug for TB in 98 per cent of cases. According to Richard Chaisson, Director of the John Hopkins Centre for Tuberculosis Research in Baltimore, Maryland, who was not involved in the work:

It has the potential to be revolutionary ...

So, on 24 March, I will join with all my colleagues in this place to remember World Tuberculosis Day and to do our part to ensure that we help tackle this preventable disease. Thank you.

Dr WASHER (Moore) (7.45 pm)—First, I would like to thank the member for Werriwa for moving this important motion, and I congratulate the member for Braddon: his pronunciation of the drug names was excellent!

World Tuberculosis Day is on 24 March, a couple of days from now. Tuberculosis—previously known as consumption, phthisis, scrofula, Pott's disease or the white plague—is an infection by the bacterium *Mycobacterium tuberculosis*. Tuberculosis primarily affects your lungs, and the bacteria that cause tuberculosis spread from person to person through tiny droplets released into the air via coughs, sneezes, laughter and speaking, making it a highly transmissible disease.

Historically, it is believed that *Mycobacterium bovis*, which is the cattle form, moved from cattle to humans approximately 20,000 years ago, coinciding with the domestication of animals. It is thought that it almost wiped out the human population at that time. The number of cases of TB has been increasing since 1985, partly due to the emergence of the Human Immunodeficiency Virus. HIV weakens a person's immune system so it cannot fight the TB bacteria.

The first antibiotics used to fight tuberculosis were developed 60 years ago. The *Mycobacterium* has since developed the ability to survive these antibiotics and that ability has been passed on to its descendants so that we now have drug-resistant strains of tuberculosis. These strains are known as multidrug resistant, or MDR, and extensively drug resistant, or XDR. In 2009, 1.7 million people died of TB, including 380,000 people with HIV. TB affects mostly young adults and occurs mainly in the developing world, with more than half of all cases in Asia.

TB is the leading killer amongst people with HIV. In 2009, 9.4 million cases were diagnosed, with 80 per cent coming from just 22 countries. It is a worldwide pandemic, with 13 African countries in the top 15 countries for TB incidence rates and a third of all new cases being found in India and China. According to the WHO *Global Tuberculosis Control Report 2009*, there may be more than 500,000 new MDR-TB cases diagnosed worldwide, with over 50 per cent coming from China, India and the Russian Federation. XDR-TB has been confirmed in more than 58 countries. Current testing for drug resistance can take more than four weeks, leading to higher mortality rates and the further spread of the disease.

Programs funded in 2009 by the Global Fund to Fight AIDS, Tuberculosis and Malaria have provided treatment for six million people with active TB. The global fund has provided nearly two-thirds of the external financing for TB and multidrug-resistant, or MDR, TB control efforts in low- and middle-income countries. TB programs supported by the global fund have also provided 1.8 million TB-HIV services. In many countries in which the global fund supports programs, TB prevalence is falling, as are TB mortality rates. To date, programs supported by the global fund have saved 6.5 million lives by providing AIDS treatment for three million people and antituberculosis treatment for 7.7 million people.

In October 2010, Australia announced a 55 per cent increase in its commitment to the Global Fund to Fight AIDS, Tuberculosis and Malaria, bringing its pledge to \$210 million over the next three calendar years. Imagine how many more lives could be saved if we could supplement this pledge to ensure that the resources for TB, AIDS and malaria were sufficient. In December 2010, the World Health Organisation endorsed a new rapid test for tuberculosis. This new test can provide an accurate diagnosis in about 100 minutes—

Mr Sidebottom—Ninety.

Dr WASHER—Ninety, as the member for Braddon said, to 100—compared to current tests that can take up to three months to provide results. The Xpert diagnostic tool is a fully automated nucleic acid amplification test for the early diagnosis of TB as well as multidrug-resistant TB and TB complicated by HIV infection, which are more difficult to diagnose. The system uses single-use disposable cartridges which are self-contained, eliminating cross contamination between samples. Many countries still rely principally on sputum smear microscopy, which was developed over a century ago.

The company which has developed the new test, Cepheid, has granted a 75 per cent reduction in the price for countries most affected by TB, compared to the current market price.

Preferential pricing will be given to 116 low- and middle-income countries where TB is endemic, with additional reduction in price once there is significant volume of demand. It is estimated the cost of each test in 2011 will be about \$16.86 with 0.6 million tests conducted, but this will reduce to approximately \$10.72 by 2014 when an estimated 3.7 million tests will be conducted.

I request the government to facilitate the adoption of Xpert in South-East Asia and call on its use as part of the Debt2Health agreement with Indonesia. Indonesia has the third-highest rate of tuberculosis in the world, with more than 90,000 Indonesians dying from the disease each year. Despite tuberculosis being preventable and curable, the disease is on the rise in Indonesia and many other developing countries. Debt2Health is the financing initiative of the global fund and is helping to channel resources of developing countries away from debt repayment towards investment in health. Under the current Debt2Health arrangements, Australia will cancel \$75 million of Indonesia's debt and, in return, Indonesia will invest half of this amount into national programs to combat tuberculosis through the Global Fund to Fight AIDS, Tuberculosis and Malaria.

Mr LAURIE FERGUSON (Werriwa—Parliamentary Secretary for Multicultural Affairs and Settlement Services)

(7.52 pm)—At the outset, I recognise RESULTS, the group that has approached the member for Forrest, the member for Braddon and me—and, I guess, many other members—on this issue. I admire their effort in lobbying members of parliament and working with the media—they have accomplished much in regard to microfinance and debt cancellation—as well as their interest in tuberculosis.

It is important to note that tuberculosis is very much related to poverty and, in particular, is gender based. The characteristics of women's circumstances around the world—cramped living conditions; poor ventilation when cooking; using biomass fuel when they cook; confined living spaces and the predominance of women in sex work, which is very closely interrelated with living in confined spaces—are all aspects that lead to a greater prevalence amongst women. Throughout large parts of the world women with this disease suffer a degree of stigmatisation and often do not get the treatment that males receive. It is also important to note another example of how this affects poorer people. If we adjust the statistics to take account of differences in age structures between Indigenous and non-Indigenous populations in Australia, we see that the rate of tuberculosis amongst Indigenous Australians compared to other people in this country is 14 to one. It is very much a disease that is related to living conditions and to a person's circumstances in life.

The situation is that, around the world, a person dies from TB every 20 seconds. Many other speakers have mentioned the figure of 1.7 million people dying per year, with 9½ million people contracting active TB. One of the other problems is, despite the efforts of foreign aid and the efforts of doctors et cetera, population growth around the world is in some areas overwhelming our gains. We are making strenuous steps forward, occasioned by the United Nations and other organisations, but in some parts of the world population growth means that, although the rates are going down, the number of people being affected is making the situation extremely serious. Another problem that has been identified with tuberculosis is the difficulty that many people have in completing their regime of medication, which is supposed to be at least six to 12 months in duration. The circumstances of some people around the world make that very difficult. Screening rates are lower in large parts of the developing world.

Self-medication is a problem when people do not have access to proper medical facilities et cetera. The organisation referred to in the motion, which I take to be an organisation that does not have a commercial motivation, is advocating to move towards the Xpert diagnostic tool. The current test is very much affected by the circumstances in which the patient takes that test. But most particularly it takes too long to get the results back. On average, a person suffering from tuberculosis can infect 10 to 15 people. So if somebody is wandering around the streets undiagnosed, unknowing et cetera, that obviously becomes a major threat to the spread of the disease. It has been said that clinicians will now be able to obtain dependable test results in virtually any clinical setting, not only for detection of TB but for simultaneous determination of whether or not it is a drug-resistant strain.

As the previous opposition speaker noted, another significant issue around the world with tuberculosis is the growth of drug resistance because of self-medication and people not keeping to their regimes.

Returning to the theme raised at the beginning, it is important to note that 17 of the 22 countries most affected by this problem, where 80 per cent of people are suffering from TB, have a per capita GDP of less than \$760 a year. So it is very much related to poverty and associated issues. I also associate myself with Senator Pratt's motion in the Senate, which, in addition, calls for Australia not to move backwards with foreign aid funding in this area, calls for funding not to be affected by the Queensland floods and other catastrophes, and calls for Australia not to in any way walk away from commitments on foreign aid in this and other areas.

Mr McCORMACK (Riverina) (7.57 pm)—I rise to speak on the member for Werriwa's motion relating to World Tuberculosis Day and commend him for putting it before the House. This coming Thursday, 24 March, the world recognises World Tuberculosis Day. Tuberculosis is one of the oldest diseases which still causes a grave effect on humans. It is currently the leading killer of people living with HIV and the third-leading killer of women. Besides people with low immunity, the disease is often found amongst lower socioeconomic communities and the homeless. It is a disease of the past and of the present, and if nothing changes it will continue into the future.

More than two billion people are currently infected with the TB bacterium, which is roughly a third of the world's population. Tuberculosis, commonly referred to as TB, is a chronic infectious disease caused by bacteria known as mycobacterium tuberculosis. It is an infectious and airborne disease. Tuberculosis predominantly attacks lungs; however, it will proceed to attack bones and joints, the circulatory system and the central nervous system.

First reference of a disease similar to TB in humans dates back to ancient Egypt.

Examinations of mummies in tomb paintings reveal that tuberculosis was present at that

time—around 5,000 BC. Ancient Egyptian paintings portray spinal tuberculosis, indicating the presence of the disease, and reference to the disease is evident in ancient Greek literature by Hippocrates as well as in literature by English playwright William Shakespeare.

Tuberculosis has been known by different names since ancient times. The ancient disease called phthisis has references to symptoms similar to that of TB. The recognised term ‘tuberculosis’ was first used in the 19th century.

It is believed to have originated from the word ‘tubercle’, meaning a protuberance, swelling or nodule. In the case of tuberculosis, such nodules are found in lungs or on bones.

In 2010, TB became one of the leading diseases in HIV related deaths. According to the World Health Organisation, prevention and treatment of TB in people living with HIV is an urgent priority for both HIV-AIDS and TB programs. It is sad to see the disease that for so long infected our ancient ancestors is still affecting many people today. Preventing TB is easy. Treatment is simple. However, it continues to navigate its deadly path, causing devastation amongst those less fortunate. Supporting further action to control tuberculosis is one way in which Australia can increase the impact of its aid. TB is in most cases a curable disease. The past 20 years has seen considerable success in eradicating the disease. However, TB still kills more than 1.75 million people a year internationally and has the highest growth rate in the South-East Asia region. The highest number of deaths occurs in the Asia-Pacific region in countries including China, India, Indonesia, the Philippines, Thailand and Vietnam. The World Health Organisation has announced an endorsement of a new rapid tuberculosis diagnostic tool, Xpert MTB/RIF. This tool allows patients to receive an analysis and begin suitable treatment faster than ever before.

Used widely, Xpert will prevent TB transmission on a massive scale. In recognising World Tuberculosis Day, it is important to acknowledge the implementation of this new Xpert diagnostic tool and particularly what it can do in South-East Asia. The member for Braddon spoke passionately about the cycle of poverty and tuberculosis and the spread of the disease. This is a sad state of affairs as it is extremely preventable. The implementation of this device will cut the time for diagnosis from several weeks to two hours and will eventually lead to significant improvements in the detection and treatment of tuberculosis. Awareness of what can and should be done is commendable and encouraged, particularly on such a significant day as this Thursday.

Dr LEIGH (Fraser) (8.01 pm)—Tuberculosis, as the previous speaker, the member for Riverina, has noted is a disease from the times of ancient Egypt. It inflicts upon the world 1.7 million deaths each year. Each untreated sufferer of tuberculosis can infect another 10 to 15 people around them. Our region is in a part of the world where many other countries have high tuberculosis rates. Indeed, almost half the world’s tuberculosis fatalities occur in the Asia-Pacific region. The 10 countries with the highest tuberculosis rates include China, India, Indonesia, the Philippines, Thailand and Vietnam.

Tuberculosis is a curable disease and considerable progress has been made in its treatment and diagnosis in the last 20 years. What is required is more generosity and more leadership, which is why the Labor government are committed to increasing our aid commitment to 0.5 per cent of GNI. I note at this stage that the UK government, despite having budget challenges that are far greater than our own, has continued its pledge to increase UK aid to 0.7 per cent of gross national income.

Seventy per cent of aid that targets tuberculosis comes via the Global Fund to Fight AIDS, Tuberculosis and Malaria. It is important in this context to acknowledge the role that the global fund has played. The role of the global fund and the role of foreign aid have at least been bipartisan policies in this parliament, and I hope that this continues to be the case.

Two reasons that are often cited for cutting back on foreign aid—and reasons which

arose in the recent debate when the coalition suggested that they would find budget savings by reducing foreign aid to Indonesian schools—are national interest and corruption. It is true that the global fund has recently had disturbing revelations about corruption. There have been suggestions that global fund resources have been misused. As a result, the global fund's executive director, Michel Kazatchkine, announced a series of changes, including tougher controls and monitoring, a doubling of the budget of the independent inspector general and a panel of international experts to review procedures.

We should be rigorous about reducing corruption but the fact that we see corruption does not mean that we should shut down our support of the global fund. The global fund concept has been effective. The global fund makes countries compete for money based on their ability to implement programs—driving a race to the top among recipient countries. The global fund is also effective because it brings together resources from a range of different sources. These include government moneys, wealthy philanthropists, such as those who support the Bill & Melinda Gates Foundation, and businesses.

An interesting idea highlighted in a recent article in the *Economist* is RED, which was created by Bono and is a brand attached to products and services from firms such as Apple, Gap and Starbucks. This scheme has so far raised \$160 million to go to the global fund to help reduce the prevalence of tuberculosis in the world.

It is important, as we wrestle with the challenge of corruption, that we recognise that the main game is cutting poverty. The problem of corruption and aid is a bit like the challenge of a footy coach trying to reduce injuries. No footy coach wants the players to hurt themselves but neither does a footy coach go out and say to the players, 'Blokes, the main thing here is that we do not have any injuries at the end of the game.' A strategy which guarantees zero injuries is also a strategy that will earn you the wooden spoon. We should be rigorous in reducing corruption as we go through, and we should do in the global fund as we do in the Australian aid program: try and reduce corruption whenever we can.

A generous foreign aid program is an expression of who we are as Australians. It is also a program that is in our national interest in bringing about a safer region and a region in which there is more trade. Of Australia's 20 nearest neighbours, 18 are developing countries. So our aid program needs to be a strong one if we are to invest in a richer and safer region. I want to thank my friend and colleague the honourable member for Werriwa for bringing this motion before the House for debate this evening.

Mr TEHAN (Wannon) (8.07 pm)—I rise to talk on this motion, in particular points 1 and 3, which recognise that 24 March is World Tuberculosis Day—an observance of a disease that still claims the lives of 1.7 million people every year. It also acknowledges that the widespread adoption of the new Xpert diagnostic tool, which cuts the time for diagnosis from several weeks to two hours, would lead to significant improvements in the detection and the treatment of tuberculosis.

This year marks the second year of a global two-year campaign by the World Health Organisation called 'On the move against tuberculosis'. The goal of this campaign is to inspire innovation in tuberculosis research and care. Today I would like to acknowledge the work and research that has been done on this important topic. Tuberculosis is an airborne infectious disease that is preventable and curable. The World Health Organisation is working to dramatically reduce the burden of tuberculosis and halve tuberculosis deaths and prevalence by 2015. The World Health Organisation is championing the ambitious new objective and targets of the Global Plan to Stop Tuberculosis 2011-15, which involves identifying all the research gaps that need to be filled to bring rapid tuberculosis tests, faster treatment regimes and a fully effective vaccine to market.

In addition to this, the global plan shows public health programs how to drive universal access to TB care, including how to modernise diagnostic laboratories and adapt revolutionary TB tests that have recently become available. TB is a disease of poverty affecting mostly young adults in their most productive years. The vast majority of TB deaths are in the developing world and it is among the three greatest causes of death among women age 15 to 44. More than two billion people around the globe, one-third of the world's total population, are infected with TB bacilli, the microbes that cause TB. One in every 10 of those people will become sick with active TB in his or her lifetime. People living with HIV are at much greater risk.

While Australia has one of the lowest rates of tuberculosis in the world, we are not immune and the disease remains a public health problem in our overseas born and Indigenous communities. In 2008, 1,228 TB notifications were received by both national notifiable diseases surveillance system corresponding to a rate of 5.7 notifications per 100,000 population. In 2007 there were 1,174 notifications or 5.6 per 100,000 population. The notification rate of TB was higher than the national average in the Northern Territory and New South Wales and also in my state of Victoria where the NNDSS reported 7.1 per 100,000 population.

As with many infectious diseases, time is of the essence with regard to treating tuberculosis. Whilst TB is an ancient disease, today it is curable and globally we should be working towards zero deaths from TB in the 21st century.

Two major goals that are set regarding the global fight against tuberculosis are the UN Millennium Development Goals and those of the Stop TB Partnership. The UN Millennium Development Goals aim to have halted and begun reverse incidence by 2015 in comparison with 1990. The Stop TB Partnership aims to have halved the deaths by 2015 in comparison with 1990.

It is heartening to hear that the Stop TB Department of WHO confirm they are currently on target globally to achieve both the goals set under the UN Millennium Development Goals and those set by the Stop TB Partnership.

I wish to acknowledge World Tuberculosis Day on 24 March and express my thoughts and sympathy for those who have lost family or loved ones to tuberculosis.

The DEPUTY SPEAKER (Ms S Bird)—Order! The time allotted for this debate has expired. The debate is adjourned and the resumption of the debate will be made an order of the day for the next sitting.