The Adler Museum of Medicine was founded in 1962 and was situated in the grounds of the South African Institute for Medical Research, Johannesburg. It is now housed at the University of the Witwatersrand’s Medical School Campus in Parktown, Johannesburg.

In June 1974 the Museum’s co-founders, Drs Cyril and Esther Adler, presented the Museum to the University of the Witwatersrand which named it the Adler Museum as a token of the esteem in which the founders were held by the University. In addition, the University bestowed the degree of Doctor of Laws (honoris causa) upon Dr Adler and the degree of Doctor of Philosophy (honoris causa) upon Mrs Esther Adler. Until Esther Adler’s death in 1982 she was the Museum’s Honorary Curator while Cyril Adler acted as Honorary Director of the Museum. From 1982 Dr Cyril Adler was appointed by the University as Director/Curator of the Adler Museum, a post he held until his death in 1988.

1975 saw the inception of the Adler Museum Bulletin, the brainchild of Mrs Rose Meltzer. Mrs Meltzer produced the first edition single-handedly and she continued to edit it until her retirement in 1991 and was editorial consultant until her death in 1992.

The Museum contains interesting and invaluable collections depicting the history of medicine, dentistry, optometry and pharmacy through the ages. Items of medical historical interest on display include microscopes and other scientific instruments, early bleeding and cupping equipment with an exquisitely crafted incision knife, ceramic pharmacy jars dating back to the 17th century, a collection of bone china and ceramic feeding cups, some dating from the 18th and 19th centuries, an early 19th century wooden handled amputation set in a wooden case, diagnostic and surgical instruments, treatment apparatus such as one advertised as ‘Patent magnetic electrical machine for nervous diseases’ used by Queen Victoria to ease her rheumatism (19th century) and the first electrocardiograph machine (1917) used in the Johannesburg General Hospital, the original artificial kidney machine used in South Africa, early anaesthetic apparatus, ear trumpets and brass ear syringes (early 20th century), hospital and nursing equipment and medical ephemera.

There are reconstructions of an African herb shop, a patient consulting a sangoma (traditional healer), and a 20th century Johannesburg pharmacy, a doctor’s consulting room, a dental surgery, an operating theatre and an optometry display of the same period. A history of scientific medicine is augmented with displays of several alternative modalities. Other attractions range from a reconstruction of a patient being treated by the famous Persian physician Avicenna to an exhibition of early electro-medical equipment, and a collection of rare iron lungs.

A showcase containing new acquisitions to the collection is constantly changed as donations are received. The objects displayed provide an insight into the range and diversity of the collection.

In the foyer outside the Museum are panels relating to the history of the Cradle of Humankind (Sterkfontein and environs) and a display of replicas from the site give visitors a fascinating glimpse into this world heritage site.

The Museum has a rare book collection and a significant history of health sciences reference library. An archive arranged by subject matter is housed in the library. Biographical information relating to thousands of medical and allied health professionals is available for research purposes which includes photographs, notebooks, academic certificates, records, personal papers and memorabilia of prominent health professionals and academics.

The Museum arranges public lectures, tours, temporary exhibitions and provides excellent facilities for health sciences historical teaching and research.
The Board of the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, has appointed the following members to serve on the Board of Control:

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ADLER MUSEUM BULLETIN

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The Orenstein Lecture for 2011 was delivered by Professor Francois Venter. The written version is published in this edition of the Adler Museum Bulletin. It should, dare we say, be carefully studied, not only by the readers of this journal but as widely as possible.

Occupational health services and public health services ought to be really expert in recognising and ranking risks to health, prioritising them and taking action to increase the size of the non-risk fraction of the workforce or the population in question. Many will act as if they believed that the so-called non-risk group can be ignored and left to its own devices. If the size and composition of the non-risk group is accurately known, the characteristics which protect its members from the consequences of risk taking thoroughly understood, and the persistence of these protective characteristics assured come what may, then perhaps there is not any need to fuss?

Given the oppressive effect of confidentiality, it should not surprise anyone to find that after nearly three decades of experience of the conjoined pandemic of HIV and tuberculosis there is much that we do not know about the microanatomy of risk for either of these two diseases which know no boundaries. Professor Venter, as we hoped he would, had something original to say about the continuing spread of the human immunodeficiency virus. He has spoken and has written it for publication in the Adler Museum Bulletin. As with another important Orenstein Lecture – that delivered by Dr Sydney Brenner – it is difficult to pick up all the finer points at first hearing. The script is published so that we can pose the question: ‘What did Francois Venter really say?’ He said, inter alia, that ‘[T]he big HIV news of 2011 was a study that demonstrated that people with HIV who were on successful anti-retroviral treatment would not transmit the virus to HIV negative people’. This establishes that for control of the HIV pandemic, treatment is an important instrument for secondary prevention of the spread of the disease. This is not new – it is well known that effective anti-tuberculosis chemotherapy plays a major role in interrupting the transmission of tuberculosis. In the particular case of HIV, for which a vaccine is still not available, this adds further emphasis to the proposal to test and treat. Mathematical modelling shows this to be the most effective strategy.

This leads us to the tricky question of who needs to be tested, or who is in most need of encouragement to be tested? It is not likely that the resources required to parade the whole population and test them all will ever be available in South Africa, nor is it likely that compulsory testing would pass easily through the ethics committees and constitutional challenges which would surely follow. But if it is true ‘that half of all South Africans will contract HIV’ and in due course require anti-retroviral treatment for life, then it might be cost-effective to bite on the bullet now before the country’s finances are completely exhausted. Support for this view comes from the estimate that there are still half a million new HIV infections per year in this country. Professor Venter suggests that the widely accepted ‘non-risk’ group of people

Disease knows no boundaries – and will find the chinks in our armour
in stable long-term relationships has been neglected and that appropriate action should be taken to stimulate awareness of the real risk to members of this group.

Modern liberal social mores he suggests allow occasional falls from grace, and goes on to say that some view this as strengthening the relationship. This may have been a tenable view when the sexually transmitted infections which might have followed an adventure outside the stable relationship were easily treated and more of a nuisance or an embarrassment than a threat to life. In South Africa there are thought to be more than five million individuals chronically infected with HIV and each year a further half a million undergo sero-conversion. During this interval it is likely that they are hyper-infectious in the weeks after first infection, and, of course, unaware of the nature of their new infection even if they have had transient symptoms. Because of the large number of heterosexual individuals in long-term stable relationships – many millions – erosion of the non-risk status of this group may be making a significant contribution to the continuing spread of the pandemic. For the individual the trifling extra-marital adventure may destroy the relationship and the partners in it.

In contemporary electronic society it would be prudent for all to know that ‘[M]ore public access to the internet has meant more exposure to pornography, as well as social networking sites, meaning that possibilities that had never been spoken of in polite company are now available to anyone with a smart-phone’. Neatly phrased, don’t you think?

Returning to the commonest of the AIDS defining diseases, tuberculosis, the dark thread of uncertainty which is woven into Professor Venter’s lecture runs through the situation in respect of tuberculosis control. Do we know whether it was wise to discontinue careful surveillance of treated cases, or to conflate ‘cure’ and completion of treatment as success, or to assume that short course treatment was a one size fits all solution to the chronic problem which has troubled us for so long?

It could be argued, cogently we suggest, that a careful exercise in re-perception is urgently required to ensure success in controlling HIV and its companion in arms, tuberculosis. Shall we meet in the shade of a knobthorn in a remote area of the Lowveld without electronic intrusion?
**HIV transmission and sex in Africa: Why can’t we get it right?**

Professor WD Francois Venter  
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The AJ Orenstein Memorial Lecture, Medical School, University of the Witwatersrand, Johannesburg, 23 August 2011*

**INTRODUCTION**

HIV is spread through promiscuity, says the conventional wisdom. Health care workers, scientists and public health practitioners may couch it in more professional language – ‘multiple partners’ and ‘concurrency’ – but this is the subtext. Recently, politicians have called for more personal accountability, with veiled threats regarding access to medical resources as this is ‘your own fault’. What if everyone is wrong?

HIV is often characterised as a problem distributed throughout much of the world, albeit unevenly. It is also characterised as a disease that affects, alternatively or simultaneously, young, promiscuous, single, intravenous drug-using gay men who visit prostitutes. In reality, people in a relatively small geographic area account for more than 70% of the world’s HIV infected population. The risk of a young person getting HIV infected in our country is several hundred-fold higher than in a country in Europe, North Africa, Asia, or Australasia.

If the world was a single country, the ‘most at risk’ group would be black, heterosexual, in long term relationships, and between the ages of 20 and 50. They would never have used intravenous drugs, and they come from countries where being gay is often a crime and highly stigmatised, sex is still a relatively taboo topic, condom use is often high, and sex work and prostitution is illegal. You would not think this, listening to many commentators, international agencies and even public health specialists as they speak of risk.

Politicians occasionally cynically play to these stereotypes, trying to stoke moral panic among populations who have conservative views on sex. In South Africa alone, vote catching rhetoric on ‘morality’ from different political spectrums has been seen for a decade, often with guilty politicians found in compromising situations shortly after.

**WHY THIS TALK FOR THE ORENSTEIN LECTURE?**

There is a growing frustration with HIV prevention efforts. Promises around HIV prevention outputs have been extravagant and confident, filled with common-sense language and trite one-liners. Success has been almost non-existent, outside of a few urban areas and selected countries. Failure has routinely been blamed on lack of funding, or the fact that the latest prevention flavour of the month was not adequately tested, or that adequate study was not possible. If HIV prevention was an industry, everyone concerned would have been fired for non-delivery.

Biological scientists, perhaps because they are more used to the scientific process and the demand for objectivity, have by and large managed to test various HIV
prevention methods rigorously. Biological quacks abound, but scientific peer review has largely managed to keep them under control, or been able to heap public and scientific scorn on their heads. Hence we have pretty good evidence when it comes to biological interventions as to what works or does not. Circumcision, anti-retrovirals and needle exchanges work, and while there is debate about how to get them out there, few dispute the individual benefit.

No such luck with behaviour change for HIV prevention, which has advanced ‘common sense’ wisdom as an alternative to good behaviour change, science, or even good observational evidence. Even the ‘common sense’ wisdom has been open to question, as many behaviour change interventions ignore basic science data and transmission risk research, ploughing on with interventions that have little evidence to back them up.

HIV: WHERE DO WE STAND ON TREATMENT?

HIV treatment has been transformed with the discovery and implementation of safe, cheap and convenient antiretroviral regimens. Life expectancy is unlikely to get completely back to normal, but it certainly is heading strongly in that direction, comparing more than favourably with other chronic diseases like diabetes and asthma. One recent study from Uganda demonstrated that life expectancy, indeed, did return to normal (this may in part be due to the high burden of other diseases amongst HIV negative Ugandans, and the fact that HIV care provides better health care overall).

It is estimated that half of all South Africans will contract HIV, and will require treatment for life once their immune system reaches the level at which antiretroviral protection is indicated. Treatment, if taken correctly, allows immune function to repair itself, and people with HIV to re-enter society and lead normal lives.

However, the failure of prevention means that a huge proportion of the population will require medication and health systems to deliver care for many decades. In any country, this would be a problem. In the poor countries of southern Africa, this is catastrophic.

HIV: WHERE DO WE STAND ON PREVENTION?

HIV prevention is a disaster. At the moment, about 1% of South Africans get infected annually, translating to about half a million a year. HIV and associated tuberculosis have had the single biggest impact on life expectancy of any illness, driving down predicted South African life expectancy by between 10 and 20 years.

HIV levels appear to have stabilised in many countries within sub-Saharan Africa. In South Africa, where HIV only started to be a problem in the late 1980s, over a decade after its neighbours, serial observational studies have shown a fairly consistent recent pattern – there appears to be a plateauing of the epidemic incidence, with a slight dip in adolescents, but with a continued rise in older groups offsetting this.

However, overall prevalence will now rise with the advent of effective treatment, as people who would have died are added to the pool of newly diagnosed HIV patients. Hence, the background adult prevalence of around 15% will probably start moving upwards.

HOW DOES HIV TRANSMISSION WORK?

Adult HIV is spread sexually in our region in the overwhelming majority of cases. It can also be spread through use of dirty needles by injecting drug users, or occupationally, or through contaminated blood supplies, but these incidents are very rare.
The virus spreads across mucous membranes during sex, attaching itself to specialised immune cells that patrol these mucosa. Anal epithelium is very thin and friable, while vaginal and penile mucosa is much thicker. Anal transmission is hence much more efficient. Mouth epithelium is also very thick which is why oral transmission is extremely rare. Other sexually transmitted infections facilitate entry of HIV by causing breaks in the mucosa and mobilising the immune cells HIV is adapted to infect. Condoms are effective as they stop infected sexual fluids from coming into contact with the mucosa.

The risk per sex act has been modelled using developed world cohorts, with some models suggesting the risk per act of vaginal penetration, during sex between an HIV-infected woman and an uninfected man, may be only 1 in 10 000. That’s sex every night for 27 years. Anal sex obviously carries a much larger risk, with some models suggesting 1 in every 20 sex acts.

The numbers above suggest that HIV transmission is very inefficient, especially when compared to efficient viruses like herpes, chickenpox and hepatitis. One of the puzzles of the HIV epidemic in the 1990s was why it managed to spread at all, given the large average number of sex acts required for a transmission. In the last decade, better understanding of the initial events surrounding HIV infection, especially in weeks immediately after infection (‘seroconversion’), suggest that people are hyper-infectious during these weeks, and the transmission rate may be as high as 1 in 30 sex acts. Viral loads, a measure of infectivity, are often measured in the millions during this phase, many times higher than during the chronic phase when the immune system has control of the virus, or even the more advanced AIDS phase. A clever observational study done in Malawi suggested that half of all HIV transmissions happened in this early phase.

This means that HIV prevention efforts, to be effective, would need to address this brief hyper-infectious stage. It is hard to identify people in this phase – symptoms of early HIV are non-specific, and conventional tests designed to detect early antibodies are generally negative (the ‘window period’).

Lastly, the risk per sex act may be very different in our region, with work from our Institute suggesting that young women in South Africa carry a huge risk despite not having frequent sex or many partners when compared to their developed world peers.

**BREAKTHROUGHS IN BIOLOGICAL PREVENTION HIGHLIGHT THE FAILURES OF BEHAVIOUR CHANGE**

The big HIV news of 2011 was a study (HPTN 052) which demonstrated that people with HIV who were on effective antiretroviral therapy would not transmit the virus to HIV negative people. The decrease in transmission was close to complete and the study was stopped early as the effect was so large.

In 2010, using pre-exposure prophylaxis (Prep) – ie giving treatments to high risk HIV negative people to stop them getting infected, showed promise. The same year, a microbicide, a gel impregnated with an antiretroviral and introduced into a woman’s vagina before sex, showed that the gel worked in halving HIV infection rate if used correctly (the CAPRISA 004 study).

The triumph by the biologists eclipsed some very alarming results in the behaviour of patients in these studies. For these studies to be ethically run, participants receive intensive ‘safe sex’ behavioural advice. In the study where HIV-infected patients took treatment for themselves to stop transmission, adherence to treatment was very good. However, in all the studies that have looked at taking treatment to prevent acquiring HIV, adherence to treatment was very poor.
This seems a paradox: I will take treatment well and regularly to protect my partner, but not for myself. Of course, these are different patient populations, but the notion that personal accountability trumps personal protection is counter-intuitive, and an amazingly positive comment on human perceptions of their responsibilities to others. However, it does show how little we understand people’s motivation and changes in behaviour around risk.

The other shocking message from these studies, especially the CAPRISA and 052 studies, was the number of people who got infected despite conventional prevention interventions. In CAPRISA, in the control arm, almost 1 in 10 women were infected annually, this despite intensive safe sex advice, access to condoms and sexually transmitted infection treatment. Even more alarming was the data in the 052 study. In this study, HIV-negative partners of HIV-positive partners received similar safe sex counselling and interventions; however, 11 contracted HIV outside of their relationship – meaning that despite all the safe sex advice and the presence of an HIV-infected partner to provide them with presumably daily reminders of their risk of contracting HIV, they still had sex unsafe enough to contract HIV from someone else.

It seems that behavioural advice is insufficient – or at least the current behavioural advice. It means we have an inadequate understanding of what motivates people around sex, behaviours that don’t appear on the face of it rational or self-interested.

**DO WE EVEN UNDERSTAND WHAT ‘HIGH RISK’ ACTIVITIES OCCUR IN AFRICA?**

Are there sexual behaviours that are more prevalent in Africa that may drive the epidemic? Several have been advanced. This form of research is very difficult to do – questions about sex are notoriously badly answered, and answers are very culture-specific. Study participants often don’t tell the truth, for complex reasons, or have recall inaccuracies, leading to frequently unreliable data. However, this has not stopped a large number of commentators and programme implementers from speculating about whether there is a specific behaviour in our region that may account for the wildly different HIV rates.

The first, older and less sophisticated theory is that men in Africa, specifically black men, have multiple sexual partners. Notwithstanding the age-old racism around claims made about sex among black people, this claim is a mathematical impossibility in a heterosexual epidemic. Unless men are largely homosexual, or sex is occurring between more than one partner at a time, this is not possible.

More recently, it has been suggested by more sophisticated theorists that both men and women have multiple partners. This is plausible – the more sexual partners you have, the greater your risk of contracting HIV – and is confirmed in many studies. An even more nuanced behaviour – ‘concurrency’ – whereby people have long term concurrent partners – is supposedly more common here than anywhere else. If this was true, a seroconverting person could enter this complex network of overlapping sexual partnerships, and the virus could spread through the network far more effectively, much like ripples spreading across a pond.

However, the data to support the fact that people in Africa have more partners, or have greater concurrency levels is extremely controversial, with debates raging recently in major medical journals. Part of the problem is again that comparing sexual behaviours between populations in different geographical areas is very difficult, as cultural taboos around sex vary widely and influence answers to questions. It is unclear
why people in such a large region of the world would develop such a distinct sexual behaviour. Additionally, the definition of concurrency is inadequate – someone with a different partner each night is excluded from the definition – while someone with a single infidelity in a 50 year marriage is compartmentalised with someone in a polygamous marriage. All this makes analysis of studies complex and the results unconvincing.

Other behaviours are also advanced – the ‘sugar daddy’ where young girls are materially beholden to sexually experienced and demanding men, is a popular urban tale. While the phenomenon exists, studies have demonstrated that these relationships are uncommon. Age discordance between male and female partners is certainly linked to risk of HIV acquisition, but the data to suggest that the discordance or presence of sugar daddies are greater in Africa is conflicting.

This is by no means a comprehensive dissection of different possible sexual behaviours that may drive the epidemic; different sexual practices, such as ‘dry sex’ and anal sex, are constantly changing within the community. More public access to the internet and to social networking sites has meant increased exposure to pornography. Images and possibilities that had never been spoken of in polite company are now available to anyone with a smartphone. Sexual behaviour changes have never been more fluid: an observational study done today may be out of date three years hence.

WHY DID OTHER AFRICAN COUNTRIES GET IT RIGHT?

Several countries have well documented decreases in HIV prevalence. Uganda, Kenya and Zimbabwe have all brought down new incident HIV infections. Claims about the reasons for this decrease generally fall into two overlapping categories.

The first is around political leadership, with Uganda being the classic example. Popular history has it that President Yoweri Museveni, when he came to power in 1986, led a ‘zero grazing’ campaign that addressed people having sex outside of their primary relationships. He rarely spoke publically without tackling HIV issues, and the campaign was accompanied by community mobilisation. Condoms were not generally available at the time, so messaging relied heavily on sexual behaviour change. Researchers contend that this was accompanied by partner reduction and an increase in age at virginitiy loss. HIV levels dropped at the time, although the incidence has started to rise again in the last few years.

Few dispute that the Ugandan epidemic dipped significantly, but the reasons for this are disputed. The first explanation has a pleasing African ring to it that may impress people who subscribe to an intrinsic African ubuntu community mindedness. Unfortunately, the story is contested by critics, who claim that this history is not nearly as neat as it is made out, with many questioning the degree of community engagement or the consistency of the message. It also seems implausible – churches and political leaders have issued strong messages around sex for centuries, with little effect. Why would anyone listen to this president? Finally, in South Africa, with a current president who is polygamous, and where several politicians who have previously preached sexual morality have been caught cheating on their partners, it would be very difficult to imagine how this sort of messaging would be taken seriously.

The second popular theory goes something like this: People were dying of AIDS. These people were seen as promiscuous, and hence people made the link and altered their sexual behaviour. While also neat, this theory is completely unbelievable. In the early 1980s, HIV tests were not available in places like Uganda, and the disease
presented in many different ways – tuberculosis, pneumonia, meningitis, many of which were common in the general HIV-negative community anyway due to poverty. To have tied these to promiscuity seems difficult to believe. In addition, community labelling of someone as ‘promiscuous’ is hardly scientific, especially when the supposed promiscuity occurred almost 10 years prior, as the lead time from the transmission event to AIDS is about this long.

Again, we have a data-contested area and unsatisfying explanations for documented drops in prevalence. In addition, the directed behaviour change that is claimed in Uganda seems implausible; even if true, it doesn’t help us design a reproducible programme.

CLOSETING BEYOND GAY MEN

“Closed and in the closet are metaphors used to describe lesbian, gay, bisexual, transgender, queer/questioning and intersex (LGBTQI) people who have not disclosed their sexual orientation or gender identity” (Wikipedia). The term has come to encompass LGBTQI individuals who don’t even acknowledge their sexuality to themselves. This is important for public health specialists, as closeting is associated with high risk sex, drug use, depression and increased risk of new HIV infection. A term in the US, the ‘down-low’ refers to men who have sex with men but possibly self-identify as straight.

However, we could use the term ‘closeting’ in reference to any hidden or shameful behaviour that leads to destructive behaviours.

a) Men who have sex with men (MSM)
Staying in the closet can be lifesaving in Africa. Many countries still carry the death penalty for gay male sex, and most countries still have legal frameworks that criminalise being gay. The MSM population is at higher risk than the general population of getting HIV; driving them into the closet means that states which criminalise and stigmatise gay men essentially have consented to a high risk environment. Many of these states advance crude arguments about ‘not in our culture’ supposed morality, and ‘naturalness’. Data from South Africa suggests a growing community of gay men in all race groups as homosexuality becomes increasingly normalised. Addressing this group is a public health priority, but difficult to tackle in the midst of irrational legislation.

b) Sex workers and their clients
Sex work carries an HIV risk, although data suggests that the industry is responsible for only a small percentage of the overall epidemic. Sex work remains criminalised throughout the continent, despite much evidence that the industry exists everywhere. Criminalisation leads to police harassment, difficulty in accessing sex workers with health programmes, legal challenges when sex workers are assaulted, and harassment of sex worker clients. Internationally, there has been a move to advocate for decriminalisation of sex work on the basis that this would allow for a more rational approach to workers’ health.

But what about the clients of sex workers? Recently, at the International AIDS Conference in Rome in July 2011, a session was held on sex work, presenting some very interesting research on communities in Tijuana, Mexico, on the border with the United States of America. One of the researchers had interviewed the clients of sex workers, and found high levels of shame, perceived stigma and lack of impulse control. During the discussion, he referred to them, in summary, as ‘losers’. This judgement exists even among people who believe in decriminalisation of sex work – many policy makers and even country legislation support the continued criminalisation of the clients.
Notwithstanding the (moral and often irrational) debate as to why sex work should be different from any other business between consenting adults, this approach drives the clients of sex workers underground. It is also difficult to understand how this would help the sex workers themselves – having your clientele shamed by society and harassed by the law is hardly going to make doing business safer and more effective. This appears, yet again, to be a form of closeting – stigmatising a behaviour, and driving it underground, with attached difficulty of delivering condoms, safer sex messaging and other programmes.

c) Drug users
Illegal drug use is associated with HIV risk. While intravenous use has a particularly high risk, the lifestyle associated with illegal drugs is usually also accompanied by risk disinhibition, lack of access to prevention and care, stigma from communities, and legal harassment, again a kind of closeting. The ‘war on drugs’ has recently been criticised as having accomplished nothing more than making senior drug lords obscenely rich by pushing up prices, increasing resources for ineffective legal agencies exponentially, and not providing care to people with addictions. Calling for the ‘normalising’ of treatment – handling illegal drug addiction like we do cigarette smoking and alcoholism, has intensified, including within the medical fraternity in South Africa.

d) The straight problem
Ours is a heterosexual epidemic. Much modelling suggests that the majority of HIV transmission in southern Africa occurs within long-term relationships – marriages and boyfriend-girlfriend arrangements. Marriage levels are low in many countries in the region, including in our country; the ‘protection’ popularly accorded by marriage is questioned in some studies, where married people had higher rates of HIV than their unmarried counterparts. This is further complicated by the issue of lobola, which has made marriage an expensive and aspirational state, with theories as to how this may lead to high risk behaviour among younger people, including women needing to demonstrate fertility before a man will marry them. Condom use in stable couples is very low throughout the world so yet again, protection from HIV rests on moderating risk within these relationships. Much attention to the ‘ABC’s of prevention – abstinence, be faithful and condomise – has been given in the last two decades, but this is not useful in addressing people in long term relationships; abstinence is not an option unless mutually agreed upon, a partner can be as faithful as they like but still be infected, and condom use is unpopular. This kind of message does not talk to these relationships.

Much is currently being made of the faithfulness message. Unfortunately, this often ignores the fact that infidelity is so common as to be almost normal, especially in the context of a decades-long relationship. Some studies suggest that in the Unites States, in 80% of loosely defined long term relationships, one or both partners have ‘cheated’. In an Africa Centre study in KwaZulu-Natal, a third of men had been unfaithful to their partners over five years, and in another, married women had high new incident HIV infections, higher even than their husbands, all suggesting sex beyond their primary relationship.

How should this be dealt with? The ‘just say no’ faithfulness message isn’t working, and does not help those who do not say no. It also ‘closets’ infidelity, making honest discussions about risk taking within relationships even harder than they are. Introducing condoms into a stable relationship during the potential ‘window period’, which would be the scientifically rational thing to do, is rarely an option when the offender is feeling alone, ashamed and desperate for advice.
So straight people in relationships have little on offer, beyond a ‘behave’ message, and despite these people contributing the bulk of the epidemic.

IF IT ISN’T BEHAVIOUR WHAT IS IT?

The data for differences in risk acquisition, looking at biological reasons for the increase, is frustratingly disparate. There is a lot of data suggesting differences in our genes that may make some people more vulnerable than others. Many of these genes are racially distributed, suggesting that this may play a role. The discovery of the most famous gene that appears to moderate HIV transmission, the so-called CCR-5 gene, has led to the development of antiretroviral drugs that exploit the changes seen in a receptor. This gene mutation seems to protect some Caucasians from infection, and other racially determined genes appear to have some bearing on transmission.

Further, there has been speculation that something about the subtype of virus (called HIV Clade C) makes it more virulent, or that it has a more prolonged seroconversion phase, meaning that it is infectious for longer. It is unclear, if this is the case, why it didn’t become the predominant virus throughout the world, so much more research is required before accepting this theory.

Finally, it appears that the vaginal ecological environment is important for HIV transmission risk, and that perhaps our region has different organisms, or is altered by some external environmental factor, such as nutritional status.

These things are important, as they lend themselves to interventions which may be cheap and easy, or at least effective. It would also give a more believable explanation as to why the epidemic has gripped our region so hard. Behaviour may play a role, but something else would seem to be at play in the background.

CONCLUSIONS

How to tie all this up? Scientists and policy makers do not understand or agree on the relative contribution of behaviour and biological factors to HIV risk acquisition. Even within these broad categories, there is no agreement as to what is important and what is not. The data to support a specific behaviour pattern that drives the epidemic in Africa is absent, of poor quality, or conflicting, and overall unsatisfying. In addition, it is unclear whether any form of directive behaviour change is effective (in fact, we could even argue it may do harm, as it did in the prevention studies above). How can we then forge scientifically based HIV prevention programmes?

It seems some of this will be guesswork until better science comes along. We have excellent evidence for the efficacy of male circumcision and the prevention of mother to child transmission. Condom promotion seems prudent, as they work in individuals, even if the public health effect has been disappointing. Encouraging HIV testing is current policy and, it appears, improves sexual risk behaviours in people testing positive. Better interventions around those who test negative are needed, though.

We need a better way to deal with the ‘straight’ problem. The programmes we have in place do not talk to people in established relationships. A popular Seattle based relationship counsellor and talk show host, Dan Savage, has coined a term ‘monogamish’ to describe people in long term relationships, where occasional infidelities are acknowledged and negotiated as part of keeping the relationship strong. Maybe specialised large scale broad minded relationship counselling could make an impact, although it is hard to imagine this being acceptable to conservative African governments.
What to do beyond that? Programmes that decrease ‘closeted’ behaviour described above – whether minority sexual orientation, drug use or sex work – lend themselves to focused interventions.

Finally, we need to explain clearly why we have such a disproportionate HIV problem. We need a proper South African sexual behaviour study, conducted by credible scientists in a transparent manner. Once we have a handle on what behaviour we want to change, we need to bring in experts who specialise in behaviour change. People in the advertising industry are tried and tested, not public health specialists sitting in discussion and focus groups. We also need the biological data to be tied up to work out how much our genes, the virus clade and other factors may play a role.

We’ve had three decades of failed HIV prevention projects. South Africans deserve a better understanding about why they are at risk than that which we have provided so far.

**FURTHER READING**

The phone rang a moment ago – Sunday morning, at eleven o’clock. An extreme emergency? No, it is Jacob, a Bushman (as he identifies himself) from a resettlement farm 40 km away, on his cellphone. He wishes to make an appointment for tomorrow morning, but is unable to agree to a specific time. He is coming voetsaam (by foot), but will try to hitchhike part of the way.

A caption in the Mail & Guardian, which I glance at online, reads: ‘An intoxicated child shuffles along a teeming street in Luanda, casually gulping vapours from a plastic bottle containing petrol.’

Yet I am utterly bewildered by the anomaly of a Bushman communicating on a cellphone and having to walk many miles to consult a doctor; of a child in the fastest growing economy in Africa escaping from reality by sniffing vapours of petrol – forever a fugitive from life.

IN THE BEGINNING

Today to think of Africa is to recall a pot pourri of smells. It is to hear a symphony of strange and different sounds and to see visions of which the mind has not yet dreamed.

On one small island of memory, I see every morning two small girls running with their black ‘nanny’ along the dusty road towards a farm gate, where they clamber onto the fence of three-pronged wires. There they sing with carefree abandon treini ihatla (the train is coming) and ‘Nkosi sikelel’ iAfrica’, the beautiful prayer ‘God bless Africa’, that now, many years later, has become part of our national anthem. I sing lustily along, making up in vigour what I lack in melody. In the distance appears a small black snake, weaving and winding across the green savannah. Soon an enormous polished dragon spouting dark clouds of smoke bears down upon the threesome and emits a fearsome shriek as the driver waves to the small children and salutes them with a piercing whistle. At the last minute it veers away and charges down the twin rails, away towards Platberg and Natal.

The year is 1941 and we live on a farm in the eastern Free State.
At this time the Afrikaners living on the platteland (rural areas) of southern Africa were very poor. For forty years they had been lashed time after time by devastating ‘winds of change’. At the turn of the century there was the South African/Anglo-Boer War which left the country derelict: gutted houses, no crops, no animals and with thousands of women and children having died in the concentration camps. From 1914 to 1918 there was the First Great War. Soon after came the 1918 ‘flu, decimating the population even further. In quick succession followed the Great Depression (with massive unemployment) and the drought of 1933. And then came World War II.

We were poor.

We had a single pair of shoes. We wore them to church and to school and on arrival at home they were shed even before we had lunch. During the year when our feet had grown too large for the shoes, my father cut away a triangle of leather at the front end to accommodate our big toes. We were pleased as we now also had ‘peep-toes’, very fashionable after the war.

Very few toys of any kind were sold in the shops. We made our own. From a small wooden cotton reel, a strip of rubber tyre, a cylinder cut from a candle, a short stick and a match, we created a tractor that could actually move, gathering energy and speed from the tightly wound rubber. We fashioned oxen from clay. But most of our games were outside, requiring only the soil and the sand and a few stones: hop-scotch, abdol, overs and numerous other ball games. Cricket was a firm favourite using a tennis ball and a homemade bat. An empty jerry-can made do for the wicket, with the added advantage that there was a distinct sound when the batter was bowled, a third umpire long before technology appeared. And then, of course, we rode horses every day and swam in the kuile in the stream that wandered through the field beyond the house.

We had fresh fruit and vegetables, free-grazing beef, lamb and chicken and maizemeal in many shapes: krummelpap, slappap and a delicacy, clenched in our fists into a roll and enjoyed outside under the peach tree with our houseworkers. But most of all, we were extremely lucky to have an unencumbered, secure and wholesome childhood. These were the playing fields and the seedbeds of our youth. The hardships had little relevance and no deleterious effect. On the contrary, it taught us discipline, resilience and innovation.

SCHOOL YEARS

I started my career at the age of five on a farm school in the middle of nowhere. The solitary building stood on an acre of grassland about half a mile from a railway siding, still known today by the name of Chivelstone. The single classroom was built of hand-hewn sandstone blocks, with walls thicker than a large man’s boot. The inside was cool in summer; freezing cold in winter. Already then, there was an aura of days gone by: the wooden floor; the sash-windows; the solid wood and cast-iron desks (seating two children), with a central hole harbouring a small white glazed inkpot. Two reliable pupils had the daily task of refilling all the pots. As there was no running water, we washed the inkwells in the nearby spruit (small stream) when we were tired of school. In winter the pools were frozen and we had a grand time skidding the pots from side to side across the slippery surface. There were two toilets, both ‘longdrop’, one facing north towards the hills for the boys and the other for the girls, facing south across the spruit to the siding.

During the first years we learnt to write on a small slate with a special pencil (griffel) and the beauty of it was that the slates were never-ending – at no extra cost they could be used again and again ad infinitum. Mistakes were easy to rectify by simply wiping them away with a moist cloth. A finger worked as
well, a freshly-licked finger, moist with a little spittle, was even better.

The entire ‘library’ consisted of a single antique yellowwood cupboard, yet the love that our family has for reading was kindled and nurtured there. We had few Afrikaans books. It was barely twenty years since this so-called kitchen language had received official recognition and the first Afrikaans Bible was printed as late as 1933. There were old and battered English classics. I read the unabridged Uncle Tom’s Cabin in Standard 5 (Grade 7) with a bilingual dictionary beside me. I searched for and memorised every single unknown word. This stood me in very good stead almost two years later when I was sent to Eunice, an exclusive English boarding school having a connection of many years and more than two generations with our family.

We travelled the six or seven miles to school with my father, the principal, in a fashionable, dignified horsecart drawn by two enormous, specially selected horses. We acquired a first ‘car’ with a sail top, narrow tyres and plastic windows much later. There was no boarding at the school – all the children arrived either in a trêppie (cart with single horse) or on horseback, some having ridden from even further away.

We were 25 to 35 learners in the one classroom, the number varying a little from year to year – from Sub A, at that time the first year at school, to Standard 6 (Grade 8). Initially there was only one teacher, my father. To cope with eight different classes in one room took some doing. He did basic administrative work only, but had a remarkable rapport with the parents and the children and an exceptional insight into their problems. He utilised most of the time for actual teaching.

We learnt a tremendous amount in class, had very little homework and there was the added advantage of tuning in to other standards and effortlessly gathering a great deal of additional knowledge. We all had music/singing together in the classroom and did group ‘gym’ outside. Learning was fun. On completion of one’s own work, one could sit and read or do extra arithmetic. In Standard 6 we worked through the advanced Standard 8 arithmetic book. In spite of the limitations of the single classroom and the lack of equipment, the children did well when they moved on to secondary school. I changed from Afrikaans to English medium at a large city school and even so came first in my class at the midyear examinations – a great tribute to my primary school teacher.

**TEACHER AND JOURNALIST**

From my early days I never doubted that I wanted to study medicine. After completion of my year of basic sciences, my father discussed with me the possibility of first doing a BSc. I was only seventeen; medicine was a very tough course, with early exposure to the brutal realities of tragedy, disease and death and he suggested that I could return to a medical career later, if still so inclined. I decided to follow his advice. After majoring in mathematics and chemistry at Pretoria University, I spent four enjoyable and interesting years teaching at Bethlehem (OFS), Salisbury (now Harare), London (UK) and Livingstone (Zambia). While in Europe I had a fascinating time doing menial jobs in various countries: kitchen and housework in Austria (including chopping wood), picking grapes in France and working in Bertram-Mills circus in London.

This work highlighted and confirmed the healing benefits of hard physical labour on many diseases of mind and body. At the grape picking there were men and women in their late sixties and even seventies, healthy, laughing and full of fun, doing hard manual work for long hours.

At the end of fifteen months in Europe, I was loath to return to a regulated career. It would be very easy to slip into an unperturbed life of
perpetual travelling with an odd job here and there. How relaxed and easygoing that would be. The temptation was great. However, dramatic changes were taking place in Africa. By now, Harold McMillan’s new ‘winds of change’ were gathering momentum and roaring down the continent to the south. The time had come for me to go home.

I had always been interested in writing. I applied and was appointed as a journalist at Die Burger, one of the slightly more liberal Afrikaans newspapers. However, my stay was short-lived. After a few months I was asked to sign an undertaking, which I interpreted (rightly or wrongly) as limiting my freedom of expression. I had no intention of being prescribed to in my writing. I decided to apply to Wits to resume my studies in medicine. If successful, I would continue my medical career after a lapse of more than seven years. And so it happened that at the beginning of 1964 I returned to an academic life. (To give the news editor of Die Burger his due, on my resignation and statement of my intention, he did assure me that he would not insist on my signature, but the die had been cast.)

I have often been questioned about my decision, as a staunch Afrikaner, to go to Wits. A simple answer is that at that time this was the outstanding medical school in Africa and extremely well-regarded all over the world. The theoretical and practical teaching was exceptional. But in addition, I could not agree with the direction South African politics had taken. This was the time of the Rivonia Trial, the time when Nelson Mandela was banned to Robben Island.

My disagreement presented three alternatives: I could emigrate. Scores of my compatriots had already departed for ‘greener pastures’. But with my background I was too deeply bound to Africa. I could opt for active revolt, toyi-toyi-ing, marching and bearing banners of open revolution. At heart I am a pacifist. A third and much more creative option was to qualify as a doctor and contribute productively to health care and poverty alleviation. As a medical student for whom it was imperative to pass and do well, there was no time for politics.

One other factor influenced me. I believe firmly and absolutely in the value of merit – the best man for the job, with no buts ... Wits was the only white university in the new Republic of South Africa where ‘non-white’ students were allowed. We were a class of a hundred students of whom six were female and six of ‘other colours’. I don’t think there was a quota system (although in retrospect it does seem strange that there were six of each). To the best of my knowledge, they had arrived there by merit and this was and should be the only criterion.

Medicine became my calling, but writing remained my passion.

MEDICAL SCHOOL

I flew from Cape Town to Jan Smuts airport on Sunday, stayed overnight with friends at Kempton Park and travelled by early train on Monday morning to search for the medical school and to find lodging. Needless to say, I was late for the first class and knew no-one. My first stop that afternoon was at the women’s residence, where they told me without much ado that as I had already worked for some years, I was quite capable of fending for myself and would be able to find somewhere else to stay.

In a sense this was fortuitous as I had no transport. The next few days I called at blocks of flats in close proximity to our lecture venues (much nearer than the residence) and found a room only a stone’s throw away. The building was old and bleak and occupied by pensioners whom I never saw except as fleeting shadows in dark corridors. The small room was on the landing of the first floor, faced south and was very cold in winter. My parents brought me a bed, a table and chair, an old fridge and a hot plate that served me well. I never opened my curtains during that
year, as I looked straight into an opposite flat, which seemed to be only a metre away. I studied with a blanket wrapped around my legs. But the room was affordable.

During the years of teaching I had saved enough money for that year and knew that I would have to do well to obtain loans for the subsequent years. I was totally disinclined to approach my father (in his sixties), who had already paid for the university education of four daughters. However, he insisted on contributing R25 per month, which of course was worth much more in those days. Thankfully, in the years that followed Wits came to my rescue with loans and bursaries. For additional income I gave extra classes in mathematics and wrote a few articles about my overseas experiences in The Weekend Argus.

Although my studies confined me to my room and I had no social life, I found the return exposure to academic life interesting and very stimulating. Much more memorisation was required than in my previous mathematical degree and this irked somewhat. However, numerous humorous incidents occurred, the most notable probably when I moved to a flat to share with my sister at the end of that year. For financial reasons we transported our belongings, including my sister’s piano, through the streets of Hillbrow on a donkey cart. To conserve our pride and our prestige, we did this somewhat clandestinely, in the early hours of the morning.

**INTERNSHIP – BARAGWANATH (CHRIS HANI) AND EDENDALE**

Again Lady Fortune smiled on me. I did my medical internship at Baragwanath Hospital with outstanding registrars and specialists to consult, and pathology unparalleled anywhere in the world. We were four housemen assigned to our unit. On our first night in the New Year (1969) I was the only one on duty from 12 o’clock onwards, my surname being at the top of the alphabet. Hopefully by that time things would have quietened down.

But shortly thereafter there was a great rumbling and four trolleys charged along the open cement corridors to stop at the entrance to our ward. The orderlies may have fallen asleep or perhaps they had a break for a midnight snack. Whatever the case, I was confronted with three dire emergencies at the same time. One man, who turned out to be a diabetic, was in a coma; the second was in cardiac failure with so much water retention that the only vein to be found for an intravenous injection was in his neck and the third patient had a deep vein thrombosis with his thigh swollen to elephantine proportions; the skin was stretched to the limit and beginning to weep. A baptism of fire indeed.

Fortunately by this time we were well versed in handling most emergencies. We were adept at drawing blood, doing lumbar punctures, putting up IV-fluids and prioritising the urgency of each patient. Our colleagues were most helpful and the nursing staff was outstanding.

During the second half of my internship I skipped surgery and did obstetrics at Edendale outside Pietermaritzburg instead. Here I was equally lucky in every respect. The unit was excessively busy, but the staff, from consultant to orderly, was fantastic and the experience I gained was unique. During a single Christmas weekend on duty, I handled and treated every conceivable obstetrical problem.

**TRANSKEI**

The next four years were spent in obstetrics at Edendale, paediatrics, anaesthetics and intensive care at Addington and King Edward VIII Hospitals and paediatrics again at JG Strijdom in Auckland Park, Johannesburg. In between there were a few locums in Natal, the OFS and the Transkei. What I remember clearly and what was most impressive in all
these specialities, at all the different locations, was the excellence of the nursing staff – their expertise, their outstanding training, their commitment and dedication.

At Butterworth Hospital in the Transkei, I was the only doctor apart from the superintendent Dr Harris. He was very well qualified and experienced and had worked in India for many years, but his health was failing. There were three other vacancies. I was on duty all the time and the nurses went out of their way to look after me.

I arrived one morning at the children’s ward to be told by the sister that there were four lumbar punctures to be done, but they were ‘ready for me’. To my amusement, I saw four large Xhosa nurses holding the infants, sterile and draped, on a bench of comfortable height, in a neat row in exactly the right position, each nurse with a needle and tube at the ready. Amazing! Within five minutes the job was done. If an emergency arrived at night, they would think long and hard about calling me. They ‘specialled’ the patient, with quarter- or half-hourly observations and were astute enough to recognise life threatening changes.

Whenever my phone rang at night, I asked no questions, I ran!

**BUSH DOCTOR**

I have a practice in the bush of the Kalahari.

I married Boetie Claassens, a cattle farmer in Namibia (South West Africa) in 1974 and arrived at the farm *Hekel* with suitcases filled with selected materials, wools and patterns, as I was certain that my medical career was at an end. The farm is 80 km from the town Gobabis and 300 km from Windhoek, where the nearest specialists, laboratory and good radiological services were stationed. As I had lived, studied and worked mostly in cities for more than twenty years, I had no inkling of the need for doctors in rural areas.

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*San patients arriving by donkeycart (above) and Hereros by cattle truck (below)*

*Transported to see the doctor*
My practice began innocuously on the back lawn, where I treated our own and a few other workers from neighbouring farms, handing out pain tablets and sometimes giving an injection. Within weeks patients started arriving in bakkies, on cattle trucks, riding horses and on foot, occasionally in a sleek Mercedes. I remember distinctly one day (16 May, my birthday) when eighty Herero patients sat on the grass, flamboyant in the vibrant colours of their Victorian dress, my garden aflame with brightness.

Since then, for the past 37 years, there have been many patients, mostly Herero. They have come with fever and ‘flu, malaria, hypertension and rumatiek (arthritis). Latterly diabetes is diagnosed more and more often in the Herero. I have yet to see a San patient with diabetes. First cases of AIDS were confirmed only after independence, but it has become rampant in the last ten years. There have been many instances of trauma: accidents, disagreements, stab wounds. Many San patients have come in donkey carts, travelling long distances in sunshine and in rain, summer and winter and often when they are extremely ill. As is the case elsewhere, tuberculosis is rife amongst them.

However well a doctor has been trained and no matter how proficient he or she is, nothing can alert him or her to the gruelling experience of coping with extreme emergencies without a support structure, miles away from the nearest hospital, with no access to special investigations and often, particularly in those first years, without any means of communication or transportation.

**CLINICS**

Early on a winter’s morning, when I leave for a clinic, the sky is wondrously clear, the air crisp and I watch with awe as dawn breaks over the bushveld of the Kalahari. A duiker struts by the side of the road, stiff-legged, still half-frozen after the cold night; in the distance a jackal sneaks away; with more grace than the finest ballerina a kudu lifts effortlessly over the fence and amazingly, two shiny, pitch black honey badgers with white ties, are having a tussle right in front of me. I am in the only car on the road.

I left before seven. The three clinics were in Hereroland: one at Pos 3, 50 km away, the other at Otjinene (100 km) and the last at
Okanjato (160 km). Previously the patients had all come to my farm clinic, but distance was a great problem with the cost of the ‘ambulance’ (hired private transport) excessive, usually more than my inclusive fee for consultation and medication. The vehicles were untrustworthy, frequently arriving up to a day late for an appointment but still expecting to be attended to summarily, as they ‘did phone’. Indeed, they did. This in itself was a remarkable feat as for many years they had arrived unannounced.

I never knew how many patients to expect. There were frequently forty to sixty at the clinics, sometimes eighty and on one historic occasion 120. Darkness caught up with us and by the light of numerous candles we continued in the dilapidated old building with the cracked walls and crumbling arches. There were ghosts that night in the flickering shadows. I had no assistance; did all the observations and tests myself; dispensed, explained the dosages, collected the fee and handed out change. Whenever there was an added emergency, it became impossible.

The gravel road was good and well-maintained, except in the rainy season. In Hereroland there were no fences, the road narrowed and corrugations and sandpits were frequent. Free roaming cattle became a hazard at night and in the early hours, particularly in winter when it was still dark. During the summer rains it became impassable at times. Once I ran off the wet road and sat in the ditch for half a day. I was seven months pregnant. Another time I rolled the bakkie on a straight, dry and smooth patch, turned a somersault and landed unscathed in a sea of tablets. The canopy was in tatters, three of the four tyres were flat and the door was askew but there was only a slight dent above my head on the right side of the vehicle.

Still held down by my safety belt I sat gazing across the plain of rolling grass that faded away towards distant camelthorn trees. It was as if nothing had changed out there for a thousand years. I thought that perhaps the time had come for me to stop driving to the faraway clinics, and yet I knew without a shadow of a doubt that more work awaited me.

THE SAN CLINIC

Shortly after my tussle with the road and tumble with the bakkie a San patient arrived voetsaam from Skoonheid, a resettlement centre about 30 km from my clinic. During our conversation he said to me: ‘Skoonheid is no longer Skoonheid, it is now Vuilheid (Squalor)’. In those few words were contained a tale of extreme poverty and starvation, of misery, desperation and finally abandonment and alcoholism.

After independence in 1990, several San groups were relocated to these farms. Extended families settled there, barely surviving on the occasional old-age pension of a grandparent. Although they had comfortable houses, there were no jobs and they had no other fixed income;

At the end … only ash and cinders to keep the cold at bay
sporadically, unpredictably, bags of maize meal were off-loaded by a government truck. They were hopeless, helpless and destitute. I started planning to operate a private clinic there. Since November 2003 the clinic has been running on a fortnightly basis.

At every visit there were about forty patients, about one third of whom were children – drunken patients with dirty children dressed in tatters or not at all. They arrived early, sat idly for hours, raucous and agitating to be helped, hungry children clambering all over, crying and fighting, the whole situation untenable. This sorry state of affairs would be eased if we could find work for them, try to keep them creatively occupied and at the same time afford them a measure of food security. For a lasting solution they would have to acquire skills and their children an education geared to the needs of the labour market.

Handouts erode dignity, challenges confer strength.

With this maxim in mind we negotiated an acceptable and affordable fee for the clinic, provided they had an income from crafting. Adults would pay R5 and children R2 for consultation and medication. This again highlights the enormous disparity between First and Third World medicine. In the beginning almost no-one was able to pay and we mostly had a list of so-called ‘ous’ (give me), which were in fact gifts. The opposite is now the case; it is the exception that a patient does not pay.
To make a small comparison: the money due for a single visit to a fashionable hairdresser can provide basic food security for a family of six for a month. A similar disparity exists between the cost of good primary health care for the bulk of our society and advanced tertiary care.

The crafts centre began with three workers. Gradually more and more gathered confidence and were willing to try their hand. To date we have almost sixty workers, although the number fluctuates. They are very artistic – think of rock paintings – original and do outstanding beading. They now also sew, knit, crotchet, make bead jewellery (from ostrich eggshells) and do woodwork. From factory offcuts they fashion (by hand with needle and thread) dresses, jackets and shirts with brightly coloured geometrical patterns. They have started on a road of self discipline and are accepting ownership for themselves.

Great emphasis is laid on quality products geared to the demand, at market-related prices. Although their monthly income is small, they can afford the basics such as mealie meal, oil and soap. As they are paid on collection of the article, they have the joy of instant reward. It has been most gratifying to see the pleasure and the pride with which they deliver their craft and accept praise for work well done. It is months since last a drunken person arrived at the clinic; I suspect that over weekends it may be a different story.

In the final analysis I think that I have learnt more from them than they have learnt from me.

RURAL MEDICINE: A FEW THOUGHTS

Doctors (and other medical personnel) qualifying in South Africa were (are?) unquestionably of the best in the world. Nowhere else was there the exceptional combination of outstanding theoretical training with world-renowned specialists combined with extraordinary opportunities to gain hands-on practical experience.

The excellence of medical care, of outstanding primary health care, does not lie in numbers of new, fashionable and excessively expensive buildings, or in a wealth of equipment; it lies in the expertise, devotion and dedication of the health worker. The standard of care is as good as, but only as good as, the staff handling it. Nothing else can supplant the merit of a well trained, committed worker. The first prerogative, of primary importance, absolutely imperative for the excellence of our health care, is the expansion and conservation of our human resources – the cost is not exorbitant. A partnership between the state and private health care can be forged to the benefit of both parties.
Additionally preventive medicine is of paramount importance.

In our locally trained medics and paramedics we have a treasure of immeasurable worth. For the past decades we have been lulled into an euphoria of complacency and have all but lost this irreplaceable wealth. Why?

For the worker nothing is more fundamental than recognition – recognition of many exhausting years of intensive training and appreciation of intolerably long hours working under duress. I stand aghast that we are prepared to pay so little for life and for quality of life. Is it possible to attribute monetary value to life? If it were, healthcare workers surely should be best paid of all. When we consider this, their remuneration is a pittance. When compared to the pay packets of executives and politicians, it becomes ludicrous.

Our riches, our best resources, are fast flowing away. Time is running out. Perhaps we should sit up and take notice.

REFLECTIONS

As I begin to write the end of my story day is breaking once more here over the Kalahari.

By chance we came to Africa.

Ironically, we were of the first Free Burgers at the Cape in 1657 and my maternal great, great ... great-grandmother, Krotoa-Eva, was, by legend, a Khoisan queen. My Van der Post grandparents were part of a first ‘struggle’ against a Colonial power, the British Empire, from 1899 to 1902. I recall a snippet told by my father, Karel (Charles) Stuart de Kok, of a strange quirk of fate that intervened in the history of two De Kok brothers. Originally Le Coq and French Huguenots, their family had abandoned their heritage in France for the sake of a religious ideal. Together the young men stood at the harbour of Rotterdam, from whence they were planning to emigrate to Australia. A middle-aged Dutch man, with English ancestry, Jacobus Stuart, heard them speaking his language. He was drawn into their discussion and managed to persuade them to come to Africa instead. Jacobus happened to have three attractive, marriagable daughters, one of whom became my great-grandmother Agatha Stuart. Jacobus Stuart with his son-in-law, Karel de Kok, wrote the constitution of the Transvaal Republic, using the French ‘liberté, égalité, fraternité as a model and a guide. Such is the chance that shapes the destiny of man.

By chance we came to Africa, by choice I have remained.

I am from Africa and I am of Africa and here is where my life is and was destined to be. But with so mixed and muddled a genome, with a dedication to justice and human rights, and with an ingrained compassion for the weakness of man, coupled with the strength of the human spirit, I also have a dream, the same dream as in the celebrated words of Martin Luther King:

‘Let no man be judged by the colour of his skin.
Let every man be judged by the content of his character.’

For then, even now, we may have more of the strengths of the many different peoples of our country and less of their weaknesses; the spiral shall always trend upwards albeit with many a downward turn.

Editors’ note: Dr De Kok is also a Founder and Trust member of a semi-private school established for San children fifteen years ago. There are now three hostels and over 300 children, from Grade 1 to Grade 7. She has two children: Johan, who is a farmer and electronic engineer, and Mareli, a medical doctor doing research at Tygerberg, Stellenbosch University, in tuberculosis (and AIDS). She has written two humorous accounts of her practice (in Afrikaans) and Lammie, mother of Laurens van der Post and By the roadside in English.
In June 2010 I returned a book to the Royal College of Surgeons of Edinburgh after a journey that had taken it across the world and 175 years to complete.

This book, a compilation of the lectures of John Hunter had, like the notes of his brother William, found its way to Australia. I was aware that historical notes sometimes take on a life of their own and I was happy to follow the journey, across three continents, on which this book would take me. I knew the story of the notes of William Hunter travelling from Edinburgh before disappearing into Australia where they were rescued from oblivion, and I wondered if I would ever be fortunate enough to have cause to visit those far off lands.

I did, but the story for me started many years ago in 1988. As a young medical student in South Africa, I sat in the Hunterian lecture theatre of the University of the Witwatersrand Medical School in Johannesburg. I listened entranced while the Head of Anatomy, Professor Phillip Tobias, gave a lecture about John Hunter and the history of anatomy. He told the stories of Robert Knox in Surgeons’ Square, and of the Resurrection Men who supplied him with corpses. He went on to describe the terrors of Burke and Hare and the origin of the word ‘burking’. He spoke at length about the two Hunter brothers, William and John, and how John had learned his anatomy from bodies supplied by

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Tobias’s words and Hunter’s book: an odyssey across the world

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UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
DEPARTMENT OF ANATOMY
INAUGURAL LECTURE - 1988

The Anatomy Department’s Inaugural Lecture will take place as follows:

Date: Monday, 6th February 1988
Time: 08h00 sharp
Venue: Johannesburg Hospital Auditorium

Following Professor P.V. Tobias’s lecture, the class will be addressed by the course organiser, who will explain the procedures for the first week of term.

Students are requested to arrange themselves in pairs, these pairs to be allocated to dissection tables as a fixed arrangement for the remainder of the year. The names of the students in each pair are to be entered on the Departmental Registration Form which will be issued at the time of the address.

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[Signature]
the ‘body snatchers’. He recited an old medical poem about the ‘Foramen of Monroe’ and coloured his students’ imaginations by describing the dissection methods, characters and lives of the great Edinburgh anatomists and surgeons. I remember him narrating how the works of William Hunter had been saved from destruction in the far away city of Adelaide in Australia where they had been found, and put up for auction. He narrated how Ms Nell Dowd had bought them at auction and had saved them from landing up in a rubbish heap.

Eight years later I travelled to Bath in the UK with two colleagues who, along with me, were filling Senior House Officer positions as locums in the National Health Service. I was working as an Ophthalmology SHO in Maidstone and this was one of our forays into the South East of the UK. We stopped at a little bookshop in the town and I noticed a first edition book entitled: The Works of John Hunter with Notes, edited by J Palmer, Vol IV, 1835. I took it to the counter, and knew that in deference to Professor Tobias, I had to buy it. I paid what for me at the time was a small fortune.

On my return to South Africa I showed the book to Professor Tobias. He took me to his library and we went through the catalogues of John Hunter to see where this first edition fitted in. He was delighted to see the initials W N, 1884, written in the front cover and said that the book may well have been owned by William Nicol, another famous resident of Edinburgh. William Nicol had invented the ‘Nicol prism’ which was the first device which could plane-polarise light. I covered the book carefully and placed it safely away. I wrote the name William Nicol down on a piece of paper and forgot about it. Had I been an astronomer, having a book possibly owned by William Nicol would have had me incredulous with my luck, but I was quite oblivious to his fame at the time. There was, of course, no way of knowing whose initials they really were.
Fourteen years passed, and my life’s path had led me to being an ophthalmologist in Melbourne, Australia. I noticed the book on my study shelf and realised that I had forgotten who W N was. Also, I was aware that there were very few Hunterian museums in the world and I felt that the book might need a better home. I would be going to South Africa for a two week period and knew that if I had a chance I would try and track down Professor Tobias in Johannesburg and once again ask him if he remembered who W N was.

Towards the end of my two week break I realised that I would not have time to find the Professor, and instead went to the coast for a few days’ holiday. To my utmost surprise and joy I saw Professor Tobias taking his breakfast on the balcony of a coastal town hotel. I had found the man I was looking for by pure chance. We reminisced about the past and he reminded me that the initials might be those of William Nicol, but that I would have to check against the dates when he lived in relation to those in the book.

I flew back to Melbourne and wrote to the College of Surgeons of Edinburgh. I asked them if they had the set of books of which I had the fourth volume. I received a prompt reply that the College might have the other three volumes, but not the one I had in Australia. I thought of the College Library near Surgeons’ Square and of John Hunter who had once lived close by. I thought of that seminal lecture that I had heard as a medical student at the beginning of my career and of the circuitous route this book, and indeed my career, had taken. I remembered that John’s brother William’s dictated notes had also somehow managed to make their way to Australia before being
rescued. What a co-incidence that his younger brother’s notes had also taken that route.

I realised that there was a pattern that I dare not disturb. I contacted the College in Edinburgh and arranged to return the book by one of Edinburgh’s most distinguished anatomists, and possibly owned by one of her most distinguished scientists.

I arrived in June 2010 and walked straight from Waverly Station to the College. I handed over the book so that it could be housed in a place where it would feel more comfortable and at home.

It had taken 23 years and had been with me on three continents, but by returning the volume the set of books in the College was once again complete. I did, however, feel that perhaps I should have kept the book for my son and let him return it when it was 200 years old, or auction it on e-Bay, after all, it was a 175 year old first edition and might have been owned by a distinguished Scottish scientist who has a lunar feature named after him, the Dorsum Nicol. I was mulling over these thoughts while having a meal that evening with my Scottish colleagues. I mentioned where I had been that morning and told them about the book. “No”, they said, “thank you for returning it to us”. We drank some good Scottish whisky to that.

Back in Melbourne I felt that I had somehow let Ms Nell Dowd down. She went on an incredible detective journey once she had bought the Hunter manuscripts. She had traced the previous owner’s family through the Registrar of Births, Marriages and Deaths in Adelaide and then spent time researching the watermarks on which the letters had been written to try and date them. She spent time in the Royal College of Surgeons of England and enlisted the help of librarians around the UK. She also went through old journals which helped to complete the puzzle as to who recorded the lectures and how they had come to auction in Adelaide 200 years later.

I wrote to the librarians at the Royal College of Surgeons in Edinburgh to ask for their help in trying to trace the signatures on the book. A librarian and a volunteer initiated a search of the National Library of Scotland and the City Central Public Library to see if there was indeed a link between the two famous men. The dates, however, did not match as the book was signed in 1884 and William Nicol died in 1851. The other initials on the book, TB, or TBL could have belonged to one of four College Fellows who lived between 1803 and 1993. I had hoped that it might have belonged to Thomas Lothium, a Treasurer of the College, elected a Fellow in 1803. They could also, of course, have belonged to any previous owner of the book. But this is just speculation and supposition and it is here that I must end this chapter.

If anyone is interested in seeing this book, or the signatures therein, visit the Library of the Royal College of Surgeons of Edinburgh and find it, back where it belongs, on the shelf with the other works of John Hunter.

My thanks, gratitude and respect to Professor Phillip Tobias for the enthusiasm, inspiration and sense of awe he instilled in his students which was enough to last most of us our entire medical careers. I would also like to thank him for looking over this manuscript. Many thanks to Mr S Kerr at the Library of the Royal College of Surgeons of Edinburgh, Nicolson Street, Edinburgh, for his help in trying to trace the previous owners of the book and for his warm welcome when I visited the College in June 2010.

REFERENCES

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Reference examples

Dr Frack had been a member of the 1919 Class, the Tin Templers.

It did not, however, include anything about osteology, for bones would have doubled the size of The Pocket Gray.

Direct quotes should be in italics or in inverted commas

Military medicine, surgery, and nursing were matters too important to be left to private charity, however well intended…

“The tenth edition of Aids to Anatomy appeared in 1940…. It had been edited by Professor Stibbe, who, sadly, in 1923 left the University of the Witwatersrand.”

References


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