entitlements, and their ethical implementation by use of human rights principles, provides an ethos with which to guide doctors during war and peace. Second, the Geneva Conventions[3] provide legally binding regulations that—outside of combat situations—require that everyone be treated humanely. Lastly, the binding UN Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment,[4] along with interpretations published by its UN monitoring body, provides an exhaustive list of prohibited behaviour.

Reducing moral decision-making processes to negotiating an algorithm risks euphemising contentious issues in much the same way as the Tokyo Declaration euphemises doctors and torture into a matter of ethics. Torture is a heinous international crime prohibited under international human rights law, the laws of armed conflict, and customary international law. So seriously is it taken that, as former Chilean president Augusto Pinochet found when visiting London, UK,[5] it is subject to universal jurisdiction. Military doctors should make themselves as familiar with these laws as any specialist over jurisprudence specific to their discipline.

I played a part in the development of General Comment 14 of the International Covenant on Economic, Social, and Cultural Rights.

Peter Hall
peterhall@doctorsforhumanrights.org

Doctors for Human Rights, Abbots Langley, Watford WD5 0BE, UK

1 Caplan A. The proper ends do justify the means. *Lancet* 2010; **376:** 675.
2 United Nations. The right to the highest attainable standard of health. (General Comment No 14). Geneva: United Nations, 2000. http://www.unhchr.ch/tbs/doc.nsf/(symbol)/E.C.12.2000.4.En (accessed Nov 23, 2010).
3 International Committee of the Red Cross. The Geneva Conventions. 1949. http://www.icrc.org/web/eng/siteeng0.nsf/html/genevaconventions (accessed Nov 23, 2010).
4 United Nations. Convention against torture and other cruel, inhuman or degrading treatment or punishment. http://www2.ohchr.org/english/law/cat.htm (accessed Dec 8, 2010).
5 Hall P. A stain on medical ethics. *Lancet* 2005; **366:** 1263.

A plea for investment in district hospitals

We welcome the *Lancet* Commission on the Millennium Development Goals (MDGs; Sept 18, p 991).[1] The report highlights the fact that the narrow focus on the three health MDGs 4 (reduction of child mortality), 5 (reduction of maternal mortality), and 6 (combat of HIV/AIDS, malaria, and other diseases), encourages vertical organisation without full integration into the wider health system. Concerns that funding of specific health silos could perpetuate the fragmentation of global health have also been raised elsewhere.[2]

We strongly recommend investment in district hospitals in low-income and middle-income countries since they are the key to sustainable, long-term solutions. District hospitals should be the main providers of care to rural populations, and so improvement of their service will lead to improvement in overall care to a population, especially in rural areas. Improvement of surgical district hospital care would have a general effect on health by acting as an "enabler", to raise the overall quality of health care, and a more specific effect on meeting MDGs 4, 5, and 6 as well as MDG 1 (halving the number of people living in poverty).[3] Additionally, it would allow the unknown burden of surgical conditions to be treated. Investment in district hospitals would ensure provision of local surgical care, and would allow proper and full integration of public health "vertical" programmes, thus improving health care overall. Access to surgical care is also part of a basic right to health,[4] not just a luxury for the rich. District hospitals have also been shown to be cost effective.[5]

A well functioning local district hospital would have further, much wider ranging benefits such as easy access to medicines and vaccinations, as well as easier and better follow up. We strongly recommend that this should be considered within future health policies.

We declare that we have no conflicts of interest.

**Caris Grimes, Christopher Lavy*
carisgrimes@doctors.org.uk

Epsom and St Helier Hospitals, Carshalton SM5 1AA, UK (CG); and Nuffield Department of Orthopaedics, Oxford, UK (CL)

1 Waage J, Banerji R, Campbell O, et al. The Millennium Development Goals: a cross-sectoral analysis and principles for goal setting after 2015. *Lancet* 2010; **376:** 991–1023.
2 Feachem R, Yamey G, Schrade C. A moment of truth for global health. *BMJ* 2010; **340:** c2869.
3 PLoS Medicine Editors. A crucial role for surgery in achieving the UN millennium development goals. *PLoS Med* 2008; **5:** e182.
4 McQueen K, Ozgediz D, Riviello R, et al. Essential surgery: integral to the right to health. *Health Hum Rights* 2010; **12:** 137–52.
5 Debas HT, Gosselin R, McCord C, Thind A. Surgery. In: Jamison D, Breman JG, Measham AR, et al, eds. Disease control priorities in developing countries. Washington: Oxford University Press, 1245–60.

Breaking away from the disease-focused paradigm

The newly formed Global Task Force on Expanded Access to Cancer Care and Control in Developing Countries (Oct 2, p 1186)[1] proposes to "challenge the public health community's assumption that cancers will remain untreated in poor countries." I strongly support this proactive initiative. Yet I wonder why we continue to tackle health inequities one disease at a time—first HIV, then cancer. What's next? Heart disease? Depression? Will we work our way down the list of the Global Burden of Disease?[2]

Even though many vertical programmes have become more "diagonal" by incorporation of an element of health system strengthening,[3] we are still toiling within the same paradigm as before. To make real progress on global health inequities we must break free from the traditional biomedical model. For instance, child labour does not appear on the list of the

Global Burden of Disease, yet 20% of the world's children younger than 15 years are working, often in hazardous jobs in the informal sector, to help support their vulnerable families.[4] This situation perpetuates multigenerational health inequities through a cycle of low educational attainment, low income, and poor health. Strengthening primary health care and other forms of social protection is crucial, not only to combat HIV and cancer and a host of other diseases, but to affect the shared causes of health inequities.[5]

A new paradigm is therefore needed within which we can develop creative and evidence-based solutions to complex and interconnected health and social problems in a more comprehensive way.

I declare that I have no conflicts of interest.

Anne Andermann
anne.andermann@mail.mcgill.ca

Family Medicine Centre, St Mary's Hospital, Public Health Department, Cree Board of Health and Social Services of James Bay, Faculty of Medicine, McGill University, Montréal, Quebec H3T 1M5, Canada

1 Farmer P, Frenk J, Knaul F, et al. Expansion of cancer care and control in countries of low and middle income: a call to action. *Lancet* 2010; **376:** 1186–93.
2 Lopez A. Health and health-research priorities: has WHO got it right? *Lancet* 2008; **372:** 1525–27.
3 Ooms G, Van Damme W, Baker B, Zeitz P, Schrecker T. The 'diagonal' approach to Global Fund financing: a cure for the broader malaise of health systems? *Globalization Health* 2008; **4:** 6.
4 International Labour Organization. Accelerating action against child labour. Geneva: ILO, 2010.
5 Van Lerberghe W, Evans T, Rasanathan K, et al. World health report 2008. Primary health care: now more than ever. Geneva: World Health Organization, 2008.

Music of the heart

The mysterious power that music wields over many people has long been linked to its resonance with biological rhythms such as the heartbeat, and to its parallels with the intonations and cadences of spoken language. Music is also said to have a part to play in the treatment of selected medical disorders, notably in parkinsonism where rhythmic music can have a profound effect in easing patients' movement restrictions.[1]

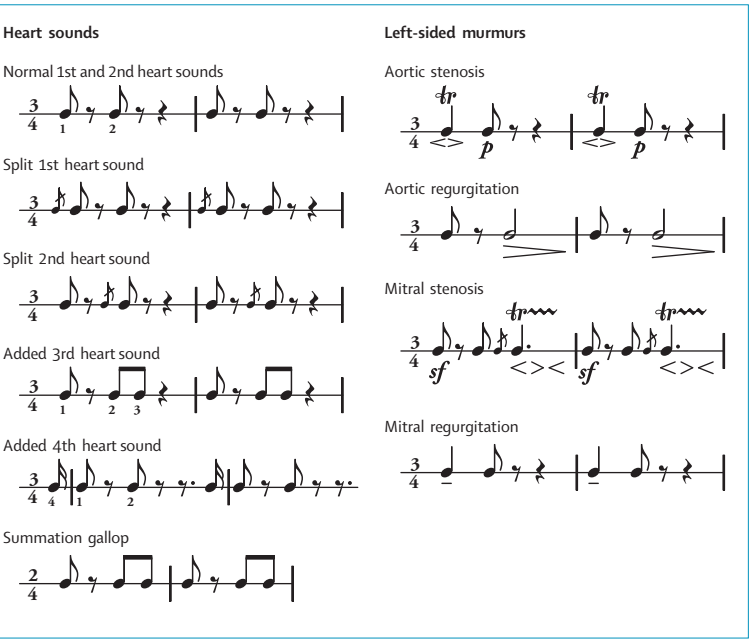

Figure: **Use of musical notation to represent heart sounds and murmurs**

More recently, a role for music as an adjunct in teaching medical communication has been proposed,[2] and music is a component of programmes in medical humanities at several medical schools. The skills involved in attentive listening during medical history taking have some parallels in the close listening that is required for full enjoyment of a piece of music, and the modulations of speech associated with a patient's narrative of illness are analogous to the subtleties of rhythm, tone, and dynamics that imbue musical performances with their emotional content.

I have found a specific role for musical analogy in teaching cardiac auscultation to medical students. Although diagrams and test recordings can help beginners to acquire this elusive skill, another aid to convey the characteristic cadence of the heart sounds and valvular murmurs is their representation in musical notation (figure). Students with a musical background, and many without, have responded to this initiative with delight and appreciation, and have often contributed additional illustrations of their own.

A surprising number of features of the common murmurs can be represented in this way. Thus the harsh or rumbling quality of the murmurs of aortic and mitral stenosis, respectively, can be represented by trills, the long decrescendo sound of aortic regurgitation can be so marked, and even the opening snap in mitral stenosis can be shown with a grace note. This exercise can be extended to the discussion and representation of auscultatory variants of these lesions, and to the portrayal of other murmurs and cardiac conditions.

Wordsworth wrote of the "precious music of the heart", and we need to teach our students how to hear it.

I declare that I have no conflicts of interest.

Michael J Field
michael.field@sydney.edu.au

University of Sydney, Northern Clinical School, Royal North Shore Hospital, St Leonards, Sydney, NSW 2065, Australia

1 Sacks O. Musicophilia. London: Picador, 2007: 248–58.
2 Newell GC, Hanes DJ. Listening to music: the case for its use in teaching medical humanism. *Acad Med* 2003; **78:** 714–19.