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Highly Active Antiretroviral Therapy and Risky Sex: Is there a Link?

According to South Africa's leading demographic model, the provision of highly active antiretroviral therapy (HAART) for people living with AIDS will have positive spin-offs in terms of limiting the spread of HIV/AIDS. The ASSA2000 Interventions Model[1] (an offshoot of the ASSA2000 demographic model of South Africa) predicts that over a million new HIV infections could be averted in the first twelve years if a HAART treatment programme was added to a set of AIDS prevention interventions. In other words, not only is HAART assumed to prolong the lives of AIDS patients, but it is also assumed to save lives by preventing a significant number of new HIV infections. See Johnson and Dorrington (2002) for a discussion of the modelling assumptions and supporting evidence. This link between AIDS treatment and AIDS prevention occurs for two reasons: firstly, HAART lowers the viral loads of AIDS patients, thereby making them less infectious. Secondly, the model assumes that voluntary counselling and testing (VCT) is an integral part of a HAART programme, and that VCT is effective in encouraging people to practice safer sex.

This modelled link between AIDS treatment and prevention is, however, contentious. According to a recent Joint Health and Treasury Task Team government report (on the economic of providing HAART in South Africa), there is 'no compelling evidence that antiretrovirals would reduce numbers of new infections' (2003: 18). This is a strange comment, given that the ASSA2000 Interventions model (which, as noted above, assumes the opposite) was used by the task team in their modelling work. Nevertheless, seeing as there is wide-spread concern about the nature of the link between HAART and fewer HIV infections, the matter requires serious consideration.

The relationship between HAART and lower viral load is accepted in the scientific literature and will be discussed no further. It is the second assumption, i.e. that HAART will be accompanied by safer sexual behaviour, which is controversial. The ASSA2000 Interventions Model relied on several behavioural studies indicating that there is a positive relationship between behaviour change and VCT (e.g. VCTESG, 2000; de Vincenzi *et al*, 1994). But is this a reliable basis for modelling the net behaviour change resulting from HAART? VCT can facilitate shifts towards safer sexual practices, but might not the very availability

[1] The ASSA2000 Interventions Model was developed by Leigh Johnson and Rob Dorrington at the Centre for Actuarial Research at the University of Cape Town.

of HAART itself result in behaviour change in the opposite direction? Is it not possible that the mere fact of the availability of HAART might cause people to relax their guard and practice less safe sex?

This possibility is often an unmentioned elephant in the room when the pros and cons of introducing HAART are discussed. It has become part of a conventional wisdom against perceiving HAART as a treatment and prevention strategy. But it is not uncontested. Ranged against this view is the argument that HAART is likely to help prevent AIDS by reducing the social marginalisation and stigmatisation of people living with AIDS. This paper explores the evidence and arguments concerning the (potential) link between HAART and sexual behaviour in South Africa. In so doing, it draws on a growing body of international literature.

Does HAART Lead to an Increase in Risky Sex?

Those who argue in favour of prevention rather than treatment tend to be sceptical of the prevention benefits of HAART programmes. In particular, they worry about the possibility that HAART treatment may result in an increase in risky sexual behaviour – thus contributing to the spread of AIDS, rather than reducing it. According to Marseille *et al*:

> 'These dangers are not only theoretical: San Francisco has recently witnessed evidence of increased HIV incidence that may well be linked to misconceptions that HAART is equivalent to a cure and that it eliminates transmission risk by those with HAART-associated viral load reductions. There is some early indication that similar dynamics might operate in less-developed countries. A recently reported 3.7% rise in HIV incidence in Brazil was attributed by the Brazilian Ministry of Health to decreased condom use in young men who have sex with men. The Health Ministry added that the decline in condom use "seemed to have started after the introduction" of antiretroviral drug therapy, which Brazil provides for free to all citizens with AIDS. The added survival conferred by HAART may exacerbate these effects' (2002: 1854).

The first thing to note about the above quote is the qualified language. The increase in HIV incidence in San Francisco 'may well be linked' to HAART, and the decrease in condom use 'seemed to have started' after HAART was introduced. The argument in large part amounts to conjecture because there is no hard evidence for any causal connection between HAART and increased HIV incidence. The thin evidential base for Marseille *et al*'s argument is born out by

an examination of the sources they cite. Their reference for the Brazilian story is a newspaper report, and for the San Francisco trend it is a short article published in the *Morbidity and Mortality Weekly Report* (Page-Shafer *et al*, 1999). This article reported the results of a set of surveys conducted by volunteers in the Stop AIDS Project, a San Francisco community-based organisation.

In this study, men who have sex with men (MSM) were approached in clubs, bars, neighbourhoods and outdoor events and asked to respond to peer-administered one page questionnaires. The resulting annual cross-sectional surveys between 1994 and 1997 revealed an increase in anal sex, in unprotected anal intercourse (UAI) and in the number of sexual partners. This was particularly pronounced amongst younger men. The general increase in recorded risky behaviour was accompanied by a rise in rectal gonorrhoea (Page-Shafer, *et al*, 1999).

No association is made in this report between HAART and increased risky behaviour (as it was not the subject of the study, and no questions were asked about the link between risk behaviour and motivations for it). Instead, an accompanying 'editorial note' hypothesised about a possible connection between HAART and these reported trends:

> 'The increase in reported risk behaviours and increases in STDs in San Francisco coincide with the expanded availability of effective ART (antiretroviral therapy) in San Francisco and the United States. Although ART can result in decreased viral load and decreased risk for HIV transmission, advances in HIV treatment and the resulting declines in AIDS deaths in San Francisco and nationally might lead to increased risk behaviour by MSM who perceive that HIV infection can be managed effectively' (Page-Shafer *et al*, 1999).

Here we have an argument based on the fact that the increase in reported risk behaviour *coincided* with HAART and the supposition that HAART *might* lead to increased risky behaviour. The reference for this theory is a letter published in the *New England Journal of Medicine*. Given that coincidence and hypothesis do not amount to causality, we can conclude that there is no hard evidence cited in the sources used by Marseille *et al* (2002) to question the preventive benefits of providing HAART. The rise in risky behaviour amongst surveyed MSM may be the result of selection bias in the set of cross sectional surveys (discussed in more detail below) or result of other changes in the environment besides the introduction of HAART – for example, the growth of the internet. According to a study by McFarlane *et al* (2000), those who seek sex through the internet are more likely to be homosexual and to engage in risky sexual behaviour. One could in other words, just as plausibly suggest that it is the growth of internet

dating amongst MSM that is the root cause of the rise in risky behaviour amongst some groups.

Given that co-incidence does not amount to causality, studies based on cohorts of HAART patients are better placed to make stronger conclusions about any potential link between AIDS treatment and risky sexual behaviour. However, these kinds of studies are of limited relevance in the sense that they only capture one possible dimension of HAART-related behaviour change, i.e. that experienced by patients on HAART. Nevertheless, they are instructive. A Dutch study of HIV-positive MSM of all ages found that risky sexual behaviour increased in HAART patients once CD4 cell counts had risen and viral loads had dropped to undetectable levels – but that the frequency of unsafe sex was lower again with sustained virological and immunological improvements seen with continued treatment (reported in Stolte *et al*, 2002: 21). This suggests that the increase in risky behaviour amongst MSM may be temporary. An appropriate policy implication may thus be that care should be taken to counsel people on HAART (particularly young MSM) during the time when they first start to feel the beneficial health impact of HAART – rather than to deny them the chance of obtaining HAART on the assumption that they will respond by increasing their risky behaviour (as implicitly assumed by Marseille *et al* [2002]).

Note also that, even if there is an increase in risky sexual behaviour by people on HAART, one cannot draw a straight link between this and increased risk of HIV transmission because of HAART. HAART patients have lower viral loads, and hence are less infectious. As greater risk behaviour and lower infectivity work in opposite directions, the net impact on HIV transmission risk is unclear. However, if the study cited above is anything to go by, the net increased risk of HIV transmission is almost certainly lower for HAART patients – if only because the increase in risky behaviour appears to be temporary and takes place at a time when viral loads are undetectable.

Of greater importance, perhaps, than the behaviour of those on HAART, is the impact of the availability of life-prolonging treatment on attitudes and risk behaviour in the broader population. This is why survey-based studies, such as the San Francisco study cited above, are useful. But these studies, too, have their limitations. An obvious problem with the San Francisco study is that the sample cannot be assumed to be representative of the broader MSM community in the area. This is true also for other international studies that have found increases in sexual risk behaviour amongst MSM in Holland (Stolte *et al*, 2002), Spain (Perez, *et al*, 2002), Canada (CIDPC, 2002) and Switzerland (Dubois-Arber *et al*, 2002). These studies recruited their respondents from bars, clubs, gay organisations, gay media and the like. If MSM who have decided to practice

safe sex no longer frequent gay clubs (or do so less often), then there will be a strong selection bias in studies which recruit their respondents from such clubs. Studies showing an increase in reported high-risk behaviour could simply be surveying a changing population whose composition reflects an increasing proportion of high-risk individuals.

Likewise, those studies which recruit their respondents from STD clinics (as is the case with the Dutch study cited above), are more likely to be interviewing those who have continued to engage in risky behaviour – rather than those who have changed behaviour and lowered their risk of STD infection. In the absence of data on the size of the MSM population in Amsterdam, the Dutch study cannot conclude that the increase in STDs and risky behaviour as recorded by STD clinics is representative of MSM in the area.

A recent study in Barcelona compared the results of cross-sectional surveys between 1998 and 2000 of MSM (recruited mainly from saunas, sex shops and pick-up sites in the public parks) in 1998 and 2000. The main finding was that there were no significant changes in HIV prevalence or risky behaviour over the period (Perez *et al*, 2002: 27). However, concern was raised about the minority of respondents who expressed optimism about HAART. Perez *et al* report that:

> 'Participants who agree that "HIV-positive persons taking ARV therapy are unlikely to transmit HIV" are 1.9 times more likely to have UAI with casual partners, and those who agree that "with ARV it is likely to avoid HIV infection after a potential sexual risk exposure" are 1.7 times more likely. Similarly, those who report "being less afraid of becoming HIV-positive" and "paying less attention to prevention" or "being less worried if they take sexual risks" are also more likely to have UAI' (2002: 27).

Evidence of this kind indicates that there may be a connection between HAART and increased sexual risk behaviour for a minority of MSM. However, commenting on the growing literature of this kind, Laporte notes that 'surveys on knowledge, attitudes and sexual behaviour in the new therapeutic context remain unconvincing (2002: 15). He argues that the studies published since 1997 show 'an excellent understanding of the benefits and limits of new treatments and a minority of people (less than 10% of all respondents) reporting a decreasing practice of safer sex because of treatment possibilities' (*ibid.*). He speculates that this minority may comprise those 'who regularly took risks before the introduction of new treatments, thus justifying their behaviours with hindsight' (*ibid.*). In other words, neither a causal connection (nor its direction) can be established between attitudes to HAART and risky sexual behaviour.

The best available study of the possible relationship between HAART and sexual risk behaviour is that by the International Collaboration on HIV Optimism (2003). MSM were surveyed in 2000 in Australia (Sydney and Melbourne), Canada (Vancouver), England (London) and France (Paris). In all cities, most men were currently employed, around one in five reported having had a STD in the past 12 months, and more than one half said they were in a relationship with another man (2003: 547). The study distinguished between two dimensions of possible 'HIV optimism': one relating to the reduced severity of HIV infection (because HAART boosts the immune system), and the other to reduced susceptibility (because people on HAART are less infectious). To capture both dimensions of HIV optimism, the study asked all MSM the following questions:

- New HIV treatments will take the worry out of sex;
- If every HIV-positive person took the new treatments, the AIDS epidemic would be over;
- People with an undetectable viral load don't need to worry so much about infecting others with HIV;
- HIV/AIDS is a less serious threat than it used to be because of new treatments (2003: 546).

Responses were recorded on the following 4-point scale: 1) strongly disagree; 2) disagree; 3) agree; 4) strongly agree. The responses to each question were then added together to get an index ranging from 4 (the respondent strongly disagreed with each statement) to 16 (the respondent strongly agreed with each statement). A score of 8 indicated that on average the respondent disagreed with all four statements (i.e. were not optimistic). As can be seen in Table 1, overall, mean optimism scores were low (range across cities 5.1–6.8 indicating that most MSM disagreed or disagreed strongly with all four statements. The study notes:

> 'What is striking about this finding is that these gay men were recruited in cities where HAART had been widely available for 4 years at the time of the survey. Despite the dramatic and visible reduction in HIV-related mortality and morbidity in these cities since 1997, only a few gay men expressed 'HIV optimism'. Far from being optimistic, most gay men appeared to be realistic about the benefits of these drugs' (International Collaboration on HIV Optimism, 2003: 548).

UAI with a casual partner was used as the measure of risky sexual behaviour. The 18%-39% of MSM who reported UAI with a regular partner were excluded from the analysis on the grounds that this group is at a lower risk of contracting

HIV than those who have UAI with casual partners (International Collaboration on HIV Optimism, 2003: 547).

Table 1: Mean HIV optimism scores between and within cities

	London (n = 690)		***Paris (n = 1,715)***		***Sydney/ Melbourne (n = 3,120)***		***Vancouver (n = 357)***	
	Mean	**95% CI**	**Mean**	**95% CI**	**Mean**	**95% CI**	**Mean**	**95% CI**
All men	6.3	6.2-6.4	5.1	5.0-5.2	6.4	6.3-6.5	6.8	6.6-7.0
By HIV status:								
HIV-positive	6.4	6.0-6.8	5.4	5.2-5.6	6.5	6.3-6.7	7.3	6.5-8.1
HIV-negative	6.3	6.1-6.5	5.0	4.9-5.1	6.4	6.3-6.5	6.8	6.6-7.0
Never tested	6.1	5.8-6.4	5.3	5.1-5.5	6.8	6.5-7.1	6.6	5.0-8.2
p (within city)	0.5		<0.001		<0.05		0.5	
By age:								
<30	6.6	6.3-6.9	4.9	4.8-5.0	6.5	6.3-6.7	6.9	6.7-7.1
30-39	6.2	6.0-6.4	5.1	5.0-5.2	6.4	6.3-6.5	6.8	6.6-7.0
>39	6.3	6.0-6.6	5.2	5.1-5.3	6.4	6.3-6.5	–	–
p (within city)	0.05		<0.05		0.7		1.0	
By sexual risk behaviour:								
UAI with casual partner	6.8	6.4-7.2	5.5	5.3-5.7	7.0	6.8-7.2	6.7	6.3-7.1
No UAI	6.1	5.9-6.3	4.9	4.8-5.0	6.3	6.2-6.4	6.8	6.5-7.1
p (within city)	<0.001		<0.001		<0.001		0.5	

*p values between cities were <0.001 for all variables
Source: International Collaboration on HIV Optimism (2003: 548)

There was no consistent relationship between HIV optimism and HIV status – thus highlighting the heterogeneous nature of gay men's responses to HAART (International Collaboration on HIV Optimism, 2003: 547). In all countries except Canada, mean optimism scores were higher (but still in the pessimistic range) for MSM who reported UAI with a casual partner than for those who did not. However, as the study notes, causality could not be established from this kind of cross-sectional analysis: 'It is impossible to say whether HIV optimism triggered high-risk behaviour or whether treatments optimism was used as a post-hoc rationalization to justify sexual risk-taking' (International Collaboration on HIV Optimism, 2003: 549).

In short, the conventional wisdom that HAART could easily result in a significant increase in risky sexual behaviour amongst MSM amounts to little more than a 'moral panic'. There is no scientific basis for assuming that the advent of HAART has resulted in increased risk behaviour amongst MSM in high-income countries. There is even less basis for assuming that a possible

behavioural response of a small minority of MSM is likely to be replicated in Africa where the dynamics of the HIV pandemic are very different. Even if a small minority of MSM have increased the riskiness of their sexual behaviour in response to HAART, we need to know how transportable this is to the African pandemic. The fact that the risk of UAI is three times higher for MSM receiving HAART than it is for heterosexuals receiving HAART (Laporte, 2002: 15) suggests that the problem in advanced capitalist countries seems to be concentrated amongst MSM rather than heterosexuals. And, according to a study of MSM in Amsterdam, recent increases in risky sexual behaviour were lowest amongst bisexual men and MSM of non-Western nationality (Stolte *et al*, 2002: 20).

Taken together, this suggests that the problem (to the extent that it exists at all) may be located within a particular sexual sub-culture – and that this sub-culture has little obvious relevance for the African epidemic. It is thus an unacceptable leap of logic to argue (as do Marseille *et al*, 2002) that because of a hypothetical link between HAART and risky sexual behaviour (for which there is little, if any, evidence) we should be cautious about introducing HAART in Africa.

Could *Failure* to Provide HAART Lead to Risky Sex?

As observed earlier, the possibility that HAART may lead to increased risk behaviour is often cited by those who are sceptical of the social impact of AIDS treatment. But the alternative – i.e. the impact on behaviour change of *not* introducing HAART is never considered. The implicit counter-factual for those who oppose HAART is that the failure to provide treatment for those already infected with the virus will have no adverse effects on behaviour. But what if this is incorrect? What if HIV-positive people feel so marginalised and rejected that some of them set out to infect others with the virus?

Just as there is evidence that a minority of the HIV-positive population in the advanced capitalist countries may be increasing their risky behaviour as a result of HAART, there is evidence that a minority of people in South Africa may be spreading HIV deliberately. A survey amongst Zulu speakers in Durban found that just over 60% of respondents said it was common or very common for people to be spreading AIDS deliberately. 24% of them said that they knew people who were spreading HIV deliberately, and a ‘small, but important portion’ reported that they would spread HIV deliberately if they found they were HIV-positive (Jones and Varga, 2001: 31-2). This echoes the results of earlier research amongst youth in KwaZulu-Natal, i.e. that young people were

adhering to the slogan 'infect one, infect all' (Leclerc-Madlala, 1997). As Jones and Varga observe, 'to suggest that a dire need exists for research into the apparent empathetic void, and for identification of means of addressing it, would be an understatement' (2001: 31-2).

It is impossible to say how many people may be experiencing this 'empathetic void' and opting to spread AIDS deliberately – or why they are behaving in this manner. Leclerc-Madlala (1997) argues that this behaviour stems primarily from a lack of hope and a desire not to die alone. One of her respondents argued as follows:

> 'You lose hope. You know that you'll be rejected; you know you're going to die. All you can do is go off and spread it. It's your only hope knowing that you won't die alone. It's the one thing you have to lean on really' (1997: 369).

Another had more aggressive reasons for pursuing the same strategy: 'If I have HIV I can just go out and spread it to 100 people so that we all go together. Why should they be left behind having fun if I must die?'(*ibid.*)

Leclerc-Madlala argues that:

> 'By spreading the virus one is sharing the burden, the anger, the hopelessness and ultimately the death. It is no longer an individual problem but a shared group problem…. If you think you have got it, spread it. This seems to be the predominant ideology shaping the sexual activities of young people in the HIV/AIDS epidemic. For better or for worse, many of KwaZulu-Natal's urban-dwelling youth have developed an acute sense of group destiny. They share a philosophy which says "If I don't have a future (now because of AIDS), then I will try my best to ensure that others don't have one either." In the words of one 19-year-old female student: "by giving it to others, I won't be going down alone. That's my only hope. That's my comfort. It's as simple as that" ' (1997: 371).

Under these circumstances, it is possible to construct a plausible hypothesis that by providing the hope of a longer life through HAART, that inroads can be made into this destructive sexual cultural response. (Such a hypothesis is as least as plausible as the assumption that the increase in risk behaviour among some MSM in the advanced capitalist countries is a result of HAART). It is a reasonable proposition that a social response to AIDS which includes treatment – and thus the gift of hope and longer life for those already infected – is likely to deliver greater social benefits (in terms of lower rates of HIV transmission) than

an uncaring response which effectively consigns a large cohort of young people to the dust-bin of history. At the very least, it will encourage people to come forward for testing. As one young man reported, 'If you know [that you are HIV-positive], that does not help because you are still going to die anyway, because there is no treatment for the disease. So I don't approve of taking the test' (cited in Mapolisa, 2001: 47). Offering the hope of treatment is likely to encourage more people with views such as these to participate in VCT. There is evidence that fear of a positive test result is a major barrier to participation in VCT in South Africa (Ginwalla *et al*, 2002). The possibility of accessing HAART if the test proves positive could thus help break down this barrier.

Of course hopelessness is not simply a product of AIDS. High unemployment, particularly amongst the youth no doubt also contributes to jaundiced view of the future. According to the 1999 October Household Survey, over a third of adults between the age of 16 and 35 are unemployed (Nattrass, 2002a: 208).[2] According to a survey of adults in Khayelitsha-Mitchell's Plain (working class areas of Cape Town), 72% of the unemployed either agreed, or agreed strongly with the statement: 'I feel useless and depressed because I do not have a job'.[3] If it is the case that social marginalisation is fostered by HIV infection and unemployment, then providing HAART is only one arm of the necessary intervention. Providing hope through job creation and poverty relief must be an integrated part of the response.

Combating Myths about AIDS

Another way in which the failure to provide HAART could lead to an increase in high-risk behaviour has to do with myths about curing AIDS. In the absence of a national treatment programme, it is possible that more people will latch onto myths about AIDS cures. Some of these are harmless (such as 'the African potato cures AIDS'[4]) but others, particularly the myth that 'having sex with a virgin cures AIDS', contribute to the spread of HIV.

The myth that sex with a virgin can help 'clean the blood' is common in other parts of Africa and is similar to the belief in nineteenth century England that sex with a child could cure syphilis (Leclerc-Madlala, 1997: 375). It has been linked to the reported increase in child rape and sharp increase in HIV-infection amongst young girls (*ibid.*). However, it is unclear how widespread this myth is.

[2] This is true for whatever definition of unemployment is used. See Table 7.1, Chapter 7.
[3] Own analysis of the Khayelitsha-Mitchell's Plain data set (available from the Centre for Social Science Research at the University of Cape Town).
[4] A focus group study of young African men found evidence for this myth (Tillotson and Maharaj, 2001: 94), as did Mapolisa (2001: 56) in his study of young men in Gugulethu (Cape Town).

According to a recent national household study, 88% of respondents disagreed with the statement 'AIDS can be cured by sex with a virgin', 10% said they didn't know, and 2% agreed (Shisana and Simbayi, 2002: 82). This survey, however, probably under-sampled high risk groups – such as those living in informal settlements, in hostels and in the army. The proportion of people who believe this myth (or who think it might be true) may well be higher. A study of young South Africans found that 7% of respondents agreed with the statement 'Having sex with a virgin cures you of AIDS' and 18% said that they did not know (LoveLife, 2000: 23). According to a study of truck drivers in 1999, 35% thought that sex with a virgin would protect them from or cure them of AIDS (Marcus, 2001: 116). As truck drivers are particularly at risk of contracting HIV, their adherence to this myth is particularly worrying.

A large-scale national prevention and treatment programme can help combat such myths by improving information about AIDS and by demonstrating that HAART offers the chance of a longer, better-quality life for those living with AIDS. One can reasonably hypothesise that, as more people respond to antiretroviral treatment, explanations and actions based on medical science rather than mythology will gain credence.

HAART and Stigma

Another way in which HAART has the potential to reduce risky sexual behaviour is by encouraging disclosure of HIV status and reducing the general level of stigmatisation of people living with AIDS. There is some evidence that these social effects are important and could contribute substantially to creating a social environment less conducive to HIV transmission. The ASSA2000 Interventions Model does not allow for these effects and, in this regard, is probably under-estimating the impact of HAART on prevention.

The stigmatisation of people with AIDS contributes to their pain and suffering, and increases the social and economic vulnerability of those (particularly young people) living in AIDS-affected African households (Strode and Grant, 2001). The stigmatisation of AIDS is also a 'powerful, pernicious force that is an important barrier to prevention efforts' (De Cock *et al*, 2002: 69). To the extent that HAART reduces stigma, it thus contributes to prevention. According to Galvao, there are important social benefits associated with the Brazilian government's policy of providing free access to HAART for people living with AIDS. She highlights the:

> 'social recognition gained when the government defended their rights to treatment, and thereby their value and importance to society as a

> whole. In this respect, the distribution programme has helped to avert what one Brazilian activist called – in less favourable times – the 'civil death' of people living with HIV/AIDS' (2002: 1863).

Providing access to treatment for AIDS suffers can also help address stigma by encouraging people to disclose their HIV-status. According to Farmer *et al*, a HAART programme in rural Haiti has contributed to a shift in social attitudes:

> 'Although AIDS remains a stigmatised disease in Haiti, we believe that access to effective therapy has lessened AIDS-related stigma. The demand for HIV testing and the opportunity of counselling have risen since HAART was made available' (2001: 405).

This particular HAART intervention entailed directly observed therapy (DOT), whereby each HIV patient was assigned an 'accompagnateur' (usually a community health worker) to observe the ingestion of pills, to respond to patient and family concerns, and to offer moral support (*ibid.*).

This DOT-HAART programme thus clearly entails disclosure of the HAART patient to his or her family, and probably also the wider community. This is what gives the intervention its transformative properties: greater disclosure means less secrecy and less stigmatisation born out of ignorance and fear. But this very transformative aspect of the programme may be problematic in the sense that it encourages (perhaps forces?) people to disclose their HIV status when they otherwise would choose not to do so. As Pawinski *et al* argue: 'The issue of confidentiality requires serious consideration in a DOT-HAART programme, since many patients might want status to remain confidential from family, friends, neighbours, shopkeepers and community health-care workers' (2002: 624). They go on to cite evidence from KwaZulu-Natal that many HIV-positive people prefer not to disclose their HIV status (*ibid.*). Fear of disclosure and lack of confidentiality has also been implicated as a barrier to participation in VCT in Africa (e.g. Pool *et al*, 2001; Ginwalla *et al*, 2002).

De Cock *et al* (2002) argue that one of the reasons why the AIDS pandemic has gained such a grip in Africa is that the public health response has not sought to challenge this 'quest for secrecy' more effectively. A well-designed DOT-HAART intervention could contribute to such transformation of attitudes. In cases where social attitudes are strongly negative towards HIV-positive people, greater preparation work is required – such as community-level education programmes and stronger support facilities for those on HAART. Negative social attitudes towards people with AIDS should not be a reason for inaction; rather, appropriate policies should be designed to address it. In the case of the rural Haiti study, the process of training the accompagnateur to provide the

necessary support to people on HAART would itself have contributed to improving community-level information about the needs of, and social and personal challenges faced by, people living with AIDS.

Clearly, a DOT-HAART programme is more intensive of resources than a HAART programme, because community health workers would need to be trained and mobilised. This would add to the cost of the programme. However, as this results in better adherence to the therapy (and hence less resistance and superior health outcomes) and has the potential to contribute to attitude shifts at the community level, it is very likely that the additional expenditure would pay for itself in terms of lower morbidity and (potentially) lower rates of HIV transmission. However, as there is no data on this effect, it is difficult to include it in a model such as the ASSA2000 Interventions Model.

It is, however, important to note that a HAART programme which does not entail DOT is still capable of fighting stigma. This is because the very existence of a treatment programme is likely to facilitate greater openness and dialogue about AIDS. Brian Brink, the director of Anglo American's AIDS policy, has reported that the company's decision to provide HAART to its HIV-positive workers resulted in 'a complete transformation in attitude' with patients being far more willing to talk about AIDS.[5]

Voluntary Counselling and Testing and Behaviour Change

The ASSA2000 Interventions Model does not allow for any increase or decrease in sexual risk behaviour as a result of the introduction of HAART *per se*, although it does assume that the accompanying VCT causes behaviour change. Is this a valid assumption? Can we assume that VCT is likely to encourage safer sex? On the basis of recent household survey data, Shisana and Simbayi argued that there is evidence that VCT leads to safer sexual practices:

> 'When adults who had had an HIV test were compared to those who had not done so, it was found that 25.1% of the former (n=1,659) used a condom at last sex as compared to 20.2% of the latter (n=5,364). This suggests that HIV testing has a positive influence on condom use' (2002: 76).

While a strong case can be made that HIV testing and counselling is *likely* to promote behaviour change, one cannot read the direction of causality from

[5] Reported in *The Economist*, 19/4/03.

simple correlation (as done above). Quantitative household survey data of this kind needs to be supplemented with information from randomised trials, and by more qualitative information about the relationship between VCT and behaviour change.

The central difficulty with generalising from non-experimental studies of the impact of VCT is that there is an inherent selection bias in these studies: those who voluntarily choose to undergo VCT are not likely to be random. They probably have reason to be concerned about their past sexual behaviour and are informed sufficiently about AIDS to be concerned about their possible HIV status. This makes it very difficult to draw conclusions about causation from empirical information about the relationship between VCT and HIV status or sexual behaviour.

One of the sources of information used by the demographers, who designed the ASSA2000 Interventions Model, was the results of a randomised trial in Kenya, Tanzania and Trinidad (VCTESG, 2000). The study was set up explicitly to determine the efficacy of VCT in reducing unprotected sexual intercourse among individuals and sex-partner couples in Nairobi, Dar es Salaam and Port of Spain. Individuals and couples were randomly assigned VCT or basic health information. At the first follow-up (between 3 and 7 months after the base-line), those who had been provided with basic health information was offered VCT, and those who had been offered VCT were offered re-testing. A second follow-up asked questions about sexual behaviour.

This study is important for two reasons: it took place in developing countries (two of which were in Africa), and it was a randomised trial. The study found that:

> 'the proportion of individuals reporting unprotected intercourse with non-primary partners declined significantly more for those receiving VCT than those receiving health information (men, 35% reduction with VCT versus 13% reduction with health information; women, 39% reduction with VCT versus 17% reduction with health information' (VCTESG, 2000: 103).

This represents strong support for the proposition that VCT affects behaviour change.

Note that this study compared two interventions (VCT versus providing basic health information). It did not compare VCT with the 'do nothing' scenario (as this would have been unethical). If it had, then the benefits in terms of behaviour change would have been greater. This is because providing some basic health

information probably also affects behaviour – although the evidence concerning the link between information about AIDS and behaviour change is not strong.

Sweat *et al* (2000), in their study of the cost-effectiveness of VCT in Kenya and Tanzania, found that the intervention did lead to behaviour change, and that it was most cost-effective with regard to HIV-positive people and for those who received VCT as a couple. Other studies have also found that counselling couples had major benefits in terms of facilitating disclosure and negotiating risk reduction strategies (VCTESG, 2000: 109-110). According to De Cock *et al*, 'increased efforts are required to arrange for couples to be tested together for HIV infection, so that HIV/AIDS can be approached as a disease of the family and of society' (2002: 70).

The argument that HIV/AIDS should be treated as 'a disease of the family and of society' is an important one. One of the limitations of using counselling as a tool to facilitate behaviour change is that it concentrates on the individual rather than the social context within which that individual behaves. There are strong socio-economic determinants of HIV transmission (Nattrass, 2002b). Providing people with information and advice may not be sufficient to bring about lower rates of HIV transmission. Sexual culture and relationship dynamics often stand between the translation of information into sexual behaviour change.

The Challenge Posed by Sexual Culture

Sexual cultures comprise the age-specific and collectively developed beliefs, expectations and rules for sexual conduct which 'govern the sorts of activities defined as legitimate and how sexual encounters are to be staged' (Crothers, 2001: 12). Leclerc-Madlala argues that the sexual culture in parts of KwaZulu-Natal is 'underpinned by meanings which associate sex with gifts, and manliness with the ability to attract and maintain multiple sexual partners' (2002: 31-2). Such sexual cultures clearly contribute to the spread of HIV and need to be addressed as part of any intervention to promote behaviour change.

But this is a difficult task, because sexual cultures are socially constructed and reflect unequal gender relations in the broader society. Leclerc-Madlala's ethnographic work describes Zulu sexual culture as characterised by:

> 'gender inequity, transactional sex, the socio-cultural *isoka* ideal of multiple sexual partnerships, lack of discussion on matters of sexuality in the home and between sexual partners, the conditioning of both men and women to accept sexual violence as 'normal' masculine behaviour along with the 'right' of men to control sexual encounters,

and the existence of increasingly discordant and contested gender scripts' (2001: 41).

Similar findings were reported by Harrison *et al* (2001) in their study of adolescents in rural KwaZulu-Natal, and by Mapolisa (2001) in his study of young African men in Cape Town. Leclerc-Madlala argues that it is these characteristics, together with social pressure to prove fertility,[6] which creates a 'socio-sexual culture/context that makes behaviour change such a difficulty' (Leclerc-Madlala, 2002: 29).

Note that risky sexual culture is not limited to the African population in South Africa. According to a qualitative study of white university students, multiple partnering (both serial and concurrent) is usual, as is the pursuit of casual sex for its own sake (Marcus, 2002: 32). Marcus comments that although 'white students perceive themselves to be very different from their black colleagues, the sexual social environment they describe does not appear to differ in qualitative terms, at least in terms of serial and concurrent multiple partnering' (*ibid.*).

Counselling people in couples can help facilitate critical discussion about the particular sexual culture they are part of, and help bring about behaviour change. This is particularly important in sexual cultures where there is a high level of violence against women – such as is the case in South Africa.[7] There is clearly a need to address the endemic problem of violence against women both through better law enforcement and interventions at community level to combat sexual sub-cultures where rape is considered to be a normal, recreational activity (Wojcicki, 2002). However, given the high level of sexual coercion within relationships (Eaton *et al*, 2003: 161), there is also a role for bringing about improved sexual relationships through counselling people in couples.[8]

Sexual cultures characterised by high-risk behaviour pose challenges for behavioural interventions, but do not necessarily render them useless. Rather, intervention strategies need to be carefully and innovatively designed so that they are meaningful to the participants. For example, a participatory workshop programme in the Gambia was successful because it focused on infertility

[6] As Preston-Whyte and Zondi (1991) explain, the 'fertility conundrum' acts as a barrier to safer sex because young women are under pressure to prove their fertility before marriage. See also Tillotson and Maharaj (2002).

[7] See review of evidence in Easton *et al* (2003) and Wojciki (2002).

[8] A recent study of the relationship between sexual violence and HIV preventive behaviour in South Africa found no statistically significant link between sexual abuse and condom use, but found that 'gender is an important influence on HIV preventive practices and needs to be more strongly emphasised in prevention programmes' (Jewkes *et al*, 2003: 132).

prevention rather than family planning (i.e. was not seen as promoting unwelcome values) and included men:

> 'The infertility prevention approach, rather than a focus on HIV or family planning, means that the programme responded to issues deemed important by men. This made it possible at the start to obtain permission to discuss sexual health issues, a topic which normally intimidates extension workers. Later, the men became convinced that poor relations with their partners could put them at risk of infection, and therefore that increased trust between themselves and their wives was in their self-interest' (Paine, *et al*, 2002: 47).

Another innovative and community-based intervention is that in Carltonville, a mining town in South Africa. The intervention reached out to migrant workers, sex workers and members of the broader community (Williams *et al*, 2000). This on-going intervention has already yielded benefits in terms of high levels of participation and trust.

Sexual cultures are far from immutable. As described above, there are indications that sexual culture amongst young Zulu speakers has responded to the AIDS pandemic in ways which contribute to the spread of AIDS. However, not all sexual cultural change has been harmful. According to focus group research amongst Zulu- speaking male adolescents, most young men believed *isoka* (the practice of multiple sexual partnerships) was risky and stupid (Tillotson and Maharaj, 2001: 95). There is also evidence that in South African sentinel sites where there is high media penetration, that self-perpetuating cultures of risk-prevention (such as increased condom use amongst non-cohabiting youth) are taking shape (Kelly, cited in Leclerc-Madlala, 2002: 25). A recent survey of young South Africans found that only a fifth of those already sexually active participated in sex for money arrangements (LoveLife, 2000: 18) – but there were still worryingly high reported rates of sexual coercion (*ibid.*: 19).

These indications of changing sexual cultures suggest that there is space for VCT to help facilitate behaviour change. And, given that high levels of AIDS information in South Africa do not seem to translate into an equivalent concern to adopt safe sexual practices,[9] there is clearly a need to supplement AIDS information campaigns with VCT interventions. VCT can help reinforce AIDS education whilst probing the individual social and psychological circumstances

[9] High levels of information about AIDS were recorded in the recent national household survey (Shisana and Simbayi, 2002) and two recent surveys of young adults (LoveLife, 2000; Rutenberg *et al*, 2001: 35), yet this does not seem to translate into an equivalent high level of safe sexual practices. See also Eaton *et al* (2003: 151-7) for a review of the evidence for high levels of knowledge about AIDS in South Africa.

which may make behaviour change difficult. In their review of South African AIDS counselling services, Richter *et al* note that VCT is 'a demonstrably effective secondary prevention strategy whereby HIV-positive individuals reduce their risk of infecting others and of themselves being reinfected' (2001: 152), but go on to argue that for VCT programmes to be effective they need to be part of a 'circle of care which links both HIV-positive and HIV-negative people to a comprehensive set of services after HIV testing' (*ibid.*: 153). They particularly stress the importance of providing additional services to support the poverty-related needs of those participating in AIDS counselling programmes.

The link between poverty and sexual behaviour poses major challenges for AIDS interventions. To the extent that women's sexual behaviour is a product of economic circumstances, interventions at the level of individual behaviour and sexual culture are unlikely to be very successful. Leclerc-Madlala found in her study of young Zulu women that promiscuity and transactional sex were in part a product of the post-apartheid political economy:

> 'For most, the present economic situation seems to be a major driving force in their new sexual assertiveness. It was apparent from my field work experience that many young women 'played the field' for all it was worth, and the 'worth' was definitely calculated in financial terms. …. Some women claimed that their parents encouraged multiple relationships both directly and indirectly, as it ensured an additional flow of money into the household' (Leclerc-Madlala, 2001: 43-4).

Other studies also point to the prevalence of transactional sex, highlighting the dangers of sexual violence that face those engaging in 'survivalist sex' (Wojcicki, 2002).

Given these conditions, it is clear that addressing poverty has to be a major component of any strategy to combat HIV/AIDS effectively.

References

CIDPC (Centre for Infectious Disease Prevention and Control, Canada). 2002. HIV Infections Among MSM in Canada. *HIV/AIDS Epi Update*. http://www.hc-sc.gc.ca.

Crothers, C. 2001. Social Factors and HIV/AIDS in South Africa: A Framework and Summary. *Society in Transition* 32(1).

De Cock, K., Mbori-Ngacha, D. & E. Marum. 2002. Shadow on the Continent: Public Health and HIV/AIDS in Africa in the 21st Century. *The Lancet* 360.

Dubois-Arber, F., Moreau-Gruet, & A. Jeannin. 2002. Men Having Sex With Men and HIV/AIDS Prevention in Switzerland. *Euro Surveillance: European Communicable Disease Bulletin* 7 (2).

Eaton, L., Flisher, A. & L. Aaro. 2003. Unsafe Sexual Behaviour in South African Youth. *Social Science and Medicine* 56, 149-165.

Farmer, P., Leandre, F., Mukherjee, J., Sidonise Claude, M., Nevil, P., Smith-Fawzi, M., Koenig, S., Castro, A., Becerra, M., Sachs, J., Attaran, M., & J. Yong Kim. 2001. Community-based Approaches to HIV Treatment in Resource-poor Settings. *The Lancet* 358.

Galvao, J. 2002. Access to Antiretroviral Drugs in Brazil. *The Lancet* 360, 1862-1865.

Ginwalla, S., Grant, A., Day, J., Dlova, T., Macintyre, S., Baggaley, R. & G. Churchyard. 2002. Use of UNAIDS Tools to Evaluate HIV Voluntary Counselling and Testing Services for Mineworkers in South Africa. *AIDS Care*, 14 (5), 707-726.

Harrison, A., Xaba, N., Kunene, P. & N. Ntuli. 2001. Understanding Young Women's Risk for HIV/AIDS: Adolescent Sexuality and Vulnerability in Rural KwaZulu-Natal. *Society in Transition* 32 (1).

International Collaboration on HIV Optimism. 2003. HIV Treatments Optimism Among Gay Men: An International Perspective. *Journal of Acquired Immune Deficiency Syndromes* 32, 545-550.

Jewkes, R., Levin, J., Loveday, A. & L. Penn-Kekana. 2003. Gender Inequalities, Intimate Partner Violence and HIV Preventive Practices: Findings of a South African Cross-sectional Study. *Social Science and Medicine* 56, 125-134.

Joint Health and Treasury Task Team (JHTTT). 2003. Summary Report of the Joint Health and Treasury Task Team Charged with Examining Treatment Options to Supplement Comprehensive Care for HIV/AIDS in the Public Health Sector, released 1 August 2003 (available on www.gov.za/reports/2003/ttr010803.pdf).

Jones, S. & C. Varga. 2001. Bloodwise? Knowledge and Attitudes Pertaining to HIV and Blood Donation in Durban. *Society in Transition* 32 (1).

Laporte, A. 2002. A New Decline in Preventative Behaviours Among Homosexual Men: The Role of Highly Active Antiretroviral Therapy. *Euro Surveillance: European Communicable Disease Bulletin* 7 (2).

Leclerc-Madlala, S. 1997. Infect One, Infect All: Zulu Youth Response to the AIDS Epidemic in South Africa. *Medical Anthropology* 17, 363-380.

Leclerc-Madlala, S. 2001. Demonising Women in the Era of AIDS: On the Relationship Between Cultural Constructions of both HIV/AIDS and Feminity. *Society in Transition* 32 (1).

Leclerc-Madlala, S. 2002. Youth, HIV/AIDS and the Importance of Sexual Culture. *Social Dynamics* 28 (1).

LoveLife. 2000. *Hot Prospects, Cold Facts: Portrait of Young South Africa*. LoveLife in conjunction with the Sunday Times.

Mapolisa, S. 2001. Socio-Cultural Beliefs Concerning Sexual Relations, Sexually Transmitted Diseases and HIV/AIDS Amongst Young Male Clients at a Gugulethu STD Clinic. *Masters Thesis in Social Anthropology*. Cape Town: University of Cape Town.

Marcus, T. 2001. Is There an HIV/AIDS Demonstration Effect? Findings from a Longitudinal Study of Long Distance Truck Drivers. *Society in Transition* 32 (1).

Marcus, T. 2002. Kissing the Cobra: Sexuality and High Risk in a Generalised Epidemic – A Case Study of White University Students. *African Journal of AIDS Research* 1 (1), 23-33.

Marseille, E., Hofman, P. & J. Kahn. 2002. HIV Prevention Before HAART in Sub-Saharan Africa. *The Lancet* 359.

McFarlane, M., Bull, S., & C. Rietmeijer. 2000. The Internet as a Newly Emerging Risk Environment for Sexually Transmitted Diseases. *Journal of the American Medical Association* 284 (4).

Nattrass, N. 2002a. Should Youth Unemployment Be Targeted as Part of a Comprehensive Welfare Policy in South Africa? *Social Dynamics* 28 (2).

Nattrass, N. 2002b. "AIDS and Human Security in Southern Africa", in *Social Dynamics*, vol.28, no.1.

Page-Shafer, K., McFarland, W., Kohn, R., Klausner, J., Katz, M., Wohlfeiler, D., Gibson, S. & the Stop AIDS Project. 1999. Increases in Unsafe Sex and Rectal Gonorrhoea Among Men Who Have Sex with Men – San Francisco, California, 1994-97. *Morbidity and Mortality Weekly Report*, Centres for Disease Control and Prevention, January 29, 1999. http://www.thebody.com/cdc/unsafe199/unsafe199.html.

Paine, K., Hart, G., Jawo, M., Ceesay, S., Jallow, M., Morison, L., Walraven, G., McAdam, K. & M. Shaw. 2002. Before We Were Sleeping, Now We Are Awake: Preliminary Evaluation of the Stepping Stones Sexual Health Programme in the Gambia. *African Journal of AIDS Research* 1 (1), 39-50.

Pawinski, R., Lalloo, U., Jinabhai, C. & R. Bobat. 2002. Community-based Approach to HIV Treatment. *The Lancet* 359.

Perez, K., Rodes, A. & J. Casabona. 2002. Monitoring HIV Prevalence and Behaviour of Men Who Have Sex with Men in Barcelona, Spain. *Euro Surveillance: European Communicable Disease Bulletin* 7 (2).

Pool, R., Nyanzi, S. & J. Whitworth. 2001. Attitudes to Voluntary Counselling and Testing for HIV Among Pregnant Women in Rural South-West Uganda. *AIDS Care* 13 (5), 605-615.

Preston-Whyte, E. & Zondi, M. 1991. Adolescent Sexuality and its Implications for Teenage Pregnancy and AIDS. *Continuing Medical Education* 9 (11), 1389-1394.

Richter, L., Van Rooyen, H. Solomon, V. Griesel, D. & K. Durrheim. 2001. Putting HIV/AIDS Counselling in South Africa in its Place. *Society in Transition* 32 (1).

Richter, L., Van Rooyen, H. Solomon, V. Griesel, D. &K. Durrheim. 2001. Putting HIV/AIDS Counselling in South Africa in its Place. *Society in Transition* 32 (1).

Shisana, O. & L. Simbayi. 2002. South African National HIV Prevalence, Behavioural Risks and Mass Media. Nelson Mandela/HSRC Study of HIV/AIDS, HSRC.

Stolte, G., Dukers, N., de Wit, J., Fennema, H. & R. Coutinho. 2002. A Summary Report from Amsterdam: Increase in Sexually Transmitted Diseases and Risky Sexual Behaviour Among Homosexual Men in Relation to the Introduction of New Anti-HIV Drugs. *Euro Surveillance: European Communicable Disease Bulletin* 7 (2).

Strode, A. & K. Grant. 2001. The Role of Stigma and Discrimination in Increasing the Vulnerability of Children and Youth Infected with and Affected by HIV/AIDS. Research Report Commissioned by *Save the Children* (UK). Save the Children, Arcadia, South Africa.

Sweat, M., Gregorich, S., Sangiwa, G., Furlonge, C., Balmer, D., Kamenga, C. & O. Grinstead. 2000. Cost-Effectiveness of Voluntary HIV-1 Counselling and Testing in Reducing Sexual Transmission of HIV-1 in Kenya and Tanzania. *The Lancet* 356.

Tillotson, J. & P. Maharaj. 2001. Barriers to HIV/AIDS Protective Behaviour Among African Adolescent Males in Township Secondary Schools in Durban, South Africa. *Society in Transition* 32 (1).

VCTESG (Voluntary HIV-1 Counselling and Testing Efficacy Study Group). 2000. Efficacy of Voluntary HIV-1 Counselling and Testing in Individuals and Couples in Kenya, Tanzania and Trinidad: A Randomised Trial. *The Lancet* 356, 103-112.

Williams, B., Gilgen, D., Campbell, C., Taljaard, D. & C. MacPhail. 2000. The Natural History of AIDS in South Africa: A Biomedical and Social

Survey in Carltonville. Johannesburg: CSIR (Council for Scientific and Industrial Research).
Wojcicki, J. 2002. She Drank His Money: Survival Sex and the Problem of Violence in Taverns in Gauteng Province, South Africa. *Medical Anthropology Quarterly* 16 (3).

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