

Pandemics, Ebola, and the family doctor

Fikre Germa MD CCFP(EM) FCFP

The rapid emergence of Ebola in 2014 should not have caught us by surprise. Infections such as HIV and SARS have taught us that worldwide pandemics are a reality of living in the 21st century because we are so interconnected. In the case of Ebola, the epicentre of the Ebola virus was a small village in Guinea; from there the virus made its way throughout Liberia and Sierra Leone, then to a few other West African countries and eventually into the United States and Europe. With the virus spreading rapidly, it was indeed a humanitarian crisis.

The countries affected by Ebola had called on the international community for partnerships; however, the international response to this disaster in Africa was on the whole “inadequate.”¹ Organizations like Médecins Sans Frontières (MSF) were on the ground rapidly doing the best they could in terms of conducting surveillance in communities, creating awareness, and protecting health facilities and health workers.¹ They were overwhelmed and needed the cooperation of others to contain the disease. A 2014 MSF briefing paper on the Ebola response explained the following: “Instead of the well-coordinated, comprehensive and expertly-staffed intervention MSF called for ninety days ago, actual efforts have been sluggish and patchy, falling dangerously short of expectations.”¹

Although cases of Ebola declined, pockets of the virus remained active in Sierra Leone and Guinea until the end of 2015. During crises like that of the Ebola virus and other emerging epidemics, such as the Zika virus, family physicians have an active role to play in mitigating disease outbreaks, even internationally. Because family physicians see disease from a holistic point of view, I think we can play a leadership role. Family physicians can promote the improvement of primary health care systems and conditions in Africa and elsewhere and take on an educational role in demystifying Ebola and other diseases. Family physicians can also help policy makers and others understand the importance of community, culture, and social determinants of health.

Contributing factors

The conditions that allow for the rapid spread of diseases in developing countries—inadequate health care

systems and poor social determinants of health—still need global attention. As Dr Paul Farmer, a medical anthropologist and infectious disease physician, has said, “The fact is that weak health systems, not unprecedented virulence or a previously unknown mode of transmission, are to blame for Ebola’s rapid spread. Weak health systems are also to blame for the high case-fatality rates.”²

Global failures to improve such conditions were brutally exposed in this epidemic and thousands of people paid with their lives. Dr Larry Brilliant, who helped eradicate smallpox about 40 years ago, said, “Outbreaks are inevitable. Epidemics are optional.”³

We know that patients can survive disease in well developed health care systems in which care and prevention go hand in hand. In West Africa, poor health care systems and a lack of supportive treatment meant the mortality from Ebola was very high. It was not only patients who succumbed to the disease but also front-line workers including health professionals. This led to a climate of fear where local staff were afraid to look after these patients, and family members were afraid to go to health care centres. People with diseases like tuberculosis and malaria were left unattended because they could not get to the health care centres or were neglected because these diseases present similarly to Ebola.

We forget that health care systems are also social institutions. When they do not function properly, there is breakdown of social systems. Appreciating these factors tells us that as family doctors we have to play a holistic role.

The terrible poverty in the countries affected by Ebola played a considerable role in the rapid spread of the virus and the high mortality rate. Because of malnutrition and lack of sanitation, the poor had weak immune systems and were vulnerable. Cultural practices around disposition of dead bodies enhanced the spread of the disease because, for example, families wash and prepare the bodies.

Because of the high mortality rates associated with Ebola, many people were afraid; stigmas accompanied not only patients with Ebola and health care workers but also whole countries with Ebola cases. This led to avoidance of people and impeded proper care and cooperative models of care. Diseases that carry stigma also have long-term consequences in terms of recovery and socioeconomics; and after a disease is contained, countries are left to deal with a backlog of patients who have other infectious diseases. Unfortunately, hysteria and fear have historically been the human response to pandemics. Even hundreds of years ago, diseases

This article has been peer reviewed.
Can Fam Physician 2016;62:203-5

La traduction en français de cet article se trouve à www.cfp.ca dans la table des matières du numéro de mars 2016 à la page e114.

carried stigma, as discussed by Cantor in his book about the Black Death.⁴

Again, family doctors in Canada are well positioned, from a holistic point of view, to help destigmatize the disease by providing accurate information to the media, patients, and the general public.

Equitable health care

The bioethics of who gets treatment and who does not is a concern. When it comes to funding research on diseases that are prevalent in developing countries, pharmaceutical companies are reluctant to invest in vaccine development. The 10/90 gap in research funding, in which 10% of global health research is devoted to conditions that account for 90% of the global disease burden,⁵ demonstrates a need for redirection of resources based on available evidence of diseases of the global poor. In an interconnected world, this issue affects all of us and we have a part in its resolution. Family doctors can also play an advocacy role here. Those doing research must engage in questions about effect, access, and fairness.

It behooves us to work together to advocate for equitable health care around the world, otherwise more pandemics could easily ravage populations. Skill in advocacy will be crucial. Family physicians have such skill, and we have a responsibility to work with partnerships to educate on awareness and advocacy. Advocacy, explains Dr Carol Herbert, is one of the core roles of family doctors.⁶ We know that as family physicians we need to be politically engaged, particularly when diseases like Ebola can cross an ocean. This fact has, I think, enabled us to have more meaningful conversations, and an interconnected world means we have a better understanding of global health epidemics. As Herbert has said: "Family physicians of the future will need to be more political than family physicians of the past."⁶

Family doctors are in a good position to engage our policy makers to take short-term measures to provide clinical care and equipment for those on the ground and to support long-term investments to strengthen public health care systems.

Social dimensions of disease

One of the things that we need to appreciate in mitigating outbreaks is that we can have strong local partners in affected countries. Institutions in developing and poorer countries need sustained cooperation and support, not sporadic curiosity from the developed world; there is a need and there are opportunities to develop research capacity. Researchers and governments in Africa, for example, are seeking prevention measures that work well on the continent. The African Centers for Disease Control and Prevention (CDC), whose development was fast-tracked owing to the Ebola epidemic, is expected to start operations this year. The African

CDC will be accountable to Africans. It will coordinate research throughout Africa and deal with serious public health threats.⁷ It will also be a 1-stop location for data for reinforcing countries' capacity for preventing epidemics. Microsoft founder Bill Gates, a funder of global health, referred to the organization as a "game-changer."⁷ Canadians can work with the African CDC in the future to help mitigate epidemics in Africa.

We do know that Canadian family physicians are involved in global health. A 2005 discussion paper published by the College of Family Physicians of Canada showed that family physicians want to play a leadership role during times of pandemic.⁸ The 6-month additional training in global health that some family doctors are taking equips them with skills to participate in global health programs. Family doctors are willing to make contributions to global health from working in developing countries to working with Syrian refugees newly arrived in Canada. We must also applaud Canadian physicians and military personnel who were deployed in the Ebola humanitarian crisis for their heroism. With my past experience working with physicians in emergency medicine as an immigrant in Canada and with learning about Canadian physicians' role in emerging issues in Africa, I strongly believe that Canadian physicians are excited to teach and are open to learning about and contributing to global health. Canada hosts many physicians from countries in the developing world and this builds bridges among practitioners and increases cultural sensitivity in conversations about topics such as cultural practices, vaccine use, and other public health care issues.

Sometimes we have to be imaginative in a time of crisis and move away from fear. As Herbert explained, "we must study complex decision making ... ethical decision making ... and new partnerships for providing health care."⁶ There must be an appreciation of the social dimension of diseases and of health diplomacy. It is not sufficient for us to simply know our technical fields. In an international health context, we need to recognize the political, socioeconomic, historical, and cultural contents of interventions.

Further reading

To inform providers about management strategies in sub-Saharan Africa, the African Federation for Emergency Medicine published a handbook in 2013.⁹ For ideas on reducing poverty in developing countries, there is Soman and colleagues' 2014 publication,¹⁰ which is an excellent resource, and websites like www.afrigadget.com and www.appropedia.org.

In his 2013 book, *No Time To Lose. A Life in Pursuit of Deadly Viruses*, Dr Peter Pilot, co-discoverer of the HIV virus in 1976 and leader in the HIV battle, chronicled lessons learned about pandemics.¹¹ He had a double

mantra when dealing with HIV: “Keeping HIV-AIDS as a global issue, not one of poor Africa, and keeping science, politics and programs on the ground in sync.”¹¹ Pilot showed how community engagement, science, and advocacy could come together.

Conclusion

Because of our training and the links we can make between socioeconomic and cultural factors and patient health care, family doctors are in a position to provide leadership and understanding of the Ebola virus and other epidemics. It is critical that we be engaged. We need to advocate more effectively for health care systems in developing countries. We need to have an enlightened self-interest in this interconnected world. We do know that under conditions of endemic inequality, all other desirable goals become hard to achieve, so health equity is important and family doctors can be involved. If health care remains grotesquely unequal, we will also lose a sense of fraternity. Acting together globally for a common purpose is a source of enormous satisfaction; we see now that there is less death and less fear of Ebola because its chance of spreading has been contained. We can also help solve ethical problems by listening to those who are most affected. The Ebola virus and other such outbreaks present Canadians with great opportunities to engage with colleagues in affected countries. Such crises provide an opportunity for family physicians to reflect on the interconnectedness of the world and better define the role of the family doctor in the 21st century. 

Dr Germa is a hospitalist at Brantford General Hospital in Ontario.

Competing interests

None declared

Correspondence

Dr Fikre Germa; e-mail fikregerma130@hotmail.com

The opinions expressed in commentaries are those of the authors. Publication does not imply endorsement by the College of Family Physicians of Canada.

References

1. MSF USA. *Ebola response: where are we now? MSF briefing paper*. New York, NY: MSF USA; 2014. Available from: www.doctorswithoutborders.org/sites/usa/files/ebola_briefing_paper_12.14.pdf. Accessed 2015 May 22.
2. Farmer P. Diary. *London Rev Books* 2014;36(20):38-9. Available from: www.lrb.co.uk/v36/n20/paul-farmer/diary. Accessed 2015 May 22.
3. Brilliant L. *Revenge of the superbugs: how can we outsmart killer microbes?* Presented at: 2014 Global Conference; 2014 Apr 27-30; Los Angeles, CA.
4. Cantor N. *In the wake of the plague. The Black Death and the world it made*. New York, NY: Free Press; 2001.
5. Stevens P. *Diseases of poverty and the 10/90 gap*. London, UK: International Policy Network; 2004. Available from: www.who.int/intellectualproperty/submissions/InternationalPolicyNetwork.pdf. Accessed 2016 Jan 27.
6. Herbert CP. The fifth principle. Family physicians as advocates. *Can Fam Physician* 2001;47:2441-3 (Eng), 2448-51 (Fr).
7. Butler D. African CDC needs more money and a strong leader. *Nature* 2015 Apr 24. Available from: www.nature.com/news/african-cdc-needs-more-money-and-a-strong-leader-1.17409. Accessed 2015 May 22.
8. College of Family Physicians of Canada. *The role of the family doctor in public health and emergency preparedness. A discussion paper*. Mississauga, ON: College of Family Physicians of Canada; 2005. Available from: www.cfpc.ca/uploadedFiles/Resources/Resource_Items/Role_Fam_Doc_Dec05.pdf. Accessed 2015 May 22.
9. Wallis LA, Reynolds TA, editors. *The AFEM handbook of acute and emergency care*. New York, NY: Oxford University Press; 2013.
10. Soman D, Stein JG, Wong J. *Innovating for the global south: towards an inclusive innovation agenda*. Toronto, ON: University of Toronto Press; 2014.
11. Pilot P. *No time to lose. A life in pursuit of deadly viruses*. New York, NY: W.W. Norton and Company; 2013.
