Education and debate

Reframing HIV and AIDS

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Last month WHO declared the HIV/AIDS epidemic a global health emergency. Should governments go one step further and treat it as a disaster?

Over the past 20 years, the public health community has learnt a tremendous amount about the HIV/AIDS epidemic. Yet, despite widespread discussion about the epidemic and some measurable progress, the overall response has been insufficient: globally 42 million people are already infected with HIV, prevalence continues to rise, and less than 5% of those affected have access to lifesaving medicines.[1] In the face of this growing crisis, the World Health Organization has made scaling up treatment a key priority of the new administration.[2] We argue that not only is the HIV/AIDS epidemic an emergency, but its devastating effects on societies may qualify it as one of the most serious disasters to have affected humankind. As such, this crisis warrants a full disaster management response.

Why the HIV/AIDS epidemic should be formally treated as a disaster

According to the United Nations, a disaster is any "serious disruption of the functioning of a society, causing widespread human, material or environmental losses which exceed the ability of a society to cope using only its own resources."[3] In just over two decades, the epidemic has already killed over 23 million people.[4] Although other diseases may have cumulatively resulted in more deaths, HIV and AIDS are unique because they attack young adults in their peak productive years. These are the people who are essential to a society's current stability, potential economic growth, and functioning in the next generation.[5] Unless more effort is put into saving lives and remedying the loss of human resource capacities in vulnerable countries with high prevalence or increasing incidence rates, the devastating effects may exceed these societies' ability to cope and could lead to their eventual disintegration. This potential can already be seen in some sub-Saharan countries.[6]

Using components of a formal disaster management framework

There are three main components in a formal disaster response that could be beneficial in tackling the HIV/AIDS epidemic: firstly, officially recognising a disaster; secondly, enacting appropriate policy actions; and, thirdly, organising an appropriate management system to tackle the disaster.

AIDS cemetery in Windhoek, Namibia

Official recognition as a disaster

When faced with serious disasters, countries often declare a formal state of emergency. International law dictates that the nation itself has the primary responsibility for calling a state of emergency. Declaring a state of emergency in a country plagued by HIV and AIDS could help catalyse a response in several ways. The declaration signals to the country and international community that the nation is tackling a critical situation. It could also serve as the basis for an appeal to the international community for humanitarian aid. Internally, the declaration commits the government to take appropriate actions to resolve the crisis and has the potential to increase accountability.

By declaring a state of emergency, the state also acquires the ability to over-ride legal, operational, and bureaucratic obstacles that often impede effective multisectoral responses. Such over-rides may help to overcome problems associated with the lack of trained health professionals in some countries and allow, for example, the military to help in the construction of clinics or guarding antiretroviral drugs.

In addition, a formal declaration of a state of emergency allows countries to use provisions for public health emergencies that have been built into the Trade-Related Aspects of Intellectual Property Rights (TRIPS). Nations that declare a state of emergency would have indisputable grounds for applying for compulsory licences to manufacture and import,

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More detailed explanation of a possible disaster management approach is available on bmj.com

Summary of possible disaster phases, objectives, and activities for the AIDS epidemic under a disaster management approach

	Phase I (predisaster)	Phase II (early warning)	Phase III (emergency/disaster)
State of alert	Green	Yellow	Red
Hazard (seroprevalence)	<1%	≤10%	>10%
Key objectives	Mitigation (risk reduction)	Heightened mitigation	Focus on relief, rehabilitation, and reconstruction (mitigation and preparedness do not cease)
	Preparedness	Heightened preparedness	
Key activities	Targeting high risk populations for prevention	Expanded prevention activities	Scaled up, simplified treatment programmes focused on saving existing lives
	Treatment	Provision of more AIDS education	Emergency establishment and rehabilitation of treatment infrastructure
	Surveillance for increase in seroprevalence and vulnerable populations	Focus on reducing sexually transmitted diseases and other risk factors	Rehabilitation and reconstruction of social and economic infrastructure
		Build-up of prevention and treatment infrastructure	
		Treatment	
		Increased surveillance	
		Planning for possible progression to emergency phase	
Role of nation	Balance key activities with national and health priorities	Prioritise key activities in relation to other national agendas	Declare a state of emergency
			Focus attention across sectors on efficiently mobilising resources for HIV/AIDS disaster
Role of global community	Provide financial assistance, according to need	Debt relief	Increased phase II activities
		Low or no interest loans	Assist in rehabilitation and reconstruction activities
		Direct funding for HIV/AIDS activities	
		Increased attention to health and public health infrastructure	

Detailed explanation of the table is available on bmj.com

under certain circumstances, generic versions of antiviral drugs and antibiotics required to treat patients with HIV and AIDS.[7]

Enacting risk based policy decisions
Under a formal disaster management response, policy decisions are based on estimates of risk and vulnerability and on a utilitarian approach to saving lives. Vulnerability to the HIV/AIDS disaster could be approximated by incidence of HIV infection and female mortality (aged 15-45 years) reflecting susceptibility and "excess effects" (see bmj.com for full discussion).

Often, policy guidelines are created by categorising the situation into disaster phases based on the risk of progression to a full blown disaster. Each phase is linked to concrete activities and objectives that could act as guidelines for setting priorities and allocating resources (table). Such a simplified decision making system could reduce the "paralysis by analysis" currently seen among policy makers struggling with formulating an appropriate response to the HIV/AIDS epidemic at the national level. This tool could also place positive political pressure on countries lagging in their response. In addition, it could provide donors with guidance for channelling aid to countries in the greatest need of assistance.

Managing the HIV/AIDS epidemic as a disaster
Disaster response teams typically adopt a streamlined and centralised management system known as an incident command system.[8] Several components of this type of management system could have a beneficial effect on the HIV/AIDS epidemic. A key characteristic of the incident command system is that it minimally disturbs existing infrastructure but can draw on sectors and integrate all major stakeholders, as needed, to fulfill its task. The system provides clarity of purpose, ownership, defined responsibility and authority, and efficient use of resources. Core members of the incident command system are trained to respect a culture of commitment to a common goal; maintain respect for technical and managerial competence; be intolerant of petty infighting or incompetence; and show great flexibility.

Presently, large numbers of qualified people have begun to work on HIV and AIDS and many countries are directing appreciable resources to combat the epidemic. An incident command system could help make best use of their talents and direct them to attain a common goal. In addition, this structure would allow for a more integrated response from other non-health sectors, including construction, military, education, and finance.

The recent experience with severe acute respiratory syndrome (SARS) shows the effectiveness of a disaster response in a public health setting. Although it was not explicitly referred to as a disaster management approach, the containment of SARS in Hong Kong and Vietnam used key disaster management objectives and relied on strong political commitment, integrated response, rapid mobilisation of resources, and international collaboration.[9][10] An important lesson learnt from the SARS outbreak, however, was the need for a more defined chain of command both nationally and internationally.[10] This key feature of the disaster management framework, along with approaches used during the SARS response, could have a substantial effect on HIV and AIDS.

Encouraging use of disaster management to combat HIV/AIDS

Declaring a state of emergency is a serious action and should be considered only in the most critical situations. HIV/AIDS in many societies is serious enough to warrant this type of response, but it is easy to

Summary points

HIV and AIDS threaten social survival in vulnerable countries

Treating the HIV/AIDS epidemic as a disaster could speed up the response

Declaring a state of emergency would overcome barriers to multisector cooperation and facilitate access to cheaper drugs

Resources could be better coordinated, eliminating duplication and ensuring everyone is working to the same goal

Governments should be encouraged and rewarded for adopting a disaster response to HIV and AIDS

approach should not be seen as a replacement for existing initiatives or a cookie cutter solution to the epidemic. We hope, however, that our suggestions will provide a basis for generating new thinking and a better coordinated, more effective and timely response to the mounting HIV/AIDS crisis.

see why a government may be hesitant to declare a state of emergency. Declaring a state of emergency forces the government to publicly admit that their country is in a vulnerable condition, which may lead to strained international trade ties. Strong political commitment to tackle HIV and AIDS at the national level, however, has been one of the factors associated with success in countries like Uganda.[11] Thus, governments should be encouraged and supported for taking a proactive stance against HIV and AIDS.

In addition, if a country declares a state of emergency but does not have the resources to respond, this could highlight the helplessness of the government and potentially lead to negative political ramifications internally. These consequences could be outweighed by the benefits of immediate and transparent political commitment, as shown by the recent success of Vietnam in securing outside help to respond to its SARS outbreak.[9] The international community must therefore also be proactive in committing and providing necessary help and resources to any country willing to make important steps towards tackling their epidemic.

Importantly, providing any agency the power to over-ride bureaucratic, political, and legal barriers to tackle the epidemic carries the risk of potential abuse. The disaster management response must therefore be carefully monitored by the national governments and the international community to ensure that individual human rights are carefully balanced with the need to protect society against the further spread of HIV/AIDS. International human rights bodies have carefully considered this inherent trade-off and have articulated which rights can and cannot be overridden in times of emergency.[12]

Governments may also be concerned about the duration of the state of emergency once it has been declared. A phase based decision making system, however, could provide a checklist for countries to reassess the effect that HIV is having on their society. Thus, countries would be able to "phase in" as well as "phase out" of a state of emergency dependent on progress.

There are many complex issues that a disaster management response will not resolve, and this

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(Accepted 6 October 2003)

Endpiece

Differences

The old man pays regard to riches, and the youth reverences virtue. The old man deifies prudence, and the young commits himself to magnanimity and chance . . . Age looks with anger on the temerity of youth and youth with contempt on the scrupulosity of age.

Samuel Johnson (1709-84)

Fred Charatan,
retired geriatric physician, Florida