Community participation is essential in clinical trials

Editor—Health research should be treated as a public good, but currently the positive impact of clinical trials in developing countries is limited. The research agenda is usually set without consulting the communities concerned, and disadvantaged people may not have fair access to treatment in trials.

Trials of more relevance to the community may be undertaken in a way that maximises adherence to trial protocols by taking into account the cultural, linguistic, and socioeconomic barriers that have an impact on people’s behaviour and ability to participate. Involving consumers and community leaders in research planning is one way of addressing these concerns. Furthermore, the knowledge gained will be better fed back through the community.

Ethics in clinical research may be affected by cross-cultural variations. For example, in AIDS trials in South Africa myths and beliefs about the disease hamper progress and treatment is unavailable to most patients. An AIDS consumer advocate has said, “To researchers the trials are often seen as experiments and we are research subjects, whereas to people like myself the trials are something far more important; they are seen as treatment rather than research.”

The burdens of taking part in trials, such as the cost of transport, are not always covered. For example, an HIV drug trial is currently being run in an upmarket suburb of Cape Town, which makes it less accessible for people from disadvantaged communities, the very people who would benefit from taking part. Disease in Africa predominantly affects those living in poverty. Developing countries largely focus their healthcare provision on primary healthcare services, so trials need to be conducted in these settings rather than in the tertiary medical institutions where most trials are based.

Another major problem is the lack of commitment by drug companies to continue to provide all participants who would benefit with free drugs after the trial has ended. This is most important in the treatment of AIDS. Some researchers are worried about how trials may affect the virus in an individual or whether they will lead to drug resistance, which could limit the ability to benefit from any drugs that may become available.

Thus a trial may leave participants and the community worse off than they were before. Stronger community scrutiny and negotiation with researchers and drug companies in developing countries is therefore essential, as is the role of governments in ensuring the ongoing provision of treatment.

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We thank the six women who shared their experience of being on a drug trial, as well as Hilda Bastian from the Cochrane Collaboration, for their help.

1 Bosse P. Freddin but essential; the voices of people with AIDS. Bmj 1997;314:888.

Disaster relief and development could be twinned in health research

Editor—Whenever decisions must be made about the allocation of resources to deal with health issues, research plays a key part.

This theme issue testifies that developing countries are not short of health issues.

We have recognised the need for advanced research in our master of science (MSc) course on disaster relief nursing. Both natural and manmade disasters have the greatest effect where the municipal infrastructure is already weak—in developing countries. So, for the purposes of health research, disaster relief and development could be twinned. Healthcare professionals must act at all stages of a disaster. Decision making must be rapid and informed by a brief needs assessment. Nurses take a keen interest in holistic care and user participation. In a disaster this ethos is even more important as initiatives for health and wellbeing must be sustained long after the rescue workers have gone.

Our course makes extensive use of the internet—the latest tool for learning at a distance. In a disaster zone distance may separate the student not only from the tutor but also from the context of care. This suggests that distance learning may also facilitate health research in developing countries as some of the same issues—for example, remoteness from normal resources—may arise. As in other areas of work, both quantitative and qualitative research methods have a place, and the two approaches often inform each other. Qualitative methods such as participatory action research play a part in the context of developing countries as they provide deeper understanding, lead to emancipation, and include the potential to change things for the better.

Observational study is also particularly relevant in overcoming the language barrier to health research in the absence of a translation service. Advanced study and research in a disaster zone is not for everyone, so initiatives need to adopt a multi-centre approach to gain a critical mass of students and researchers. The MSc in disaster relief nursing, supported by colleges and universities in five countries in the European Union, is working towards this aim.

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1 World Health Organization Regional Office for Europe. Development of a disaster preparedness tool kit for nursing and midwifery. Copenhagen: WHO Regional Office, 1996. (EUR/96/PC/DEV 03 01 (e2)

Effect of drug patents in developing countries

Editor—Do drug patents kill? If they do the risk is felt overwhelmingly by the poor. AIDS will soon become the leading cause of death worldwide, and 95% of people infected with HIV worldwide live in the world’s poorest countries. Effective treatments are mostly patent protected, with the result that the annual cost to treat a single patient with AIDS is up to 100 times the average gross domestic product per capita in developing countries.

These staggering facts have led to a campaign to increase access to essential AIDS medicines in poorer countries, including a loosening of patent protections on medicines.

Opposition comes mainly from pharmaceutical companies, which argue that without patent protection profits will dry up, eliminating the incentive to conduct research into new drugs. But who really pays for AIDS research? The reality is that taxpayers, not shareholders, have borne most of the cost. Publicly funded research councils have contributed hundreds of millions of taxpayers’ dollars to AIDS drug research. Indeed, the Pharmaceutical Research and Manufacturers of America, an industry lobby group, estimates that private industry finances only about 43% of drug development. Five commonly used drugs against AIDS—dapsone, lamivudine, nelfinavir, stavudine, and zidovudine—were developed largely as a result of public funds.

But beyond this argument lies the question of what a loosening of patent protection means. The access to essential medicines campaign advocates for the right of poorer countries to use completely legal trade measures in a public health emergency. These include compulsory licensing—the legal right to produce patented medicines in exchange for a royalty payment to the patent holder—and parallel imports—the legal right to import patented drugs from another country where they can be obtained more cheaply.

These measures can hardly be considered a threat to drug research, especially since they already exist under the World Trade Organization’s rules and would have no impact on patent protections in Western countries. Furthermore, the introduction of generic drugs lowers costs. A study by Médecins Sans Frontieres found that the introduction of generic AIDS drugs in Brazil means that it now costs the same to treat 1000 patients there as it does to treat 552 in Thailand, where generic drugs are less available.

Patents restrict access to medicines, and poor patients die every day of diseases against which effective treatments exist. Those prepared to defend an unfettered
Vaccines and medicines for the world's poorest

Quality of vaccines and medicines must be monitored

Editor—Smith points to increasing international awareness about inadequate supplies of vaccines and drugs in tropical countries.1 Future private-public partnerships for better supply of vaccines and medicines for the world's poorest countries with "push" and "pull" mechanisms and financial allocation of billions of dollars by the American Congress would indeed imply adequate funds for researchers and others. Nevertheless, given that excitatory fiscal input would provide little relief to many people living in tropical countries. Funds should be spared to monitor the quality of vaccines, drugs, and diagnostics in such countries.

There have been frequent reports of the poor quality of vaccines, drugs, and diagnostics in Asia, Africa, and Latin America. In Kelantan, a state in northwestern Malaysia, the contents of 14 of 15 phials of live poliovirus vaccine did not meet the criteria of a potent vaccine.2 Assay of active ingredients of tetracycline, co-trimoxazole, ampicillin-clavulancetate, and chloroquine being offered to patients in Nigeria and Thailand showed 37% of samples to be substandard; in six samples of chloroquine no active ingredient was left.3 Reagents for HIV antibody assay that had been improperly stored or were past the expiry period in a Zambian hospital had reduced their efficiency and specificity reduced by 11-18%.4 The use of blood pretested with such reagents was associated with at least a six times higher than expected risk of HIV transmission.5

The prospective international collaborators to address current issues with vaccines, drugs, and diagnostics in tropical countries should allocate money to assess the quality of these items available for local use. Representative aliquots should be retrieved for measurement of the active ingredients. Research towards standardisation of simple tests to assay active ingredients in the field is essential. A paracetamol specific test that does not require costly equipment and trained staff has been useful as an initial screening test to monitor the quality of individual tablets in the field.6

Only pilot programmes for surveillance of vaccines, drugs, and diagnostics in the world's poorest countries would determine if there was any need to stabilise them. The addition of stabilisers to labile vaccines might well ensure the full stability and utility of vaccines, drugs, and diagnostics among people in the world's poorest countries. An ambitious project for surveillance of these items in any global push and pull strategy would ensure that billions of dollars would assist in alleviating the misery of masses.

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1 Smith R. Vaccines and vaccines for the world's poorest. BMJ 2000;320:952-3. (4 April)

Attempts of Global Forum for Health Research should be viewed with optimistic scepticism

Editor—The Global Forum for Health Research mentioned in Smith's editorial is attempting to tackle the complex issues involved in supplying vaccines and medicines for the world's poorest people, but many areas of major concern remain.

The focus on the development, supply, availability, and use of vaccines and medicines is similar to that in the vertical disease programmes used in the past few decades. Such a targeted approach may have some short term benefits but does nothing to address the root cause of morbidity and mortality in poor countries—namely, poverty. Such programmes have always been favoured by donor countries as they achieve rapid results and seemingly pleasing statistics.

The supply of vaccines and medicines to the poorest in the world might attract publicity and media attention, but vaccines and medicines remain little in the long term if the root causes of ill health are not addressed with similar resources and enthusiasm. Children may survive their first few years of the high uptake of vaccines only to succumb to diarrhoeal disease and malnutrition.

Some drug companies are selling products in developing countries that are of no health benefit, simply because they know they can sell any products available in poor countries are not on the World Health Organization's essential drugs list and are not formulated for use in rich countries. Sugar coated vitamin pills are a prime example of this. The way that such items are marketed makes them seem desirable to poor families, who may give up a day's wages to buy them. As long as these activities continue the sincerity of certain pharmaceutical companies in their involvement in the battle to improve the health of people in poor countries remains questionable.

Before more medicines are to be made available, urgent action needs to be taken on the monitoring and control of the sale of medicines in developing countries. Inappropriate use of many medicines has led to ineffective treatment and drug resistance. For example, street vendors in some of these countries sell various drugs used in the treatment and prophylaxis of malaria with no knowledge of their effectiveness. This has contributed to the rising morbidity and mortality from malaria and to resistance to chloroquine.

Until these concerns have been addressed this well intentioned initiative should be viewed with optimistic scepticism.

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When public health may not be public health

Editor—Confronted with the health of people in developing countries, governments focus aid on healthcare services or high technology prevention. These are not necessarily a logical initial reaction. They may not even be "public health" practices.

Hospitals without inland revenue or a broader infrastructure can be white elephants to those who cannot afford to attend or whose conditions require more resources than are available. This is not the best strategy for a country's health but a reality in countries which have suffered civil disruption.

Even preventive approaches are invariably medical. Immunisation requires a degree of organisation that exists only with external input: sterilisation, materials, vehicles and fuel, refrigeration, portable ice boxes, maintenance, trained staff, and vaccines or serum samples. Such operations are intrinsically unsustainable in certain environments.

Medical prevention tries to address the common childhood diseases that can be vaccinated against and were prevalent in Britain before the second world war, not the main problems of developing countries: acute respiratory infections, tuberculosis, malaria, and diarrhoea. In Europe these mainly decreased before drug treatments or vaccinations were available, not through health service management but through sanitation, water, and land reclamation, decreased overcrowding, and improved nutrition. Many improvements were side effects of unrelated activities such as agricultural revolution, swamp drainage, economic growth, even war. These are not medical