

## GLOBAL CHILD MORTALITY: AN INCONVENIENT TRUTH RCH GRAND ROUND: February 6<sup>th</sup> 2008

[trevor.duke@rch.org.au](mailto:trevor.duke@rch.org.au)

- Each year 10 million children die, more than half from easily treatable or preventable conditions, and 95% in developing countries or poorer areas of transitional countries.
- The distinction between developing and developed countries has changed in the last 30 years. The economies of countries such as China and India are booming, with marked increases in child survival, in these, and in most parts of Latin America.
- About one 6<sup>th</sup> of the world's population constitute the Bottom Billion, with low GDP, slow economic growth and high child mortality. These countries, most in sub-Saharan Africa, have missed out on the benefits of globalization that have flowed to economic giants like India and China, and smaller but strong economies like Malaysia and Vietnam.
- Average national child mortality rates hide marked inequity within countries. Within countries child mortality rates are higher among the rural poor, indigenous populations and ethnic minorities.
- In 2007 for the first time in history more than 50% of the world's population live in urban areas. However increasingly in urban areas there are large slums and settlements where mortality rates are much higher than the national averages.
- The commonest causes of death remain infectious diseases: acute respiratory infections, malaria, diarrhoeal disease, HIV, measles, tuberculosis. Perinatal conditions comprised a quarter of child deaths; mostly low birth weight / prematurity, infections, birth asphyxia and congenital abnormalities. As countries address common childhood infections, the proportion of child mortality that occurs in the neonatal period increases. Malnutrition contributes to two-thirds of global child mortality.
- In 2004 WHO and UNICEF launched the Child Survival Strategy in response to slowing of progress in child survival. This involves an integrated approach that includes 23 interventions known to reduce child mortality that can be delivered on a national scale in low income countries.
- There is a deficiency of 4.3 million health workers worldwide. The reasons are complex and involve underinvestment in health training colleges in developing countries over decades; and drain of health workers from rural to urban areas, public to private sector, government service to NGOs and UN agencies, and from poor to rich countries. The loss of personnel to HIV is a double jeopardy in many sub-Saharan African countries: HIV treatment programs are now consuming the time and energy that health workers previously spent managing pneumonia, diarrhoea and malnutrition, and there are fewer doctors and nurses because so many have died from AIDS.
- It is estimated that to scale up the Child Survival Strategy in the 40 poorest countries would cost an additional \$5.1 billion per year.
- Only 5 of the 22 OECD countries have delivered on their 1992 promise to increase overseas development aid (ODA) to 0.7% of GDP. If the other 17 countries fulfilled this promise an extra \$110 billion would be provided in ODA annually.
- In several of the poorest countries in our region, real gains in child survival *are* being achieved. This has resulted from broad systematic approaches to building child health services, and a focus on human resources.

- What can paediatric institutions in Western countries do? What could be *our* institutional contribution? A few principles:
  - Any contribution must have a strong scientific and ethical foundation
  - There is some (but limited) role for “international rescue”
  - Focus on health systems development based on equity
  - We should support local, national and global WHO / UNICEF programs, not parallel projects
  - We should foster and encourage collaboration with existing institutions in developing countries with an emphasis on local leadership
  - Human resources and training
    - Support local institutions of training in child health, at all professional levels including medical, nursing, allied health and medical scientist.
    - Focus on the poorest countries
    - Focus on individuals most likely to make a future and leading contribution to public child health
    - Take steps to mitigate the potential for brain drain
  - Research
    - Local priorities based on knowledge of burden of disease and potential for equitable impact
    - Where the strengths that we have as an institution overlap with local needs in developing countries
    - Research capacity building, both institutional and individual is important
    - High impact research does not necessarily mean high impact factor publications
  - Advocacy for greater generosity by our governments

# INTERNATIONAL CHILD HEALTH RESOURCES

## GLOBAL ORGANIZATIONS AND TECHNICAL RESOURCES

- **UN Convention of the Rights of the Child**  
<http://www.unhchr.ch/html/menu3/b/k2crc.htm>
- **UNICEF State of the World's Children**  
<http://www.unicef.org/sowc02/>
- **Millennium Development Goals**  
[http://www.developmentgoals.org/Child\\_Mortality.htm](http://www.developmentgoals.org/Child_Mortality.htm)
- **UNICEF's Priorities for Children 2002-2005**  
<http://www.unicef.org/pubsgen/mtsp/mtsp-en.pdf>
- **WHO Department of Child and Adolescent Health**  
<http://www.who.int/child-adolescent-health/over.htm>
- **WHO / UNICEF Regional Child Survival Strategy**  
[http://www.wpro.who.int/publications/PUB\\_9290610875.htm](http://www.wpro.who.int/publications/PUB_9290610875.htm)
- **World Development Report, 2005**  
<http://www.who.int/whr/2005/chapter5/en/index3.html>
- **World Health Report, 2006**  
<http://www.who.int/whr/2006/en/>
- **International Child Health Review Collaboration**  
[www.ichrc.org](http://www.ichrc.org)
- **Handicap International**  
<http://www.handicap-international.org.uk/>

## BOOKS

1. **Pocketbook of Hospital Care for Children:** Guidelines for the management of common illnesses with limited resources. World Health Organization, Geneva 2005  
[http://www.who.int/child-adolescent-health/publications/CHILD\\_HEALTH/PB.htm](http://www.who.int/child-adolescent-health/publications/CHILD_HEALTH/PB.htm)
2. **Teaching Aids at Low Cost (TALC).** A UK based charity established in 1965 to provide low cost technical resources to developing countries. An excellent website now with extensive materials available.  
<http://www.talcuk.org/>
3. **Management of the Child with a serious infection or severe malnutrition: guidelines for management at a district hospital.** WHO/FCH/CAH/00.1  
[http://www.who.int/child-adolescent-health/publications/referral\\_care/Referral\\_Care\\_en.pdf](http://www.who.int/child-adolescent-health/publications/referral_care/Referral_Care_en.pdf)
4. Morley D. **Paediatric Priorities in the Developing World**, Butterworth, London 1973. A classic text which is still relevant today.
5. King M. (ed) **Medical Care in Developing Countries.** Oxford University Press, 1966. Another classic text, a monograph from a very early symposium on health in developing countries at the University of Makerere in Uganda.

6. Shann F, Biddulph J, Vince J. **Paediatrics for Doctors in Papua New Guinea**. 2003 Ed. 2. An excellent resource for clinical care in hospitals in developing countries.
7. **Standard Treatment for Common Childhood Illnesses in Papua New Guinea**. 8<sup>th</sup> Edition 2005. Probably the world's longest running clinical guidelines from developing countries; continually published and updated by the Paediatric Society of PNG for over 30 years.
8. Coovadia HN and Wittenberg DF. **Paediatrics and Child Health: a manual for health professions in developing countries**. Oxford University Press Cape Town. 2003.
9. Parrey E, Godfrey R, Mabey D, Gill G. **Principles of Medicine in Africa**. 3<sup>rd</sup> Edition, Cambridge University Press 2004
10. Duke T. **Child Health in a Global Context**. In Practical Paediatrics. Robertson & South (Eds) 6<sup>th</sup> Edition. 2007. Churchill Livingstone.
11. Collier P. **The Bottom Billion**. Oxford University Press. 2007
12. **Surgical Care at the District Hospital**: [http://www.who.int/child-adolescent-health/publications/CHILD\\_HEALTH/Surgical\\_Care.htm](http://www.who.int/child-adolescent-health/publications/CHILD_HEALTH/Surgical_Care.htm).

## JOURNALS

- **Lancet** The leader in discussion on global health issues  
[www.thelancet.com](http://www.thelancet.com)
- **Bulletin of the WHO**  
[www.who.int/bulletin/en/](http://www.who.int/bulletin/en/)
- **Tropical Medicine & International Health**  
<http://www.blackwellpublishing.com/journal.asp?ref=1360-2276>
- **Annals of Tropical Paediatrics**  
<http://proquest.umi.com/pqdlink?Ver=1&Exp=08-23-2008&REQ=3&Cert=8RkgPFRptdSUzyCPUhNRyPqzYPHQYE8tfWENSQj71Wdy7%2bOYQvGNT02pX19Dpnu&Pub=38656>
- **Journal of Tropical Paediatrics**  
<http://www3.oup.co.uk/tropej/etoc.html>
- **Journal of Health, Population and Nutrition**  
<http://www.icddrb.org/jhpn>
- **Papua New Guinea Medical Journal**  
[http://www.pngimr.org.pg/png\\_medical\\_journals.htm](http://www.pngimr.org.pg/png_medical_journals.htm)

## COURSES IN INTERNATIONAL PUBLIC HEALTH OR TROPICAL MEDICINE

**Monash University in conjunction with the Burnet Centre** runs a Masters in Public Health with an International Health stream and a Post-Graduate Diploma in International Health.  
<http://www.burnet.internationalhealth.edu.au>

**The University of Melbourne** has a Masters of Public Health course with an International Health Stream coordinated by the **Australian International Health Institute**. **AIHI runs a 5**

day International Child Health course, in November each year.

<http://www.aihi.unimelb.edu.au/>

**Curtin University of Technology. Centre for International Health, WA, Australia**

<http://www.curtin.edu.au>

Curtin offer postgraduate diploma in International Health, Master of International Health and a Doctor of International Health.

**London School of Tropical Medicine, UK**

<http://www.lshtm.ac.uk/>

The London School carries out research, teaching, training and consultancy in the fields of public health and tropical medicine. It is an international institution with research and collaborations in 120 countries, teaching in London and worldwide through distance learning, students from 105 countries, alumni working in 140 countries and staff from 37 countries

**Liverpool School of Tropical Medicine, UK**

<http://www.liv.ac.uk/lstm/>

Offers a variety of postgraduate courses in tropical medicine, infectious diseases, clinical training.

**Karolinska Institute: Infectious Disease in Developing Countries, Sweden**

<http://www.phs.ki.se/ihtar/>

Runs comprehensive courses in tropical medicine (DTM), infectious diseases, international health under their World Health postgraduate program.

**Gorgas Memorial Institute of Tropical & Preventative Medicine, Peru**

<http://www.gorgas.org>

University of Alabama in Birmingham, in Peru at Instituto de Medicina Tropical. The Gorgas Institute runs a course in clinical tropical medicine in Feb-April. Cost is about \$US5000.

**Jamkhed Comprehensive Rural Health Project, India**

[www.jamkhed.org](http://www.jamkhed.org)

The Jamkhed centre is a renowned institution for training in primary health care in the Maharashtra state of India that has been conducting courses in comprehensive rural health care for over 10 years. They have a Diploma course lasting 3 months, and student course lasting one month. The Australian International Health Institute takes students to Jamkhed for a one-month course over summer. These can be credited towards a Masters subject within University of Melbourne, or used as an initial experience in primary health care delivery in low-income settings.

**EMPLOYMENT**

Websites which advertise positions vacant for doctors and nurses in developing countries

**Medicine Sans Frontiers**

<http://www.msf.org/>

MSF recruits a variety of health professionals for relief or development work in overseas countries. The people predominantly recruited by MSF are general practitioners, nurses, surgeons, anaesthetists and specialists in such areas as tropical medicine, public health and epidemiology. The average duration of appointment is 6 months.

### **Australian Volunteers International**

<http://www.australianvolunteers.com/>

AVI is Australia's largest international volunteer sending agency. They recruit hundreds of Australians each year to work in developing countries. Most assignments are for 2 years.

### **Health Volunteers Overseas (HVO)**

<http://www.hvousa.org/Bibliography.cfm>

This is a site that is sponsored by the American Academy of Pediatrics that posts vacancies for volunteer positions in developing countries, usually of short-term duration for a specified purpose. It has an excellent bibliography of references.

### **World Health Organization**

<http://www.who.int/employment/en/>

## **RESEARCH INSTITUTES INVOLVED IN INTERNATIONAL CHILD HEALTH**

- Kenya Medical Research Institute  
<http://www.kemri.org/>
- Papua New Guinea Institute of Medical Research  
<http://www.pngimr.org.pg>
- The MRC Unit, Gambia  
[www.mrc.gm/](http://www.mrc.gm/)
- Medical College, Blantyre, Malawi  
<http://www.medcol.mw/>
- ICDDR, Bangladesh  
<http://www.icddrb.org/>
- Centre for International Child Health, Melbourne  
<http://www.rch.org.au/cich/>
- Vancouver Centre for International Child Health  
<http://www.bcchildrens.ca/Professionals/CtrInternationalChildHealth/default.htm>
- Great Ormond Street University College London Centre for International Health & Development  
<http://www.ich.ucl.ac.uk/ich/academicunits/cihd/Homepage>

## **EXAMPLES OF PATHWAYS TO INTERNATIONAL HEALTH**

- Government health services
- NGOs (MSF, UNICEF, Save the Children, local)
- Developing country universities
- Bilateral govt aid agencies (AusAID)
- Multi-laterals (WHO, UN, agencies such as UNICEF)
- Research institutes (MRC Gambia, KEMRI, IMR PNG)
- Volunteer organizations (AVI, missions)
- Mission hospitals
- Collaborative Institutes of International Health (CICH Melbourne, London School of Tropical Medicine)