## Cuba: health lessons not under embargo



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For the Global Burden of Disease 2013 data see Online/ Articles http://dx.doi. org/10.1016/S0140-6736(14)61682-2

data see Articles Lancet 2014; 384: 980

For Cuba's under-5 mortality data see Articles Lancet 2014;

2014 ended with a historic change in relations between Cuba and the USA. "After all, these 50 years have shown that isolation has not worked", stated US President Barack Obama on Dec 17. Although issues around politics, freedom, and civil rights still stand and should not be overlooked, Obama pointed out, "Where we can advance shared interests, we will—on issues like health, migration, counterterrorism, drug trafficking and disaster response". Obama cited health. With a life expectancy of 79 years, 67 doctors per 10 000 people (whereas the regional average is 21 per 10 000), and with hundreds of Cuban doctors now fighting Ebola in west Africa, health indeed does come to mind first when one thinks of Cuba.

According to the Global Burden of Disease 2013 data published in *The Lancet*, Cuba's top three killers (ischaemic heart disease, stroke, and lung cancer) are typical of high-income countries. Cuba's maternal mortality ratio of 39.8 per 100 000 livebirths is low compared with that of Brazil and Mexico (58.7 and 54.0, respectively), and has improved notably in the past

decade. Cuba has an under-5 mortality rate of 5.7 per 1000 livebirths, below that of the USA (6.6).

While under economic sanctions, the country could be considered paralysed, but health indicators are telling us a different story—a complex story, a paradox. Although the embargo has had severe consequences for many sectors of Cuban life, such as infrastructures and technologies, health has been a success. Cuba's health system has been able to solve some issues that other countries have not. The Cuban health system, which is free and firmly anchored in disease prevention and primary care, provides good health outcomes at a cost within the reach of most middle-income countries.

Despite the severe constraints on resources that Cuba has had to endure, the country provides an interesting example of what can be achieved by prioritising health and education. As Anthony Robbins points out in a letter in today's issue, public health could and should lead the way in a renewed relationship between Cuba and the USA. ■ The Lancet

## Warning sounded over commercial ultrasound in pregnancy



Ultrasound imaging in pregnancy, which uses high-frequency sound waves to view the fetus, has been used in health-care settings in the USA and other countries for decades. It has an excellent safety record. A recent consumer health release from the US Food and Drug Administration (FDA) warning against the use of ultrasound scans outside health settings therefore seems, on first look, surprising. However, the FDA has noted the growing commercialisation of ultrasonic imaging in the USA and has concerns.

Several US companies now offer fetal keepsake images and videos using ultrasound. In some cases, the ultrasound machine might be used for as long as an hour to video the fetus. Several sessions might also take place, amplifying the number of scans a woman normally has during a healthy pregnancy. As well as ultrasound scans, the FDA also warns against use of over-the-counter Doppler ultrasound heartbeat monitors, noting that although there is a lack of evidence of any harm, "prudent use of these devices by trained health care providers is important".

Ultrasound imaging introduces energy into the body and laboratory studies have shown that diagnostic levels of ultrasound can produce physical effects in tissue, such as pressure oscillations and rises in temperature. In some cases, it can create small pockets of gas in bodily fluids or tissues. The long-term consequence of these effects are unknown, but on the basis of what is known, the FDA have recommended that health-care providers minimise exposure to ultrasound while maintaining diagnostic quality. The warning about commercial use of ultrasound is therefore understandable and welcome.

In addition to potential biological effects, commercial ultrasound might cause unnecessary anxiety for the consumer if images, videos, or monitor readings are misinterpreted by them or an untrained provider. Similar concerns exist about other medical services that are being used outside clinical settings, such as memento MRI scans and personal whole genome sequencing. The increasing commercialisation of health technologies is a trend all medical regulatory agencies need to be vigilant about. ■ The Lancet

For the **FDA notice** see http:// www.fda.gov/ForConsumers/ ConsumerUpdates/ucm095508.