

The land mine crisis: a growing epidemic of mutilation

"The aim should be to build widespread support for an international agreement on a total ban on the production, stockpiling, transfer, and export of mines and their components. Only in this way can the community of nations begin to make sustained progress against the killing, maiming, and societal destruction caused by these terrible weapons." Thus writes Boutros Boutros-Ghali, Secretary-General of the United Nations, in his foreword to *Clearing the Fields*,¹ a book deriving from the proceedings of a symposium held in New York in April, 1994. This volume, which describes in often sickeningly vivid detail the devastation caused by antipersonnel mines, is influencing the debate currently taking place in the General Assembly of the United Nations on the continuing use of mines as legitimate weapons of warfare.

In a commentary in *The Lancet* in 1993, McGrath² drew attention to the amoral profiteering of some Italian companies in propagating this deadly pollution of our planet. Regrettably, the situation worsens by the week as countless mines are scattered across the lands of nations impoverished by civil war and strife—during the past decade more than 100 million mines have been sown in 60 countries. Afghanistan and Cambodia are the most mine-infested countries in the world; Africa is the most heavily mined continent, with 18–30 million mines in 18 countries. Since 1989, 3 million mines have been sown without markers or maps among the citizenry of the former Yugoslavia, and 50 000 mines are being sown there each week at a rate faster than anywhere else in the world. Over 700 varieties of mine, costing from 50 cents to \$30 each, are being produced at a rate of 10 million per year by more than 100 companies and government agencies in 56 countries, netting an annual income to the industry of \$100–200 million. The cost of clearing the minefields of the world is a staggering \$30–85 billion.

So much for broad brush statistics, which in their magnitude tend to obscure the personal tragedy that results from an exploded mine. When a farmer tilling his field steps on a mine or a child scoops the clay to grasp the brightly coloured plastic that beckons from the soil, the victim who survives the blast is left not merely without an arm or leg but also with a wound that is a challenge to a skilled surgeon operating with first-class facilities. But such catastrophes take place more often than not in farming communities in impoverished countries far from skilled medical assistance. The suffering induced by pain, infection, and mismanagement is unimaginable. The blast of the mine ensures that soil and bacteria contaminate and infect the wound, simultaneously burning and coagulating the tissues at the site of injury and driving soil, grass, metal, or plastic fragments up between the tissue planes of the leg or arm to cause severe secondary infection. Multiple operations are required to save the victim and to provide a stump capable of sustaining an artificial limb. Children face special problems. As the child grows, the bone of the amputation stump will grow more rapidly than the surrounding skin and soft tissue. Multiple reamputations may be needed as the bone grows out through the soft tissues, causing pain and infection in an amputation stump that cannot support an artificial limb. A 10-year-old child with a life-expectancy of another 40 years may need 25 prostheses in his or her

lifetime. Do you wonder that the mothers of Somalia chain their playing toddlers to the trees?

A fundamental ethic underlies the concept of a "just war"—namely, the prohibition of superfluous or unnecessary suffering. International law prohibits the use of any weapon against individual civilians not taking part in the hostilities. These considerations have led to the banning of "dumdum" bullets and asphyxiating gases, and of bacteriological, toxic, and chemical agents as legitimate instruments of war. Why not also mines? The argument for persisting with the manufacture of mines comes solely from the military, whose experts claim that antipersonnel mines are the "most cost-effective system available to the military" and that "no alternative fulfils the military requirement". In the USA, the military argue for the "responsible" use of mines, an example of such use being, presumably, the Gulf War. Many *Lancet* readers will recall how military commanders declared on television that their rockets had struck military rather than civilian targets. We were told nothing, however, about the mine assault by allied forces which rocketed one mine for every Iraqi man, woman, and child into civilian lands far from the battlefield. Now, and for years to come, long after the soldiers have laid down their guns in Iraq and Kuwait, their children and grandchildren will go on being maimed and mutilated.

The perverse reasoning of the military argument should not be tolerated. Yet it is the politicians we elect to our comparatively wealthy democracies who are persuaded by their military advisers to supply mines to developing countries, thereby profiting from, and perpetuating, an epidemic of mutilation. It is time for the public to join together to halt the destruction that threatens so much of the earth. We could start by demanding that our governments no longer accept compromise solutions, as do the European Union and the USA, by agreeing to a moratorium on the export of mines from the arsenals in existence. We should call for a total ban on the use of mines as legitimate weapons of warfare, and once that has been achieved call for destruction of the existing stocks of mines. Surely in this at least the UN can give the world a lead.

Eoin O'Brien

Royal College of Surgeons in Ireland Medical School, Dublin, Ireland.

- 1 Cahill KM. *Clearing the fields: solutions to the global land mines crisis*. New York: Basic Books and the Council on Foreign Relations, 1995.
- 2 McGrath R. Trading in death: anti-personnel mines. *Lancet* 1993; 342: 628–29.

Not for computer buffs

See page 1543

How confident would you feel about judging the merits of a computerised system for recording and communicating clinical data? You may be asked to do so; and, if not very confident, the series that begins this week is for you. The articles arose from concern that costly systems are being installed without sufficient clinical involvement—possibly with dire consequences. Dr Wyatt is one of those rare computer experts who can write in plain English; it is as a clinician that he outlines the factors behind a successful system

Robin Fox

The Lancet, London, UK