

Pioneering treatment access in a rural area of South Africa

Providing access to antiretroviral treatment in an urban setting is very different to rural provision, which brings its own set of challenges. However, with commitment and dedication, nothing is impossible, and **Belinda Beresford** reports movingly from the 'frontline' of the Transkei area of South Africa, on the significant achievements that are being realised in this remote rural area.

Lusikisiki, Transkei, South Africa

Lusikisiki was the dumping ground for thousands of black people not required as labour in apartheid South Africa. Once counted as part of the 'independent homeland' of Transkei, Lusikisiki is a one-road town in a remote part of the country. The people of the area are extremely poor and widely dispersed across a rural area badly served by infrastructure and with little, if any, public transport.

Many families survive on money sent home by migrant labourers, and households frequently consist of grandparents and their grandchildren. The economically productive adults go elsewhere to look for work because unemployment is so high. Women in Lusikisiki tend to have large families, and five or six children is common. In part this is because getting access to contraception, especially condoms, is difficult for such a dispersed population.

With so many of the factors that contribute to the spread of HIV, such as migrant workers and poverty, in place around Lusikisiki, the level of HIV infection among the population is very high. Prevalence among people seeking voluntary counselling and testing at different sites in Lusikisiki ranges from 25 per cent to 83 per cent.

So this was the town that international aid organisation Médecins Sans Frontières (MSF) felt would be the ideal place to demonstrate that antiretroviral treatment could be given effectively and safely in rural areas. Creating a sustainable antiretroviral clinic in Lusikisiki would be powerful evidence that it is possible to do the same anywhere else in South Africa.

In 2003, MSF launched its antiretroviral programme in Lusikisiki as an extension of MSF's ARV clinic in Khayelitsha, near Cape Town. The Khayelitsha clinic has been a vivid example that indigent black patients living in an overcrowded and impoverished township can, and will, be able to successfully take antiretroviral drugs. Lessons learnt from this flagship urban clinic were applied to the new project, including the transfer of staff and material.

MSF sees great advantages to treating patients with AIDS in a clinic, rather than hospital setting. Hospital patients tend to have lower adherence levels to their treatment regimes, they are often sicker, out of their communities, and may have to travel further than patients attending primary health care facilities. In contrast to clinics, where attendance tends to be voluntary, hospital patients may feel less freedom to refuse VCT,

and so may be less likely to accept the results. An additional aim was for the Lusikisiki clinic to show that primary health care can be a better method of providing antiretroviral therapy than hospitals, and to do it in convincing enough a manner to ensure that the decentralised model becomes policy.

The Lusikisiki programme is headed by Dr Hermann Reuter of MSF. It is designed to educate nurses, so that they can assume more responsibility in giving ARVs. The driver for this approach is the realisation that a proper, national treatment plan that reaches the furthest corners of South Africa, will have to rely on primary health caregivers. Nurses, who often live in the community they tend, are in an ideal position to know and understand their patients – factors critical for the success of a chronic care initiative like the ARV treatment programme.

In keeping with this approach, the project has a strong bias towards nursing and community involvement. Instead of a doctor deciding that a patient is ready for antiretrovirals, patients are chosen by a 'selection committee' of healthcare workers and counsellors. The idea is that the committee should have a fairly comprehensive understanding of the potential patient, and whether he or she is likely to adhere to the treatment regime.

As far as it is possible to assess, the patients seem to have been chosen well. So far, only about 5 per cent of patients miss appointments, and in roughly half the cases this is because they are hospitalised.

There are two significant – and interrelated – differences between patients in Khayelitsha and those at Lusikisiki. People in the latter tend to be poorer, and further away from clinics. Therefore patients attending the Lusikisiki clinic tend to be sicker than those at the Khayelitsha project, partially because they are reluctant, or unable, to use scarce resources to travel for medical help. It can cost R200 to get a person to hospital and families might be reluctant or unable to spend that money until they see no choice.

On the face of it, the Lusikisiki clinic is succeeding. Started in February 2003, it now has over 350 people on antiretrovirals, of whom 23 are children. Clients are scattered between St Elizabeth's Hospital in the centre of town, and 12 outlying clinics.

The arrival of the programme has had widespread ramifications. Medical workers have been empowered by intensive theoretical and hands-on training which has improved

their knowledge and frequently added to their job satisfaction. Nurses are more confident about their ability to take responsibility for problems that previously they would have referred on. For example, patients with peripheral neuropathy and psychiatric problems were once referred to the Gateway clinic next to the main hospital, even though nurses were technically able to order amitriptyline. Now, with the confidence of seeing how good the results can be, nurses now order and prescribe the treatment themselves.

Rising numbers of people are choosing to undergo voluntary counselling and testing (VCT) and are attending support groups. There are signs that stigma is diminishing and there is greater community awareness about HIV/AIDS and about prevention and treatment.

And there are the clear signs of success in the several hundred people on the programme, most of whom are steadily regaining their strength and health. The target is to have 1 000 adults and 100 children on antiretrovirals by the end of the year.

However, the programme cannot yet be counted as a success. Repeated failures of leadership and management within the public health system mean that the project is surviving and expanding in spite of its setting. The major problem is that the ARV treatment roll-out in Lusikisiki is dependent on MSF for expertise and resources.

As a demonstration of the possibility of giving ART in a rural area, the programme succeeds. As a part of the national treatment plan, integrated into existing health services, it has yet to prove itself. Spending time at the programme reveals an endless stream of small hitches and glitches that steadily erode its successes and effectiveness.

A morning at one of the outlying clinics highlights a number of problems. There is one fully trained nursing sister and one assistant nurse from Limpopo who doesn't speak Xhosa. Theoretically there is another nursing sister, but she's on a year's study leave and hasn't been replaced. The consulting room is so small that access to the basin is blocked by the filing cabinet that holds the drugs. The doctor washes his hands with a bar of household soap in a tin basin of water perched on a cupboard.

Patient one is a large lady of 43 years, with six living children and two dead. Her husband is dead, and she now has a small child with her boyfriend. The baby has been given none of its required birth vaccinations, nor has the mother been given a Road to Health card, to record immunisations and monitor the child's growth and development.

The mother has chosen not to breastfeed for fear of transmitting HIV to her child, and should be collecting the milk formula to feed her child. But, not for the first time, the clinic has run out of formula.

The MSF HIV programme used to provide the formula, although it is supposed to be the responsibility of the state as part of its prevention-of-mother-to-child-transmission programme (PMTCT). But despite repeated promises from local government the milk powder often fails to turn up. The formula has been 'on the way' to this particular clinic a couple of times in the previous days, but somehow never arrives.

The doctor tells the mother to buy her own milk if she can. Looking worried she leaves, not knowing that she is part of a battle about responsibility between MSF and the local health system. The MSF management feel caught. As long as the aid agency supplies the formula, local government, doesn't appear too concerned about getting its act together to provide the formula. Why do something when someone else is doing it already, and at their own expense? But, the state has a PMTCT programme that should include provision of formula feed, and so there should be a distribution chain that ensures artificial milk is available to all mothers who need it. This is, after all, one of the most simple steps for curbing the spread of HIV.

MSF recognises that the most effective way to boot local administrators into action is to mobilise the community. But that is hard to do over an abstract idea – people need something to make them angry. So Dr Reuter has decided not to buy fresh formula for the clinic. The mother will have to feed her baby on something else – probably thin porridge – in the hope that this experience will trigger action by health service officials. Hopefully a few days of solid foods long before it is due to wean won't harm the child.

The next patient is a skeletal woman, barely able to walk, who clammers onto the examination couch on her hands and knees. Her brother, who has lost his job in Durban, bends down to take off her shoes. Recently discharged from hospital, she doesn't have any idea of her CD4 count. Using his cellphone, the doctor calls the hospital for the results of her blood tests, but repeatedly fails to get through. Eventually the network goes down.

Giving up, he returns to the examination. His patient has tuberculosis (TB), but there is no TB ward at the hospital. 'Here you can see lack of resources affecting medical decisions', says Dr Reuter. There is no TB ward at the hospital for patients to stay in

while they receive the daily injections required in the first two months. But there are also not enough nurses to go on home visits to do the injections. The woman is too weak for the two hour walk from her home to the clinic, so she and her brother have to get a taxi. This costs R14 return per person, far too much for them to afford every day for two months.

The third patient had been due to start antiretroviral treatment the week before, but had been diagnosed with TB. As a result his antiretroviral regime has been delayed until the TB treatment is under way. His wife – herself HIV-negative – is his treatment supporter and accompanies him to the clinic. He has been twice treated for STIs, using the approved broad spectrum syndromic treatment. But the treatment protocol does not include acyclovir and he has herpes. So the herpes is not controlled, damaging his health and making him more susceptible to passing on and being infected with other STIs – including HIV.

Patient four is a woman, getting better after four months on ARVs. Her sister recounts the small triumphs of improving health: She can wash herself, can feed herself, can even wash her own panties sometimes.

A nursing sister comes in with a previous patient's script because the clinic has none of the prescribed vitamins. The doctor tells the patient to try again in a couple of weeks. One of the earlier patients comes back as instructed to display her pills. The doctor has given a script for toxoplasmosis which involves dispensing 120 tablets. But the clinic only has 126 tablets in total, and some of these will be needed for prophylactic treatment to prevent other patients from developing cryptococcal meningitis. So the dispensing nurse – actually the cleaner – unilaterally decided only to hand over the normal dose for prophylactic use. The doctor points out that the patient will probably die without the full treatment. The best strategy is to give the patient the 120 drugs, and not give out prophylaxis, accepting that anyone who becomes infected with cryptococcal meningitis because they don't have the preventative medicine will just have to be treated later. Hopefully by then there will be enough drugs.

Nor is the problem of missing drugs confined to just one clinic. At another, in town the next day, a young woman is carried into the consulting room by her mother and father. She presents the classic picture of an African AIDS sufferer. Very thin, cold, accompanied by the stench of urine, unable to talk, or to straighten her arms and legs, she whimpers and cries repeatedly with pain. The doctor's instinct is to relieve her suffering. But the clinic has no morphine, so the trio will have to go to the hospital to relieve her agony.

Her parents are gentle with her and concerned as the doctor explains that their daughter has TB, and must be treated for that before she can start antiretrovirals. She's unable to stand, so the doctor easily picks her up and then stands on the scale himself, deducting his weight to get hers. Outside a battered, windowless red bakkie waits in the boiling sun. This is the woman's ambulance, hired by her parents to bring her to the clinic. As she is carried to it, it's hard not to see it as her potential hearse.

Ironically, given the national trauma over lack of access to antiretroviral medicines, these are among the most assured drugs at the clinics. Because Lusikisiki is not an accredited government ARV site, the state does not provide any of the antiretrovirals. Rather patients receive Indian generics, ordered and supplied by MSF. The antiretroviral drugs arrive on schedule. But the other medicines needed to treat opportunistic infections such as shingles, thrush, and pneumonia are more problematic. Frequently clinics and pharmacies run out of scheduled medicines, as well as other interventions such as milk formula.

Many reasons are given for shortages of medicines. Sometimes requisition forms have been filled in incorrectly, or have not been submitted in time. There are complaints that orders are cut down, or rejected by district management because the drug bill is perceived as too high. Sometimes Central Stores in Umtata runs out of supplies, and in other cases there isn't a car or truck to distribute the drugs to clinics. Frequently the things not supplied may ostensibly be less important, such as creams to relieve skin rashes. But the constant irritation of skin rashes can be traumatic, not only because of the physical discomfort, but also because they reveal the sufferers' HIV status.

In an area with such high levels of HIV infection, people are quick to learn the common signs of AIDS-related illnesses. Handing an orange to Dr Reuter, a hawker is taken aback when his customer asks him if he has been tested for HIV. Warily he says 'yes', adding in a whisper that he is infected. 'I know,' says the doctor, having seen the tell-tale fungal rash on the man's fingernails as he handed over the fruit.

The clinics are often in poor condition, with no water and no electricity. Sometimes this appears to be the result of muddled planning or incompetence rather than lack of funding. For example, one corrugated iron clinic sits to the side of a fenced-in field, a few hundred meters from an electricity sub-station. Standing proudly in the middle of the field is the new clinic, built of brick with toilets, huge water tanks to ensure fresh water, consulting rooms, and everything else needed to provide good health care. But

this spanking new clinic is firmly locked, and has been for months. Unfortunately, a few days before the opening ceremony, it was discovered that the clinic had not been connected to the electricity supply. And, rumour has it, that although one size of clinic was commissioned – and paid for – the final product was actually a smaller and less costly design. While management work out how to connect the new building to the national grid, which is just a tantalising few hundred metres away, the doors are kept firmly locked. So people instead queue in the open air to be seen in the equally electricity-less corrugated temporary clinic next door. This is far too small to contain the patients waiting to be seen, some of whom may be very ill.

This was clearly demonstrated one winter morning, as patients sitting in line on the ground ignored a thin and semi-conscious woman writhing in the grass behind them. Suffering from AIDS-related dementia she was being restrained by relatives, while nurses tried to work out how to get her to the hospital in town.

Another example of wasted resources can be seen in central Lusikisiki itself. The village clinic consists of a collection of containers and corrugated iron, adapted to form consulting and waiting rooms. Situated in a space right next to the main road through the town, patients attending it face inadvertent disclosure. It's hard to retain confidentiality when clients are part of a large singing support group in full view of everyone going to and from town.

Just around the corner from this motley clinic, with its pit toilets, is a smart brick building, the Anglogold Health Services clinic, there to provide health services to former and current employees of the mining giant. It appears empty, in stark contrast to the long queues at the Village Clinic.

But despite the physical problems of treating AIDS, MSF finds its work is becoming easier. National government's endorsement of a country-wide AIDS treatment plan, including antiretrovirals, has reduced some of the initial hostility to the MSF programme. Nurses were sometimes fearful of being involved with antiretrovirals, which were viewed as politically contentious. Another reason for fear was ignorance: Many nurses, especially those in rural areas, tend to be older, and so are less likely to have been trained about HIV/AIDS.

As one nurse explained, '...we were not trained about HIV and AIDS. We thought that HIV-positive meant he or she was dead tomorrow. Before we had patients on the drugs we feared patients would die of the side effects. Now we know they don't.'

But nurses are not always keen for further knowledge, for fear that it will increase their often already overburdened workload. There is a shortage of qualified nurses and it has been known for clinics to open for patients with just a semi-trained nursing assistant in charge. The argument is that simply having the clinic open is crucial – if patients are turned away from a closed door because a nurse hasn't turned up, then they may not have the resources or the inclination to come back again.

MSF ensures that doctors rotate through the different clinics, ensuring that each of the two doctors visits every clinic at least once every two weeks. Most of the work falls on the nurses in charge, many of whom are staggering under the burden. Although the plan to have a nurse-based scheme is more sustainable in a large and relatively poor country like South Africa, this strategy places extra burdens on the nurses.

The impact of the disease on healthcare workers as people is also not hard to see. Frustration at inaction, shortages of drugs, not enough staff or training burst out. So too does anger at the situation, at people who can't look after themselves, at the endless sick and the limited resources, and at those who are perceived as spreading the disease. And healthcare workers often have an intimate knowledge of the disease in their private lives. Rage within one healthcare worker erupted when she spat angrily about people who don't care about others, or different opinions or points of view. 'Men are selfish, they don't want to die alone,' she said. The face of antiretroviral treatment, the sympathetic ear, and the caring medical worker encouraging hundreds of people to be tested, and to seek treatment, she herself is hiding a secret: her partner almost certainly has AIDS.

The professional façade of another nurse, sitting confidently in her clean and organised clinic, also cracks while being interviewed. Regret at her ignorance shines through as she confides that her first personal encounter of AIDS was in 1998, when a young relative of 23 became sick. 'She was very thin, grossly wasted. Then her boyfriend was also diagnosed. I was scared to touch her, scared to go and look after her'. Then the tears start. 'I have a cousin. She had five children, all of them died. Now she is also positive. Five daughters. The youngest was 17 years old'.

Nurses interviewed say that the biggest problems are erratic supplies and overwork. 'The hardest thing is that you don't get treatment for opportunistic infections. Sometimes you don't get enough drugs for treatment. Also there is a shortage of staff. There are too many clients, we cannot do all the testing,' said one clinic head. 'Mondays in particular

are bad,' she mused, gazing thoughtfully at the long queue of people sitting under a rusting tin roof in the waiting area on a hot Tuesday morning.

Although nurses and other workers both want and need training, actually arranging it is problematic. Usually there are no staff to cover for those away on training, and the time and money costs of gathering them together at a central point can be overwhelming. Decisions for training can be sent down from on high, with scant regard for the practical problems. Some nurses also complain that the training is too theoretical, and they want to learn in a hands-on environment.

Other smaller things add to the stress nurses face. For example, right next door to one outlying clinic is the house of an experienced nurse. But every day she has to travel for half an hour to get to a clinic in town where she has been assigned to work. Meanwhile, the clinic next door to her house is run by a nurse who lives in town. Two women, both spending unnecessary amounts of time and money travelling to work to do the same job. The orders given by the National Department of Health do not necessarily appear to result in co-ordinated action at the district or local level, and this is not confined to the health department.

A significant part of the MSF project's resources are non-medical, primarily in helping people to get the welfare grants that may end up feeding extended families. When MSF arrived, people were waiting more than six months to get paid their grants. After threats by MSF's partner, the Treatment Action Campaign, to organise a demonstration, the delay fell to about three months by the end of 2003. Then came the Christmas holidays, and now delays are as long as before, if not worse.

Healthcare workers have encountered patients who were not even permitted to hand in their grant application forms. One woman attempting to hand in her grant application in August was told to return with it in November, because of the backlog in dealing with applications. But grants are only backdated to the date of application, so these three months she delays in handing in the form means she will get three months' less of backdated payment.

A major hurdle in sorting out these logistical problems is getting a response from local and district health service managers. Dr Reuter admits that working with district government can be very difficult. 'They are often not in their offices, frequently they are doing workshops or at meetings'. Some of the lack of help Dr Reuters attributes to

insecurity on the part of government officials. 'Officials tend to take us as a threat to them. But we need them. It is government who should be responsible for the people of South Africa, not MSF. MSF just kick-started it'.

For whatever reason, without effective decision-making the confusion continues.

Laboratory tests that could not be done locally used to be sent to Port Elizabeth. But a reorganisation in the health department meant they were then sent to a laboratory in Umtata. Unfortunately the laboratory had problems in actually providing the results to doctors, so while that's being sorted out the tests are sent back to Port Elizabeth. Inefficiency over lab tests leads to unnecessary duplicate testing when results are lost, or are not given to patients before they are discharged from hospital.

It's not just the lab tests that go on roundabout routes. For reasons somewhat lost in time, but relating to the apartheid boundaries, untarred roads between Umtata and Lusikisiki and other uncertain but complex reasons, supplies sent to the clinics travel on a roundabout route. Supplies are sent from the Central Stores in Umtata to Port Elizabeth. From here they are sent by rail to Port Alfred. There they are loaded onto trucks and driven for three-and-a-half hours to Lusikisiki. The logical thing would be to send the medical supplies directly from Umtata to Lusikisiki, a journey of approximately two hours.

MSF went into the Lusikisiki project with clear goals that included an exit strategy. Within three years the hope was that the project would be so integrated into the state's health system that MSF would be able to pull out, leaving the district health structures to continue with a fully functional and successful system. The aid organisation saw itself as helping to overcome the initial inertia of rolling out such a massive treatment programme. But without radical changes within the provincial and district health system, porcine pilots are more likely to be zooming above the Eastern Cape than MSF being able to withdraw on schedule.

Lusikisiki requires innovative planning and good administration to overcome the problems of distance, poverty, high numbers of patients, and all the other logistics of providing chronic care. Probably the biggest problem the area faces is its remoteness from the sources of government power. Far away from a provincial government that is notoriously wracked with infighting, Lusikisiki is even further away from Pretoria and the leadership of the national government departments. Small towns like Lusikisiki might not be out

of the minds of leadership, but too often the inability, or lack of interest, of local level officials seem to be disregarded or overlooked.

MSF is filling much of the gap, either by directly providing the missing items, or by assisting local managers to overcome problems. But without input and resources from the state, there is the risk of creating a situation where the aid organisation becomes a more integral part of the provincial health system: an uneasy and unsustainable situation for both parties. As government ministers have pointed out, it is the role of the state to care for its citizens, not for outside organisations, no matter how worthy

Yet MSF cannot plan its withdrawal from the antiretroviral site unless it is totally confident that all its patients would continue to receive at least the same level of care. To abandon patients to an erratic drug supply and under-trained health workers would be highly unethical. Yet the Eastern Cape health department does not appear to be building the kind of capacity needed to successfully run its antiretroviral programme. So it looks as if, despite its original intentions, MSF may be involved with the clinic indefinitely. To extricate itself from the situation, the aid organisation may even have to scale up its work: possibly becoming more involved in the rejuvenation of the health department above grassroots level, by working with regional or provincial policy-makers and managers.

Caring for the children

An additional problem for the MSF clinic is getting treatment to children because adults tend to crowd out services and resources. 'It is the survival of the fittest, and adults are stronger than children', says Dr Reuter. The odds against children getting the care they need are increased if they have already been orphaned by the disease.

An example of this grim triaging is seen in one patient: a tiny emaciated girl accompanied by a large lady, who has a plump baby attached to her breast. It's the first visit to the clinic for the girl child who looks far younger than her eight years. Her blood test results have failed to arrive. The doctor tries repeatedly to get through to the hospital, but the connections keep going down. It's almost immaterial in this case: the child is passive and non-responsive and obviously in need of immediate treatment. But the question is whether she has TB. The two adults agree that she needs to go to hospital, but not for a few more days. The aunt doesn't have the money to get to the hospital until Friday, when she'll get R100 as a welfare grant.

The doctor estimates the girl's chances of survival if she gets treatment are roughly even, although it's likely she'll be permanently damaged as a result of AIDS. The aunt seems uncomfortably aware that the child should have been brought for treatment earlier. But she has several children of her own to look after, including the infant. And money is very tight.

Assuming she gets to hospital, the girl child should eventually be fitted into the paediatric antiretroviral clinic that runs from a nurses' rest-room at the hospital. Examinations are conducted against a background of nursing staff coming to collect their food and changes of clothes. Management have waived the R17 treatment fee for these children on the antiretroviral programme, otherwise many of them simply will not be able to afford to come back.

First in is a shy 12-year-old girl. She's not the patient though. The patient is her cousin, an energetic looking six-year-old. The girl carries the ubiquitous plastic bag, full of pill boxes and bottles and her little cousin's medical chart. He's been on antiretrovirals for three months, and she is his primary supporter. They are armed with a large pill box which has one column per day, and each column subdivided into compartments for morning, lunchtime and evening doses. Told to stack the pill boxes with the new supply of drugs, the two children set to with vigour. Sibling rivalry to demonstrate their expertise leads to an impromptu race, little hands flying between the pill bottles and the pill box, the older child swiftly cracking in half the pills that need to be divided to give the correct dose. They both recognise the pills, and can recite the treatment regime, looking proud of themselves at getting it perfectly right.

The next child is sick, and despite being only 17 months old, obviously knows what lies ahead as he is carried in and undressed. Shaking his head determinedly as the doctor tries to examine him, he reaches for his mother, crying in protest. Weighing less than 9 kilograms, he's got chronic diarrhoea, is covered in a skin infection, and is coughing. His mother has also returned too much unused medication – and the doctor cannot determine if she is failing to give the treatment correctly, or if she was given the wrong amount of drugs at the last visit. The mother gets upset, firmly asserting that she has been giving the drugs.

The next patient doesn't protest as he's carried in by his healthy-looking mother. Apparently blissfully asleep, in his red woolly hat, he is four years old and weighs just over 8 kilograms. Thin arms and a swollen belly are revealed when the blankets are

pulled back. The peaceful sleep is not all it appears. The child is so lethargic he barely stays awake to be examined. Just out of hospital for a week, he's still coughing and not eating. He had TB two years ago, and now has been diagnosed with TB again. The problem is that a resurgence of the same infection should be treated with a different treatment regime. 'We'll treat with the same drugs, and hope it is a new infection because then the drugs will work. We don't have anything else, so if it is a resurgence of the old infection we'll just have to hope the drugs will still help,' says the doctor.

The next child is confused as a result of a nine-hour convulsion that led to him being admitted to hospital. Since then his mother has been sleeping at the hospital with her son, and her baby. The baby, sitting up straight on his mother's lap, is six months old and as yet untested for HIV. He was given nevirapine as part of the MTCT programme. Shy, squirming and smiling at the floor in his adult medical gown with the sleeves rolled up and a drip in his arm, the young patient has uneven eyes and isn't certain where he is. Diagnosis requires a CAT scan. But the nearest scanner is in Umtata, and experience suggests that getting an appointment for the boy will be impossible. 'I'll finally get through to someone, they'll say they have to consult the head of department and will call back. But they never do, no matter how often you call', says Dr Reuter wearily.

Proof of progress

On October 15th, MSF held a function at the Clinic in Lusikisiki to celebrate one year of antiretroviral roll-out.

- 442 people are now on ARVs
- The first 'cohort' of people who have completed six months on treatment show excellent results
- 81 people started ARVs between October 2003 and March 2004
- The survival rate is 84 per cent with 13 deaths (these were not unexpected as people had commenced the programme late)
- There has been no loss to follow-up
- One patient had to change regimen due to side-effects

- At six months, 95 per cent show an undetectable viral load (this compares well to the highest reported in Bangkok of 91 per cent)
- Average weight gain is 8,7 kilograms
- Average CD4 raise is 267, with average CD4 at the start being 81 and now 348