Arms or health: a role for medical colleges?

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In his leading article in the October 1988 issue of this journal [1], Dr Halfdan Mahler, former Director General of the World Health Organisation (WHO), reviews the work and achievements of his organisation, looks at what still has to be done, and indicates some of the obstacles to be overcome. He comments on the conspiracy of silence, including economic, political and media interests, which prevents effective action on such topics as alcohol, tobacco and nutrition, and he asks why we accept Rabindranath Tagore’s assessment that ‘Fate has allowed humanity such a pitifully meagre coverlet that, in pulling it over one part of the world, another has to be left bare’. Dr Mahler suggests that, as forecast by MacLuhan, the world is now a global village. However, he omits a key factor: why is it not yet a healthy village and why is humankind’s coverlet still so sparse? This factor is not fate, but derives from the policies of many of the world’s governments, in the form of the global arms race.

The arms race as a health hazard

The nuclear threat

WHO is clear on the disastrous consequences to world health of a nuclear war. In resolution WHA 36.28 of 16 May 1983, the World Health Assembly concluded that ‘...it is impossible to prepare health services to deal in any systematic way with a catastrophe resulting from nuclear warfare’ and that ‘nuclear weapons constitute the greatest immediate threat to the health and welfare of mankind’. This conclusion is based on two successive reports from WHO’s Management Group, which reviewed the likely physical and human effects of a nuclear exchange on the combatants and the consequent impossible burden that would be placed on surviving health services [2,3]. Similar conclusions were reached by a working party of the Board of Science and Education of the British Medical Association [4] and in numerous other studies [eg 5].

The effects of a nuclear exchange would not be confined to the participants. Immense amounts of smoke and dust would enter the atmosphere, and all studies predict that this would have severe adverse effects on the global climate and consequently on agriculture and food supplies. The most comprehensive examination of these effects, by the Scientific Committee on Problems of the Environment [6,7], predicts that global death rates from starvation and its secondary effects, such as epidemic disease, would run to thousands of millions—surely a justification of Carl Sagan’s fear that the survival of the human species might be in doubt [8].

Conventional and chemical warfare

The uneasy balance of nuclear terror between the superpowers has not, of course, ensured global peace. Upwards of 10 million people may have died in regional conflicts since the end of World War II [9]. The sophistication of conventional warfare has increased and its brutality is no whit diminished. Chemical weapons have been used in the Gulf War, and Mozambique and Nicaragua, both poorly developed countries with governments desperately desirous of improving health care and access for their populations, have suffered from guerilla attacks that have included health centres among their targets; in Mozambique, in particular, children have been among the victims [10].

‘Destruction without detonation’

Indirect health costs of the arms race

In a world with finite resources, excessive spending on arms is bad for health, even if the weapons produced are never used, in both developed and developing countries. World expenditure on arms has now reached the equivalent of about a trillion (10$^{12}$) dollars a year; half of this is spent by the USA and the USSR.

In the USA, in the past 3 years, funding for military research has increased by 28%, while that for health research has been reduced by 5% [11]. The huge US trade deficit, which threatens the stability of the world economy, is in large part attributable to arms spending.

Of major developed countries, the USSR devotes the highest proportion of its GNP, some 15%, to the military. The resulting inadequacies of its health and social services are among the major targets for President Gorbachev’s programme of perestroika, and he is well aware that this cannot succeed without a reduction in arms spending [12].

Alone among NATO European countries, the UK defence budget was increased, according to the
demands of NATO, by 3% per annum in real terms between 1979 and 1987. During the same period, according to successive reports from the House of Commons Select Committee on Health and Social Services, the cumulative underfunding of the National Health Service was £2000 million [13].

In contrast, developed countries with relatively low arms spending, such as Japan, Sweden and Denmark, devote a much higher proportion of their resources to social services and health care. The Black report drew attention to the contrast between the UK, where differentials in standards of health and health care between the social classes are increasing, and the situation of our European neighbours [14]. It is surely no coincidence that they spend only about half as much on defence, whether expressed per capita or as a percentage of GNP, as does the UK, and are able to spend 50% more on health care [9].

Some of these countries, including Japan and Sweden, while spending less than the USA or the UK on their own military, contribute very significantly to the global arms trade, as do a few relatively more prosperous developing nations, notably Brazil. Such arms exports usually go where they are least needed and do most harm, elsewhere in the Third World, and the morality of this must be as questionable as active participation in one of the major power blocs. In all countries, the arms industry tries to justify this by its role in job creation. If current negotiations succeed in reducing the demand for conventional as well as nuclear arms in Europe, pressures for arms sales elsewhere could then increase. In view of the well known adverse health effects of unemployment, the role of the arms industry as a principal provider of employment in industrialised countries must thus be taken seriously. However, a given sum invested in other fields of public spending, such as transport, construction, health or education, generates many more jobs, and detailed studies have shown that the arms industry can be converted to peaceful uses with no loss of employment and only minimal retraining of the workforce [15].

Developing countries

The developing countries now account for about one-fifth of the trillion dollars spent annually world-wide on arms, and their share of arms spending is rising [9]. Among the biggest spenders are the oil-rich states of the Middle East, where there is an obvious fear that a local conflict could involve the superpowers and escalate to global nuclear war, but some Third World countries least able to afford the burden, such as Ethiopia, Angola, Mozambique and Nicaragua, are in relative terms among the highest spenders on arms, whether through misguided government policies or in response to perceived outside threat.

The health needs of such countries need no emphasis, and they are very well known to WHO and similar agencies. UNICEF estimates that every year some 12–15 million children under the age of 5 die in Third World countries from avoidable causes. These include diseases preventable by immunisation such as poliomyelitis, enteric illnesses such as typhoid and dysentery due to contaminated drinking water and poor sanitation, and conditions such as measles and gastroenteritis which are life-threatening when superimposed on severe malnutrition. In 1980 the Brandt Commission, quoting World Bank figures, estimated that at least 800 million people in the Third World were destitute [16]. Since then, the Third World debt crisis must have greatly increased this number. WHO’s aim of ‘health for all’ by the year 2000 is unattainable while hunger is rampant.

Only a small fraction of the financial and other resources now spent on arms and the military would go a long way towards providing the resources necessary to overcome poverty and starvation and improve health standards. The eradication of smallpox, rightly claimed by Dr Mahler as WHO’s greatest success, cost only the equivalent of a few hours of the arms race, and its programme to eradicate malaria would cost no more than what is spent on arms in a single day. Other similar figures were cited by the Brandt Commission: official development aid is less than one-twentieth of the world’s military bill; the cost of a tank, about a million dollars, could improve storage facilities for 100,000 tons of rice, saving 4,000 tons annually (one person can live on little more than one pound of rice a day); for the price of a jet fighter plane, some 20 million dollars, 40,000 village pharmacies could be set up. Just half of 1% of military expenditure for one year would pay for the farm equipment to enable low-income food-deficient countries to approach self-sufficiency over a 10-year period [16].

Immunisation played an essential part in WHO’s attack on smallpox, and its Expanded Programme on Immunisation in collaboration with UNICEF has significantly reduced death and disability from measles, diphtheria, pertussis, tetanus, poliomyelitis and tuberculosis. In 1974, 5% of children in the developing world were immunised against these diseases; today the figure is 50%, with the aim of 100% by 1990 [17].

The cost per child of the six vaccines is now no more than 50 cents, but transport, personnel and refrigeration costs raise the overall price of immunisation to more than 5 dollars per child. In addition, many new vaccines are needed, while others, such as diphtheria–pertussis–tetanus, need to be made safer. Some now available, such as genetically engineered hepatitis B vaccine, are still far too expensive for general use. The cost of developing a new vaccine could be 30–50 million dollars. Market forces in developed countries may delay or prevent development and production of vaccines urgently needed in the Third World, but with no great potential in developed countries, such as those against Salmonella, Shigella and enterotoxic E. coli [17], although each new vaccine could be developed for the equivalent of just one hour of global arms spending. Vaccine development would be an obvious potential beneficiary from an international tax on military expenditure and on the arms trade as proposed by Brandt [16].
After the initial burst of interest in the Brandt report, its findings and recommendations have been ignored, as have the proposals of the Thorsson commission on the link between disarmament and development [18]. Now the Bruntland report, on environmental issues, also emphasizes the need for disarmament as an essential factor in resolving global problems with major health implications such as pollution, the threat to the ozone layer, and the greenhouse effect [19]. Meanwhile the arms race continues.

The medical response

The medical peace movement

In the early 1980s, after the breakdown of East–West détente, there was worldwide concern at the renewed vigour of the arms race. In Western Europe, designated as the home for Cruise and Pershing II missiles and the target for SS-20 missiles, this was at first mainly an anti-nuclear protest, expressed not only in the revival of CND but also in the foundation and rapid growth of medical groups such as the Medical Campaign Against Nuclear Weapons (MCANW) in the UK, and the coming together of such groups worldwide into International Physicians for Prevention of Nuclear War (IPPNW). For its contribution to public awareness of the consequences of nuclear war, and its promotion of East–West accord, IPPNW was awarded the Nobel Peace Prize in 1985 [20]. Sadly, an attempt was made to discredit IPPNW as a tool of the Soviet Union [21]. Nevertheless, many believe that the work of these organizations has made a significant contribution to the lessening of global tension which became apparent during 1988 in particular, with progress in direct negotiations between the superpowers, and also signs of an end to regional conflicts in several parts of the world.

A role for medical colleges

Meanwhile, as emphasized by Dr Mahler in his editorial [1], much remains to be done, both in maintaining standards of health care in developed countries and in improving them elsewhere. This has to be achieved against a background of limited resources, for which health care providers have to compete with other demands upon the national purse; not least among these is what President Eisenhower termed the ‘military–industrial complex’. However, according to the latest UNICEF annual report, as little as 5% of the world’s annual spending could overcome the worst aspects of global poverty by the year 2000 [22].

Although there is no guarantee that, even if arms spending were to be reduced, the resources freed would be diverted to the production of vaccines or any other aspect of health care, the pressure of public opinion can compel an appropriate governmental response. Here, surely, academies and colleges of medicine throughout the world have a role, but to play it they must be willing to enter the political arena. This is already happening in the field of health care pro-

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