Box 3: Requirements for making moral progress in international health research

• Educating researchers and members of research ethics committees about research ethics

· Ensuring that international researchers understand and are sensitive to the social, economic, and political milieu that frames the context in which their research is taking place

• Involving members of the host country in the design and conduct of the trial

· Ensuring that trials are of direct relevance to the health needs of the host country and that the balance of benefits and burdens of the project are fairly distributed

· Conducting prior evaluation by a local committee or governing body of whether the study findings can, and will, be incorporated into the local healthcare system

· Providing subjects with care or treatment they would not ordinarily get in the country where the trial is carried out

· Ensuring existing disparities are not more deeply entrenched by inappropriate deflection of local human or material resources away from the healthcare system in the host country towards the research project

• Ensuring that research produces benefits for the practice setting and builds the capacity of healthcare professionals in the host country

> resulted in the Nuremberg code and the Tuskegee experiment (where African Americans were deliberately denied effective treatment for syphilis) that led to regulations concerning research ethics in the United States. The protections need to be extended to address systemic deprivation of research subjects through poverty and other threats to freedom.

> Those who are involved in international research should be required to have some understanding of, and be sensitive to, the social, economic, and political milieu that frames the context in which their research is taking place and that greatly influences the health of their research subjects.26-28 This should include knowledge of (a) the sociology of pharmaceutical research; (b) the political relation between the sponsoring and host countries-for example, how the host country fits into the sponsoring country's foreign policy, what economic aid is provided, the nature of any debt relations, and the extent of arms trading between the two countries; and (c) the human rights' achievements of the sponsoring and host countries. Lessons learnt from a genuinely collaborative research endeavour could be used by international investigators. For example, they might influence political leaders in their countries to promote more equitable relations with the host country in which the research was conducted.

> There is thus a need to go beyond the reactive research ethics of the past. A new, proactive research ethics must be concerned with the greatest ethical challenge-the huge inequities in global health.29 Research ethics must be more deeply rooted in the context of global health. It must more forthrightly address the social, political, and economic forces that widen global inequities in health, and it must ultimately be concerned with reducing inequities in global health and achieving justice in health research and health care.

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- Angell M. The ethics of clinical research in the third world. N Engl J Med 1997;337:847-9. 2
- Anon. The ethics industry. Lancet 1997;350:897. 2
- Varmus H, Satcher D. Ethical complexities of conducting research in developing countries. *N Engl J Med* 1997;337:1003-5. Gambia government and Medical Research Council research ethics and the second secon 4
- 5 committee. Ethical issues facing research in developing countries. Lancet 1998;351:286-7.
- The debate over clinical trials of AZT to prevent mother-to-infant transmission of HIV in developing nations. CD Rom. John F Kennedy School of Government Case Program, Harvard University. C14-99-1535.9 6
- Benatar SR. Imperialism, research ethics and global health. J Med Ethics 7 1998:24:221-2.
- 8 Fairchild AL, Bayer R. Uses and abuses of Tuskeege. Science 1999;284:919-21
- 9 Tan Torres Edejer T. North-south research partnerships: the ethics of carrying out research in developing countries. *BMJ* 1999;319:438-41.
- 10 Angell M. Investigator's responsibilities for human subjects in developing countries. N Engl J Med 2000:342:967-70. 11 The ethics of clinical research in developing countries: a discussion
- paper. London: Nuffield Council on Bioethics, 1999.
- 12 Weijer C, Goldsand G, Emanuel EJ. Protecting communities in research: current guidelines and limits of extrapolation. Nature Genet 1999;23: 275-80.
- 13 Commission on Health Research for Development. Health research: essential link to equity in development. Oxford: Oxford University Press, 1990.
- 14 Beauchamp TL. The role of principles in practical ethics. In: Sumner LW, Boyle J, eds. *Philosophical reflections on bioethics*. Toronto: University of Toronto Press, 1996:79-95.
- 15 Spece RG, Shimm DS, Buchanan AE. Conflicts of interest in clinical practice
- and research. New York: Oxford University Press, 1997.
 16 Moreno J, Caplan AL, Wolpe PR. Updating protection for human subjects involved in research. *JAMA* 1998;280:1951-6.
 17 Ellis GB. Keeping research subjects out of harm's way. *JAMA* 1000 protection for human subjects.
- 1999;282:1963-5
- Woodward B. Challenges to human subject research protections in US medical research. JAMA 1999;282:1947-52.
 The human radiation experiments: final report of the president's advisory
- commission. New York: Oxford University Press, 1998.
- 20 Nowak R. Problems in clinical trials go far beyond misconduct. Science 1994;264:1538-41.
- 21 Silberner J. A gene therapy death. Hastings Center Report 2000;30:6.
- Bloom B. The future of public health. *Nature* 1999;402(suppl 2):C62-4.
 Loue S, Okello D, Kawama M. Research bioethics in the Ugandan context. J Law Med Ethics 1996;24:47-53.
- 24 Hardy E. Factors often not considered before a multicenter trial is started. Clin Pharmacol Ther 1996;60:121-3.
- 25 Marshall PA, Koenig B, Grifhorst P, Van Ewijk M. Ethical issues in immigrant health care and clinical research. In: Loue S, ed. Handbook of immi-grant health. New York: Plenun Press, 1998:206-26.
- 26 Benatar SR. Global disparities in health and human rights: a critical com-mentary. Am J Publ Health 1998;88:295-300.
- 27 Falk R. Predatory globalisation: a critique. New York: Polity Press, 1999. 28 Benatar SR. Avoiding exploitation in clinical research. Cambridge Q Healthcare Ethics 2000 (in press).
- 29 Singer PA. Medical ethics. BMJ 2000;321:282-5.

Corrections and clarifications

Effect of 1995 pill scare on rates of venous thromboembolism among women taking combined oral contraceptives: analysis of General Practice Research Database

A small error persisted to final publication of this paper by R D T Farmer and colleagues

(19-26 August, pp 477-9). In table 2 the upper limit of the confidence interval for the age adjusted ratio for the 25-34 age group should be 1.46 (not 1.96).

Birth characteristics of women who develop gestational diabetes: population based study

A glitch in electronic processing led to a problem with reference numbers in this paper by Grace M Egeland and colleagues (2 September, pp 546-7). No reference numbers appear in the text of the printed article, but they can be seen on the BMJ website (http://bmj.com/cgi/content/full/321/ 7260/546).

Systematic review of studies of patient satisfaction with telemedicine

An antipodean mix-up occurred in this article by Frances Mair and Pamela Whitten (3 June, pp 1517-20). In the table (p 1528) the study by Oakley et al (reference 9) was ascribed in the far right hand column to Australia, whereas in fact it was conducted in New Zealand

¹ Lurie P, Wolf SM. Unethical trials of interventions to reduce perinatal transmission of the human immunodeficiency virus in developing countries. N Engl J Med 1997;337:853-6.