

This article was downloaded by: [Pinto, Andrew D.]

On: 23 October 2008

Access details: Access Details: [subscription number 904758465]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



## Medicine, Conflict and Survival

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title-content=t713673482>

### Engaging health professionals in advocacy against gun violence

Andrew D. Pinto <sup>a</sup>

<sup>a</sup> Physicians for Global Survival, Ottawa, ON, Canada

Online Publication Date: 01 November 2008

**To cite this Article** Pinto, Andrew D.(2008)'Engaging health professionals in advocacy against gun violence',*Medicine, Conflict and Survival*,24:4,285 — 295

**To link to this Article:** DOI: 10.1080/13623690802374197

**URL:** <http://dx.doi.org/10.1080/13623690802374197>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

## Engaging health professionals in advocacy against gun violence

Andrew D. Pinto\*

*Physicians for Global Survival, Ottawa, ON K1R 6P1, Canada*

*(Accepted 23 July 2008)*

Health professionals have long been involved with advocacy around the social determinants of health, including protesting against war and mitigating the production, trade and use of specific weapon systems. Small arms and light weapons are a key area on which to focus, as they are responsible for the majority of injuries and deaths in war and their availability is related to increased levels of crime and suicide. Challenges for health professionals hoping to engage in such advocacy include a lack of adequate data, the need to confront political questions and the gun-lobby, and difficulty in measuring the effectiveness of campaigns. This article discusses some examples of successful advocacy and suggests future directions for health professionals in this area.

**Keywords:** advocacy; gun violence; health professionals; interpersonal violence; small arms and light weapons; violence and injury prevention

### Introduction

Advocacy is an important means by which health professionals can work towards improving health. This is especially applicable to the social determinants of health, such as poverty, access to the basic necessities of housing, food and clean water, access to education and the existence of a clean and sustainable environment. Such factors reflect the written and unwritten rules of a society, including the dominant economic structure. The negative impact on human lives of inequity related to these social determinants has been called 'structural violence'<sup>1</sup>. Health professionals have a long history of advocacy around these issues, inevitably dealing with political forces and the flow of power in society<sup>2</sup>. Advocacy has been criticized as an action that steps beyond what should concern health professionals, namely, individual physical health and illness. However, it is increasingly being seen as a necessary skill, particularly in public health, and is now part of the formal training programme of many health professionals<sup>3,4</sup>.

---

\*Email: [andrew.pinto@utoronto.ca](mailto:andrew.pinto@utoronto.ca)

'Advocacy is about power. It means influencing those who have power on behalf of those who do not'<sup>5</sup>. Advocacy occurs at multiple levels, from the individual to the global community, and includes self-advocacy, citizen advocacy on behalf of an individual, or collective advocacy. Advocacy concerns itself with prevention and not just the immediate cure to a situation<sup>6</sup>. In our current world system, many individuals and communities go unheard. Advocacy is using one's voice, position and skills to work towards positive change on behalf of an individual or group. The characteristics of health professionals uniquely position them to engage in such action, especially when an issue is contentious. Extended altruism, honesty and training in ethics, as well as a firm foundation in rational, scientific inquiry, allows health professionals to be effective, trusted advocates with a high status with politicians and the public<sup>7,8</sup>. Importantly, health professionals have a direct view of the impact of social policy on health, allowing them to make the links between ill health and broader forces<sup>9</sup>.

Speaking out against war and militarism is an area where health professionals have played an important role. The history of this philosophy can be traced to the founding of the International Committee of the Red Cross (ICRC), the rights of soldiers and prisoners during World War II and the actions of physicians and nurses, such as Dr. Benjamin Spock and Claire Culhane, during the Vietnam War. Throughout the later part of the Cold War, International physicians for the prevention of nuclear war (IPPNW) worked to raise awareness of the lack of a meaningful medical response to nuclear war. In recent years, health professionals, especially surgeons and rehabilitation specialists, have spoken out against the continued use of landmines<sup>10</sup> and cluster munitions<sup>11</sup>, and have helped to prevent the development of weapons such as blinding lasers<sup>12,13</sup>.

This article focuses on advocacy to limit the production, trade and use of small arms and light weapons (SALW). This has been a particular interest of IPPNW since the late 1990s, involving a number of affiliates in both the developed and developing world<sup>14</sup>. Such work emerged from a call for more research into the impact of violence on health by the World Health Organization (WHO). In 1996, the WHO 49th Assembly identified violence as a leading public health problem worldwide, and followed this by the document '*Small Arms and Global Health*' prepared for the first UN Conference on illicit trade in SALW in 2001. In it, WHO states that: 'Violence is ... an important health problem – and one that is largely preventable. Public health approaches have much to contribute to solving it'<sup>15</sup>. IPPNW launched its 'Aiming for Prevention' campaign shortly thereafter with a conference in Helsinki that brought together medical, policy and educational professionals to discuss how the health community could contribute to preventing armed violence.

This paper reviews the scope of the problem of SALW, existing advocacy on this issue and discusses challenges and future goals for the movement.

Advocacy by health professionals, built on sound research, can play an important role in ending gun violence.

### **Gun violence and its impact on health**

SALW are portable weapons operated by one to two individuals, and include handguns, assault rifles and machine guns<sup>16,17</sup>. They directly cause between 200,000 and 300,000 deaths annually, including the vast majority of deaths in conflicts globally, and over 1 million injuries<sup>15,18</sup>. They also increase the number of deaths occurring during robberies and assaults and enhance the lethality of suicide<sup>18-21</sup>. The indirect deaths can only be estimated but are thought to be much higher. SALW prolong conflicts, have a negative impact on humanitarian action and increase violence against women and children<sup>20,22-24</sup>.

SALW reach those who use them, and their victims, through a complex web of buyers and sellers. Paradoxically, the major producer countries include the permanent members of the United Nations Security Council, the United States, Russia, China, the United Kingdom and France. As Amnesty International has noted, Western countries undermine their commitments to poverty reduction and the protection of human rights by profiting from arms sales to poor countries which experience armed violence<sup>25</sup>. Despite the presence of restrictions on whom weapons can be sold to, weapons and parts of weapons are often shipped through intermediaries and end up in conflict zones. In a globalized world economy, the billions of dollars worth of arms sold annually are extremely hard to track. Attempts to control and limit the trade in SALW have so far proved impossible<sup>19,21,26,27</sup>.

Why should health professionals be more concerned with SALW than with other weapons? A gun makes a given situation much more dangerous. In the majority of communities, more guns equal more deaths, through homicides, suicides and domestic violence. Guns are 'violence multipliers', as they increase the lethality and destructiveness of a violent act<sup>28,29</sup>. Gunshot wounds are many more times likely to kill than other weapons, such as knives<sup>30</sup>. A weapon extends the distance violence can travel, affecting victims at a great distance, and often indiscriminately. SALW can be operated easily by almost anyone, including children, with little training or know-how.

Gun violence is, thus, a significant public health issue and can be framed as such in advocacy efforts. One can apply public health methods, looking at the epidemiology of the problem, drivers and quantify responses<sup>31</sup>. This begins with information gathering at the individual and population level. Looking at SALW as a lethal 'vector' of injury, death, impaired development and humanitarian efforts, it transforms the issue from a political question to one of health.

### Developing the research base on gun violence

Firm facts about the number of deaths and injuries attributable to SALW and the context in which they occur are needed for advocacy efforts and prevention strategies. This is especially true for advocacy from health professionals when framing gun violence as a public health issue. Yet research that links gun violence to its health outcomes is limited<sup>21,22,32</sup>, especially from developing countries and areas of active or recent conflict where most of the deaths and injuries occur<sup>29,31,33</sup>. Public health officials, physicians and peace activists often do not, or cannot, collect sufficient, accurate information on health and development indices, which would permit an assessment of the impact of the conflict on health and the role of SALW.

However, examples of such research from a health perspective include work from Uganda, using hospital-based trauma registries and interviews to characterize the general pattern of injuries in rural areas and the capital, Kampala<sup>34–36</sup>. Building on this work has led to a chart review in eastern Uganda looking specifically at gun violence and the vulnerability of pastoralist groups in the border region to armed conflict<sup>37</sup>. In El Salvador, a chart review has been carried out at a major public hospital, which noted that the majority of homicides were caused by SALW and had a very high mortality rate<sup>38,39</sup>. Similar retrospective analyses have been carried out in Kenya<sup>40</sup>, Nigeria<sup>41</sup> and South Africa<sup>42</sup> as well as through hospitals affiliated with the ICRC in Afghanistan<sup>43</sup>.

Prospective injury surveillance is more valued than retrospective analyses, as more detail about the context of the injury can be captured<sup>44</sup>. Such work has been done in Nigeria in the northern part of the country<sup>45</sup>. Recognizing the value of such prospective studies, especially in assisting with monitoring and evaluating interventions, IPPNW helped plan and implement a hospital-based pilot project on violent injury in five African countries: Zambia, Nigeria, Uganda, Kenya and the Democratic Republic of Congo<sup>46</sup>. This project involves an international coalition including IPPNW staff in the United States, physician affiliate leaders in Africa and the Ponce School of Medicine in Puerto Rico. This study had the objective of not only collecting data, but to engage medical professionals in public-health oriented research, and is discussed elsewhere in this issue (pp. 260–272).

Calculating the cost of gun violence can be powerful information for advocacy. The public, policy makers and other health professionals are interested in the cost to the healthcare system and to the victims. Most people can also understand that a single gunshot injury can have enormous impact on the victim, but many underestimate the larger societal burden. It is challenging to collect this information and predict the long-term loss of income and future costs, especially in developing countries. However, such

work has been done in Uganda<sup>37</sup>, El Salvador<sup>38</sup>, Kenya<sup>40</sup>, South Africa<sup>47</sup> and Jamaica<sup>48</sup>.

Beyond this epidemiology, research is needed to assess the context in which gun violence occurs. Although most health professionals have had the experience of working with victims of violence, many find it challenging to think 'upstream' to identify the root causes of violence, let alone feel that they can influence these factors. Although some of the above studies have touched on these ideas, for example linking gun violence to ethno-religious conflict in Nigeria<sup>45</sup>, much more remains to be done.

### **Linking research on gun violence to advocacy**

Research has been the foundation for advocacy by health professionals to limit and eliminate gun violence<sup>33</sup>. Although beginning with statistics, such campaigns have gone on to 'connect the dots' between injuries and deaths, the physical, psychological and financial impact on individuals and communities, and broader struggles over resources and human rights, and the actions of oppressive governments and trans-national corporations<sup>9</sup>.

Advocacy by health professionals has occurred at the local level, through sensitization of fellow medical workers, through press conferences and grassroots public awareness and through conferences. Advocates have helped educate the traditional injury prevention community to consider gun violence as a priority, with articles and presentations at the past four World Injury Prevention conferences. IPPNW has also been a member of the WHO Violence Prevention Alliance and members have been active in teaching violence injury and prevention (TEACH-VIP) (see pp. 296–305). At a regional level, professionals have engaged with national leaders in the military, with politicians and others involved in foreign affairs. At an international level, IPPNW has made presentations to the UN Programme of Action (PoA) and at the UN General Assembly.

A challenge has been to make the numbers come alive through stories and cases that reach the public and impact decision-makers. The IPPNW 'One Bullet Stories', which present cases of how a single injury or death due to a SALW can have enormous implications, are perhaps the best example of such advocacy. These stories have been used by the International Action Network on Small Arms (IANSA) and have been presented at the UN PoA Biennial Meeting of States in 2005<sup>31</sup>.

At a global level, IPPNW has become the public health leader in IANSA, working with a broad cross-section of groups internationally<sup>31</sup>. There have been a number of recent important national and regional activities:

- In El Salvador, health professionals presented research to President Saca personally. This helped encourage him to create a National

Commission to review gun laws in the country. IPPNW-El Salvador was invited to participate in this Commission, and has gone on to present to the local offices of UNDP and PAHO<sup>38,39</sup>. In 2007, the government adopted a recommendation to limit the carrying of arms in public places and to add a tax on the sale of SALW to support public health budgets. Making this link was a crucial victory of advocacy.

- In Zambia, the IPPNW affiliate has worked since 1999 to document injuries and deaths due to gun violence and present them to colleagues, government officials and the public. In part due to this work, the government formed the national committee against landmines and appointed IPPNW-Zambia to be part of this. In 2006, a key leader within IPPNW was asked to be part of the national focal commission on SALW.
- In South Asia, Indian IPPNW activists have organized a number of workshops and symposia, sensitizing health professionals, members of the military and police and policy makers around the issue of gun violence. They have had a focus on border towns and on encouraging dialogue between Pakistan and India<sup>49</sup>.
- In the Democratic Republic of Congo, IPPNW affiliates have been involved with research around SALW for a number of years. They helped form the first national citizens' network on small arms and helped to convince the government to develop a national small arms commission<sup>31</sup>.

Health research has also been used effectively in advocacy campaigns such as Gun Free South Africa<sup>50</sup>, the Brazilian gun control movement<sup>51</sup> and the Cali, Colombia homicide reduction programme<sup>52</sup>. Focusing on the epidemiology and using apolitical, reliable sources such as hospital registries and mortuary data brings the issue out of the public security debate and into the public health realm.

### **Challenges in advocacy around gun violence**

A number of challenges restrict advocacy on limiting gun violence. First, the logistical challenges of conducting research in this area are difficult to overcome. Data are difficult to obtain, as usually there are no proper surveillance systems and the collection of information is usually a low priority for many governments. Even within the developed world, registries of injuries due to SALW are uncommon. The populations studied are constantly changing and adapting to circumstances such as armed conflict and forced displacement, which leads to debate on how to interpret the data. Given the nature of armed violence, one cannot conduct a controlled trial and usually advocates rely on correlation and indirect measures.

This approach must be defended and the importance of not under-representing the scale of the problem of SALW must be emphasized<sup>53</sup>. Such research may never be fully evidence-based but will be 'evidence-informed'<sup>53</sup>. Finally, there is a significant lack of trained personnel to carry out such research and very little funding to train staff or pay for basic costs.

Second, personal risks and costs are significant. Security concerns are an important issue to address, not only for research personnel but for those who speak out about the findings. Criticizing the government or security forces in a region can be risky. Health professionals often sacrifice time, energy and financial resources to carry out this work. As with other areas of public health, such activity is rarely compensated.

Third, health professionals speak on these issues from a privileged perspective, not only as an educated group but with the authority of medical science. There is a risk of undermining local voices, and victimizing certain groups who bear the brunt of gun violence. All areas of advocacy must address this challenge of paternalism and the possibility of conflict between the advocate and the person on behalf of whom one is speaking<sup>5,6</sup>. Health professionals can draw on their training in bioethics to ensure that autonomy is respected at the individual and community level, that the values of different groups are respected and that their work does not reinforce helplessness or victimization.

Fourth, it is an important political act to report the epidemiology of such injuries and make the connection to armed conflict<sup>54</sup>. In some instances, barriers are placed purposefully to prevent such research and the results may not be well-received. Health professionals must acknowledge that violence, both direct and indirect, is driven by politics and economics<sup>53</sup>. Such political engagement is, perhaps, the greatest challenge to advocacy. Certain policies and interventions around gun violence have good evidence to support their implementation, such as limiting sales to high-risk purchasers, mandatory sentences for gun crimes and waiting periods to obtain a weapon<sup>29,55</sup>.

However, opposition by the gun-lobby to even these minimal restrictions is fierce. Other areas of debate exist around alcohol sales and how they relate to gun violence. There is a push-pull between libertarian values that focus on personal freedoms and the public health impetus to protect the common good. The gun-lobby, epitomized by the National Rifle Association in the US, has exploited this debate to help defeat efforts such as the Brazilian ban on private gun ownership and the registration of weapons in Canada, under the guise of an individual right to bear arms<sup>56</sup>.

### **Future work for advocates**

Much more remains to be done. Health professionals engaging in advocacy to limit gun violence can learn from the efforts of other groups, such as

Médecins Sans Frontières and Amnesty International, which have made humanitarian relief and human rights a household concept for much of the western public; likewise, gun violence can become an unacceptable reality.

Advocacy can work to expose the issue further, such as the paradox of the continued sale of weapons to conflict zones by Western companies and governments; similarly, the paradox of blaming certain groups such as gangs for gun violence, although they are also the majority of the victims<sup>57</sup>. Advocacy and research can also address the problem of labelling of violence as 'ethnic', rather than linking it to political and economic disparity<sup>37,58</sup>. Advocacy can also focus on resilience, or on why some communities and individuals cope, whereas others do not<sup>59</sup>.

Health professionals can continue to connect local and global factors that drive or mitigate violence. This may require unique ways of collecting information, such as media reports that highlight the link between deaths due to SALW and poverty<sup>60</sup>.

## Conclusion

Gun violence is a complex issue. Security is not simply about an environment free of weapons, but includes many other issues including economic security, human rights and access to basic necessities. Advocacy must go beyond the linear relationship between guns, injuries and death, and address other factors. The actions of advocates must also expand beyond research and spreading the word about research findings, to building broader relationships and coalitions. Health professionals can be a link between a community and resources, and between grassroots initiatives and governments. Developing an advocacy culture is a long-term process, something that IPPNW and other organizations have started. A world free of gun violence is a worthwhile and attainable goal. Health professionals can help make it possible.

## Notes on contributor

Andrew D. Pinto is a family physician and a member of Physicians for Global Survival (IPPNW-Canada). He is currently pursuing speciality training in public health with a focus on mitigating violence.

## References

1. Galtung J. Violence, peace and peace research. *J Peace Res.* 1969;6(3):167–191.
2. Horton R. Violence and medicine: the necessary politics of public health. *Lancet.* 2001;358:1472–1473.
3. Benbassat J, Bauml R, Borkan J, Ber R. Overcoming barriers to teaching the behavioural and social sciences to medical students. *Acad Med.* 2003;78:372–380.

4. Coulehan J, Williams P, Van McCrary S, Belling C. The best lack all convictions: biomedical ethics, professionalism, and social responsibility. *Camb Q Healthc Ethics*. 2003;12:21–38.
5. Teasdale K. *Advocacy in health care*. Oxford: Blackwell; 1998.
6. Henderson R, Pochin M. *A right result? Advocacy, justice and empowerment*. Bristol: The Policy Press; 2001.
7. MacQueen G, Santa Barbara J, Neufeld V, Yusuf S, Horton R. Health and peace: time for a new discipline. *Lancet*. 2001;357:1460–1461.
8. MacQueen G, Santa Barbara J. Conflict and health: peace building through health initiatives. *Br Med J*. 2000;321:293–296.
9. Wiwa O. Guns, health and the exploitation of natural resources. *Med Confl Surviv*. 2002;18:407–410.
10. Coupland R. Abhorrent weapons and ‘superfluous injury or unnecessary suffering’: from field surgery to law. *Br Med J*. 1997;315:1450–1452.
11. Moszynaki P. Ban on cluster bombs a ‘victory for humanity’, say disability campaigners. *Br Med J*. 2008;336:1268–1269.
12. Marshall J. Blinding laser weapons: still available on the battlefield. *Br Med J*. 1997;315:1392.
13. Editorial. Weapons intended to blind. *Lancet*. 1994;344:1649–1650.
14. Rawson B. Aiming for Prevention: medical and public health approaches to small arms, gun violence, and injury. *Croat Med J*. 2002;43:379–385.
15. World Health Organization. *Small arms and global health: WHO contribution to the UN Conference on Illicit Trade in Small Arms and Light Weapons*; 2001 July 9–20; New York.
16. Sidel V. Warfare: medicine and war. In: Reich WT, editor. *Encyclopedia of bioethics*. Vol. 5. Woodbridge USA: Macmillan Reference USA; 1995. p. 2533–2538.
17. Coupland R. Armed violence. *Med Glob Surviv*. 2001;7:33–37.
18. *Small Arms Survey 2005. Weapons at war*. Geneva: Oxford University Press; 2005.
19. Sidel V. The international arms trade and its impact on health. *Br Med J*. 1995;311:1677–1680.
20. Arya N. Confronting the small arms pandemic. *Br Med J*. 2002;324:990–991.
21. Cukier W, Chapdelaine A. Small arms: a major public health hazard. *Med Glob Surviv*. 2001;7(26): 32.
22. Cukier W, Sidel VW. *The global gun epidemic: from saturday night specials to AK-47s*. Westport (CT): Praeger Security International; 2006.
23. Obstructing development: the effects of small arms on human development. In: *Small Arms Survey 2003: development denied*. Oxford: Oxford University Press; 2003. p. 125–167.
24. Stewart F. [Internet]. How does conflict undermine human development? HDR Networks 2007, issue (5) [cited 2008 July 23]. Available from: [http://hdr.undp.org/docs/network/HDInsights\\_Feb2007.pdf](http://hdr.undp.org/docs/network/HDInsights_Feb2007.pdf)
25. *The G8: global arms exporters*. London: Amnesty International, the International Action Network on Small Arms (IANSA) and Oxfam International; 2005.
26. *Small Arms Survey 2003: development denied*. Oxford: Oxford University Press; 2003.
27. Regehr E. [Internet]. Militarizing despair: the politics of small arms. *Ploughshares Monitor*. 1997;18(4) [cited 2008 July 23]. Available from: <http://www.ploughshares.ca/libraries/monitor/mond97d.html>.
28. Jackson T, Marsh N, Owen T, Thurin A. Who takes the bullet? Understanding the issues No. 3/2005. Oslo: Norwegian Church Aid; 2005.
29. Marsh N. Taming the tools of violence. *J Public Health Policy*. 2007;8(4):401–409.

30. Chapdelaine A, Samson E, Kimberley MD, Viau L. Firearm-related injuries in Canada: issues for prevention. *CMAJ*. 1991;145(10):1217–1223.
31. Christ M, Valenti M. IPPNW's 'Aiming for Prevention' campaign on small arms and light weapons. *Med Confl Surviv*. 2005;21(3):245–249.
32. Coupland RM. The effect of weapons on health. *Lancet*. 1996;347:450–451.
33. Zwi A. Studying political violence: we should push for more from epidemiology. *Int J Epidemiol*. 2002;31:585–586.
34. Kobusingye O. The effects of SALW proliferation and abuse in Gulu District, Uganda: a public health approach. Bonn International Centre for Conversion Briefs no. 24; Gender perspectives on SALW. Bonn: Regional and International Concerns; 2002. p. 73–77.
35. Kobusingye O, Guwatudde D, Lett R. Injury patterns in rural and urban Uganda. *Injury Prev*. 2001;7:46–50.
36. Kobusingye O, Lett R. Hospital-based trauma registries in Uganda. *J Trauma*. 2000;48(3):498–502.
37. Pinto AD, Olupot-Olupot P, Neufeld VR. Health implications of small arms and light weapons in eastern Uganda. *Med Confl Surviv*. 2006;22(3):207–219.
38. Paniagua I, Crespín E, Guardado A, Mauricio A. Wounds caused by firearms in El Salvador, 2003–2004: epidemiological issues. *Med Confl Surviv*. 2005;21(3):191–198.
39. Ugalde A, Selva-Sutter E, Castillo C, Paz C, Canas S. The health costs of war: can they be measured? Lessons from El Salvador. *Br Med J*. 2000;321:169–172.
40. Hugenberg F, Anjango WO, Mwita A, Opondo D. Firearm injuries in Nairobi, Kenya: who pays the price? *J Public Health Policy*. 2007;28(4):410–419.
41. Mohammed AZ, Mandong BM, Manasseh AN. A review of 101 homicide cases in Jos, Nigeria. *Niger Postgrad Med J*. 2003;10(1):13–15.
42. Meel BL. Firearm fatalities in the Transkei region of South Africa, 1993–2004. *S Afr Med J*. 2005;95(12):963–967.
43. Coupland R, Samnegaard H. Effect of type and transfer of conventional weapons on civilian injuries: retrospective analysis of prospective data from Red Cross hospitals. *Br Med J*. 1999;319:410–412.
44. Krug E. Injury surveillance is key to preventing injuries. *Lancet*. 2004;364:1563–1566.
45. John IA, Mohammed AZ, Pinto AD, Nkanta CA. Gun violence in Nigeria: a focus on ethno-religious conflict in Kano. *J Public Health Policy*. 2007;28(4):420–431.
46. Zavala DE, Bokongo S, John IA, Mpanga SI, Mtonga RE, Aminu ZM, Odhiambo W, Olupot-Olupot P. A multinational injury surveillance system pilot project in Africa. *J Public Health Policy*. 2007;28(4):432–441.
47. Lerer LB, Matzopoulos RG, Phillips R. Violence and injury mortality in the Cape Town metropole. *S Afr Med J*. 1997;87(3):298–301.
48. Mansingh A, Ramphal P. The nature of interpersonal violence in Jamaica and its strain on the national health system. *West Indian Med J*. 1993;42(2):53–56.
49. Gorea RK. Impact of proliferation of small arms and light weapons in south Asia. *Med Confl Surviv*. 2006;22(3):199–206.
50. Gun Free South Africa [Internet]. Home page [cited 2008 July 23]. Available from: <http://www.gca.org.za/MaterialsAndResources/Statistics/tabid/1134/language/en-US/Default.aspx>
51. Marinho de Souza Mde F, Macinko J, Alencar AP, Malta DC, de Moraes Neto OL. Reductions in firearm-related mortality and hospitalizations in Brazil after gun control. *Health Affairs*. 2007;26(2):575–584.

52. Villaveces A, Cummings P, Espitia VE, Koepsell TD, McKnight B, Kellermann AL. Effect of a ban on carrying firearms on homicide rates in 2 Colombian cities. *JAMA*. 2000;283(9):1205–1209.
53. Zwi A. How should the health community respond to violent political conflict? *PLoS Med*. 2004;1(1):e14.
54. Brentlinger PE, Hernan MA. Armed conflict and poverty in Central America: the convergence of epidemiology and human rights advocacy. *Epidemiology*. 2007;18(6):673–677.
55. Krug EG, Dahlberg L, Mercy JA, Zwi A, Lozano R. World report on violence and health. Geneva: World Health Organization; 2002.
56. Morton D. Gunning for the world. *Foreign Policy*. 2006;58–67.
57. McIntyre A, Weiss T. Exploring small arms demand: a youth perspective. Institute for Security Studies Occasional Papers 2003. Pretoria: ISS 2003; 67:1–10.
58. Stewart F. Root causes of violent conflict in developing countries. *BMJ*. 2002;324:342–345.
59. Rutherford A, Zwi AB, Grove NJ, Butchart A. Violence: a priority for public health? (part 2). *J Epidemiol Community Health*. 2007;61(9):764–770.
60. Taback N, Coupland R. Towards collation and modelling of the global cost of armed violence on civilians. *Med Confl Surviv*. 2005;21:19–27.