

Political and socio-economic instability: does it have a role in the HIV/AIDS epidemic in sub-Saharan Africa?

Case studies from selected countries

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Abstract

Many sub-Saharan African countries are confronted by the HIV/AIDS epidemic. This article reviews academic literature in the social sciences and health to discover why HIV/AIDS has become an epidemic in sub-Saharan Africa and not in other parts of the world. This was studied by examining the social determinants of diminishment of tradition and social cohesion in terms of political, social and economic problems. Four countries in this region were selected for this case study, namely South Africa, Botswana, Uganda and Zimbabwe. The findings showed that instability in socio-economic and political aspects in these nations was responsible for creating a suitable environment for the spread of HIV/AIDS infection. This paper concludes by using the theories of collective action/responsibility and social cohesion to hypothesise that the breakdown of social ties due to various kinds of conflicts and unrest is one of the main contributors to the HIV/AIDS epidemic.

Keywords: HIV, violence, social cohesion, connectivity, Prem-Achilles hypothesis, sub-Saharan Africa.

Résumé

De nombreux pays sub-sahariens africains sont confrontés à l'épidémie du VIH/SIDA. Cet article des revues de la littérature académique des sciences sociales et de la santé a pour but de découvrir pourquoi le VIH/SIDA est devenu une épidémie en Afrique sub-saharienne par rapport aux autres parties du monde. Ceci a été étudié en examinant les déterminants sociaux de la diminution de la tradition et la cohésion sociale en termes de problèmes politiques, sociaux et économiques. Pour ce cas d'études 4 pays dans cette région ont été sélectionnés, à savoir l'Afrique du Sud, le Botswana, l'Ouganda, et le Zimbabwe. Les résultats ont montré que l'instabilité politique et socio-économique est responsable de la création d'un environnement favorable à la propagation de l'infection du VIH/SIDA. Ce document conclut en utilisant la théorie de l'action collective/responsabilité et la cohésion sociale l'hypothèse que la rupture des liens sociaux en raison de divers types de conflits et de troubles reste l'un des principaux contributeurs à la pandémie du VIH/SIDA.

Mots clés: HIV, violence, cohésion sociale, connectivité, Prem-Achilles hypothèse, Afrique sub-saharienne.

Introduction

Background and significance

There are 45 nations in sub-Saharan Africa (SSA). Although they are all separate entities, they are bound by the many diverse and similar ethnic groups as well as a historical legacy of colonialism that has implanted the torment experienced today in the area (Frederick, 1974). They somehow relate to each other or have grievances against each other. Among these 45 countries, 15 had more than 5% of adults living with HIV/AIDS at the end of 2008 (www. Africa statistics, 2008).

In its 2008 report on the pandemic, UNAIDS estimated that 2 million people died of AIDS in 2007, and that a further 33 million people were living with HIV, including 2 million children under 15. However, the disease is not evenly spread. By far the largest concentration is in SSA, home to 67% of all those living with HIV and 90% of children with HIV (UNAIDS, 2008).

Understanding the social as well as the biological determinants for the spread of this disease has therefore become a priority in SSA (Fox, 2010). One raging question is how and why HIV/AIDS spread so quickly, especially in some nations of SSA and not in the others. It is hard to depend on one exact cause for this epidemic. Many theorists have tried to find an explanation for the spread of HIV/AIDS in SSA and a few significant theories are summarised below.

Previous empirical studies

Hunt (1996) distinguished between theories that are based upon biological explanations and those based upon social explanations. The first category emphasises the biological determination of HIV/AIDS epidemic, while the theories in the second category have a historical-materialist or cultural nature. Webb (1997) further distinguishes different approaches within social epidemiology. There is a structuralist approach, which emphasises the importance of structures or micro-issues. Economic and political

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processes which include the debt crisis, poverty, urbanisation and government policies, influence the AIDS epidemic (Webb, 1997). This approach situates epidemiology in a historical, economic and political context and has a strong focus on the power relations within societies. The structuralist approach emphasises that individual human behaviour is partially determined by global economic and political structures that act on an international and national level, but also locally (Lurie, 2001; Webb, 1997).

On the opposite side of the structuralist is the anthropological approach, which examines the heterosexual spread of HIV from a bio-anthropological point of view. Cultural variables are the main study object of this approach (Webb, 1997). The focus is on sexuality and the psychology of individual behaviour. It is in this context that some theorists speak of the promiscuity of African men and the tolerance of African societies towards multiple sexual partners. Most HIV prevention organisations had accepted this approach and promote interventions, such as encouraging abstinence or condom use. Stillwaggon hypotheses provide evidence for those health variables such as malnutrition, malaria and schistosomiasis lowering the immune response, thus causing HIV spread (Stillwaggon, 2006).

There are certain dangers inherent to both approaches. Both the structuralist and anthropological approach have the same deterministic nature. The former implies that in any given area with the same structures, people should develop the same behaviour patterns. The latter can easily lead to ethnocentrism and universalism that will lead to the simplification of the real-life situation or the denial of the heterogeneity of African societies. The biased focus on cultural and psychological elements of societies ignores the importance of political and economic structures and their impact on the spread of HIV/AIDS. Both approaches are individually not capable of explaining local and regional diversity in sexual behaviour (Webb, 1997).

Alternative theory

Webb (1997) conceptualised the social epidemiology of HIV as the study of a constantly changing interrelationship between culture, individual action and socio-political factors. Instead of a narrow focus on one aspect of HIV/AIDS epidemiology, epidemiologists may have to look at the interplay of different factors that facilitate the spread of HIV (Fig. 1.) This we had categorised as direct, indirect and intermediate factors. For example, there is an indirect link between conflict and the spread of HIV in SSA; particularly, the

combination of HIV endemicity and a high level of violent conflict and state instability in the study region is worth exploring.

If there is a possibility when events such as wars, political or socio-economic transitions are likely to unleash diseases like HIV, the theory of social cohesion and understanding how social collectivity can assist in dealing with the HIV/AIDS epidemic is also worth investigating. Analytically, social cohesiveness can be regarded as solidarity that can be divided into an ideational component, referring to the psychological identification of members within a society. The second component is relational, which refers to the observed connections among members in a society. Durkheim (1984) identified the theoretical connection between these two components by linking changes in the common consciousness to the movement from mechanical to organic societies. This study defines the relational component of social solidarity as ‘cohesion’, and introduces a new characterisation of cohesion that rests on the pattern of multiple connections within a social network.

The organising hypothesis for this study is that the HIV epidemic is shaped by lack of social cohesion and collective connectivity in a society or nation, among other things.

A cohesive group is one that is held together well, thus difficult to break apart. Two features can be identified as responsible for the ability to keep the group connected; this can be through strong ties to leadership or can be through a diffuse pattern of relations that weave members together through independent connections (Moody & White, in press). The term cohesion through some kind of leadership can be regarded as ‘adhesive’ and the reserve term as ‘cohesive’ for a collective unity through multiple connections (Moody, 1999). The results of this study showed how social cohesion in many sub-Saharan countries has been affected, resulting in chaos that appears to feed the HIV/AIDS epidemic.

This study concentrates on this alternative theory and then selected countries that exemplified the different poles and then examined the literature to determine whether the evidence supported the theory.

Methods

Selection of study countries

In 15 SSA countries, more than 5% of adults were living with HIV/AIDS at the end of 2008 (www. Africa statistics, 2008). Among these, four countries were selected to determine whether the

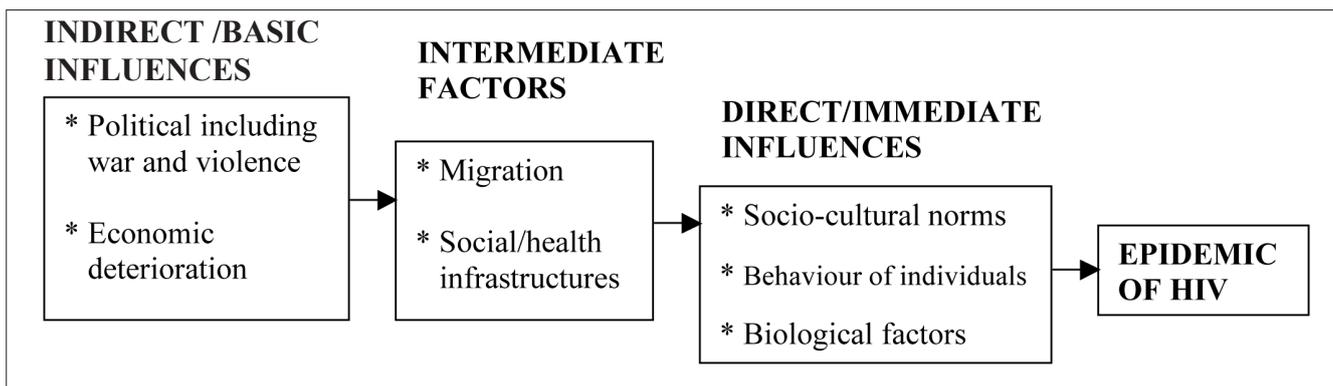


Fig. 1. Framework of different factors that facilitate the spread of HIV and its interplay.

evidence from these countries supported the alternative theory. The selection criteria were based on the countries that have more than 5% adult rates of HIV/AIDS in SSA. At the end of 2008 it was as follows in four countries: South Africa 18.1%, Botswana 23.9%, Zimbabwe 15.3% and Uganda 6.7% (www. Sub-Saharan Africa statistics, 2008). No control countries were taken, as it is optional in such qualitative case studies. Another justification for the selection of the above countries was because they were important ones, and this validated their inclusion. This study reviewed epidemiology of endemicity, mortality and politico-socio-economic indicators in these countries through document search.

Search methods of documents

The review of earlier publications was done through a systematic search in the major databases, namely PubMed, Web of Sciences, Medline and PsycINFO. Core international and sub-Saharan journals in the areas of HIV/AIDS were also utilised; for example, *AIDS and Policy Journal*, *Health and Social Work*, *African Journal of AIDS Research*, *SAHARA Journal*, and *UNAIDS*. A number of articles used in this paper were from a variety of disciplines: Social Science, Psychology, Economics, Political Sciences, Anthropology and Health/Medicine.

The principal inclusion criteria were: (i) it should have been published between 1980 and 2008, from the approximate time when the HIV/AIDS infection was identified in the sub-Saharan regions; (ii) it had to address social and economic problems, poverty, political environment, general health and the spread of HIV; and (iii) it had to be a peer-reviewed published article.

The key word/s used for these literature searches consisted of one or more combinations of the following terms: 'HIV/AIDS in sub-Saharan region', 'Economy in sub-Saharan region', 'Spread of HIV in Africa', 'War and Economy', 'Army conflict in Africa', 'Poverty and HIV', 'HIV/AIDS and stigma', and 'STD in developing countries'. The first author reviewed each document produced by the above search procedures during December 2008. Of the 117 articles, 60 published articles met the above inclusion criteria, as well the key word/s literature search and therefore were included in this review.

Data analysis

The first stage in data analysis was development of a data extraction form containing the summary of all the reviewed articles, with a critical assessment. The first author did this. His written summary was shared with a mentor as well with the second author, and these two scientists checked it independently and matched their results to find out if lack of collective action/responsibility and social cohesion has anything to do with the spread of HIV/AIDS or not. We would also like to record that data collection is a general problem in Africa; either much of it is missing or a part of it is fabricated in order to fit certain criteria such as aid, etc.

Findings

Analysis of study countries

The country-wise historical review indicated a fairly even politico-socio-economic situation that contributed to the HIV epidemic. Details are as follows.

South Africa

It is believed that the HIV/AIDS epidemic started in South Africa in 1982 at the time when the country was in the midst of racial tensions (Cichocki, 2007). While the government was focusing more on what was taking place in the country, HIV started to take hold, more within the gay community. By 1991 the disease had silently spread to all people regardless of their sexual orientation. During this time the whole country was focusing on the political unrest without concern about the growing disease of HIV/AIDS.

In 1985 a state of emergency was declared in South Africa that would last for 5 years. This was a result of riots and unrest that had arisen in response to apartheid, the system of racial segregation that had been in place since the 1950s. After the white minority regime turned over the power to the majority population, symbolised by the first elections in 1994, the economic and social problems that followed the Freedom Day were so overwhelming that HIV was not a priority at the time. Most people's living conditions remained the same. The freedom also meant globalisation of the economy and free trade, leading to opening borders to foreign competitors. Good as it may sound, it caused domestic problems by re-organisation of industries and agriculture, and increasing unemployment especially among the unskilled. Abolition of 'pass laws' opened the doors to mass migration from the countryside, where the majority of the population had been forced to live on insufficient means of production and seasonal migratory work (Pembrey, 2006).

The transition of power from the minority to the majority and its consequences go far beyond freedom. The breakdown of all the barriers that were formed by apartheid invited all kinds of people in the country, including those with HIV infection. In South Africa, institutional infrastructure was taken over by the democratic government with goodwill and represented the majority population. However, these agencies on central and local levels have to struggle with limited financial resources, unemployment, social inequalities and mass migration which made the environment highly susceptible to HIV infection (Pembrey, 2006; UNAIDS, 2006). The recent data show that South Africa lost 900 000 jobs in the beginning of 2009 due to recession. This country has a two-tiered economy: one competes with other developed countries while the other has only basic structure. South Africa ranked 6th highest in unemployment rate in the world (ILO, Reuters, 2010).

Botswana

Since the first reported case of AIDS in Botswana in 1985, HIV has spread rapidly. It is estimated that between 28% and 36% (UNAIDS, 2008) of the country's sexually active population is HIV positive. In Botswana, the hardest-hit country, one of every four adults appears to be infected by HIV. Life expectancy at birth dropped from 61 years in 1990 - 1995 to 47 years in 1995 - 2000. In the absence of HIV/AIDS, it would have been expected to reach 65 years in 1990 - 1995 and 67 years in 1995 - 2000. Due to the impact of AIDS, life expectancy has fallen to 40 years in the last 6 years (UNAIDS, 2006). This is more than 20 years less than expected in the absence of HIV/AIDS. Mainly due to the mortality impact, population growth in Botswana has significantly reduced. The average annual population growth rate of 3.5% per year in 1980 - 1985 has fallen to

2.9% in 1990 - 1995 and continued to drop further to 1.9% by the end of 2006. In the absence of AIDS, Botswana's population would have experienced growth above 2.5% throughout the 1990 - 2005 periods. It is estimated that its population will be 20% smaller than it would have been by 2015 (Fredriksson-Bass, & Kanabus, 2006; UNAIDS, 2006).

Botswana became independent in 1966. In 1997, after many years of sustained economic growth, it was estimated that it had a GNP per capita of US\$3620, the highest in Africa after Gabon and South Africa. Between 1985 and 1995 the economy grew at 6.1% per annum (World Bank, 1997). From 1966 to 1999 its growth was estimated at 9% per year (Republic of Botswana, 1998) but slowed during 2007, 2008 and fell to about 4 - 5% in 2009. Traditionally the people of Botswana were mobile, moving between villages, the lands where crops were grown, and places where cattle were kept. With the growth of wealth, cities were formed and provided a fourth destination. The development of a good all-weather road networks greatly assisted in the movement of large sections of the population. Botswana is also a corridor for goods transported by road or rail from South Africa to Zambia, the Democratic Republic of the Congo, Angola, Malawi as well as Namibia, its eastern neighbour. It is evident that the population of Botswana is highly susceptible to HIV infection. One other important point is that there was a breakdown of some cultural-social norms; in the past parents were often judged by the conduct of their children as they were primarily responsible for their upbringing and training (Schapera, 1940). Pregnancy outside the socially and culturally prescribed institutions such as marriage was taken to reflect parents' failure to bring up a well-disciplined child. The small population and the layer of highly skilled people as well as the level of social services provided may also have made the country vulnerable, although it does have the resources to respond (Macdonald, 1996). In 2009 Botswana ranked 9th highest in unemployment rate in the world.

Uganda

In the 1970s and early 80s Uganda was in civil disorder and warfare, the government at the time was corrupt and disorganised. It was also during this period when a war between Tanzania and Ugandan forces and those of Idi Amin gave rise to an environment of disruption and chaos (Palmowski, 2003). Today, parts of northern Uganda remain mired in conflict between the Lord's Resistance Army and the government-backed militia. This conflict has claimed many civilian victims, with both sides targeting civilian population, and atrocities such as mass amputation of limbs are reportedly common (Barnett, and Whiteside, 1997). This, along with proximity of long-distance lorry routes from Kenya's coast to Burundi and Rwanda gave rise to an environment in which any 'new' sexually transmitted disease organism was bound to thrive. There was also a pre-existing cultural imbalance in access to resources between men and women. With no other alternatives, many women entered into sexual liaisons of one kind or another along a continuum from married to commercial sex worker in order to gain access to goods and services. These factors, combined with poor medical services and high prevalence of STDs, meant that the epidemic rapidly became generalised (Barnett and Whiteside, 2000; Berry and Noble, 2006).

Uganda is one of the least urbanised countries in Africa, with over 90% of the population living in rural areas. About half the population of the country, around 10 million, is less than 15 years of age, as reported in the 2005 census. While those less than 25 years of age make up 67% of the population. Youth, as defined by the government of Uganda, includes boys/girls and young men/women from 10 to 25 years of age. Uganda is estimated to have a population of about 25 - 30 million. According to some estimates, up to 1 million men and women could become infected every year with the HIV infection in the next 5 years as the seropositivity rate has been rising by about 25 - 30% per year since 1988. According to the Congressional Research Service (CRS) report the current population of Uganda is about 30 million with a life expectancy of 51.7 years compared with 46.1 years in the 1990s (Cook, 2008). Interestingly, life expectancy has gone up 5.6 years in spite of the HIV/AIDS epidemic. With some improvement in life expectancy one would expect some growth in the population but it has remained almost the same due to deaths caused by AIDS-related diseases.

Uganda's first officially recognised AIDS deaths occurred in 1982, when 17 traders in the southern district of Rakai died of symptoms that came to be associated with the disease. Within a year, AIDS (then known as 'Slim') was diagnosed in Masaka, Rakai, and Kampala, and by 1989, all districts of Uganda were affected. The disease appeared to spread by heterosexual contact, often along main transportation routes (Barnett & Whiteside, 2000). After 6 years defined cases of AIDS were identified in many other parts of the country. These cases were concentrated in an age group of 15 - 50 years. In the early and late 1990s AIDS was more prevalent among females than among males, especially in the younger age cohorts. As there was no requirement to report AIDS cases, the total figure of 344 cases reported by 1986 does not seem to reflect a true picture of the burden of illness and death. In the early days of the epidemic the distinctions were between urban and rural areas, the former being lower than the latter, and between districts (Berry & Noble, 2006). It was discovered that those in the southern half of Uganda were showing the higher rates of infection and more frequent clinical presentation than the northern. There were also some indications that the epidemic might be concentrated among the very poor and the very wealthy. In 1988 a sample sero-survey that was taken from the people reachable throughout the country plus those in then-prevailing security situations showed that the epidemic had become generalised and in excess of one million Ugandans were likely to be HIV positive. Some areas and age cohorts exhibited rates of infection as high as 35% (UN Joint Programme HIV/AIDS, 2004).

However, the overall HIV prevalence decreased from 18% in the early 1990s to 5% in 2001, but has increased to about 6.4% in 2008 (Szadkowska, 2009). In 1986, after 15 years of civil strife, Uganda's new head of state, Yoweri Museveni, responded with high-level political commitment and a diverse spectrum of community participation, and comprehensive behaviour change-based strategy was responsible for the decline of the disease (Hogle, 2002). At the same time, falling prevalence within a few years may be due to better testing. In the 1990s HIV prevalence was strongly over-estimated just because the tests had many false positives.

Zimbabwe

The first reported case of AIDS in Zimbabwe occurred in 1985. By the end of the 1980s, about 10% of the adult population was thought to be infected with HIV. This figure rose dramatically in the first half of the 1990s, peaking at more than 36% between 1995 and 1997 (Lopman & Gregson, 2008). Although Zimbabwe gained political independence from British rule in 1980, the majority of the country's land remained in the hands of non-indigenous white farmers, despite the fact that they made up just 1% of the population. This was a source of tension in the years that followed, and in 1999 the government began to forcibly evict white farmers from their land (Tibaijuka, 2005). The land redistribution campaign that followed is thought to have contributed to the AIDS epidemic in several ways. As farming communities were disrupted, the economy deteriorated, leading to increased poverty and reduced access to education and health care. Many farm workers were forced to move to different areas and in some cases families were separated, both factors that are likely to have widened sexual networks and increased the risk of HIV transmission. Violence against farmers was practically encouraged, a climate of lawlessness ensued in many areas and rape became increasingly common, making women more vulnerable to HIV infection (Osirim, 2001; Tichagwa, 1998). Since 2000, Zimbabwe experienced hyperinflation and economic ruin. By 2008 inflation skyrocketed to nearly 100 000%, up from 7 000% in 2007 (Zimbabwe, 2008), thus has the highest inflation rate in the world. This country also had the world's highest unemployment rate of 95% at the beginning of 2009 (ILO, Reuters, 2010).

Specific impacts

The above historical review in the selected countries for this case study depicted an effect on the socio-economic and political environments, which lead to a negative impact. Its impact was grouped into economic, social and political and was systematically examined. The findings showed homogeneity in these four nations. Details are as follows.

Economic impact

Economic instability is severe in three out of the four study countries in SSA, namely Zimbabwe, South Africa and Botswana. At the beginning of 2009 they were among the top 10 countries with the highest unemployment rates in the world. The HIV/AIDS epidemic has devastated economic growth and development in SSA. It has affected individuals and households, companies and all sources of income. Research indicates that when a country has a prevalence rate of 20%, annual gross national product growth drops by an average of 2.6% per year. In SSA as a whole the rate of economic growth has dropped by an estimated 2 - 4% (Philipson and Posner, 1995).

The HIV/AIDS epidemic has both direct and indirect impact on the economy of any location that is stricken by HIV. For example, the epidemic increases the cost of health care, health education, prevention programmes, and money spent on taking care of the sick and their dependants, and for funeral expenses of the deceased (Dixon, McDonald and Roberts, 2002). Its impact is felt on the local and global levels of economy as it affects the structure of the family and the survival of communities. The economic impact of HIV/AIDS at the local level affects individuals more as the complications of HIV/AIDS start to weaken the person to a point where he or

she is not capable of working (Vitry-Henry, Penalba and Beguinot, 1999). The negative impact for people who are not financially well-off and/or well-educated is that they do not have any time to prepare themselves for the tough life ahead of them. They spend the little money they have seeking a cure from witchdoctors, and by the time they discover that they are infected with HIV /AIDS all their resources can be depleted. The worst of all is that most of the people in SSA have no health insurance or available government assistance so they find themselves in a helpless situation within no time (Shinsana, Hall and Maluleke, 2003).

The epidemic of HIV/AIDS in these regions can be clearly identified by the socio-economic problems, which are very well documented. At the household level families affected by the epidemic are pushed into poverty through loss of income, reduced ability of caregivers to work, medical expenses and the emotional part of losing loved ones (UNAIDS, 2002). Many households end up using up their savings and in many cases sell their assets such as livestock and land. Due to lack of labour, less land is cultivated and fewer crops grown, leading to food insecurity that has become common in households that were once secure. According to a UNAIDS (2000) assessment, employee illness related to HIV resulted in lost labour, leading to a 50% decline in output, a 500% increase in workers' spending on funerals and more than 1 000% increase in medical costs. A case study of the Debswana mining company in Botswana (Barks-Ruuggles, 2001) revealed similar findings.

HIV/AIDS has a profound effect on the economic situation of those households where a member is affected by this disease. Income declines as the breadwinners become ill or die, and other household members are obligated to take time off from their productive activities to care for their sick relatives. Households are forced to spend much more on health care, including medication, doctors' bills, and supplies for home care. In the health care sector more resources are being diverted towards HIV/AIDS care and more beds are being occupied by AIDS patients. With scarce money in these regions most of it is diverted to the care of HIV/AIDS patients at the expense of other health care needs. The needs of health care systems in these regions are stretched beyond their limits as they not only deal with the growing number of AIDS patients and loss of personnel due to death and illness, but also have to cope with the rising cases of tuberculosis, the most common infection associated with AIDS (Berry, 2006). AIDS is a threat to development and development affects the course of AIDS. There are biological and sociological determinants that cause the disease. The fundamental relationship between these three factors goes both ways as a vicious cycle. This is shown in Fig. 2.

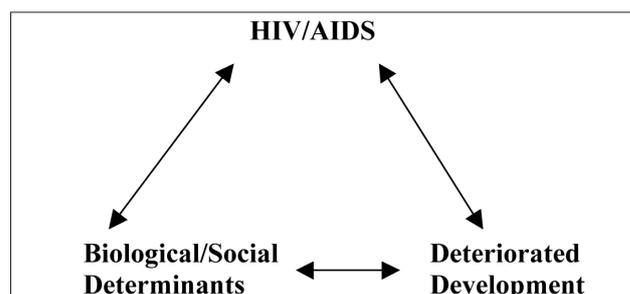


Fig. 2. The vicious cycle map depicts the causal relationship in sub-Saharan Africa that goes both ways.

Political impact

South Africa has had a very turbulent past, and its history appears to be relevant to the explosive spread of HIV in the country. Apartheid prohibited mixed-race marriages and sex between different ethnic groups, and categorised separate areas in which different races lived. The same year, In 1985, the government set up the country's first AIDS Advisory Group in response to the increasingly apparent presence of HIV among South Africans. The first recorded case of AIDS in South Africa was diagnosed in 1982, although initially HIV infections occurred among gay men, by 1985 it was clear that other sections of society were affected. Up to 1990 the struggle and chaos to abolish apartheid took centre stage while the HIV infection was establishing itself (Pembrey, 2006).

It is reported that the rapid increase in HIV/AIDS in South Africa took place between 1993 and 2000. This is the time the country was distracted by major political changes. While the attention of the South African people and the world's media was focused on the political changes occurring in the country, HIV was silently gaining a foothold. Although the results of these political changes were positive, the spread of the virus was not given the attention that it deserved, and people did not realise the impact of the epidemic in South Africa until prevalence rates had begun to accelerate rapidly (African Development Forum, 2000).

Lack of political commitment came to wider international attention in 2000, with the South African government's reluctance to prevent the transmission of HIV from pregnant women to children through the use of ART. The reasons were unclear. One argument was that the official belief that HIV does not cause AIDS. South African President Thabo Mbeki raised concerns by citing reports of ART toxicity but many think the government feared that providing ART would lead to demands for such treatment for everyone who needed it – demands which the government could not fulfill, given current prices and international trade rules (Freedberg, 2000).

Despite the HIV/AIDS pandemic, Botswana remains one of the wealthiest and most stable countries on the continent. After independence it maintained good relations with its white-ruled neighbours, but gradually changed its policies, harbouring rebel groups from Rhodesia as well as South Africa (www.Botswana, 2008). In Zimbabwe the land redistribution campaign is thought to have contributed to the AIDS epidemic in several ways (Osirim, 2001 and Tichagwa, 1998). Zimbabwe, with very poor governance, is now a nation teetering on the brink of political collapse. In recent years the country has been wracked by rising levels of politically motivated violence, extensive political corruption and military involvement in the Democratic Republic of Congo and violence against supporters of political opposition (Maclea, 2002). The Mugabe regime until recently had not given a high priority to containing and treating the disease (Price-Smith, 2004).

The population of Uganda had poor health status and high prevalence of sexually transmitted diseases, which were often untreated or incompletely treated. Livelihoods were precarious and, with a corrupt and disorganised government, revolved around illicit trade and smuggling across and around Lake Victoria.

The above evidence from the four study countries clearly indicates that countries that lack of good governance have higher rates of HIV.

Social impact

This study selected and examined some of the problems that appear to affect social cohesion in SSA. The social impact of HIV/AIDS involves the illness and deaths of individuals and the consequent effect on the family, community and broader society. HIV/AIDS is a slow motion catastrophe with long time lags. It takes some five to ten years from the time of a spread of infection in a population, until the consequences in the form of illness and death appear in full. Sadly HIV/AIDS is also a catastrophe without a clearly visible end (Poku and Whiteside, 2004). Hence, it is not a question of coping with the catastrophe for a limited period of time and there after return to the good old days, but to deal with a continuous catastrophe that involves the whole community. Emotionally, the impact of HIV/AIDS is great, especially in coping with the illness or death of a member depending on the status of the member of the family who is ill or dead.

The impact of HIV/AIDS extends beyond the boundaries of households directly affected, to many other households that intervene to provide support. Usually in these regions when a household is dissolved by HIV/AIDS, members of the extended family take care of the surviving children. Therefore the loss of a household member has long-term effects on the well-being of other members, through the costs of treatment and, especially, if the children have to take time off from school for financial reasons or to care for the sick (UN Programme on HIV/AIDS, 2004). The health sector as a whole and hospital sector in particular have been vulnerable. The ability of the society to care for the unusual numbers of orphans created by the epidemic has meant that some households have come under stress, and traditional systems of coping with orphans have sometimes had to be revived and supplemented by community-based responses (Mbugua, 2004).

As a number of teachers die without reasonable replacement and orphans drop out of school, gains in literacy and enrolment ratios are being eroded. In most of the countries in SSA children who lose their parents to HIV/AIDS drop out of school. Given that the number of AIDS orphans is projected to reach 40 million by 2010, this is evidence that progress towards education in these countries is under threat (UN General Assembly, 2001).

Discussion

It is widely recognised that the health of individuals and populations is influenced by more than biological factors. Uncountable contributions from many disciplines have shown that the way a society functions, and the way in which it changes, affects health positively or negatively. Due to this fact there have been many attempts to explain and point out the exact cause of the HIV epidemic in the sub-Saharan Africa without much success (Spiegel, Bennedsen, Claass and Burns, 2007; Fox, 2010; Stillwaggon, 2006; Macdonald, 1996; Kalipeni, 2000; Osirim, 2001 and Tichagwa, 1998). Although many researchers have focused on the problem of poverty as the cause of the epidemic this has

proved wrong as a richer developing country in this study, namely, Botswana has serious epidemics, while others, despite economic and development determinants pointing to the potential for AIDS epidemic, are not experiencing this.

In spite of all theories and hypotheses for reasoning out why HIV/AIDS became an epidemic in some areas of SSA and not in other parts of the world remains unsolved. Also, the indicators developed so far do not appear to conclusively point to the cause of the HIV/AIDS epidemic in this region. The findings of this study showed that among the four chosen countries, there have been wars, civil disorders, and people migrating from one country to another before the 1970s and after (Aluko, 2003; Gisselquist, 2005; Poulsen, 1997). Besides, the important social determinants that we observed were: poverty and social inequality, migration, gender relations and violence. Inequality and social marginality was specifically found among women and is characterised by male power and the controlling of women when it comes to sexuality and this kind of behaviour has been commonly reported among men in SSA (Monteiro, 2009).

Application of the alternative hypothesis

In this study conflict and politico-socio-economic instability contributed to the spread of HIV in various ways. Kalipeni in 2000 also made similar observations. The possible reasons for it, firstly is that during conflict or war, soldiers live in a stressful environment, separated from their family, while civilians might get exposed to sexual violence and have to live in situations of extreme poverty. In many cases the conditions force women to sell themselves (Ateka, 2001). Furthermore, conflicts disrupt social institutions and family life, largely because wars and conflicts often lead to forced migration (Carballo *et al.*, 2000). The decades of the 1980s and 90s witnessed a steady climb in violence across three study countries of SSA, namely South Africa, Zimbabwe and Uganda.

Second, migration; this study categorized it as an intermediate factor for the causation of HIV infection (Fig. 1). This term is defined as the movement of people from one place to another temporally, seasonally, or permanently, for a host of voluntary or involuntary reasons. This definition includes refugees and internally displaced persons (UNAIDS, 2001). In the new millennium tens of thousands of Zimbabweans who have arrived in Botswana, driven by political uncertainty, growing repression, and economic 'meltdown' in their country. In SSA, migration flows are mainly related to larger-scale non-voluntary migration. For example, from Angola and Congo, as a result of civil war, to economic migration towards South Africa

and to rural-urban migration in all countries. Similar observations were made by Girdler-Brown in 1989. This study also showed that economic prosperity was also a factor for the epidemic of HIV. This was observed in Botswana and South Africa during the era of their higher economic growth, which drew migrants, a number of them, in all probability with infection, from adjacent countries.

The evidence from the study countries, namely Uganda, South Africa, Zimbabwe and Botswana, showed evidence to the alternative hypothesis of this study that when people lack a sense of cohesion and connectivity they become desperate and this leads to destructive behaviour and social stress. These determinants have an association in the causation of HIV. Lack of a sense of cohesion and connectivity has negative psychological effects upon individuals, groups and societies by living through pressures from socio-economic and political determinants. For individuals, it can result in psychological and physical health problems, reducing capacity to cope with difficulties, frustration, and lack of hope for the future, and violence. All these outcomes appear to feed the epidemic of HIV/AIDS. Fig. 3. attempts to illustrate the Prem-Achilles hypothesis of the HIV epidemic in SSA. Using Durkheim's term, social and political systems and discourses can be affected by 'amomie', a negative consequence of change.

Authors such as Markovsky (1998) and Lawler (1993) state that cohesion starts when every actor can reach every other actor through at least a single path. The paths that link actors are the relational glue holding them together. When individuals are scattered due to war conflicts or looking for work from one place to another the link between them is disrupted and the glue that holds them together is gone. The strength for cohesiveness and connectedness is weakened when there is only one path connecting all the actors, stronger when there are two, stronger yet with three, and so forth reaching a maximum when every person is directly connected to every other person to complete a circle.

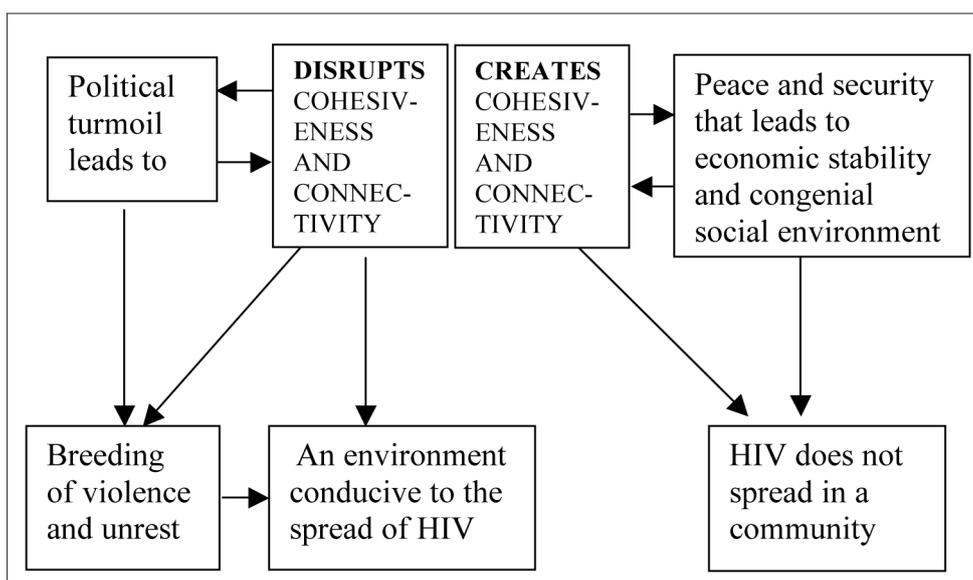


Fig. 3. The Prem-Achilles hypothesis of how cohesiveness and connectivity lead to an environment of peace and security that is likely to prevent political turmoil where HIV is not expected to breed. At the same time political turmoil leads to violence and unrest, which disrupt the environment of cohesiveness and connectivity where HIV is likely to thrive.

At this juncture we would also like to refer to a recent study of Paul Spiegel *et al.*, 2007 who found insufficient data to support the assertions that conflict, forced displacement, and wide scale rape increase prevalence or that refugees spread infection in host communities. We dispute this finding with the following queries. (a) Their conclusion is based on secondary data and the validity of the data collected in conflict zones; (b) what the prevalence of HIV infection was in the displaced population when conflict began; (c) no antenatal surveillance of HIV infection data among long-term refugees and the data is on men in these camps; and, (d) some of the assessments referred to by the authors were made several years after the conflict on disease progression and death. The theory is that conflict and forced displacement increase prevalence and refugees spread infection, particularly in sub-Saharan Africa. For example, the first major epidemic of HIV/AIDS, in Uganda, which coincided with their conflict with the Tanzanian army. The combination of high HIV prevalence with the political instability and violence that followed seems to be the culprit for causing the epidemic. Therefore, it is hard to totally disregard this hypothesis and simply call it a coincidence. South African experiences have shown that there could be substantial risk of HIV spread during the phase of reconstruction after conflict, because usual sexual activity is resumed in a context of economic recovery, infrastructure development, and renewed population mobility.

This study suggests that the policy makers in their effort to prevent the spread of HIV must also take social cohesion and the connectivity theory into account. Awareness among societies and health professionals in SSA should be created that one of the major reasons for the HIV/AIDS endemicity in this region is lack of the sense of cohesion and connectivity.

Conclusion

AIDS in SSA has become a critical factor for development. The review of this paper emphasises that HIV/AIDS continues to be the number one threat to the development of many nations in the SSA, with those most affected faced with significant reversal in levels of socio-economic development and quality of life. The results of the developmental outcome in these countries strongly appear to affect the course of the HIV/AIDS epidemic.

This study used theories of collective action/responsibility and social cohesion to hypothesise the breakdown of social ties. It suggests that building social relationships within societies of SSA is a vital need of the hour to prevent the epidemic of HIV infection. The policy makers must also consider social cohesion and connectivity theory in their planning and future directions in controlling the HIV menace in SSA.

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Notes

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