

## Health in Timor-Leste: 20 years of change

Timor-Leste voted for independence in 1999. Life expectancy has since climbed and primary care strengthened, yet maternal mortality is high and NCDs are rising. Sophie Cousins reports from Dili.



The maternity ward at Timor-Leste's national hospital in Dili, the capital, is teeming with pregnant women, many of whom have travelled for hours on pot-holed roads across the mountainous country. Many sit on the floor, near splatters of blood, while others lie on beds in the hallway. "There are not enough beds. Not enough space for women to give birth", Sara Maria Filomena Xavier, head of quality control at the Hospital Nacional Guido Valadares, says as she walks through the ward shaking her head.

Xavier pulls out her phone and flicks to a photo of a woman giving birth on a plastic chair because there were no beds. "I just want to see mother and baby in good health. More and more women want to come to the hospital to give birth, but facilities in their communities need to be staffed because we are overburdened." The women here, however, are lucky. Their births will be overseen by midwives, doctors, and nurses—the main reason why women flock here.

Timor-Leste is a small southeast Asian country occupying half the island of Timor. The country has a population of almost 1.3 million, 70% of whom live in rural and remote areas. In 1975, Indonesia invaded what was then called East Timor. The invasion and subsequent occupation of the country led to decades of violence and brutality. Between 1975 and 1999, a third of the population died from military action, starvation, or disease. 20 years ago, on Aug 30, 1999, a referendum on independence was held, which led to the country becoming independent on May 20, 2002.

By the time of independence, most of the country's crucial infrastructure had been destroyed, including the foundations of its health-care system. The violence that followed separation resulted in 77% of health facilities

being damaged, in addition to an exodus of doctors and other health professionals. Between 1999 and 2000, WHO, together with UNICEF, acted as a temporary ministry of health, coordinating health sector

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responses across the territory. Life expectancy was less than 60 years.

Since 2002, successive governments have focused on rebuilding the country. Today, life expectancy has reached almost 70 years. In the past 15 years, the country has built up a corps of primary health-care physicians who have received medical training in collaboration with the Cuban Government, both in Cuba and, more recently, at the University of Timor-Leste Medical School.

Rui Maria de Araújo, who served as the minister of health between 2001 and 2006 and later as the prime minister from 2015 to 2017, is pleased by the development of the health-care system since independence but stresses there is far more work to be done. "In 2001, we only had 23 Timorese doctors", he says. "Now we can see that over the last 15 years, through the cooperation with the Cuban Government, our capacity to deliver services is in a better shape than when we started. But that doesn't mean everything is going smoothly."

In 2015, the government launched a national health programme called *Saúde na Família*, which is modelled on the Cuban primary health-care system. The idea of the programme is to provide care through a network of doctors, nurses, and midwives and

to overcome major obstacles in access to health care, including geographical, financial, and cultural barriers.

Although the programme is still in its infancy, there are hopes it will, in addition to other programmes and international support, help the country to overcome some of its major health burdens, which include tuberculosis, malnutrition, and the increasing incidence of non-communicable diseases (NCDs). But given most people live in rural and remote mountainous areas—many of which are only accessible by foot and lack access to clean water and sanitation—huge challenges remain. "Coverage is still an issue. Many rural areas are left out. In some places, there are no health posts", de Araújo says.

Despite the country's challenging terrain, it has made impressive progress in the control of vaccine-preventable diseases in a short period. In 2012, maternal and neonatal tetanus was eliminated and in 2018, Timor-Leste was declared free of measles and as having controlled rubella. In 2016, an additional five vaccines were introduced into the childhood immunisation schedule.

However, like in many other parts of the world, there has been a measles outbreak this year, with at least



15 cases. Although the outbreak was small and has since been contained, Rajesh Pandav, the WHO country representative based in Dili, says it nevertheless illustrates the importance of vigilance, especially in a country with a developing health system. "The focus must be on sustaining the gains on diseases such as measles and malaria", he says.

Timor-Leste is on track to eliminate malaria in 2020 after having cut the incidence by more than 99% in 12 years through the aggressive use of indoor residual spraying and insecticide-treated nets, among other interventions. However, dengue is becoming an increasing public health threat with a growing number of cases recorded during the rainy season.

But for all its progress, there is a sobering reality. Timor-Leste has one of the highest tuberculosis incidence rates in the world, at around 500 cases per 100 000 population. Poverty, poor living conditions, high smoking rates, chronic malnutrition, a lack of awareness, and stigma continue to fuel the epidemic. "People know they're suffering but because of stigma and a lack of information, they don't know [it is tuberculosis]. If people don't understand tuberculosis, they won't accept the disease and they won't follow the treatment the doctor gives them", says Maria do Céu Pina Sarmiento, former minister of health, now an academic at the University of Timor-Leste.

Malnutrition in Timor-Leste has also led to one of the highest rates of stunting in the world. 53% of boys and 47% of girls are stunted, according to the World Food Programme, although the proportion is decreasing slowly. Malnutrition is not exclusively due to a lack of food but a combination of factors including poverty, poor sanitation, and poor health literacy. "Our number one priority should be to get food to the table of families", de Araújo says.

In recent years, there has been a push by the government and by non-governmental organisations to provide people with nutrition-based agricultural

support, including educating parents about healthy food they can produce and eat including sweet potatoes and leafy greens, and the benefits of preserving traditional recipes that are unique to Timor-Leste.

Rural communities tend to sell the fruit and vegetables they grow to buy rice and other imported goods such as instant noodles. Not only are noodles cheap, but they are a sign of increasing socioeconomic status. "People are selling organic vegetables to buy instant noodles. It is an issue of education. We're seeing a lot of hypertension cases in rural areas now. Why is that? Is it too much salt? We don't have the evidence yet, but my suspicion is the condiments that come with instant noodles are high in trans-fat and that is having an impact. It is going to be a huge burden of the health system in the future", de Araújo says.

But while most communicable diseases are declining, NCDs are on the rise, now accounting for 62% of all deaths in the country. According to a WHO survey in 2014, a fifth of all adults have three or more NCD risk factors, including smoking, inadequate diet, high blood pressure, alcohol use, and inadequate physical activity.

According to the 2014 WHO survey, 70% of men consume tobacco in some form. Comprehensive national tobacco control legislation was passed in 2016, in a bid to address the epidemic. But despite now having one of the largest graphic health warnings on cigarette packets in the world, smoking rates remain high.

In addition, alcohol use is endemic in Timor-Leste and a major contributor to its use is the lack of regulation: there is no legal minimum age to purchase alcohol and no restrictions on advertising. Alcohol advertising is aggressive, with beer, wine, and spirit adverts adorning the walls of restaurants, cafes, and bars.

Back at the Hospital Nacional Guido Valadares in Dili, volunteers from the Alola Foundation, a non-governmental organisation focused on improving

the lives of women and children, are educating new mothers on the benefits of breastfeeding. The women listen intently. This is a precious opportunity to help to nourish Timor-Leste's next generation and prevent all forms of malnutrition.

More than half of births in Timor-Leste take place at home and, in some areas of the country, only one in five is accompanied by skilled birth attendants. While the country's maternal mortality rate has fallen from 317 deaths per 100 000 mothers in 2010 to 215 deaths per 100 000 in 2015, it remains one of the highest in the region. Most deaths are due to obstetric complications including post-partum haemorrhage and sepsis. Women have an average of 4.2 children, according to the UN Population Fund, and just 26% are using modern contraceptive methods.

But for all the violence, destruction, and hardship Timor-Leste has faced, the country has made impressive health gains in a short period of time. Now, experts agree, the focus must be on improving quality of care, strengthening health service delivery, and building the capacity of health workers.

Augustine Asante, from the University of New South Wales (Australia), has researched Timor-Leste's health system. He says that health worker skills must be improved, and the medical supply system strengthened. "We all know that persistent stock-outs and shortages of essential medical supplies compromise quality and undermine trust and confidence in the health system."

"I think there should be a systems approach to improving quality of care. At higher levels of government, appropriate quality improvement structures and policies should be put in place. In the end, whether it is improving quality of care or increasing the number of specialists, there will be the need for additional funding."

*Sophie Cousins*