



Victims of Antipersonnel Mines: What is Being Done?

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The scale of the effects of antipersonnel mines on both individuals and communities is such that action is now required to limit the effects of the millions of mines that are laid all over the world. Because its personnel witness the results of these weapons every day, the Medical Division of the International Committee of the Red Cross organized a symposium of experts on antipersonnel mines in Montreux, Switzerland, in April 1993. The purpose was to establish the exact nature and extent of the problem on a worldwide basis. Since the Montreux symposium, there has been a heightened public awareness, a campaign to ban mines has taken effect, and a review of existing law, the 1980 United Nations Convention, is fore seen. Only a multidisciplinary and international effort will be effective in limiting the suffering produced by these weapons. [M&GS 1994;1:18-22]

Antipersonnel mines were originally designed to prevent the lifting of anti-tank mines. Since World War I, they have been used with increasing frequency by armed forces. In today's conflicts they are used indiscriminately by both regular and irregular troops. Antipersonnel mines have been laid haphazardly in large numbers in many developing countries, and this has generated a worldwide epidemic of injuries [1].

There are essentially two types of antipersonnel mine. Blast mines are usually buried and are triggered by foot pressure; fragment mines, which are above the ground, are triggered by trip wires or other sensors. There are many different types of mines that can be remotely delivered by air or artillery; they may contain such a small amount of

metal that they are undetectable [1-3].

The pattern of injuries depends on the type of mine and whether the mine was trodden on or was handled when it exploded. Each pattern has its different implications for surgical resource, expertise, and later disability [4]. The most severe wounds with which the victim might survive are sustained from buried blast mines.

Through its surgical hospitals for war wounded and its rehabilitation centres, the International Committee of the Red Cross (ICRC) has come to recognize the scale of human suffering caused by mines and has undertaken medical, legal, and diplomatic measures to prevent it.

The ICRC Experience of Antipersonnel Mine Injuries: Only an Indicator of the Problem

One of the countries most severely affected by antipersonnel mines is Afghanistan. The number of victims of mines admitted to the hospitals of the ICRC on the Afghan border of Pakistan is indicated in

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Figure 1. The fall of the communist government in Kabul in April 1992 encouraged movement of population around the country; many of these people were returning refugees. This movement precipitated a marked increase in the number of mine injured seen in these hospitals (see Fig 1). We estimate only a small proportion, probably less than 10%, of Afghan mine victims are admitted to ICRC hospitals; this gives an indication of the magnitude of the problem. It also shows how noncombatants are at particular risk from these weapons. The ICRC hospital in Peshawar, Pakistan, closed for admissions on March 1, 1993. The patient flow has been diverted to Jalalabad inside Afghanistan where the ICRC has rehabilitated a hospital and placed a surgical team; of the patients admitted there injured by weapons of war, up to 55% are victims of antipersonnel mines. It should be noted that most hospitals in Afghanistan have been rendered nonfunctional by the war.

The ICRC wound database, instituted in July 1990, now holds data on 17,414 war wounded patients admitted to five independent ICRC hospitals for the conflicts in Afghanistan, Cambodia, or Sudan. (There are little data for comparison on the majority who never reach an ICRC hospital.) Refined data are available for 3,264 injured by antipersonnel mines; hospital mortality was 3.8% (143 patients); surgical amputation of one lower limb was necessary in 1,284 patients (39.3%) and of both lower limbs in 110 patients (3.4%). (It should be noted that not all antipersonnel mine injuries result from stepping on a buried antipersonnel mine [4] and so not all patients require surgical amputation of a lower limb.) The number of patients who are females and who are males under 16 years or over 50 years is an indicator of the proportion of victims that are noncombatant. In this group, 32.4% (1,057 patients) were "noncombatant."

There is a lack of reliable information on the full effects of antipersonnel mines. Military medical authors may not acknowledge antipersonnel mine injuries at all [5]; if they do so, it is only in the context of combat casualties [6,7]. Had they expressed concern about these weapons outside a military context this humanitarian problem might have been recognized earlier. The ICRC has documented many of the effects of antipersonnel mines with respect to injury, use of surgical resource, and disability [4,8,9]; it has also gone to great lengths to pass on the experience it has gained with this common but difficult surgical problem [10-12]. Other agencies have joined the ICRC in voicing their concern about the nature and extent of the

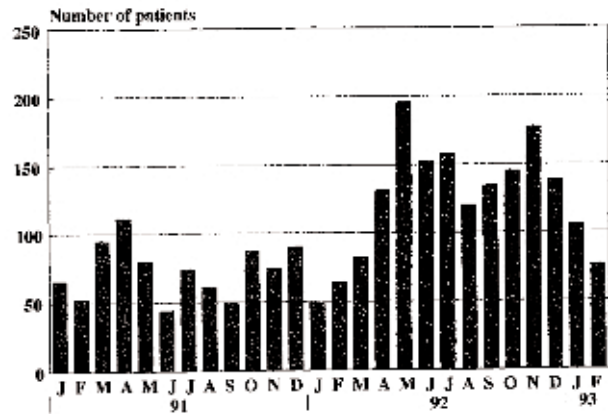


Figure 1. The number of mine injured patients admitted each month to the ICRC hospitals in Peshawar and Quetta on the Afghan border of Pakistan from January 1991 to February 1993 inclusive.

problem in humanitarian terms [1,13-16]. Some of these reports give an indication of the fate of those -- the majority -- who do not receive adequate medical care. There is much less information about the long-term psychological effects of injury and disability in mine victims. There are no reliable data concerning the social, economic, and environmental consequences of the presence of antipersonnel mines in developing countries.

Rehabilitation of a mine victim who has lost a leg requires a prosthetic limb. Each such prosthesis must be individually fitted, has a limited life, and so must be replaced after some years, especially in children. A specialised workshop is required for the manufacture and fitting of these prostheses. In most countries affected by mines, there is neither resource nor expertise to establish such workshops without outside help [1]. Many agencies are involved in prosthetic manufacture; the ICRC alone makes up to 14,000 prostheses in a year in orthopaedic centres all over the world.

International Law and Mines

The use of mines as witnessed by the ICRC in many countries does not conform with the fundamentals of international humanitarian law in that these weapons do not discriminate between combatant and civilian. Protocol II of the 1980 United Nations Weapon Convention [17,18] specifically relates to the use of mines but not their production or export. Implementation is hindered by the fact that the Protocol really applies to international armed conflict. In today's civil and internal conflicts, those responsible for the humanitarian disaster are difficult to identify and so are beyond criminal sanctions.

The Montreux Symposium on Antipersonnel Mines

The level of concern within the ICRC prompted its Medical Division to organise a symposium of international experts on different aspects of mine warfare and the effects of mines. This symposium took place in Montreux, Switzerland, in April 1993. There were 60 participants including military officers, diplomats, doctors, lawyers, weapons specialists, representatives of humanitarian organizations, and mine clearance experts. (Manufacturers of antipersonnel mines were invited but failed to reply.) This group of experts drew five essential conclusions.

1. The military cost of the effectiveness of the use of mines measured against the human and social cost is a matter for urgent consideration.

2. Those who manufacture antipersonnel mines and those who actually lay them assume no responsibility for clearance operations and do not help care for people disabled by these devices.

3. In modern conflicts, antipersonnel mines may not be laid for military purposes. They have been and continue to be used to terrorise civilians or to destroy the social and economic fabric of the countries where they are laid. However, there is a lack of objective data.

4. Antipersonnel mines are widely used by irregular forces who do not consider themselves subject to the international rules governing the use of such weapons.

5. The suffering and damage caused by antipersonnel mines are increasing as they are still being laid in the thousands; there is neither resource nor means to remove them. The overall cost, per mine, of detection and elimination is 100 times that of procurement and laying.

These conclusions led to five broad proposals.

1. Immediate diplomatic, governmental, and legal measures should be taken to limit and control the production, availability, and use of antipersonnel mines (Table 1).

2. It should be determined who is responsible for financing and providing direct aid to mine victims.

3. It should be determined what resources are required to clear the estimated 100 to 200 million active mines that have been laid in at least 27 countries (Table 2).

4. Public awareness about the problem should be heightened both within and without the affected countries.

5. Existing rules of international

humanitarian law on the use of weapons should be implemented, strengthened, and developed; likewise, possible control measures relating to the commerce in and stockpiling of mines should be developed.

With respect to international law, several participants considered that total and unconditional prohibition of all types of mines was the only solution. Others viewed this as a long-term objective and favoured, as a first step, the prohibition of certain types of mines, e.g., those without self-destruct mechanisms or those that are undetectable.

Since The Montreux Symposium

The Vietnam Veterans of America Foundation (WAF) has coordinated with other agencies (in particular, Human Rights Watch and Handicap International), a campaign to heighten public and governmental awareness about the problem of mines with a view to securing a ban on these weapons. WAF has also undertaken a study in four countries in order to obtain data on the social and economic impact of the presence of large numbers of mines.

The United States has extended for a further three years a ban on the export of antipersonnel mines.

In December 1993, the United Nations passed a resolution that calls for a ban on the worldwide trade in mines that affect civilians. However, some states believe that this does not affect the export of mines with self-destruct or self-neutralising mechanisms.

In January 1994, the ICRC convened a meeting of military experts to ascertain details of the military use of mines. These experts generally agreed that antipersonnel mines were a necessary weapon because they achieve their purpose better than any other system that would require greater resource and risk more military casualties. However, they also acknowledged the enormous humanitarian problem that resulted from their indiscriminate, widespread, and uncontrolled use. The information from this meeting will be a necessary part of any review of existing law.

The first of a series of meetings in preparation for the review of the 1980 United Nations Convention has been organized by the United Nations for February 1994.

Conclusion

The scale of the suffering caused by antipersonnel mines becomes increasingly evident. Any single action -- whether directed at helping the victims of mines, demining, heightening public awareness, or bringing about

changes to the law -- is insufficient. It is necessary for all concerned, including health professionals, soldiers, lawyers, manufacturers, and politicians, to recognize their responsibilities. Only a unified multidisciplinary approach will be effective, and then it will be many years before there are fewer mine victims.

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Table 1. Producers of Antipersonnel Mines

Argentina
Austria
Belgium
Brazil
Canada
Chile
China
Community of Independent States
Ex-Czechoslovakia
Egypt
France
Germany
Hungary
India
Israel
Italy
Netherlands
North Korea
Pakistan
Peru
Portugal
Rumania
South Korea
South Africa
Spain
Sweden
Switzerland
United Kingdom
United States of America
Vietnam
Ex-Yugoslavia

Source: *Jane's - Military vehicles and logistics* [16].

Note: these countries are not necessarily exporters of mines.

Table 2. Countries Where Civilians Are at Risk from Antipersonnel Mines

Afghanistan*
Angola*
Armenia
Azerbaijan
Cambodia*
Colombia
Ethiopia
Falkland Islands (Islas Malvinas)
Guatemala
Honduras
Iran
Iraq*
Kuwait
Laos*
Mozambique*
Myanmar (Burma)
Nicaragua
Peru
Rwanda
Salvador
Somalia*
Sri Lanka
Sudan
Uganda
Ex-Yugoslavia
Zimbabwe

*Indicates high risk

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