PRACTICE POINTS

Corporate response to the HIV/AIDS epidemic in Uganda - time for a paradigm shift?

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ABSTRACT
The HIV/AIDS epidemic is likely to remain the pre-eminent global health concern for the foreseeable future. In Uganda, while significant progress has been made by the government over the past decade in bringing down the rate of new infections, the HIV/AIDS burden in the country remains huge and vigilant efforts must be continued if this burden is to further decrease.

Traditionally the government, supported by its international partners as well as local non-government organizations and the community has borne the brunt of the costs of containing the epidemic in Uganda. While the corporate sector in the country has financially contributed towards the costs of some of the interventions that are currently in place to combat the HIV epidemic, there is largely a paucity of sustained and systematic corporate leadership in providing comprehensive HIV/AIDS programmes for their employees.

A survey done by the authors of this paper reveals that most programmes undertaken in the private sector are of limited scope. We argue that there is more the corporate sector can do to more equitably share the HIV/AIDS burden, without necessarily jeopardizing its primary role – namely to maximize returns to shareholders.

This paper proposes a conceptual framework of how companies can approach the issue of HIV/AIDS within their workforce and suggests that providing more comprehensive interventions may in some instances result in substantial cost savings through the prevention or at least delay of HIV/AIDS related consequences such as: frequent absences from work, erosion of company skills and knowledge through key employee deaths, and the costs of hiring and training replacements etc. This ultimately could result in positive financial returns to those companies that choose to pursue work place led HIV/AIDS control and prevention programmes.

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INTRODUCTION
The overwhelming share of the global HIV burden is borne by developing countries, where 95% of HIV infected people live. According to UNAIDS, out of the 24 countries in the world with an adult HIV seroprevalence of more than 5% in 1999, 23 were in sub-Saharan Africa. Of the global total of an estimated 40 million people who were living with HIV/AIDS at the end of 2001, 70% were from sub-Saharan Africa, which houses only 10% of the world’s population.\textsuperscript{1} The United States Bureau of Census has predicted that by the year 2010, 8 to 31 years of life will have been lost in those countries worst affected by HIV/AIDS in sub-Saharan Africa. HIV/AIDS has also led to a resurgence of other diseases, notably tuberculosis, a paucity of hospital beds available for the treatment of other illnesses and poses an immense threat by reversing the gains made over many years of trying to improve public health service delivery in sub-Saharan Africa.

This region bears the brunt of the global HIV/AIDS epidemic and yet by a cruel twist of fate, it is also the region where poverty is most pervasive (almost nine out of every ten people in Africa’s poorest countries subsist on less than US$ 2 a day)\textsuperscript{2} and hence has the least resources to effectively cope with an epidemic of HIV’s enormity.

The Ugandan situation clearly depicts the ravages of the HIV scourge. Uganda has been facing an HIV/AIDS epidemic for almost two decades during which time the epidemic has had devastating effects on society. By 1996, the country was being described as the nation with the highest prevalence of HIV in the world.\textsuperscript{3,4} In 1999 alone, about 110 000 people are believed to have died from AIDS related illnesses and currently, some 1.4 million Ugandans (almost 7% of the population) are living with HIV. In addition to these effects an estimated 1 million children have been orphaned (the largest number of orphans arising from the effects of the HIV epidemic in the world) and sadly a large proportion of Ugandans personally know at least one individual, either within their own family or close circle of friends, who has succumbed to the epidemic.

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\textsuperscript{2}World Bank (2001), \textit{World Development Indicators}, Washington, DC.
Despite these odds some progress in combating the epidemic in Uganda has been made over the past 15 years. With the leadership of the President, Uganda launched a tireless prevention and awareness campaign that has reversed the trend of the epidemic by almost 50% in some areas.\(^5\) HIV infection prevalence rates from the major sentinel surveillance sites in different parts of the country have continued to show declining trends. The weighted overall antenatal prevalence rate was 6.1% in 2000 down from 6.8% in 1999.\(^6\) Additionally, there has also been an observed decline in the HIV incidence for adults of all ages in the Kyamulibwa Medical Research Council cohort from 8.0/1000 person years of observation in 1990 to 5.2/1000 person years in 1999.\(^7\) So effective have has the awareness campaign been that currently more than 95% of Ugandans are now aware HIV/AIDS and the major modes of transmission.\(^5\)

**Meeting the Burden caused by the HIV/AIDS epidemic in Uganda**

The government of Uganda together with its development partners has since the beginning of the epidemic taken a leading role in advocating for and implementing of prevention and awareness campaigns all over the country. To date the following HIV/AIDS intervention strategies have been incorporated into the national health policy:

- Sexually Transmitted Disease (STD) treatment
- Sex worker interventions to prevent the spread of HIV among this group and their clients
- School based HIV/AIDS awareness and prevention programmes
- Voluntary counselling and testing (VCT) services
- Condom social marketing
- Prevention of Mother-to-Child transmission of HIV (PMTCT)
- Information Education and Communication (IEC)

More recently, some government parastatals such as the Bank and Uganda as well as other institutions such as the theme groups of the United Nations Organization in Uganda have started providing anti-retroviral (ARV) treatment to their sick employees. The overall effect of these interventions has been a slowing down in new infection rates over the past decade.

Despite these noble efforts however, the current HIV infection rate is still unacceptably high. A significant number of new infections are still occurring and due to the maturing of the epidemic many of the people who got infected during the ‘HIV heydays’ of the early and mid 1990s are now becoming ill with AIDS. This presents a huge burden whose traditional bearers, namely the government and non-governmental organizations (NGOs); are unlikely to contain. The excess burden that government and NGOs are not currently not able to absorb predominantly falls on households and extended families of those affected, who in most cases are ill prepared to bear the brunt of the costs involved.

The corporate sector in Uganda clearly has a role to play in sharing some of the burden of the epidemic, especially among the people it employs. When companies recognize the threat posed by HIV among their employees, they can pursue three basic strategies for mitigating the anticipated short- and long-term financial consequences on their businesses. They could:

1. Invest in HIV prevention programmes designed to reduce the incidence of the disease in their workforces
2. Provide treatment, care, and social support to employees with opportunistic infections or AIDS, with the objective of keeping these employees in the workforce and delaying or avoiding the costs of large amounts of paid sick leave, death or disability benefits and recruiting and training replacement workers (as has been outlined in Table 1)
3. Alter benefit policies, contract structures and hiring practices to reduce company exposure to HIV/AIDS related costs and basically shift the burden to other stakeholders.

It has oft been stated that the ‘business of business is business’ and therefore the private sector may have an incentive in pursuing strategy 3 (burden shifting) or at a minimum, strategy 1. HIV/AIDS can be looked at as primarily being a social disease but which could also have significant business impact. Unfortunately, few studies in sub-Saharan Africa have rigorously attempted to quantify the cost of impact HIV/AIDS has on individual businesses which could partly explain why corporate response to the epidemic has been lukewarm at best in most countries of the region.\(^10\) While this is so we argue that added social responsibility is not mutually exclusive from profit maximizing strategies that are demanded of the corporate world by their shareholders.

There is extensive experience that can be borrowed from other fields on how to balance the good for society with profit maximizing goals of business and seek for solutions that promote both sets of objectives. In the environmental field for example, many industries in the developed world have found that the mandatory safety, health and environmental technologies they have implemented as required by government regulations have also served to reduce their operating costs by making their processes more efficient.

Likewise, businesses that can do more to prevent an erosion of core skills and knowledge through the loss of skilled employees to AIDS, ultimately stand to financially benefit from the increased longevity of these HIV+ employees. The same logic would apply to those businesses that have an interest in having a healthy consumer base that has disposable income to spend on buying commodities, which
is otherwise not diverted to anti-retroviral treatment or to care for the orphans the AIDS epidemic leaves in its wake.

**Rationale**

The rationale for this paper derives from the important role employers in the private sector can play in combating the HIV/AIDS epidemic in Uganda. Within Uganda, approximately 90,000 people are employed by the corporate sector, with a further 400,000 dependants. This represents a small but significant proportion of the population in terms of income earning and tax paying capacity. Workplace-led or based initiatives against HIV/AIDS can effectively be used to reach this population.

The overall response to HIV/AIDS from the corporate sector in Uganda has not been systematically addressed and only scanty information is available about this response in the literature. While it is arguable that many large businesses in Uganda have financially contributed towards fighting the epidemic in some way or another, few have comprehensive programmes in place that directly address the issue of HIV/AIDS among their employees.

A pilot survey done by the authors among 5 of the biggest private sector companies in the country revealed that company-led or based HIV/AIDS interventions often tend to be of a very limited scope. Those companies that have onsite clinics for their employees tend to provide only STD treatment and counseling as HIV prevention interventions. Comprehensive VCT is often not provided and no company was found to provide ARV therapy for sick employees. Some companies had policies whereby skilled employees were allowed to see a physician of their choice for treatment and then claim a refund for expenses incurred, but only up to the limit preset by the company. This obviously meant that expensive ARV treatment was often not covered by the medical insurance policy.

Such corporate responses may in part be due to the lack of will power to commit what is often thought of as massive financial resources towards a cause whose exact business impact is difficult to quantify. Additionally, we believe there is a lack of effective inter-business coordination and monitoring structures that could allow cost sharing for such interventions in the private sector. The need therefore has arisen for a more coordinated response from the private sector. Such an initiative however requires support from other key stakeholders notably Government, local and international NGOs, other civil organizations as well as the community.

The aim of this paper is to propose a conceptual process in which the corporate sector can become more actively involved in combating the HIV/AIDS epidemic in Uganda. While the financial analysis necessary to calculate the present value of HIV infections and ultimately the cost to individual companies is outside the scope of this work, we have attempted to highlight where the major ‘buckets’ of costs for businesses may lie in a series of Figures and Tables in the subsequent sections of this paper.

**The costs of the HIV/AIDS epidemic**

While it is difficult to quantify these costs in any accurate manner, HIV/AIDS related costs stem from both internal and external effects. These costs become particularly more important in a situation where the HIV epidemic has matured and the number of people dying of AIDS is visible throughout all strata of society as is now the case with the Ugandan epidemic.

Figure 1 below illustrates how an HIV infected individual could have widespread effects on society as a whole.
External costs are caused by such factors as a decrease in disposable income among affected families, which results in decreased demand for company products, rising costs associated with breakdown in society etc. These can be extremely difficult for corporate firms to manage or control. The overall economic impact of an adult AIDS death on surviving household members varies according to the following characteristics:

- The deceased individual in terms such as age, gender, income etc.
- The household itself, such as composition (number of adults and children and their ages) and assets
- The community such as attitudes towards helping needy households and the general availability of resources and standard of living in the community

Sources of internal costs of HIV/AIDS to businesses are outlined in Table 1 below.

**Table 1: Progression of cases and costs of workforce HIV/AIDS (internal company costs only)**

<table>
<thead>
<tr>
<th>Progression of HIV/AIDS in the</th>
<th>Economic impact of individual cases</th>
<th>Economic impact of all cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employee becomes infected with HIV</td>
<td>No Costs to Company at this stage</td>
<td>No Costs to Company at this stage</td>
</tr>
</tbody>
</table>
| 2. HIV/AIDS related morbidity begins | Sick leave and other absenteeism increase  
Work performance declines due to employee illness  
Overtime and contractor's wages increase to compensate for absenteeism  
Use of company's onsite clinics increases  
Payouts from medical aid schemes increases  
Employee requires attention of human resource and employee assistance personnel | Overall productivity of workforce declines  
Overall labour costs increase  
Additional use of medical aid causes premiums to rise  
Additional medical staff must be hired at the company's health clinics  
Managers begin to spend time and resources on HIV-related issues  
HIV/AIDS interventions are designed and implemented |
| 3. Employee leaves workforce due to death, admission to hospital or voluntary resignation  
Payout from death benefit or life insurance schemes is claimed | Pension benefits are claimed by employee or dependants  
Other employees are absent to attend funeral  
Funeral expenses are incurred  
Company loans to employees are not repaid  
Co-workers are demoralized by loss of colleague | Payouts from pension fund cause employer and/or employee contributions to increase  
Returns on Investment in training are reduced  
Morale, discipline, and concentration of other employees are disrupted by frequent deaths of colleagues |
| 4. Company recruits a replacement employee | Company incurs costs of recruitment  
Position vacant until new employee is hired  
Cost of overtime wages increases to compensate for vacant positions | Additional recruiting staff and resources must be brought in  
Wages for skilled (and possibly unskilled) employees increase as labour markets respond to loss of workers |
| 5. Company trains new employee | Company incurs costs of pre-employment training (tuition fees etc.)  
Company incurs costs of in-service training to bring new employee up to the level of the former one  
Salary is paid to employee during training | Additional training staff and resources must be brought in |
| 6. New employee joins the workforce | Performance is low while new employee comes up to speed  
Other employees spend time providing on-the-job training for the new employee | There is an overall reduction in experience, skill, institutional memory and performance of the workforce  
Work unit productivity is disrupted as labour turnover rates increase |
PROPOSED CONCEPTUAL FRAMEWORK FOR CORPORATE RESPONSE TO HIV/AIDS

Figure 2: Corporate response to mitigate the direct impact of HIV/AIDS on the workforce must seek to address needs at all stages of the disease.

<table>
<thead>
<tr>
<th>Typical elements of care programme</th>
<th>What results could the HIV care programme achieve?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Reduce HIV incidence*</td>
</tr>
<tr>
<td>Personalisation of risk of HIV</td>
<td>- Reduce risk of transmission without behaviour change (e.g. treating STDs)</td>
</tr>
<tr>
<td>Behaviour change</td>
<td>- Change sexual behaviour (increase condom use, reduce number of sexual partners)</td>
</tr>
<tr>
<td>HIV+, unaware of status</td>
<td>Slow HIV progression to AIDS in infected population</td>
</tr>
<tr>
<td>HIV+, aware of status</td>
<td>Slow HIV progression to illness/AIDS in infected population (targeted at infected individuals)</td>
</tr>
<tr>
<td>Onset of illness (AIDS)</td>
<td>Maintain health (and ability to work) for 8-10 years</td>
</tr>
</tbody>
</table>

* Incidence rate here refers to the number of new infections occurring in the workforce

VCT refers to voluntary counselling and testing services

ARV refers to anti-retroviral therapy
Figure 3: Programme objectives should however be prioritized by the HIV prevalence and risk status of the workforce

Figure 4: Any investment in achieving these objectives should be well motivated and carefully controlled in order to achieve the desired results

* i.e. A high incidence of high-risk behavior such as frequent unprotected sex with multiple sexual partners

Figure 4: Any investment in achieving these objectives should be well motivated and carefully controlled in order to achieve the desired results

Recommended approach
* Intervention is appropriate to workforce situation
* Intervention must be aligned with business needs
* Investment cost must be justified in terms of business or social impact
* Potential number of individuals covered in each intervention should be well established and fact based
* Intervention should be structured so that investment follows performance
* Alternatives considered in terms of ability to realise desired objectives
* Existing facilities/resources are leveraged as far as possible
* Expenditure is efficient and incorporates alternative funding where possible
Table 2: To be both effective and efficient the corporate HIV/AIDS programme should establish a sound fact base and a methodology to monitor and respond to changes

<table>
<thead>
<tr>
<th>Key questions to ask</th>
<th>Rationale</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Is the programme focused on achieving the right objectives?</strong></td>
<td>▪ Programme objectives should be driven by workforce needs and potential business/social impact</td>
<td>▪ HIV prevalence by stage of disease and rate of progression to AIDS should be established and monitored</td>
</tr>
<tr>
<td><strong>Are interventions targeted at true barriers to action?</strong></td>
<td>▪ Interventions should target specific barriers to individual employees taking the necessary actions along the disease progression curve</td>
<td>▪ Barriers to action should be monitored on an ongoing basis</td>
</tr>
<tr>
<td><strong>Is the scope of intervention appropriate to the needs?</strong></td>
<td>▪ Utilization of services provided by the company should be quantified relative to the identified needs and managed accordingly</td>
<td>▪ Upfront planning should quantify potential scale of intervention</td>
</tr>
<tr>
<td><strong>Is the programme well supported by all stakeholders?</strong></td>
<td>▪ Results achieved and implications for business and social impact should be transparent to all stakeholders</td>
<td>▪ A tracking system is required to determine programme effectiveness</td>
</tr>
</tbody>
</table>

The type of programme an individual company should run can range from basic to advanced depending on such factors as the workforce needs, expenditure required to run a programme vis-a-vis the company’s finances, and other amount of collaboration that exists with other stakeholders. Companies should seek as much as possible not to duplicate programmes that are easily accessible to their workforce and to provide interventions in the most cost effective manner possible. For example, Voluntary counseling and testing (VCT) services are already freely provided at a number of sites within the country, the role of companies here may be as basic as trying to de-stigmatize the issue of HIV/AIDS within their workforce and to encourage employees to utilize these services. Figure 5 is an illustration about the range of components that can be included in a basic, intermediate and advanced HIV/AIDS control programme along a ‘Knowledge-Personalization-Decision-Action’ funnel for individual employees.
### Table: AIDS Education

<table>
<thead>
<tr>
<th><strong>AIDS Education</strong></th>
<th><strong>Focus on Self and Stock</strong></th>
<th><strong>Increased Awareness and Positive PV</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher in Model</strong></td>
<td>Focus on self and stock</td>
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</tr>
</tbody>
</table>

### Diagram: Behavior Change Model

1. **Knowledge**
2. **Persuasion**
3. **Decision-Making**
4. **Action**
5. **Behavior Change**

**Figure 5: Companies can choose from a wide range of programs depending on their capacity to implement them as well as the resources they have at their disposal.**
CONCLUSIONS
This paper proposes a framework through which businesses can think about how they can get involved in sharing the burden of HIV/AIDS in Uganda more equitably. We are not suggesting that companies bear all the costs of treatment for their HIV infected workforce. Co-payment schemes whereby affected employees can contribute to the treatment fund should also be explored, in addition to trying to source for additional funding for the more costly interventions from international donor organizations. By adopting strategies like these, the burden sharing even for AIDS management can be made affordable at least for a larger proportion of the affected population even in high burden but resource limited settings like Uganda.

Organizations like the Uganda Business Coalition on HIV/AIDS can assist in coordinating company response in the corporate sector. Currently one great advantage for those companies that would wish to pursue ‘advanced’ programmes (see Figure 5) for their employees is that the price of the treatment of some of the more common opportunistic infections has dropped dramatically. As an example; due to a great philanthropic effort by Pfizer, fluconazole, which only a few years ago was a prohibitively expensive drug used for the treatment of cryptococcal meningitis is now provided free of charge at major government hospitals. Additionally the cost of anti-retroviral therapy in Uganda has reduced more than 80% over the past four years thanks largely to a collaborative effort between high burden countries, UNAIDS, and the drug manufacturers. These noble efforts mean that for the first time since the advent of the HIV/AIDS epidemic, specialized treatment could become affordable to a large number of those infected and Uganda can finally complement the behavioural change strategies that have been the mainstay of controlling the epidemic for the last two decades.

However, if the corporate sector is to be persuaded to make larger investments in care and treatment than is currently the case, there is an urgent need for further research and communication on several key issues. Notable among these are the following:

- The effectiveness and cost of treatment and care interventions that can be implemented through the workplace or ways in which companies can meaningfully participate in care delivery elsewhere
- The costs to companies in present value terms, of new HIV infections at each level of the workforce under different assumptions about employee value, life expectancy and discount rates in order to identify which interventions, done where, will be more impactful
- The administrative and logistical feasibility of providing care and treatment interventions to large numbers of employees in various kinds of companies and organizations

The onus is on health and economic researchers to do the relevant contextual research to provide the right answers to these germane issues that we have raised.

REFERENCES