literature has subsequently found 'insufficient evidence to support an interventional effect of male circumcision on HIV acquisition in heterosexual men'. The review says that previous studies failed to control for most of the confounding factors, but notably has yet to interrogate the Orange Farm findings.

Cochrane is awaiting the two other prospective trials alluded to by Puren (being conducted in Uganda and Kenya). Their results are expected within 6 months. Over 40 studies over the last decade, none of them prospective, have failed to support the Fink hypothesis that circumcision somehow reduces HIV infection.

Cracking the debate wide open

While the jury remains out on the current findings, the sheer weight of the pandemic has given them valence and raised important sociological questions at the interface of culture and science.

Among the myriad questions is how the research, should it prove groundbreaking and become widely known and accepted, could impact on some indigenous cultures where clumsy circumcision by traditional healers leads to scores of deaths every year.

Says psychologist Pierre Brouard, Deputy Director of the Centre for the study of AIDS at the University of Pretoria, 'my own take is that it's fascinating, but what can we do with it?' He believes that as a public health policy issue 'this thing is too complicated. There are so many difficulties, never mind individual autonomy. What about sensation and sexual pleasure, never mind religion, faith and culture? I just think it's a minefield in a country like South Africa'.

After 21 months 51 members of the uncircumcised group had contracted HIV, while only 18 members of the circumcised group got the disease.

He added that, compared with using a condom, circumcision was 'an incredibly invasive, if not life-changing, intervention. This is not just an everyday intervention. I can't see it catching on as a public health intervention as it doesn't eliminate risk. Men are generally very attached to their foreskins – and purely biomedical interventions don't give us the whole picture'.

You can snip if you want

However both he and Helen Schneider, former Director, Senior Researcher and Associate Professor at the Wits Centre for Health Policy, agreed that as part of a health risk reduction plan it was 'worth consideration' by individual patients when offered by individual physicians.

Said Schneider, 'I think it's really interesting. People should know and have access to services if they want to do this. I say, if it makes a difference, go for it!' She added that, while very promising, circumcision as an intervention needed to be 'fully understood', particularly at a population level. Its efficacy in the long run remained unproven.

'My hesitancy comes from the deeply social and cultural content of this as an intervention – can you effect the sociological and behavioural changes over the long term? What about communities where being circumsised (or not) is tied to cultural and religious practices?' She warned about 'unintended consequences', saying she had witnessed, first hand, the sharp division among scientists on this topic while attending international conferences.

Venter said that 'if the country had a vaccine that was this effective, we'd probably roll it out tomorrow'.

Schneider revived the long-standing hypothesis that the difference in HIV prevalence levels between populations in KwaZulu-Natal and the Eastern Cape could be attributed to Xhosa ritual circumcision.

Puren said the Orange Farm community was a mixture of mainly Zulu, Sotho and Xhosa speakers with similar numbers of each in both his control and study groups. He reported little resistance to medical circumcision across the board. Puren said he would be 'fascinated' to research the 'Zulu/Xhosa' provincial HIV prevalence hypothesis.

Other findings of the study were that circumcision appeared to be protective for herpes simplex and that it could 'well play a protective role' with other sexually transmitted infections as well. 'We're busy analysing the data for syphilis and will know shortly,' Puren added.

Chris Bateman

FORGING A NEW DIRECTION – WSU

A pioneer of community-based education and problem-based learning in South Africa, Walter Sisulu University's Health Sciences Faculty at Umtata turned 20 in September. Its Dean of Medicine is convinced that its location suits its approach and philosophy.

Professor Lizo Mazwai, with convincing and urbane logic, takes on detractors who argue that the remoteness of the faculty and the paucity of specialised supervision of its students remain an Achilles heel.

'We've followed up our graduates (500 so far) over 3 - 4 years and they're performing very well – no less than any other intern trained in any other institution. Subjectively we feel they're well prepared to work in any institution and perform equally well in urban and rural environments,' he says with confidence.

Apartheid 'tinkering'

Apartheid tinkering led to the then University of the Transkei (Unitra) starting up a medical school in 1985 after the De Villiers Committee recommended that existing campuses be opened up to black medical students.

While the committee (1981 - 83) decided that a dedicated 'black' medical school was not then warranted, it noted that

another medical school for 'blacks' might be required within 5 years and pinpointed the Transkei region as having potential. Unitra immediately picked up on this and lobbied for a medical school on campus.

Says Mazwai: 'At first there was some resistance around logistics, costs, recruitment and the quality of the doctors and so on and not much support'. But Unitra persisted and the government chose to go ahead in terms of the new educational approach of community-based education and problem-based learning – which it duly pioneered in South Africa, resulting in subsequent widespread take-up.

While the approach was not new internationally (Mazwai and colleagues visited Israel, Holland and New Mexico), the new government believed existing medical schools to be contextually inappropriate and educational ivory towers.

Two more local health care education probes followed over the next decade (Moodley and Hoffenberg Commissions). The first recommended Unitra's incorporation as the new South Africa's eighth medical school and the second questioned how practical and financially viable this was.

'So we're resuscitating the idea of a dedicated campus with the department of education,' says Mazwai with the confidence of a man who has got his way in the past.

Hoffenberg examined the cost of bringing Unitra 'up to standard' with other medical schools. The capacity of the Umtata campus to recruit specialists, its accessibility and mobility were duly weighed up against East London and Port Elizabeth.

Huge costs

Unitra came a poor third (twice the cost of Port Elizabeth and R100 million more than East London).

The more urban coastal centres had decent hospitals requiring only modest upgrading and new medical campuses, while Umtata needed an entirely new hospital (Umtata General was falling apart and deemed too expensive to upgrade for teaching).

Walter Sisulu University medical students soak in their community health training.

A master plan for a teaching hospital, drawn up in an outburst of post-DeVilliers Committee enthusiasm, was located, dusted off and updated and thrust before Health Minister Nkosazana Zuma.

As Mazwai tells it, the politicians asked themselves, 'we have a medical school with a sound philosophy, producing the kind of doctor we want and tailored for the country's needs – and this R400 million cost for a brand new hospital and general upgrading'.

'Basically they decided that an appropriate training curriculum was more important than the problems posed by location and cost,' he sums up. Thus was Nelson Mandela Academic Hospital born, prompting emotive editorials in the local *Daily Dispatch* newspaper slamming the decision as 'purely political' and drawing Mazwai into a fierce 'Letters page' duel, asking what tone their editorial would have taken should the decision have gone East London's way.

'There was the challenge of specialists. It's true we couldn't get them overnight and there was this generally negative attitude to this area, then considered to be unsafe.'

The 'Cuban option'

Minister Zuma's decision also met with general disapproval in the medical community, prompting Mazwai into 'getting creative' about the paucity of specialists and giving birth to the much vaunted and subsequently fiercely debated 'Cuban solution'.

'South African specialists simply did not want to go to rural areas. We already had a government-to-government agreement with Cuba and I asked for medical recruits,' he recalls. In 1997 the first 25 Cuban specialists were recruited to Umtata General Hospital, followed 3 years later by another 18. 'In the end we had 50 specialists in various fields,' Mazwai says triumphantly.

The dismal conditions at Umtata General Hospital proved almost too much even for the Cubans during their first 3 years, giving Mazwai ammunition to push for the speeding up of the Nelson Mandela Academic Hospital, finally completed in 2003.

That mission accomplished, it was time to spread his wings further, this time lobbying for an entirely new medical campus alongside the hospital, thus easing themselves out of the two floors into which they were cramped in the Unitra campus buildings. Unfortunately says Mazwai, Unitra was under 'financial siege' at the time and government officials baulked at spending another R120 million for a dedicated medical campus.

Now things look better with the merging in July 2005 of the Border (near Potsdam in the East London area) and Eastern Cape (Butterworth) technikons with Unitra to form the new Walter Sisulu University.

Have done, can do

'So we're resuscitating the idea of a dedicated campus with the department of

The Nelson Mandela Academic Hospital in Umtata.

Picture: Chris Bateman

education,' says Mazwai with the confidence of a man who has got his way in the past. He says that today anecdotal compliments 'abound' about how good WSU interns are, chiefly because of the contextual and problem-based learning approach. About 15% of graduates were currently doing some postgraduate studies (introduced at WSU 5 years ago) with about 80 registrars currently working in the Eastern Cape hospital network.

Mazwai strongly rebuffs the longstanding refrain that the education quality and levels of supervision of his students are 'below par', thus condemning them to an inferior education. 'Firstly the philosophy that if you're not a specialist you shouldn't be teaching medical students is simply not true – we use pre-selected GPs and others. I don't know where this misconception comes from. Sure, it's certainly a danger but we're doing everything to fight against simply teaching classroom theory. And I agree that if you do not follow up students there is a danger,' he concedes.

Problem-based learning involved tutors in small groups of no more than 12, discussing real or realistic cases – always with a 'mentor' present. Every faculty staff member underwent a tutor/mentor workshop with an annual refresher course and selected senior medical officers in Eastern Cape district hospitals were brought in for orientation courses before undergraduates spent time in their hospitals.

Maximum exposure

'We also expose our students to a broad spectrum of disease conditions – much more so than in the big cities. I guess at most about 30% of them will become specialists or super-specialists. The majority will work as generalists,' Mazwai said.

Professor Lizo Mazwai, Dean of Medicine at the Walter Sisulu University in Umtata.

Picture: Chris Bateman

Dropping a student in a country village where they could witness their patients' living context (drawing water, collecting wood) proved an excellent learning environment and gave them an opportunity to do some community health training. A full 30% of the student's education was community-based, with the first year dedicated mainly to visiting facilities such as outlying paediatric and maternity clinics.

By the time they get to their third year they are doing group community projects such as tracing a scabies outbreak or isolating factors affecting an outbreak of diarrhoea. The study design, methodology and results are then presented for evaluation.

'Basically they decided that an appropriate training curriculum was more important than the problems posed by location and cost,' he sums up.

In their fourth and fifth (clinical) years, students work under the supervision of local doctors in hospitals or private consulting rooms.

Racial mix

Mazwai said that with more than half of the medical students coming from the Eastern Cape region, there was no difficulty in finding them private GPs to work with (there are more than 20 in Umtata alone) and 'more than sufficient district hospitals'.

He said one paradox of the historical debate was that local people and doctors did not buy into or attach the common stigma associated with WSU but instead embraced the university's philosophy.

True to its apartheid beginnings, WSU has about 80% African students, 15% Indian (Mazwai says that if left to matric results alone, his student body would be predominantly Indian) and 3% whites. He says Umtata General Hospital, now managed entirely by his Department of Family Medicine, is slowly improving with certain wards due for either demolition or revamping.

'The revitalisation programme is going slowly because of capacity problems but the Sir Henry Elliot Hospital (part of UGH) has now been condemned for renovation as a 110-bed chronic hospital (to absorb the HIV/AIDS pressure) while the Bedford Orthopaedic Hospital near the Umtata Airport has recently been upgraded. UGH also served as 'an excellent' psychiatric hospital for acute patients.

While the historical debate never seems to go away, there is little doubt health care delivery and education at WSU has improved – seemingly against daunting odds.

Chris Bateman