

HAART for the HIV-infected employees of large companies in Africa

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The International AIDS Conference held in Durban in 2000 was a watershed for highly active antiretroviral treatment (HAART) in Africa. Since then, HAART in sub-Saharan Africa has been firmly on the international agenda, and access to treatment in resource-poor settings has become a top priority. Multiple initiatives were developed to realise the goal of expanding treatment access (The Global Fund to Fight AIDS, Tuberculosis and Malaria, the US President's Emergency Plan for AIDS Relief, the World Bank's Multi-country AIDS Programme, and many others). Although private sector employers in Africa were some of the first to embark on HAART for their workers (eg, Anglo-American, Compagnie Ivoirienne d'Electricité, Volkswagen South Africa), public sector approaches have now largely surpassed these efforts. Few large companies in Africa have launched comprehensive AIDS treatment schemes for their workers and dependants.¹⁻³ Most employers in Africa hesitate to take responsibility, and refer employees to government HIV programmes that are benefiting from international financial support but struggling with implementation. There is an encouraging trend among companies in countries with high prevalence to have HIV policies, but even in countries with prevalences between 5% and 20%, less than half of companies claim to have an HIV policy.¹ In sub-Saharan Africa, only 26% of the companies that have HIV policies provide antiretroviral treatment to their workers.¹

In 2001, Heineken decided to add HAART to the package of medical benefits for employees. Where the existing medical policy extended to spouses and family members, dependents would also benefit from HAART. The programme was implemented in collaboration with PharmAccess Foundation, a non-government organisation from the Netherlands dedicated to sustainable quality AIDS treatment in resource-poor settings. In many business meetings, Heineken was asked what justified the decision to offer treatment to their employees, but on those occasions the question was reversed and other companies asked why they did not offer HAART to employees. Various reasons were given; here we point out why such justifications are not valid.

HAART is complicated, difficult to administer, and skilled physicians are rare in Africa⁴

Today, more than 20 different antiretroviral medicines are available and new drugs and drug combinations are regularly appearing on the market. The combination of three drugs that are needed for HAART is complex: companies argue that expert know-how is needed and that "AIDS is not our core business".

In 2003, WHO published guidelines for scaling up HAART in resource-limited countries offering simpler protocols and guidelines.⁵ Thus, in practice, there are less than five combinations of antiretroviral drugs commonly used in Africa. The Heineken Workplace Programme (WPP) chose to use only two of these combinations: a first-line regimen consisting of zidovudine/stavudine, lamivudine and efavirenz, or nevirapine, and a second-line regimen consisting of didanosine, tenofovir, and lopinavir-ritonavir.

This restricted choice of HAART regimen warranted an efficient transfer of knowledge to Heineken medical staff. The WPP treatment teams attended a 3-day theory workshop during which the principles of HAART were explained, the eight drugs used in the programme introduced, and drug interactions reviewed. After the workshop followed a practical traineeship of 2-3 weeks, where the doctors saw patients under the supervision of a clinician with experience in antiretroviral treatment. When the teams started treating patients with HAART, teleconferences were carried out every 2 weeks to enable clinical review of patients. Teleconferences were supported by an electronic database with key patient data, entered by the teams in Africa and also accessible from Europe. This procedure allowed a team of skilled clinicians (PharmAccess Foundation) to assist their colleagues in Africa in an efficient and practical manner. Therefore, with practical HAART choices and targeted clinical support, general practitioners were able to manage HIV patients effectively, at low additional cost.

Cost

More than one billion people worldwide, including almost half the population in Africa, subsist on US\$1 a day.⁶ Costs for AIDS treatment have decreased substantially in the past 5 years, but are still at least \$150 per patient per year for the cheapest drug combination. The additional costs of laboratory monitoring are similar (\$100 per year). Therefore, HAART remains beyond the financial reach of most people living in these countries, and out-of-pocket payment can cause individuals and families to fall below the poverty line.⁷

In our view, for decision makers of large companies to plead poverty is inappropriate. First, the cost of several hundred dollars per person per year should be put in the perspective of the benefits of a healthy workforce. Second, antiretroviral treatment reduces the need for hospital admissions, as shown both in developed^{8,9} and in developing countries,^{10,11} which leads to substantial cost savings. Third, workplace AIDS treatment costs

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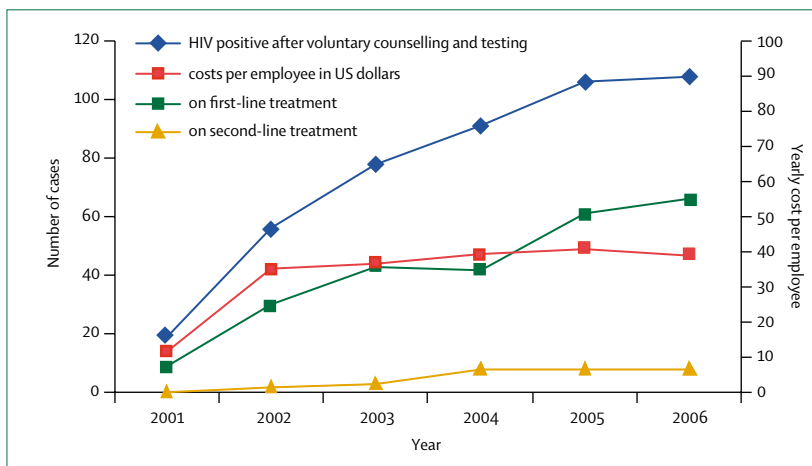


Figure: HIV detection and treatment at Heineken in Rwanda, 2001–06
Statistics for 2001 are from Sept–Dec only.

have usually been far lower than expected. In the WPP in Rwanda for example, after 2 years, 75 HIV-seropositive adults were identified in 460 people who participated in voluntary counselling and testing (43% of the 1060 target population for the programme). Of this group, only 36 patients (48%) required immediate first-line antiretroviral treatment. Over 4 years, the number of patients identified with HIV increased to 108, of whom 74 are currently on HAART: 66 on first-line and eight on second-line treatment. 34 patients are not on HAART, but are monitored by regular CD4 counts.

The figure depicts the cumulative numbers of HIV positive patients on first-line and second-line HAART between 2001 and 2006 at the Heineken Rwanda breweries. In view of a cost of \$500 for first-line treatment and \$1500 for second-line treatment in 2001, decreasing by 2006 to \$150 and \$1000, respectively, one can conclude that the actual extra cost of providing HAART has been constant over time—around \$45 per employee per year.

Companies have often asked experts to make cost-benefit analyses about HAART. We feel this is not the right question, and instead they should establish whether treating workers and their families is affordable in the foreseeable future and might remain so in the long term. If cost-benefit arguments were used, segmentation among employees (management *vs* staff, skilled *vs* unskilled workers) would arise. This situation might lead to the conclusion that HAART should be provided for skilled workers but not unskilled workers.¹² To preserve equity among workers, the affordability argument will need to enter the equation.¹² The use of affordability as a norm is probably more common than cost-benefit analysis in related human resources decisions (concerning salaries or benefits, for example). The real-life example of the Heineken programme might help corporate decision makers to make the appropriate choices.

African patients are not adherent

When HAART for Africa was first proposed, the fear was expressed that African patients would be less adherent to the daily regimen because of different notions of time and disease.¹³ Experience with HAART in Africa so far has shown this fear to be misplaced. Adherence has been good in many different studies across the continent.^{14–16} In general, available data do not suggest that adherence in Africa is different from that in Europe or the USA. The favourable survival in a recent pooled analysis of various cohorts from developing countries supports this finding.¹⁷

HAART is not sustainable

Because of the cost of antiretroviral therapy and the need for life-long treatment, provision of HAART in resource-limited settings has been regarded as unsustainable. In several of the sub-Saharan countries even the basic health-care infrastructure is not financially sustainable and relies heavily on donor aid. If sustainability is seen as the ability of a country to independently raise the financial resources for its health-care system, then most of the current HAART programmes in sub-Saharan Africa are indeed not sustainable. However, if sustainability is considered on a worldwide scale (as many large companies operate), these programmes are indeed sustainable. Additionally, many large companies in sub-Saharan Africa have proved to be stable and sustainable entities, having uninterrupted local presence for many decades. If these companies were to arrange access to HAART for their workforce, their programmes should be more sustainable than many public programmes that are inspired and hindered by the fickle fashion of the donor community.

In case of retirement or retrenchment of workers, Heineken continues provision of HAART or arranges for an orderly transfer of the treated individual to a public treatment programme.

HIV treatment in Africa will create resistance to antiretroviral drugs and will render them useless

It has been argued that provision of antiretrovirals in African settings will lead to the rapid creation of resistance.^{4,18} If HIV becomes resistant to the drugs taken, there will be no full viral suppression and disease will progress. Second-line treatment is more expensive than first-line treatment, and has less chance of success than the first regimen.¹⁹ There is the additional risk of transmission of resistant virus, and people infected with a resistant virus will not respond well to first-line treatment.²⁰

Development of resistance can be avoided in several ways (such as adherence and low pill burden) and corporate programmes provide opportunities for this. Because sub-Saharan Africa has not experienced extensive antiviral monotherapy or dual therapy like North America or Europe, the resistance problem might be much less than anticipated. In the Heineken programme, a strong framework and close monitoring

aim to contain the major risk factors for resistance. Financial distress leading to drug holidays—ie, periods when the patient is not taking the drugs—is avoided by sponsoring HAART; drug-sharing is avoided by entitling registered dependants to treatment; use of counterfeit drugs is avoided by strict procurement rules; discontinuity of supply is avoided by the presence of buffer stocks of drugs; and incorrect prescription is avoided by using simple protocols and providing training, feedback, and supervision. Thus, simple measures at the corporate level have created optimal conditions for superior HAART adherence.

Treatment of employees will increase inequity in society

Some African government officials, as well as observers from developed countries, have warned that HAART programmes sponsored by employers would not be equitable. People already in a relatively fortunate position (having paid employment) would benefit rather than the unemployed and the poor. The price of rolling out HAART is increased inequity, they argue.

When a new treatment or prevention regimen is made available, it has to start somewhere; in practice it usually starts in urban areas, and in those people who are relatively well off.²¹ That does not mean coverage will stop there. We feel that to start somewhere is worthwhile, and private companies have the means, the reasons, and the opportunity to start. A good example will be followed. Additionally, in the African context those who are fortunate enough to have a well-paid job usually take care of a large number of dependants. If the income-generator loses his or her job because of sickness, this has consequences for the entire (extended) family.

HAART is not an appropriate technology for developing countries

Malaria and tuberculosis can be diagnosed with clinical skills and simple tools (microscopy), and yet these infections are not controlled in sub-Saharan Africa. Many children in Africa die from vaccine-preventable diseases. In a continent where even straightforward disease control strategies do not succeed, how could one seriously consider introducing complex disease management strategies like HAART?

The level of complexity is relative though. Most large companies operating in sub-Saharan Africa equip their African sites with similar infrastructure and capacities as their subsidiaries in countries in the Organisation for Economic Co-operation and Development. Large investments are made in information technology in the private sector in Africa, and these are deemed necessary for the successful operation of the company. In a similar manner companies can invest in health technology for their staff. If complex computer networks and assembly lines can be made operational, surely three-drug regimens with laboratory monitoring can be made to work as well.

Other diseases should get priority over HIV

For a company, the desired outcome of a well functioning medical service is to achieve a mortality record comparable to that in middle-income and high-income countries, which means that mortality due to infectious diseases should be kept to a minimum. Although malaria, diarrhoeal diseases, measles, and acute respiratory tract infections are major causes of death in sub-Saharan Africa, they mainly affect children. By contrast, tuberculosis and HIV mainly affect adults, especially those aged 18–45 years, the economically and pedagogically most productive period of life for most people. So for companies (but also governments and non-governmental organisations) in sub-Saharan Africa, HIV and tuberculosis are the biggest threats to the health of their workforce and they should be priorities.

HIV infection is due to an individual's private behaviour, and therefore not the company's business

Some people, and indeed some companies, contend that HIV infection, being usually the result of sexual intercourse, is not a workplace-acquired condition and that therefore there is no obligation for companies to treat their HIV-infected employees. This idea sounds logical, but in fact many diseases of workers are not occupational, and still companies cover the costs of medical treatment (eg, for malaria, tuberculosis, sexually transmitted infections, diabetes, and hypertension). Why should HIV be an exception?

Public health is a government's responsibility

To protect the health of the citizens, some argue, is the government's responsibility, so private companies have no role in health care. However, the reality is that in many places governments do not provide adequate health care or preventive services. In that case, private companies (or non-governmental organisations) should do what is in the interest of their employees: provide the required health care and not hide behind a government's failure to deliver. This approach best serves the long-term interests of the company as well.

Prevention is the only way to tackle the HIV epidemic

Treatment cannot be the solution to the HIV epidemic, some also say, and prevention should be centre stage. There are some multinational companies in Africa that have comprehensive HIV infection prevention programmes in place, but do not offer HAART to their workers and dependants.¹ The harsh consequence of this position is that those already infected are left to die. Although prevention efforts are crucial and should be increased, those who are already infected have the right to be treated to avoid a certain and premature death. Additionally, prevention programmes benefit from

simultaneous HAART programmes. Trying to choose between prevention and treatment is not helpful.²²

Discussion

Providing antiretroviral treatment to workers of large companies in Africa is feasible. Heineken mostly offers health care for its staff through company health services, but the arguments apply equally to companies that offer health care outside company clinics, such as through health insurance. In the past 4 years, various arguments have been raised by outsiders in criticism of Heineken's workplace HAART programmes. In this article we have listed 11 such reasons, none of which stand up to scrutiny. Rather than asking Heineken or other companies that provide HAART to their employees: "Why do you do this?" we feel it is time to ask other companies: "When will you start?"

Contributors

S Van der Borgh and T F Rinke de Wit had the original ideas. S Van der Borgh wrote the first draft. All authors discussed the ideas and commented on drafts in various stages. S Van der Borgh, T F Rinke de Wit, and M F Schim van der Loeff wrote subsequent drafts. All authors read and approved the final version.

Conflict of interest statement

S Van der Borgh and H Rijckborst are employees of Heineken. T F Rinke de Wit, M F Schim van der Loeff are employees, V Janssens is a former employee, and J M A Lange is a Board Member of PharmAccess Foundation, a non-governmental organisation contracted by Heineken to support its workplace programme.

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