## References

- 1 Arnold F. Assessment of the quality of birth history data in the demographic and health surveys. Columbia, MD: Institute for Resource Development Inc., 1990. Report No. 1: An Assessment of DHS-I Data Quality. http://www.measuredhs.com/pubs/pdf/MR1/MR1.pdf (accessed April 26, 2010).
- 2 Artzrouni M, Zaba B. HIV-induced bias in the estimation of child mortality using birth history reports. Presented at the Technical Meeting on HIV and Child Mortality London. 2003.
- 3 Boerma JT, Stanecki KA, Newell ML, Luo C, Beusenberg M, Garnett GP et al. Monitoring the scale-up of antiretroviral therapy programmes: methods to estimate coverage. *Bull World Health Organ*. 2006; 84:145–50.
- 4 Brass W. Methods for Estimating Fertility and Mortality from Limited and Defective Data. Chapel Hill, NC: Laboratories for Population Statistics at the University of North Carolina at Chapel Hill, 1975.
- 5 Bryce J, Daelmans B, Dwivedi A, Fauveau V, Lawn JE, Mason E et al. Countdown to 2015 for maternal, newborn, and child survival: the 2008 report on tracking coverage of interventions. *Lancet*. 2008; 371:1247–58.
- 6 Bryce J, Terreri N, Victora C, Mason E, Daelmans B, Bhutta Z et al. Countdown to 2015: tracking intervention coverage for child survival. *Lancet*. 2006; 368:1067–76.
- 7 Centre for Research on the Epidemiology of Disasters. CE-DAT: The Complex Emergency Database. Brussels, Belgium: Université catholique de Louvain, 2009. www.cedat.org (accessed March 11, 2010).
- 8 Centre for Research on the Epidemiology of Disasters. Deaths due to Natural Disasters, 1900-2007. 2009. http://www.emdat.be/Database/AdvanceSearch/advsearch.php (accessed Oct. 12, 2009).
- 9 Child Mortality Coordination Group. Tracking progress towards the Millennium Development Goals: reaching consensus on child mortality levels and trends. *Bull World Health Organ*. 2006; 84:225–32.
- 10 Tomz M, Wittenberg J, King G. Clarify: Software for Interpreting and Presenting Statistical Results. *J Stat Software*. 2003; 8:1-30.
- 11 Curtis SL. Assessment of the quality of data used for direct estimation of infant and child mortality in DHS-II surveys. Calverton, MD: Macro International Inc., 1995. Occasional Papers No. 3. http://www.measuredhs.com/pubs/pdf/OP3/OP3.pdf
- 12 DFID. The International Health Partnership Launched Today. 2007. http://www.dfid.gov.uk/Media-Room/News-Stories/2007/The-International-Health-Partnership-Launched-Today/ (accessed March 18, 2010).
- 13 Garenne M, Gakusi E. Health transitions in sub-Saharan Africa: overview of mortality trends in children under 5 years old (1950-2000). *Bull World Health Organ*. 2006; 84:470–8.
- 14 Gaskell GD, Wright DB, O'Muircheartaigh CA. Telescoping of Landmark Events: Implications for Survey Research. *Public Opin Q.* 2000; 64:77–89.
- 15 GAVI Alliance. Investing in immunisation through the GAVI Alliance: The evidence base. Geneva, Switzerland: GAVI Alliance, 2010.
- 16 Global Health Council News. Women and Children First: A Sneak Peek at the Global Business Plan for Maternal, Newborn and Child Health. 2007. (accessed Sept. 13, 2007).

- 17 Gregson S, Hallett TB, Kurwa F, Garnett GP, Dube S, Chawira G et al. Monitoring progress towards Millennium Development Goal 4 in generalised HIV epidemics: measurement and correction for bias in child mortality statistics. IUSSP International Population Conference; Marrakech, Morocco, Sept. 27, 2009.
- 18 Guillot M, Lim S. Infant Mortality in Kyrgyzstan Before and After the Break-up of the Soviet Union. In: Harris K, Moffit R, eds. Detroit, MI: Population Association of America Annual Meeting, April 30, 2009.
- 19 Harvard University, Institute for Health Metrics and Evaluation at the University of Washington, Johns Hopkins University, University of Queensland, and World Health Organization. Global Burden of Disease Study Operations Manual. Seattle, WA: Institute for Health Metrics and Evaluation, 2009. http://www.globalburden.org/GBD\_Study\_Operations\_Manual\_Jan\_20\_2009.pdf (accessed March 9, 2010).
- 20 Hill K, Thomas K, AbouZahr C, Walker N, Say L, Inoue M et al. Estimates of maternal mortality worldwide between 1990 and 2005: an assessment of available data. *Lancet*. 2007; 370:1311-9.
- 21 Hogan MC, Foreman KJ, Naghavi M, Ahn SY, Wang M, Makela SM et al. Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5. *Lancet*. 2010; 375:1609-23.
- 22 Kleinschmidt I, Schwabe C, Benavente L, Torrez M, Ridl FC, Segura JL et al. Marked Increase in Child Survival after Four Years of Intensive Malaria Control. *Am J Trop Med Hyg.* 2009; 80:882–8.
- 23 Lessler JT, Sirken MG. Laboratory-Based Research on the Cognitive Aspects of Survey Methodology: The Goals and Methods of the National Center for Health Statistics Study. *Milbank Q.* 1985; 63:565–81.
- 24 Lim SS, Myerson R, Rosenfeld LC, Murray CJL. Safe pregnancy and delivery: A systematic analysis of trends in the coverage of antenatal and intrapartum care. *Forthcoming*.
- 25 Mahy M. Measuring Child Mortality in AIDS-Affected Countries. Sept. 4, 2003.http://www.un.org/esa/population/publications/adultmort/UNICEF\_Paper15.pdf (accessed Dec. 18, 2009).
- 26 Murray CJL, Laakso T, Shibuya K, Hill K, Lopez AD. Can we achieve Millennium Development Goal 4? New analysis of country trends and forecasts of under-5 mortality to 2015. *Lancet*. 2007; 370:1040–54.
- 27 Nakiyingi JS, Bracher M, Whitworth JA et al. Child survival in relation to mother's HIV infection and survival: evidence from a Ugandan cohort study. *AIDS*. 2003; 17:1827-34.
- 28 Ndirangu J, Newell ML, Tanser F, Herbst AJ, Bland R. Decline in early life mortality in a high HIV prevalence rural area of South Africa: evidence of HIV prevention or treatment impact? *AIDS*. 2010; 24.
- 29 Paciorek CJ. Nonstationary Gaussian Process for Regression and Spatial Modelling. Pittsburgh, PA: Carnegie Mellon University, 2003.
- 30 Preker AS, Wang J, Bos E, Peabody J, Jamison DT. Measuring Country Performance on Health: Selected Indicators for 115 Countries. Washington, DC: World Bank, 1999.
- 31 Rajaratnam JK, Marcus JR, Flaxman A, Wang H, Levin-Rector A, Dwyer L et al. Neonatal, postneonatal, childhood, and under-5 mortality for 187 countries, 1970–2010: a systematic analysis of progress towards Millennium Development Goal 4. *Lancet*. In press.

REFERENCES 83

- 32 Rajaratnam JK, Tran LN, Lopez AD, Murray CJL. Measuring under-five mortality: validation of new low-cost methods. *PLoS Med.* 2010; 7(4):e1000253.
- 33 Rasmussen CE, Williams CKI. Gaussian Processes for Machine Learning. Cambridge, MA: MIT Press, 2006.
- 34 Ravishankar N, Gubbins P, Cooley R, Leach-Kemon K, Michaud C, Jamison D et al. Financing of global health: tracking development assistance for health from 1990 to 2007. *Lancet*. 2009; 373:2113–24.
- 35 Thompson P. Optimum smoothing two-dimensional fields. *Tellus*. 1956; 8:84–93.
- 36 UNFPA News. Second Regular Session UNDP/UNFPA Executive Board: statement by Thoraya Ahmed Obaid, Executive Director, UNFPA. 2007. (accessed March 18, 2010).
- 37 UNICEF, WHO, The World Bank, and UN Population Division. Levels and Trends of Child Mortality in 2006: Estimates developed by the Inter-agency Group for Child Mortality Estimation. http://www.childinfo.org/files/infant\_child\_mortality\_2006.pdf (accessed April 26, 2010).
- 38 UNICEF. Child mortality database: estimates for 2007. UNICEF, Nov 20, 2009. http://www.childmortality.org (accessed March 18, 2010).
- 39 UNICEF. Child mortality database: estimates for 2008. UNICEF, Nov. 20, 2009. http://www.childmortality.org (accessed March 18, 2010).
- 40 United Nations Population Division. World Population Prospects: the 2008 Revision Population Database. New York, NY: United Nations. 2009.
- 41 Uppsala Conflict Data Program. UCDP Non-state Actor Dataset v. 1-2009. Uppsala, Sweden: Uppsala University, 2009. http://www.pcr.uu.se/research/UCDP/database.htm (accessed March 2, 2010).
- 42 Uppsala Conflict Data Program. UCDP Non-State Conflict Dataset v. 2.1 2002-2007. Uppsala, Sweden: Uppsala University, 2009. www.ucdp.uu.se/database (accessed March 2, 2010).
- 43 Uppsala Conflict Data Program. UCDP/PRIO Armed Conflict Dataset v.4-2009, 1946 2008. Uppsala, Sweden: Uppsala University, 2009. www.ucdp.uu.se/database (accessed March 2, 2010).
- 44 Ward P, Zaba B. The Effect of HIV on the Estimation of Child Mortality Using the Children Surviving/Children Ever Born Technique. S Afr J Dem. 2008; 11.
- 45 Wiener N. Extrapolation, Interpolation, and Smoothing of Stationary Time Series. Cambridge, MA: MIT Press, 1949.
- 46 World Bank. World Development Report 1993: Investing in Health. New York, NY: Oxford University Press, 1993.
- 47 World Health Organization. World malaria report. Geneva, Switzerland: World Health Organization, 2008.
- 48 You D, Wardlaw T, Salama P, Jones G, UNICEF. Levels and trends in under 5 mortality, 1990-2008. *Lancet*. 2009; 375:100–3.

Institute for Health Metrics and Evaluation 2301 5th Ave., Suite 600 Seattle, WA 98121 USA

Telephone: +1-206-897-2800

Fax: +1-206-897-2899

Email: comms@healthmetrics and evaluation. org

www.healthmetricsandevaluation.org

