

Global Health and Social Medicine and the Pedro Kouri Institute of Tropical Medicine in Havana). The Medical Education Cooperation with Cuba (MEDICC), a non-profit organisation founded in 1997, is promoting interaction between the US, Cuban, and global health communities.⁹

The Cuban experience in the health sector seems to be a useful example of public policies that have prioritised development of human capital within a context of limited resources, and seems to have achieved good results. Cuban cooperation with other developing countries in the health sector is good international practice. Further funding from international agencies such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the GAVI Alliance, and the World Bank is necessary to support the scaling up of country collaborative efforts of this type and to reverse the deficits in human resources that hinder health-system strengthening in much of the developing world.^{1,10}

Miguel Márquez

Miramar, Havana, Cuba
marcere@infomed.sld.cu

I am a former PAHO/WHO Representative in Cuba (1989–96). I declare that I have no conflicts of interest.

- 1 Vujici M, Ohiri K, Sparkes S. Working in health: financing and managing the public sector health workforce. 2009. http://www.who.int/workforcealliance/knowledge/publications/partner/workinginhealth_vujici_worldbank_2009.pdf (accessed Nov 1, 2009).
- 2 De la Torre EE, Lopez C, Marquez M, Muniz G, Rojas F. Health for all is possible. Havana, Cuba: Cuban Public Health Society, 2005 (in Spanish).
- 3 Hernández E, Marquez M. Medical education in Cuba. *Educ Med Salud* 1976; **10**: 1–41 (in Spanish).
- 4 World Bank. World development report 2004: making services work for poor people. Sept 1, 2003. <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTWDRS/EXTWDR2004/0,,menuPK:477704~pagePK:64167702~piPK:64167676~theSitePK:477688,00.html> (accessed Nov 1, 2009).
- 5 WHO. World health report: primary health care now more than ever. 2008. <http://www.who.int/whr/2008/en/index.html> (accessed Nov 3, 2009).
- 6 Pan American Health Organization. Health situation in the Americas: basic indicators. 2007. http://www.paho.org/English/DD/AIS/BI_2007_ENG.pdf (accessed Nov 1, 2009).
- 7 Pan American Health Organization. Health in the Americas. Vol II—countries, Cuba. 2007. <http://www.paho.org/HIA/archivosvol2/paisesing/Cuba%20English.pdf> (accessed Nov 1, 2009).
- 8 Marimon N, Martinez E. International health collaboration. La Habana, Cuba: OPS/OMS, 2009 (in Spanish).
- 9 Cuban research in current international journals. *MEDICC Rev Int J Cuban Health Med* 2009; **11**: 3 (abstr).
- 10 WHO. World health report: working together for health. 2006. <http://www.who.int/whr/2008/en/index.html> (accessed Nov 1, 2009).

The right to health in times of economic crisis: Cuba's way

The current economic crisis affects the health of millions of people in developing countries and palliative sectorial aid is needed.¹ By contrast, Cuba's economy has been in crisis for almost 20 years—since the Soviet Union's breakdown followed by a tightened US embargo—without much impact, at least on health outcomes.^{2,3} Why?

After the 1959 Cuban revolution, the Government tackled socioeconomic health determinants with redistributive policies, developed participation structures, and set up a comprehensive health system. Equitable policies—in line with what we call today a health-rights approach—were stubbornly, but successfully, sustained after 1990. The health-care system guarantees accessible, integrated, and effective curative services and stresses prevention. The different levels of care interact adequately. Balanced development of resources led to a dense network of facilities—from the doctor's cabinet in the neighbourhood to the university hospital—with the essential technology, comfortable staff–population ratios (63.4 physicians

and 83.8 nurses per 10 000 inhabitants³), and local production of diagnostics and drugs (covering 85% of the needs, including antiretrovirals and cytostatics).⁴

The tenet of Cuba's exclusively public system is the first line of defence, in which the family doctor has had a central role since the 1980s. He or she serves a well-defined population for which the doctor functions as the entry point to and coach through the system. Family doctors and nurses also analyse ecological risks within the community and the perceived health problems of the population in their area.⁵ This permits fine-tuning of curative and preventive activities and the setting of local priorities for intersectorial action.

A comprehensive research policy supports the health sector's development. Operational research ranges from optimising use of care⁶ to strengthening community-based disease control.⁷ Biotechnology research led to novel diagnostic tools and recombinant vaccines against hepatitis B, meningitis B, and *Haemophilus influenzae* type b.⁸ Close links between research institutes and health policy makers ensure the swift introduction

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Nurse takes blood pressure at informal clinic in Havana, Cuba

of innovations in the local health system, and in international solidarity programmes. Cuba develops supplies that are instrumental in controlling health problems it does not face itself, besides sending over 30 000 health professionals abroad and training similar numbers of young foreign students.⁹

Can these achievements be preserved? Equitable distribution of consumer goods and services has been under strain since the 1990s. In the health sector, periodic shortages of drugs opened a niche for a black market and waiting lists for interventions triggered informal coping mechanisms.¹⁰ The decreased availability and rapid turnover of family doctors—a consequence of intensified international collaboration since 2004—also constitutes a challenge. Concurrently, Cuba's ageing population is in need of more and better organised management for chronic diseases and psychosocial care. Moreover, due to the current global crisis, export earnings dropped dramatically in 2008 and tourism revenues decreased.

As Raúl Castro recently reminded us, "Nobody can indefinitely spend more than he earns. Two plus two is four, never five. Moreover, in the conditions of our imperfect socialism, because of our own insufficiencies, many times two plus two results to be three".¹¹ Specific measures, such as higher wages and targeted welfare to gradually substitute for free and subsidised goods, are now being publicly debated nationwide. However, the state's core functions that ensure the population's

wellbeing—education, health care, and social security—remain unchallenged political priorities, which budget allocations will continue to reflect.¹¹ At sectorial level, plans made to strengthen the role of the family doctor and nurse as a coordinating hub in an integrated health and social system seem the correct way forward.¹² To compensate for the health personnel sent abroad, training of human resources is being accelerated. Nevertheless, they need to be more stably stationed in the community.

From a human-rights perspective, Cuba's response to economic crisis exemplifies the role that a developing country state can play to ensure its citizens' health: tackle all socioeconomic determinants of health and embed sectorial health measures in a redistributive intersectorial policy. The determination of Cuba's Government to assume responsibility to protect and develop its citizens' right to health seems intact. The international community could assist by increasing pressure to make the USA revoke the crippling embargo.

**Pol de Vos, Patrick Van der Stuyft*

Institute of Tropical Medicine, 2000 Antwerp, Belgium
pdevos@itg.be

Since 1996 both authors have participated in research activities with Cuban institutes affiliated to the Ministry of Health.

- 1 World Bank. Crisis hitting poor hard in developing world, World Bank says. Feb 12, 2009. <http://go.worldbank.org/PGNOX87VO0> (accessed Oct 29, 2009).
- 2 Cooper RS, Kennelly JF, Orduñez-García P. Health in Cuba. *Int J Epidemiol* 2006; **35**: 817–24.
- 3 Pan American Health Organization. Health Information and Analysis Project. Health situation in the Americas: basic indicators 2009. http://new.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=3050&Itemid (accessed Nov 3, 2009).
- 4 De Vos P. Health report on Cuba. "No one left abandoned": Cuba's national health system since the 1959 revolution. *Int J Health Serv* 2005; **35**: 189–207.
- 5 Eisen G. Primary care in Cuba: the family doctor team and the polyclinic. La atención primaria en Cuba: el equipo del médico de la familia y el policlínico. *Rev Cub Salud Pub* 1996; **22**: 117–124 (in Spanish).
- 6 De Vos P, Murlá P, Rodríguez A, Bonet M, Más P, Van der Stuyft P. Shifting the demand for emergency care in Cuba's health system. *Soc Sci Med* 2005; **60**: 609–16.
- 7 Toledo-Romani ME, Vanlerberghe V, Perez D, et al. Achieving sustainability of community-based dengue control in Santiago de Cuba. *Soc Sci Med* 2007; **64**: 976–88.
- 8 Lage A. Connecting immunology research to public health: Cuban biotechnology. *Nature* 2008; **9**: 109–12.
- 9 De Vos P, De Ceukelaire W, Bonet M, Van der Stuyft P. Cuba's international cooperation in health: an overview. *Int J Health Serv* 2007; **37**: 761–76.
- 10 Jenkins TM. Patients, practitioners, and paradoxes: responses to the Cuban health crisis of the 1990s. *Qual Health Res* 2008; **18**: 1384–400.
- 11 Castro R. The people, with its party in the vanguard, must decide. Speech at the National Assembly. Aug 1, 2009. <http://www.granma.cubaweb.cu/2009/08/01/nacional/artic19.html> (accessed Oct 29, 2009) (in Spanish).
- 12 WHO. The world health report 2008. Primary health care: now more than ever. 2008. <http://www.who.int/whr/2008/en/index.html> (accessed Oct 29, 2009).