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What can companies do to support HIV-positive workers?

Recommendations for medium and large sized African workplaces

Introduction and overview

Over 22 million people in sub-Saharan Africa are HIV-positive (UNAIDS/WHO, 2009). More than 90% of HIV-positive people are adults in the prime of their lives (ILO, 2008). In 2008 the adult (15 – 49 years) prevalence rate across sub-Saharan Africa was 5.2% (UNAIDS/WHO, 2009) with markedly higher rates in certain countries and sub-populations. The nine southern-most countries in Africa all have an adult HIV prevalence rate above 10%, with Swaziland (26%), Botswana (24%) and Lesotho (23%) suffering the greatest adult prevalence (UNAIDS/WHO, 2009). In Zimbabwe, the country in which our interviews with workers were conducted, the adult HIV rate was 14% in 2009 (ZMoH 2009). Labourers in mining and transportation have higher HIV risk due to factors such as long periods of time spent living away from spouses (International Finance Corporation, 2002). For instance, miners are frequently housed in all-male barracks at the mining site, returning home to their spouses only during holidays. Workplaces in sub-Saharan Africa have an important role to play in addressing HIV among their employees, the families of their employees, and the communities in which they operate. The imperative is an issue of social responsibility, with global media, shareholders and consumers increasingly placing the onus on companies to provide basic wellbeing support to workers, especially surrounding HIV in poor countries. It is also an issue of economic benefit to companies, since the cost of AIDS in the workforce is frequently higher than providing workplace HIV management, discussed further below.

This paper provides recommendations on how medium and large sized workplaces can best support HIV-positive workers to improve productivity and fulfil their social responsibility to support employee health. These recommendations have been developed through (i) a review of the academic and grey literature on workplace HIV interventions and (ii) our own qualitative study of workers on antiretroviral therapy (ART).

This article focuses on medium and large sized workplaces (i.e. with more than 50 staff, based on the European Commission definition, 2005) where workers generally remain onsite, or work from the same site for long periods of time (such as medium or large offices, mines, forestry estates and commercial farms). Those who work from small offices or home offices, or those

who travel frequently and work from many different customer sites and satellite locations may require different supports and are beyond the scope of this paper.

Social responsibility

Companies are increasingly encountering greater expectations from consumers, shareholders and society more generally, of their responsibility to their workers and the communities in which they function (George, 2006). Broader understandings of company accountability, the rise of the concept of corporate social responsibility and underlying issues of moral obligation have all been cited as reasons why employers ought to support HIV positive workers in sub-Saharan countries (George, 2006; see, for example, Anglo American, 2008 and BMW Group Member Profiles, 2008). Contemporary corporate social responsibility (CSR) is the integration of social, environmental and economic concerns into business operations. It focuses on business sustainability and accountability. i.e., one understanding of the CSR approach is that it requires support of HIV-positive workers in order to ensure a healthy workforce and long-term production sustainability. This approach also creates a norm and expectation of accountability. It draws international media, consumer and stakeholder attention to the extent to which businesses are accountable to the health needs of workers.

Cost of untreated HIV/AIDS to African workplaces

Untreated HIV and AIDS can significantly increase the cost of production both directly and indirectly. While HIV interventions demand significant economic inputs, limiting the impact of disease can be less costly than doing nothing to address health issues in workers (George, 2006). The direct costs of untreated HIV/AIDS to businesses are manifold: paying for sick leave, medical care, death benefits and funeral costs (Elias and Taylor, 2001). Indirect costs of illness and death due to untreated HIV include recruiting and retraining new employees, staff demoralization and strain, and the loss of experienced staff and institutional memory (Elias and Taylor, 2001, Matangi, 2006).

The most in-depth analysis of the cost of HIV/AIDS to businesses is presented by Rosen, *et al.* (2007) and based on human resource data, financial survey data and medical data from 14 companies in southern Africa. They found workplace HIV rates ranging from 5 to 37% and determined that the average cost per employee who leaves work because of untreated AIDS varied from 0.5-5.6 times the annual compensation of the employee affected. For example, in a Zambian tourism company, losing a worker to AIDS cost about US\$1430, equal to just over a

year's salary for a worker at that level. The largest components of the cost of losing an employee to AIDS were: training a replacement worker (28% of total), funeral and death benefits (23%) and paid sick leave (17%). In 12 of the 14 companies examined, overall labour cost increases were between 0.6 and 3%. In the remaining two companies, the overall labour cost increases were higher, at 8.4% and 10.8%. In this study, specific data on tea pluckers offered great insight into the productivity of manual workers with HIV. Tea pluckers with untreated HIV/AIDS were found to be 25-30% less productive over their last two years of work and were absent 18-50 days more than they otherwise would have been. It was possible to determine this difference because the weight of the tea plucked each day by each employee was recorded.

Workers who lack health insurance will likely push themselves to continue working even when not physically fit to do so (Elias and Taylor, 2001). Not only is production reduced, but safety is affected. Accordingly, sick workers can be a hazard to themselves and others, particularly those on physically demanding job sites such as mines and factories (Elias and Taylor, 2001).

HIV treatment and good business

Properly administered ART can extend the healthy life span of workers by 10 years or more (Walensky, *et al.*, 2009). Research from South Africa has shown that workplace ART provision can achieve HIV viral suppression comparable to levels reported in developed countries (Charalambous, *et al.*, 2007). Rosen, *et al.* (2008) found that pre-ART workers were almost twice as likely to report being unable to work in the previous 5-day work week than those who had recently begun ART. In addition, those on ART for 3-6 months were absent on average 3 fewer days per month than those on ART for less than 3 months. Another recent review of the economic outcomes of AIDS treatment reinforces these findings: work absenteeism decreased significantly over a worker's first year on treatment and that ART use improved productivity (Beard and Feeley, 2009).

Eholie, *et al.*'s study (2003) of an electric company in Côte d'Ivoire compared the year before ART provision to the two year period following ART provision. The company employed 3,500 workers, most of whom were professionals who had trained for one to five years. Its annual profits were around US\$5.6 million. They found a 94% decrease in HIV-related absenteeism, an 81% decrease in HIV-related hospitalisations, an 8% decrease in new clinical cases of AIDS and a 58% decrease in HIV-related mortality. These changes brought about by ART resulted in

savings of over half a million dollars (USD) in the two years, including US\$287 000 saved due to reduced absenteeism.

Methodology

Review of the literature

Literature on workplace HIV interventions published between 2000 and 2010 was reviewed, focusing on HIV-positive worker support. For academic papers, the key search terms were: *([HIV OR AIDS] AND [intervention OR program*]) AND (antiretroviral OR ART OR ARV) AND (work* OR employ* OR company OR companies OR business*)* as well as *([organizational support OR human resource management] AND [HIV OR AIDS])* in Scopus, CINAHL and Web of Knowledge. Reference lists from key articles were scanned to identify further studies for possible inclusion. Internet searches of the grey literature were then performed using the same key terms listed above, followed by a focussed examination of publications from the International Labour Organization (ILO), World Economic Forum (WEF), South African Business Coalition on HIV & AIDS (SABCOHA), Joint United Nations Programme on HIV and AIDS (UNAIDS), International Finance Corporation (IFC), Global Business Coalition on HIV/AIDS, TB and Malaria (GBC) and International AIDS Economics Network (IAEN). Finally, three established international experts on workplace HIV support were asked to identify any material that may have been missed.

In-depth interviews with workers on ART

To supplement findings from the literature review and provide first hand input from workers on ART, nine in-depth interviews with HIV-positive workers on ART were conducted in the eastern Zimbabwean province of Manicaland. Ethical approval was granted by the Medical Research Council of Zimbabwe (Ref: A/681) and the Imperial College Research Ethics Committee (Ref: ICREC_9_3_13).

Manicaland is a rural province which had an adult HIV prevalence rate of about 20% (Gregson, *et al.*, 2010). The interviews sought to elicit descriptions of how employment helps or hinders adherence, and how workplaces provide support or present challenges. The respondents came from three workplaces: a forestry estate with approximately 800 employees, the local department of a national tea estate with 85 employees in Manicaland and a gold mine with a

total of 500 employees. The interviews were conducted in Shona, the local language, by a trained researcher and later translated and transcribed into English.

Chart 1: Basic information on the Zimbabwean interviewees

Code name	Age	Company and position	Years known HIV+	Years on ART
PE	38	Forestry estate, gardener	3.0	2.0
ML	50	Forestry estate, sawmill machine maintenance	3.5	1.0
CO	38	Forestry estate, sawmill forklift operator	0.75	0.8
CL	58	Mine, above ground maintenance department supervisor	1.0	1.0
JA	35	Mine, underground scraper machine operator	0.5	0.25
NH	42	Mine, underground assistant mine overseer	0.6	1.0
MO	35	Tea factory, foreman of tea packing and dispatching	3.0	3.0
TE	52	Tea factory, drying department	1.5	1.0
MA	39	Tea factory, cleaner	3.0	3.0

Total interviews: 9

Informants were recruited using opportunistic sampling at the on-site workplace-run clinics where (antiretrovirals) ARVs were distributed. Initial approaches were made to management, who then allocated head nurses to assist our access to workers. After receiving permission from the head nurse at each site, staff put the researcher in touch with workers coming to collect medication. All who were approached agreed to be interviewed and were given two kilograms of soap as a token of gratitude. All the respondents were male.

Analysis

The literature review enabled the identification of 31 relevant articles. Almost all articles found in the search focused on Africa, with the majority focusing specifically on South Africa. The articles were examined for information on workplace HIV interventions. The interviews were analyzed by identifying themes related to workplace support (or lack thereof), with the help of the qualitative data management software NVivo. Text segments pertaining to specific themes were coded. Coded segments were grouped under larger thematic categories.

Seven themes emerged from our analysis of the literature and the interviews. These themes were: (1) the need for workplace HIV policy, (2) elements of effective workplace voluntary counselling and testing (VCT), (3) workplace HIV disease management programs (DMPs), (4) promoting treatment uptake and minimizing attrition through confidentiality and management support (5) HIV-positive peer educators, (6) day to day assistance to help HIV-positive workers and (7) additional concerns of nutrition support, treatment of opportunistic infections and support to temporary/contract workers . The headings in the 'Findings' section below are based on these seven themes.

Findings: Hands on recommendations for supporting HIV-positive workers

(1) Laying the foundation for supporting HIV-positive workers: Develop and publicise a workplace HIV/AIDS policy

Both literature and interviews highlighted the importance of developing and publicizing a clear policy on HIV/AIDS, guided by international norms and referencing national HIV policy, so that employers and employees understand their health rights and responsibilities.

Our interviews with HIV positive workers in Zimbabwe illustrated that employees frequently lacked information on their company's stance towards HIV. In fact, most interviewees stated that the primary reason they delayed being tested for HIV was because they feared that being found HIV-positive would lead to losing their jobs or being demoted or transferred to a different department.

Some people are afraid of tests because they are afraid of losing their jobs. They feel an HIV positive status would threaten their position at work. They think they will be sacked or be removed from their comfortable jobs. (PE, 38, forestry estate gardener)

The interviewees explained that these fears were based on rumours and witnessing the re-assignment of workers who were constantly ill to physically easier tasks. However, informants noted that people were not re-assigned, demoted or fired because of HIV status but only because of illness. They clarified that in their workplaces, HIV status was not acknowledged as long as workers were able to handle the physical elements of their duties, something those on ART or with well managed pre-ART could do.

Interviewer: Does your employer consider your HIV status?

CO (38, sawmill forklift operator): I don't think they care that much. All they are concerned about is their production.

The workers frequently referred to the need for clarity surrounding the rights of workers so that more people would be tested:

CL (58, aboveground mine maintenance): I think the nurses here were very confident that I was still capable of carrying out my duties effectively and even my supervisors were very supportive. They felt I am still very able to do my duties. The senior management were also very supportive...

Interviewer: Why do you think some of your colleagues are afraid of getting tested?

CL: I think for many workers who are just as uneducated as I was, the problem is that of fear. They don't have the correct information so they die with shame without even taking the HIV tests

I think people should be told that these results will not be used in any way by decision makers in the company (CO, 38, sawmill forklift operator)

Workers who know there is an official policy of non-discrimination and support are more likely to be willing to engage in workplace HIV programmes. For example, BMW South Africa has achieved workplace VCT rates of over 90%. This high uptake has been directly linked to their progressive HIV policy and guidelines released in 2000, and the larger 'culture of trust' developed thereafter (Mayet, 2002; BMW Group Member Profiles, 2008). Based on the interviews and literature review, this paper suggests that a workplace HIV/AIDS policy should include the following elements:

- An affirmation of the right of all employees to fair access to benefits, promotions, pay and continued employment regardless of HIV status as long as physically able to do so
- A clear statement of zero tolerance for discrimination against HIV positive people
- Directions for employees on how to take forward an HIV-related complaint
- An affirmation of the employees' rights to confidentiality and non-disclosure of their status

The policy should be written clearly, using language comprehensible to the employees, and carefully communicated to all members of the workforce (displayed publicly or sent out).

(2) Identifying HIV-positive workers: Implement a workplace VCT programme tailored for high uptake

HIV-positive employees who do not know their HIV status will not seek treatment. Brink (2005) points to lack of HIV status awareness as a prime challenge facing treatment programmes. The sooner HIV-positive individuals know their status, the faster they can access appropriate drugs and counselling, and take steps to avoid re-infection or infecting others. It is substantially more expensive to treat HIV at a late stage (George, 2006; Day, *et al.*, 2003). The counselling element of VCT can be valuable to all who are tested, including those who do not have HIV. VCT has also been found to be one of the most economically viable strategies to address HIV because it offers great benefits to workers and is relatively low cost (Creese, *et al.*, 2002).

Convenient and accessible VCT will have higher uptake. Corbett, *et al.* (2006) found that uptake of VCT is higher if the services are offered on-site rather than through vouchers for off-site testing (51% uptake versus 19% in their study of a workplace in Zimbabwe). However the literature reviewed and our interviews suggest that assessing whether a workplace will have better results by testing on- or off-site is a complex issue. A corporate decision about on-site testing will depend on the capacity to uphold confidentiality surrounding test results and ensure that presenting for testing will not result in stigmatization (Bhagwanjee, *et al.*, 2008).

Conversely, workplaces must ensure that workers are not coerced or pressured into being tested—an issue illuminated in Bhagwanjee *et al's* (2008) study of VCT in a South African mine. This study found that provider-initiated, routine yearly testing, in which the entire staff were expected to participate, helped to normalize VCT. However they also expressed concern that some workers felt they had to get tested because of the need to conform to structurally induced social pressure. If a workplace cannot create an appropriate on-site environment for HIV testing, it should facilitate off-site testing instead. Options include offering vouchers or providing detailed information about how to access local services. Emphasizing that management cannot access the results instills worker trust in the programme's confidentiality and leads to higher uptake; having an independent organization conduct the testing is one way to increase worker trust (Stevens, *et al.*, 2006; Bhagwanjee, *et al.*, 2008).

Whether on- or off-site, giving workers time off to attend VCT will encourage participation. Thomas, *et al.* (2005) found that while 82% of tested workers at a South African workplace said they wanted to come back and get their results, only 57% actually did, primarily because of scheduling difficulties. Therefore, another way to encourage participation is to give out HIV results at the time of testing.

VCT is best offered directly after or in conjunction with HIV education, which includes identifying sources of support for HIV-positive people. Workers will generally be more interested in being tested if they know there is support available if they are found to be HIV positive. Evidence suggests that VCT with no peer education averages 50% uptake and with high quality peer education 80% (Thomas, *et al.* 2005).

Other strategies to overcome reluctance for testing have also been used successfully. One such strategy is to create incentive programmes such as a draw for a family vacation to all those who attend VCT (George, 2006). Another strategy, used by Anglo American, a large mining company, is to publish the VCT uptake levels of different sections and send them to other mine sites so that teams can benchmark themselves against the best performing mines (Brink and Pienaar, 2007). In this programme they were able to achieve VCT uptake around 80% in their mines in southern Africa. Strong leadership support to employee uptake is also linked to successful testing rates (Stevens, *et al.*, 2006; Thomas, *et al.*, 2005). For instance, direct participation in testing by upper management goes a long way to overcome employee reluctance. Compelling evidence for the success of this strategy was found by Stevens, *et al.* (2006): the only unit in their study that achieved 100% VCT was one lead by a particularly enthusiastic unit leader. Sites with less supportive leaders generally had low uptake. ART expert Sean Jolly, chief executive of Lifeworks, an HIV management firm, found that strong organizational support can actually override stigma around VCT uptake. Lifeworks, for instance, achieves VCT rates of over 80% where organizational support is good.

(3) Supporting HIV-positive workers through disease management programmes (DMPs)

An estimated 10% of HIV-positive people at any given time require ART (George, 2006) but all HIV-positive people need support and monitoring. Regular HIV staging and CD4 blood cell

counts ensure that workers are placed on ART when it becomes necessary. Treatment for any subsequent infections, especially tuberculosis (TB) and sexually transmitted infections (STIs), as well as nutritional and lifestyle counselling are vital components of HIV management, even in the pre-ART phases.

According to Connelly and Rosen (2005) there are four models of employer-supported HIV management:

- Model 1: Employer provider: The employer internally finances and delivers treatment and care.
- Model 2: Medical aid scheme: Employers subsidise medical aid scheme premiums for employees who choose to make the co-payment.
- Model 3: Independent DMP: A specialised HIV/AIDS disease management company is contracted by an employer to manage the costs and treatment.
- Model 4: Clinic provider: An external treatment and care provider is contracted by the employer to provide HIV-related services either at the workplace or at an outside clinic.

The authors of this paper add an additional approach to Connelly and Rosen's (2005) list based on services reported by our interviewees in Zimbabwe:

- Model 5: Employer assisted public provider: The employer assists workers in accessing treatment from public hospitals, generally through encouraging visits and providing transportation.

Connelly and Rosen (2005) estimate that model 1 and model 3 facilitate the highest ART uptake because they are generally linked to workplace VCT and outreach. Medical aid schemes (model 2) tend to exclude lower-wage workers since few enrol in these programmes because of the cost of the co-payment; this type of scheme has the lowest uptake. In addition, medical aid schemes rely primarily on worker initiative to access care.

The hybrid model (model 5) is popular in Zimbabwe where many employers run on-site clinics and link to public hospitals for drugs and medical support. This model is particularly suitable for medium sized enterprises because it can provide the best elements of model 1 (i.e. workplace outreach, links to workplace VCT and convenient access to drugs) without needing a complex onsite medical facility (i.e. CD4 cell count machine, laboratory, doctor).

(4) Promoting HIV-treatment uptake and minimizing attrition

Low uptake of workplace DMPs and high attrition have been problems across many sectors (George, 2006; Connelly and Rosen, 2006; ILO, 2003; Bhagwanjee, *et al*, 2008). Anglo American in South Africa, widely considered to exhibit one of the strongest employer responses to HIV, has found that over 30% of those who started on ART were no longer being treated (Connelly and Rosen, 2006). Operational costs of DMPs increase when workers do not access services or default (George and Quinlan, 2008). It is vital to focus on timely worker enrollment in DMPs and to sustain adherence. The literature and interviews suggest that there are two key ways for companies to do this: once again, ensure confidentiality and provide strong support.

Maintaining confidentiality

The practical challenges of maintaining confidentiality are thought to be a central reason for high ART attrition (ILO, 2003). Workers have expressed concern that the rigours of disease management, which includes frequent visits to the clinic and, when on ART, taking a pill with food twice daily, will lead their colleagues to suspect that they are HIV-positive (Setwe, 2009). Interviewees referred to these practical issues as well:

I know some senior people would go to hospital secretly to collect their medication and they don't want anyone to know that they are on ART, for us, the lower rank workers, it would be easy to be known because we visit the [worksite] clinic and we gather as a group for transport to the hospital (PE, 38, forestry estate gardener)

There are also issues around other workers seeing you taking the drugs; they will talk about it in a bad way and begin to label you as a patient, so it's always good to take the tablets away from the crowd (CO, 38, sawmill forklift operator)

...I have not told them that I am HIV positive, but I am sure they are aware because we just come to the clinic on a regular basis in a very open fashion (JA, 35, mine underground machine operator).

Considering these practical barriers maintaining confidentiality requires creative solutions. BMW successfully adapted facilities within the company to allow for better privacy during discussions with healthcarers (ILO, 2003). Another option is to provide workplace support that allow workers to access outside care if they desire, for example through a reimbursement system. Being seen

at the clinic on 'ART days' was an issue that came up in our interviews. It highlighted the fact that workplace clinics can consider switching from having one day per week for ART patients to allowing patients to come at different times throughout the week. This would enable ART patients to better blend in with other service users.

Reducing stigma to such a degree that hiding one's HIV status becomes less important would be ideal. However this is not yet a reality. Regardless of the degree of stigma associated with being HIV-positive, it is still the employee's right to keep his or her HIV status private.

Support from management

Support from management is important not only in influencing VCT uptake but also in terms of supporting HIV-positive workers on DMPs. As a Zimbabwean worker explains, supervisors can make life on ART more difficult:

Some departments are so busy and production oriented that one cannot take a minute. If a supervisor does not understand they say: "you AIDS patients are difficult to work with" because the worker would have asked to be excused for a few moments to take the drugs (TE, 52, tea factory drying department).

Our interview findings suggest that supervisors must be informed that the company has a policy of accommodating clinic visits or time to take pills. Moreover, supervisors must be given the space by their managers to relax production briefly to support workers on ART. If lower-level managers are under intense pressure from above and do not understand the larger productivity benefit of supporting workers on ART, they may be frustrated by the special needs of these workers.

(5) Day-to-day assistance to help HIV-positive workers remain healthy and productive

The interviewees spoke of the importance of workplace support in the form of being given time off to go to the clinic and providing transportation if they had to travel off-site. Providing transportation to clinics or onsite care can increase efficiency by reducing the time, money and energy workers must expend on HIV-management as the following quotation illustrates:

The company has been very supportive, I am sure now the nurses are given free transport to go and collect our ARVs every month so that we just conveniently

collect our drugs from this company clinic. We don't need to go to [name deleted] hospital because the company provides transport for the drugs to be brought here (CO, 38).

In addition, several interviewees noted that disruptions in routine can lead to taking pills late; workplaces should seek to maintain predictable hours for HIV-positive workers.

Most workers on ART also want to continue in their original positions for as long as possible but may need some accommodation, such as longer breaks or modified duties. Continuing to work in approximately the same capacity is economically important and also affirms their personal and social identity as 'normal' and productive people. The following quotations explain:

I feel I am the same as workers who are not infected with HIV/AIDS ... The only problem comes with people who begin to perceive a person as an HIV sufferer and hence put boundaries on what one can and cannot do. Otherwise I feel I am just as good as anyone who is HIV negative, except the fact that I take my pills every day. There is nothing that can stop me from achieving the best at work. (JA, 35, underground mine scraper machine operator)

Being HIV positive makes me work even harder so that I prove my HIV status does not make me a less desirable employee. (MO, 35, tea factory foreman)

I have regained enough strength to do all my chores, therefore I no longer feel like a patient when I am at work. (CL, 58, above-ground mine maintenance)

However, even well managed HIV has some adverse effects on the physical capacities of workers, particularly as treatment time advances. As discussed in the ILO's (2003) *Workplace action on HIV/AIDS: identifying and sharing best practice* employers should—and are often obligated, according to national disability legislation—make reasonable accommodations for HIV-positive workers for as long as possible within the same job.

(6) Provide a platform for HIV-positive peer educators

Businesses can provide a platform for peer education involving willing HIV-positive workers. Peer education is a practical and inexpensive initiative that can simultaneously meet important social and psychological needs of HIV-positive workers. This helps develop an open and supportive workplace environment that encourages other employees to be tested and take up treatment if needed. De Coito (2005) examined factors affecting enrolment onto workplace ART.

He recommended involving people living with HIV to reduce the stigma surrounding testing and treatment. Although peer education programmes surrounding HIV have been extensively discussed and endorsed, the specific desire and capacity of HIV-positive workers to act as educators is under-explored and came out a central theme in our qualitative research. Peer education performed by HIV-positive people can make a strong contribution to outreach and stigma reduction.

Every HIV-positive worker interviewed engaged in some form of peer education. The following is an example:

I have disclosed even to my workmates [who were] complaining of same kind of illness that I used to have. I encourage them to consider getting tested for HIV. Some wouldn't appreciate the advice but when they decided to get tested they would come back and express their gratitude. I've disclosed to many people that I used to have "on and off" illnesses but after taking HIV tests and following through the procedure I am now happy and ok. (PE, 38, forestry estate gardener)

Several interviewees explicitly discussed their desire to talk to and teach colleagues about HIV:

Maybe support groups: people should unite and meet doing programmes such as growing herbs, teaching others and so on (MO, 35, tea factory foreman).

Harnessing the interest shown by HIV-positive workers to encourage VCT uptake and facilitate better understanding of HIV among workers will also support HIV-positive workers themselves. It recognizes and affirms the knowledge and capacities of HIV-positive employees.

(7) Additional elements: Nutrition, opportunistic infections and temporary/contract workers

Improve nutrition

Although issues surrounding accessing appropriate food did not come up in the interviews, according to several comprehensive studies (Setwe, 2009; Elias and Taylor 2001), workplace wellness must include not only suppressing the viral load through ART but also reconstituting and maintaining the immune system by ensuring proper nutrition for an employee on ART. The ILO (2001) *Code of Good Practice on HIV/AIDS in the World of Work* recommends providing nutritional supplements to HIV-positive workers. Skovdal, *et al.* (under review) found that the

struggle to find nutritious food and the discomfort of taking ARVs on an empty stomach led some patients to discontinue treatment.

Address opportunistic infections (OIs)

The ILO (2003) stresses that comprehensive workplace responses to HIV must include testing and treatment for OIs, such as TB and STIs. HIV-positive people are more vulnerable to TB and STIs since they may lack the CD4 blood cells to fight these infections. TB and STIs can radically weaken people living with HIV/AIDS. These infections can also spread through the workplace. TB is a major work-related concern since it can be contagious when left untreated. STIs are a major aggravator for HIV transmission; STI treatment can play a major role in HIV prevention (WHO, 2006). Many of those interviewed experienced severe opportunistic infections prior to accessing ART and relied on support from workplace clinics in dealing with these infections.

Reach temporary employees and contractors

Temporary employees and contractors are most vulnerable to contracting HIV and not receiving workplace disease management. George (in press) has found that temporary employees and contract workers (often migrants) in South African mines are more vulnerable in terms of HIV risk, HIV testing behaviours and ART uptake. In their study of workforce prevalence in southern Africa, Evian, Fox, MacLeod, Slotow and Rosen (2004) reported that contract workers had an HIV prevalence rate of 23%, which was higher than the four other cadres of workers: managers (4.5), skilled (10.5), semi-skilled (18.7) and unskilled (18.3) workers. Reaching out to these particularly vulnerable populations requires providing HIV-related information that is sensitive to the target group's language and culture.

Conclusion

While there was striking consistency in experience and opinion about HIV support at the workplace among those interviewed, it is important to note that these interviews only reflect the opinions of a group of workers at three medium and large-sized workplaces in rural Zimbabwe; they may not reflect the full range of opinions on all issues. Female workers, urban workers and those in office work environments, for example, may feel differently about some issues. Further research to explore more diverse groups of workers (and also to examine small work environments, home office workers and mobile work—areas not addressed by this paper) would be beneficial. Nonetheless, the insight into the lived experiences of workers on ART provided by these interviews enriched our findings and confirmed conclusions from the literature review.

This paper provides recommendations for businesses on how to support HIV-positive workers. It provides practical strategies for workplaces on how to encourage VCT and support the health of HIV-positive workers, including strategies to improve ART access and adherence. Workplace HIV management requires meeting the physical, social and emotional needs of employees. Doing so involves improving HIV-related medical care through providing ART, assisting with nutrition, and providing care for OIs. It also requires reducing fear of disclosure and stigma by developing and supporting an HIV policy, emphasizing confidentiality, and bringing top and middle management onside. Additionally, it involves respecting the capacities and attributes of HIV-positive workers by accommodating their workplace-related needs (such as lighter tasks) and encouraging peer-education.

Business responses to HIV have been improving steadily, particularly as ART becomes more widely affordable and available across sub-Saharan Africa. In addition to social responsibility, there are many practical reasons for companies to support HIV-positive workers: financial gains of maintaining worker productivity, increased employee satisfaction and improved public image.

Works Cited

Anglo American (2008), "Business ethics and corporate responsibility", The Times 100, The Times Newspaper Limited and MBA Publishing Limited, available at: www.thetimes100.co.uk/case-study--business-ethics-and-corporate-social-responsibility--65-332-2.php (accessed 15 October 2010).

Beard, J. and Feeley, F. (2009), "Economic and quality of life outcomes of ART for HIV/AIDS in developing countries: a systematic literature review", *AIDS Care*, Vol. 21 No. 11, pp. 1343-1356.

Bhagwanjee, A., Petersen, I., Akintola, O. and George, G. (2008), "Bridging the gap between VCT and HIV/AIDS treatment uptake: perspectives from a mining-sector workplace in South Africa", *African Journal of AIDS Research*, Vol. 7 No. 3, pp. 271-279.

BMW Group Member Profiles (2008), "Global business coalition against HIV/AIDS", TB and Malaria, available at: www.gbcpact.org/itcs_node/4/496/member_profiles/384 (accessed 22 September 2010).

- Brink, B. (2005), “An interim appraisal of the Anglo American AIDS treatment programme”, presentation at the Second South African AIDS Conference, Durban, 7-10 June.
- Brink, B. and Pienaar, J. (2007), “Business and HIV/AIDS: the case of Anglo American”, *AIDS*, Vol. 21 No. S3, pp. S79-S84.
- Charalambous, S., Innes, C., Muirhead, D., Kumaranayake, L., Fielding, K., Pemba, L., Hamilton, R., Grant, A. and Churchyard, G.J. (2007), “Evaluation of a workplace HIV treatment programme in South Africa”, *AIDS*, Vol. 21 No. S3, pp. S73-S78.
- Connelly, P. and Rosen, S. (2005), “Will small and medium firms provide HIV/AIDS services to employees? An analysis of market demand”, *South Afr J Econ*, Vol. 73 No. S1, pp. 613-626.
- Connelly, P. and Rosen, S. (2006), “Treatment for HIV/AIDS at South Africa’s largest employers: myth and reality”, *S Afr Med J*, Vol. 96, pp. 128-133.
- Corbett, E., Dauya, E., Matambo, R., Cheung, Y.B., Makamure, B., Bassett, M.T., Chandiwana, S., Munyati, S., Mason, P.R., Butterworth, A.E., Godfrey-Faussett, P. and Hayes, R.J. (2006), “Uptake of workplace HIV counseling and testing: a cluster-randomised trial in Zimbabwe”, *PLoS Med*, Vol. 3 No. 7, pp. 1005-1012.
- Creese, A., Floyd, K., Alban, A. and Guinness, L. (2002), “Cost-effectiveness of HIV/AIDS interventions in Africa: a systematic review of the evidence”, *Lancet*, Vol. 359 No. 9318, pp. 1635-1643.
- Day, J., Miyamura, K., Grant, A., Leeuw, A., Munsamy, J., Baggaley, R. and Churchyard, G.J. (2003), “Attitudes to HIV VCT among mineworkers in South Africa: will availability of antiretroviral therapy encourage testing?”, *AIDS Care*, Vol. 15 No. 5, pp. 665-672.
- De Coito, T. (2005), *Factors Affecting Enrolment onto an HIV/AIDS Workplace ART Programme*. MBA Research Report, Wits Business School, Johannesburg.
- Eholie, S., Nolan, M., Gaumon, A., Mambo, J., Kouam-Yebouet, Y., Aka-Kakou, R., Bissagnene, E. and Kadio, A. (2003), *ART can be Cost-Saving for Industry and Life-Saving for Workers: a Case Study from Coˆte d’Ivoire’s Private Sector*, *Economics of AIDS and access to HIV/ AIDS care in developing countries: issues and challenges* Agence Nationale de Recherches sur le Sida, Paris.
- Elias, R. and Taylor, I. (2001), “HIV/AIDS, the mining and minerals sector and sustainable development in southern Africa”, *International Institute for Environment and Development*, available at: www.iied.org/pubs/pdfs/G00602.pdf (accessed 21 September 2010).
- European Commission (2005), “The new SME definition user guide and model declaration”, *Enterprise and Industry Publications*, available at: http://ec.europa.eu/enterprise/policies/sme/files/sme_definition/sme_user_guide_en.pdf (accessed 20 July 2011).
- Evian, C., Fox, M., MacLeod, W., Slotow, S. and Rosen, S. (2004), “Prevalence of HIV in workforces in southern Africa, 2000-2001”, *South African Medical Journal*, Vol. 94 No. 2, pp.

125-130.

George, G. (2006), "Workplace ART programmes: why do companies invest in them and are they working?", *African Journal of AIDS Research*, Vol. 5 No. 2, pp. 179-188.

George, G. and Quinlan, T. (2008), "Health management in the private sector in the context of HIV/AIDS: progress and challenges faced by company programmes in South Africa", *Sustainable Development*, doi 10.1002/sd.366.

Govender, K., Akintola, O., George, G., Petersen, I., Bhagwanjee, A. and Reardon, C. (2011), "Psychosocial and behavioural correlates of attitudes towards Antiretroviral Therapy (ART) in a sample of South African mineworkers", *Sahara*, Vol. 8 No. 2, pp. 55-64.

Gregson, S., Gonese, E., Hallett, T., Taruberekera, N., Hargrove, J., Lopman, B., Corbett, B., Dorrington, R., Dube, S., Dehne, K. and Mugurungi, O. (2010), "HIV decline in Zimbabwe due to reductions in risky sex? Evidence from a comprehensive epidemiological review", *International Journal of Epidemiology*, Vol. 104 No. 37, pp. 1311-1323.

ILO (2001), *An ILO Code of Practice on HIV/AIDS and the World of Work*, International Labour Office, Geneva.

ILO (2003), *Workplace Action on HIV/AIDS: Identifying and Sharing Best Practice*, Background report for Tripartite Interregional Meeting on Best Practice in HIV/AIDS Workplace Policies and Programmes ILO, Geneva.

ILO (2008), "ILO to emphasize workplace role in HIV prevention at international AIDS Conference in Mexico", press release, July 31, available at: www.ilo.org/global/about-the-ilo/press-and-media-centre/press-releases/WCMS_097803/lang--en/index.htm (accessed 1 December 2010).

Matangi, C. (2006), "Skills under threat: the case of HIV/AIDS in the mining industry in Zimbabwe", *Journal of International Development*, Vol. 18 No. 5, pp. 599-628.

Mayet, N. (2002), "BMW South Africa: the drive against HIV/AIDS", available at: www.weforum.org/pdf/Initiatives/GHI_HIV_BMW_AppendixC.pdf (accessed 2 December 2010).

Rosen, S., Feeley, F., Connelly, P. and Simon, J. (2007), "The private sector and HIV/AIDS in Africa: taking stock of 6 years of applied research", *AIDS*, Vol. 21 No. S3, pp. S41-S51.

Rosen, S., Ketlhapileb, M., Sanne, I. and DeSilva, M. (2008), "Differences in normal activities, job performance and symptom prevalence between patients not yet on antiretroviral therapy and patients initiating therapy in South Africa", *AIDS*, Vol. 22 No. S1, pp. S131-S139.

Setwe, G. (2009), "Best practice workplace HIV/AIDS programmes in South Africa: a review of case studies and lessons learned", *PHCFM*, Vol. 1 No. 1, pp. 82-88.

Skovdal, M., Campbell, C., Nhongo, K., Nyamukapa, C. and Gregson, S. (2011), "Contextual and psycho-social influences on ART adherence in rural Zimbabwe: towards a systematic

framework for programme planners”, *The International Journal of Health Planning and Management*, Vol. 26 No. 3, pp. 296-318.

Stevens, W., Apostolellis, A., Napier, G., Scott, L. and Gresak, G. (2006), “HIV/AIDS prevalence testing – merits, methodology and outcomes of a survey conducted at a large mining organization in South Africa”, *S Afr Med J*, Vol. 96 No. 2, pp. 134-139.

Thomas, E., Colvin, M., Rosen, S., Zuccarini, C. and Petzer, S. (2005), “HIV prevalence study and costing analysis undertaken for the development of an HIV/AIDS workplace strategy for Buffalo City Municipality”, available at: www.cadre.org.za/publications.htm (accessed 10 September 2010).

UNAIDS/WHO (2009), “Fact sheet Sub-Saharan Africa”, *AIDS Epidemic Update*, available at: http://data.unaids.org/pub/FactSheet/2009/20091124_FS_SSA_en.pdf (accessed 10 September 2010).

Walensky, R., Wolf, L., Wood, R. et al. (2009), “When to start ART in resource-limited settings”, *Annals of Internal Medicine*, Vol. 151 No. 3, pp. 157-166.

WHO (2006), “Media centre: treatment for sexually transmitted infections has a role in HIV prevention”, August, available at: www.who.int/mediacentre/news/releases/2006/pr40/en/index.html (accessed 20 September 2010).

World Bank (2002), *HIV/AIDS in the Workplace*, IFC good practice note No. 2, The World Bank, Washington, DC, available at: <http://documents.worldbank.org/curated/en/2003/12/2508354/hivaid-workplace> (accessed 15 October 2010).

Zimbabwe Ministry of Health (2009), *Zimbabwe National HIV and AIDS Estimates*, Zimbabwe Ministry of Health and Child Welfare, Harare.