

Empty arms: the effect of the arms trade on mothers and children

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Trading in arms, both legal and illegal, is highly detrimental to the health of mothers and children in the countries where armed conflict occurs. But do the powerful arms trading countries want to address the problems they are causing?

Aid workers have no doubts about the impact of armed conflict on the death and suffering of mothers and children. To prove that trading in arms makes a major contribution to poor health is challenging, because it coexists in poor countries with massive debt, corrupt bureaucracies, and natural disasters. We report on the devastating effects of legal and illegal weapons exported into poor countries in conflict in Africa and Asia.

Methods

Drawing on the work of international organisations,^{w1-w4} we conducted the following analyses:

- A review of literature on conflict and arms trading
- The mechanisms by which major weapons and small arms exported during 1990-2000 reached the 10 poorest countries engaged in armed conflict in 2000
- The health status of mothers and children in these countries compared with the 10 largest arms exporting countries.

Armed conflict

More than 85% of the major conflicts since the second world war have been in poor countries.^{w5} Fifty seven major armed conflicts occurred in 45 different locations between 1990 and 2001,^{w6} involving 16 of the world's 20 poorest countries.^{w7} Many of these conflicts have been longstanding. In 2000, for example, war had lasted for 22 years in Afghanistan, 35 years in Angola, and 12 years in Somalia.^{w5}

Most conflicts since 1990 have occurred in countries where government armies were poorly organised; paramilitary factions acted as the driving force, using ideological or political agendas to justify their actions. Warring factions obtained arms from international backers in exchange for money, narcotics, or precious minerals. These trades led to the development of sophisticated war based economies that fostered conflict, such as the cases of diamond trafficking from Angola and Sierra Leone.^{w8 w9} (See bmj.com for analyses of the supply of weapons to the 10 countries with the highest mortality and engaged in conflict during 2000).

Summary points

More than 85% of the major conflicts since the second world war have been in poor countries

During the 1990s the poorest countries of the world became saturated with arms, with brokers often supplying both sides of a conflict

Between 1986 and 1996, a major proportion of those dying as a result of armed conflicts were civilians, particularly women and children

Huge differences in the health of mothers and children exist between the poor countries undergoing conflict and the predominantly rich countries exporting arms to them

Legal trading in arms should be a responsibility of a newly configured United Nations, and much more regulation of arms manufacturing companies is needed

International laws and their aggressive enforcement should stop illegal arms trading, including its support systems

Once a country contains a critical number of weapons, the need for protection leads to their proliferation. The actions of paramilitary organisations, such as the indoctrination of children to kill family members,^{w5} and of racketeers who use violence and intimidation to pillage local resources, contribute to destabilisation of societies. Conflicts in Uganda^{w10} and the Democratic Republic of Congo illustrate these points (see bmj.com).

The trading of arms from rich countries to poor countries

During the 1990s the poorest countries of the world became saturated with arms; some originated from "legal" transfers, and many formed part of the illegal

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References and a supplementary analysis are on bmj.com

Box 1: Evading the rules for legal arms trading

The rules governing export were “legally” evaded in at least three ways.

Brokering through intermediate countries^{w9}

For example, British companies or individual British nationals (brokers or middlemen) did not need export licences when buying arms from another country and supplying them to a third foreign country (usually poorly resourced and governed). The United States and Germany require brokering to be licensed.

Producing arms in other countries

For example, British (unlike American) manufacturers producing arms in their overseas factories did not need export licences. In 1995, licensed production of small arms occurred in 21 developing countries, 16 of which exported them to other developing countries.^{w12-14}

Exploiting the end user system

Licences to allow export may only be granted if an end user certificate defining usage is first obtained from the recipient country. In countries with poor governance, end user certificates were easy to obtain, and subsequent shipments were not subject to verification that they were being used in agreed ways.

trade. The arms trade destabilised already fragmented countries, making development difficult and blurring distinctions between use for military and criminal purposes. Outside governments openly or clandestinely supplied arms to factions they favoured for political reasons or for access to resources,^{w11} as did some multinational companies.^{w9} Many loopholes allowed weapons to enter unstable or embargoed countries—for example, ineffective or falsified end user certificates and licensed production in or brokerage through intermediate, poorly regulated countries (box 1).^{w12-w14} Arms brokers often supplied both sides in a conflict.^{w9}

Trade in major conventional weapons

In 1972, poor countries received 48% of their weapons free from the United States and the Soviet Union. By 1982 donations had declined to around 14%, but the total value of exports to non-oil producing developing countries had doubled, leading many into debt.^{w15} During the 1990s the permanent members of the United Nations Security Council were the main manufacturers and exporters of major conventional weapons, delivering 65-96% of their exported arms to developing countries between 1997 and 2000 (table 1).^{w16} Arms were supplied to countries on both sides of the various conflicts, reducing the resources available for health and education. For example, the United Kingdom, United States, Russia, Germany, and Canada supplied both India and Pakistan with weapons despite Pakistan spending less than 1% of its gross domestic product on health.^{w17} Many weapons exported to poor countries were second hand, often accompanied by trained military support; some were sold from vast stockpiles left over from the cold war.^{w18 w19}

Trade in small arms and light weapons

Although the poorest countries struggled to afford major weapons, they could buy small arms. The AK 47 rifle, for example, can be bought in Africa for a bag of maize and in Afghanistan for \$10 (£6.45, €10). It needs

little maintenance and with minimal training can be a deadly weapon, even when used by young children.^{w20} Apart from being cheap and easy to manufacture, small weapons are also readily transported, smuggled, and hidden.

In 47 of 49 major conflicts between 1990 and 2000 small arms and light weapons were the main weapons used,^{w11 w21} causing incalculable human suffering.^{w22} They continually threaten development and have been the principal weapons used in conflicts characterised by abuse of human rights.^{w23} An estimated 600 million small arms and light weapons exist—one for every 10 people on earth.^{w24} They are responsible for the vast majority of conflict casualties,^{w25} and in 2001 they were implicated in more than 1000 deaths a day, mostly of mothers and children.^{w26}

Small arms are not included in the control of major arms trading. The UN register of conventional arms is mainly concerned with the threat that major weapons pose to international or regional stability, rather than stability within countries. Indeed, the UN acknowledges that the challenge posed by small arms “involves security, humanitarian and developmental dimensions.”^{w27} The UN supports the need to control the proliferation of small arms but is challenged by the fact that the five permanent members of the Security Council are among the main suppliers.^{w26} Despite attempts by the United States and the European Union to work together to combat the small arms trade,^{w28} the United States and some members of the EU (United Kingdom, France, Germany, Italy, and Belgium) are among the main exporters. The International Action Network on Small Arms coordinates more than 340 organisations from 71 countries to prevent the proliferation and misuse of small arms and light weapons.^{w29}

Illegal arms trading

Although 80-90% of the global trade in small arms is legal,^{w22} trading in illegal arms (defined by the UN as exports that violate national or international law^{w30}) accounts for over 50% of all weapons in circulation.^{w31} As most poor countries have minimal systems to regulate the ownership of weapons, this definition applies only to arms exported to countries under mandatory arms embargoes from countries where licensing systems exist. Most illegal arms start out legally and

Table 1 Worldwide deliveries of major conventional weapons 1997-2000, with proportions to developing countries* (countries ranked by size of trade)^{w16}

Country	Trade (millions of constant (2000) US dollars)	Percentage of total arms exports going to developing countries*
United States	68 040	65.5
United Kingdom	21 833	86.5
France	18 797	87.7
Russia	11 887	78.3
Germany	5 568	30.0
China	2 537	95.8
Italy	1 586	67.4
All other European countries	12 991	68.4
All other countries	7 884	36.1
Total	151 123	70.2

*Defined as all countries except United States, Russia, European countries, Canada, Japan, Australia, and New Zealand.



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"Home" for this Afghan family is a tent in a refugee camp. The baby was born here

become illegal by brokered sales, theft, and corruption, most often when non-state actors are supplied for political or economic reasons.

In the 1990s, sophisticated ploys reminiscent of other organised crimes such as drugs trafficking were used to distribute illegal weapons. For example, cargo aircraft supplying weapons flew circuitous routes, often at night using their own navigation systems, multiple landings, changes of aircraft, or falsification of aircraft registration. Pilots and planes were registered to "flags of convenience" and sometimes delivered during an "emergency landing" close to receiving factions. In Africa, where many countries have poor accountability, bureaucracy, customs procedures, and air traffic control, it was easy to complete illegal deliveries. The US Bureau of Intelligence and Research and Amnesty International reported that air charter companies from the United Kingdom and Belgium supplying arms to Rwanda, Congo, and Sierra Leone were unknown to and untraceable by law enforcers in their countries of origin.^{w14 w32}

The human costs of conflict

The international arms trade is the substrate for global armed conflict, causing enormous human suffering, and mothers and children are the most vulnerable people. According to Unicef, between 1986 and 1996 two million children were killed in armed conflict, six million were seriously injured or permanently disabled, and countless others were forced to witness or take part in violence.^{w5} A major proportion of victims were civilians, particularly women and children.^{w5 w33 w34} In her report to Unicef, Graça Machel stated that "Wars have always victimised children and other non-combatants, but modern wars are exploiting, maiming and killing children more callously than ever."^{w5}

The indirect effects of armed conflicts cause most fatalities in mothers and children and include^{w5 w23 w35-w38}

- Food deprivation^{w39}
- Spread of disease, in part due to disruption of public health systems
- Psychological and emotional damage (two thirds of Angolan children had witnessed murder)^{w5}
- Disability
- Separation of families (in 1995, 20% of Angolan children were separated from their families)^{w5}
- Loss of education

- Sexual abuse of children, including deliberate rape to drive out ethnic minorities
- Child abduction, torture, and slavery^{w10}
- Child soldiers (in 1998, for example, at least 300 000 children aged under 18 were soldiers),^{w10 w41}

Another consequence of conflict is displacement. In 1997, 13.2 million people were refugees and 4.9 million were internally displaced,^{w42} disproportionately more of whom were women and children than in the source population.^{w43} In Rwandan refugee camps child mortality was as high as 300 per 100 000 per day.^{w44} Child mortality in displaced communities was more than 60% higher than among non-displaced children in the same country.^{w45} In contrast, in 2001 the United States and the United Kingdom, two major arms exporters, provided haven for only 4.3% and 1.2% of the world's refugees (which totalled 12 million).^{w33 w46}

Huge differences in the health of mothers and children exist between the 10 poorest countries undergoing conflict in 2000 and the predominantly rich countries that exported arms to them (directly or indirectly) (table 2).^{w47 w48} Scaling each country to a population of 50 million gives figures of 2009 children aged under 5 years dying each day and 46 667 mothers dying each year during pregnancy or childbirth in the poorest country (Sierra Leone) compared with 15 children per day and 91 mothers per year in the country supplying the most arms (United States). Arms exports cannot be said to have directly caused this disparity, but to believe that they have not contributed would be unrealistic. These differences are so great that they question the humanity of arms exporting countries (box 2). Armed conflict and weapons trading may thus be seen as a form of maternal and child abuse.

Table 2 Health status of mothers and children in the 10 index countries at war in 2000 and the 10 largest arms exporting countries, scaled so that the populations of all countries are of equal size (50 million)^{w7 w48}

	No of children aged <5 dying each day	No of women dying during pregnancy and childbirth each year (1995 data)
10 poorest countries engaged in conflict during 2000		
Sierra Leone	2009	46 667
Angola	1926	34 466
Afghanistan	1835	19 175
Somalia	1513	37 368
Democratic Republic of Congo	1307	24 272
Burundi	1018	42 500
Ethiopia	1054	44 922
Rwanda	996	40 385
Pakistan	668	3 903
Uganda	940	25 907
10 countries exporting the most arms in the years 1996-2000		
United States	15	91
Russia	33	337
France	9	131
United Kingdom	9	65
Germany	7	56
Netherlands	9	65
Ukraine	30	212
Italy	7	52
China	103	539
Belarus	40	168

Box 2: Example of arms trading to opposing sides of the conflict^{w1 w49}

The Democratic Republic of Congo is a strategically important country rich in natural resources. The country became independent in 1960, and Mobutu Sese Soko became president in 1965. Despite corruption and abuses of human rights, the United States supplied Congo with \$300 million worth of military hardware and \$100 million worth of military training over the next 30 years.^{w49} Laurent Kabila came to power in 1997, and fighting broke out in 1998; the forces from eight countries became embroiled.^{w14} The United States has helped to build the arsenals of eight of the governments involved. Weapons also flowed into this part of Africa illegally, with brokers operating out of many countries, including the United Kingdom, France, and Belgium.^{w14}

	Opposing sides	
	Democratic Republic of Congo, factions from Zimbabwe, Angola, Chad, Namibia	Factions from Rwanda, Uganda, Burundi
Provider of military training	United States	United States
Suppliers of small arms and light weapons	United States, United Kingdom, Germany, South Africa, Finland, Denmark, Canada	United States, United Kingdom, South Africa,
Suppliers of major weapons	United States, France, Russia, China, Italy, Denmark, South Africa, Netherlands, Portugal, Slovakia, Belarus, Kazakhstan, Brazil, Czech Republic, Bulgaria, Ukraine, Poland, Libya, Yugoslavia, Belarus, Georgia, Hungary, Moldova	Russia, France, South Africa, Egypt, Slovakia, Ukraine, Bulgaria, Poland, Belarus

Recommendations

Better regulation of legal manufacture and trading in arms

Legal trading should be a responsibility of and regulated by a newly configured United Nations that is more representative of poor nations, as well as financially less dependent on countries that manufacture arms. Legal arms should be traded only for defence (article 51 of the UN charter) and must not worsen existing conflict, cause human rights violations, or impede development.

Much more regulation of arms manufacturing companies is needed, particularly for companies that have overseas factories. The middlemen (brokers trading outside their own countries) who buy, sell, and transport arms to countries without adequate govern-

ance are most important. In parallel, tighter international regulation is needed of shipping agents and money launderers (including many reputable banks) who remain above the law by sidestepping the current weak controls. In many respects it would be better to make all brokering activities illegal (as they are with the drugs trade) and permit dealing of arms only through the UN. Brokers and company owners should be indicted for war crimes if they break international embargoes or provide arms illegally through negligence or intent. In addition, loans for the purchase of weapons by poor countries should be subject to UN approval.

The UN must do more to influence the United States, a country that exports the greatest number of weapons,^{w50-w54} refuses to accept an international criminal court,^{w55} and is one of only two states refusing to ratify the UN Convention on the Rights of the Child.^{w56} Regrettably, in 2001, the US undersecretary of state at the first UN conference on small arms insisted that only illegal trading should be addressed and that the United States would resist any agreement that infringed the “right to bear arms.”^{w57}

Transparency is also important.^{w58} Only seven of the world’s 190 countries publish regular data on small arms exports, and only three of these provide details on the numbers and kinds of weapons involved.^{w59} All weapons and ammunition should be branded to enable tracing.

Important steps forward have been taken. Attempts to develop an ethical foreign policy in the United Kingdom have resulted in annual reports of licences granted for the exports of weapons, including small arms.^{w60} In 1998 an EU code of conduct on arms exports was agreed,^{w61} as well as a moratorium by the Economic Community of West African States on imports, exports, and manufacture of small arms and light weapons into west Africa.^{w62} An innovative proposal for controlling arms, “the international code of conduct,” has come from a commission of Nobel peace laureates and is based on ethical criteria within international humanitarian law.^{w63}

Economic arguments in the United Kingdom have revealed the cost of the arms trade to taxpayers.^{w64 w65}



Displaced, orphaned, malnourished, ill, or killed—the consequences of the arms trade

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The British government has also supported economic regeneration in Bulgaria and Ukraine,^{w66} countries dependent on the arms industry. However, links between the trade in arms and commodities such as oil mean that for powerful arms exporting countries the resulting economic advantages in terms of all trade are complex and probably substantial.

Programmes of weapons collection and destruction intended to demilitarise countries have included food, medical care, and education for individuals or communities that surrender weapons.^{w67} Perhaps the country that has provided the weapons should provide the compensation.

Better prevention of illegal manufacture and trading in arms

International laws and their aggressive enforcement should stop illegal arms trading, including its support systems, such as money laundering and smuggling. An international police force (perhaps better termed an international family protection force) working closely with national police is needed to arrest and charge the hundreds of criminally active illegal arms dealers, most of whom are already known and on databases.^{w18} Banks and companies supporting illegal trading should be targeted. Enhanced control of borders to detain aircraft, ships, or vehicles and arrest and charge people responsible for smuggling would have an impact. Many illegal arms dealers are based in rich, relatively well governed countries, so stopping them should be possible.

Investigations by the UN into breaches of arms embargoes often result in information about the state and individual actors involved and lead to expressions

of concern but no action. No one has been convicted of violating UN arms embargoes.^{w18} The UN seems to be powerless to act, and it clearly needs to find a way of mobilising states to accept an international family protection force as well as giving more power to the international criminal court.^{w68} Tragically, trafficking of arms to Africa seems to be low on the world's priority list.^{w8} One possible way forward could involve the UN Convention against Transnational Organized Crime,^{w69} within which is a draft protocol against the illicit manufacture of and trafficking in firearms.

Conclusion

The real question raised by the above analysis is whether powerful arms trading countries want to address the problems they are causing. Children and mothers in poor countries seem to be regarded as much too unimportant and expendable. Somehow the UN has to find a way of creating a system that ethically regulates legal arms trading, and the international community needs to establish a protection force to address illegal trading.

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How healthy is the world?

Bjørn Lomborg

We are often told that we are destroying our environment and that living conditions are deteriorating. The author of *The Skeptical Environmentalist* looks at global data and comes up with a more optimistic view

In *The Skeptical Environmentalist* I set out to describe the entire state of the world in a single book.¹ This was by no means easy, and so I was a bit hesitant when the *BMJ* asked me to do the same again—only this time in 1500 words. So how can the true state of the world be reduced to 1500 words? Of course, it cannot be. But by relying on official statistics, global trends, and long term tendencies (what I usually refer to as fundamentals), we can draw a reasonably good picture. However, not everything can be fitted into this picture, and this article will focus on human welfare.

Measuring human welfare is complex because it consists of a myriad of inter-related subjective and objective factors. I will therefore focus on internationally acknowledged objective indicators of human welfare such as life expectancy, prosperity, and the fulfilment of basic needs.

Life expectancy

One of the central aspects of human welfare is life itself. Life expectancy is a proxy for the general state of

Summary points

- Life expectancy and prosperity have risen in developed and developing countries over the past 50 years and are expected to continue to rise
- Food production should keep up with population growth without greatly encroaching on forest area
- Available energy resources are increasing
- Pollution is likely to fall as countries become wealthier
- The Kyoto agreement to reduce carbon dioxide emissions will have little effect on global warming

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health, but it also possesses an intrinsic value. Figure 1 shows the remarkable increase in life expectancy for the developing world over the past 50 years, from