


Conclusion

It is clear the students surveyed have acquired a fair amount of knowledge about HIV/AIDS, but some lack an appreciation of their personal risk for, and the relationship skills that would allow them to conduct their sex lives in a way that keeps them safe from, HIV, unwanted pregnancy and STIs. Staff were a step ahead of their students in terms of HIV knowledge, their active search for information, and more accepting views of HIV treatment, people living with HIV, and lesbian, gay, bisexual, transgender and intersex groups (LGBTI). More than half of staff members were married and living with their spouse; this may have contributed to their low perception of personal vulnerability to HIV.

The survey revealed relatively high levels of knowledge on HIV prevention methods, alongside negative attitudes to

condom use. The figures on self-reported condom use at last sex and on unplanned pregnancies indicated that a high proportion of students and staff engaged in unprotected sex with their regular sexual partner. But data on consistent or 'almost' consistent condom use painted a different picture, yielding the high rates of consistent condom use relative to other studies. The subjectivity of self-reporting on sexual behaviour might have influenced this result. ■

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Drug-resistant TB treatment: concerns over absconding patients

A study in Khayelitsha in the Western Cape illustrated the difficulty of retaining patients on drug-resistant TB treatment, a tendency that poses a significant threat to containing the spread of multidrug-resistant TB in the country, writes *Sizulu Moyo*. That drug-resistant TB is increasing year-on-year is clear when analysing the number of multidrug-resistant TB cases.

Tuberculosis (TB) is one of the major causes of morbidity and mortality in South Africa, with 328 896 new and relapse cases reported in 2013, and an overall total of 380 000 prevalent cases in the country in the same year. Approximately 89 000 people died from TB in South Africa in 2013, of who 64 000 were also HIV positive.

A major concern in the country is the development of resistant strains of the bacteria that causes TB resulting in multidrug-resistant TB (DR-TB), which is more difficult and more expensive to treat and cure. Multidrug-resistant TB refers to cases of TB that are resistant to two of the most effective drugs used for treatment, isoniazid and rifampicin.

Drug-resistant TB is a significant threat to gains that have been made in the control of TB.

Drug-resistant TB is regarded as a significant threat to gains that have been made in the control of TB across the world. While the overall number of TB cases is slowly decreasing in South Africa, cases of drug-resistant TB are increasing, with a total of 10 085 laboratory confirmed cases in 2012, which rose to 26 023 cases in 2013, due both to better detection of cases and continuing transmission of the disease.

The control of drug-resistant TB relies on the detection, diagnosis and treatment of both drug-sensitive and drug-resistant cases to prevent transmission. Impediments in the control and management of drug-resistant TB include delays in detection and diagnosis, and the loss of patients from treatment, which means treatment is terminated prematurely.

In the past, detection of drug-resistant forms of TB could take days or weeks after submitting sputum specimens for

testing. Today, rapid diagnostic technology using Xpert MTB/RIF can make results available within two hours of testing.

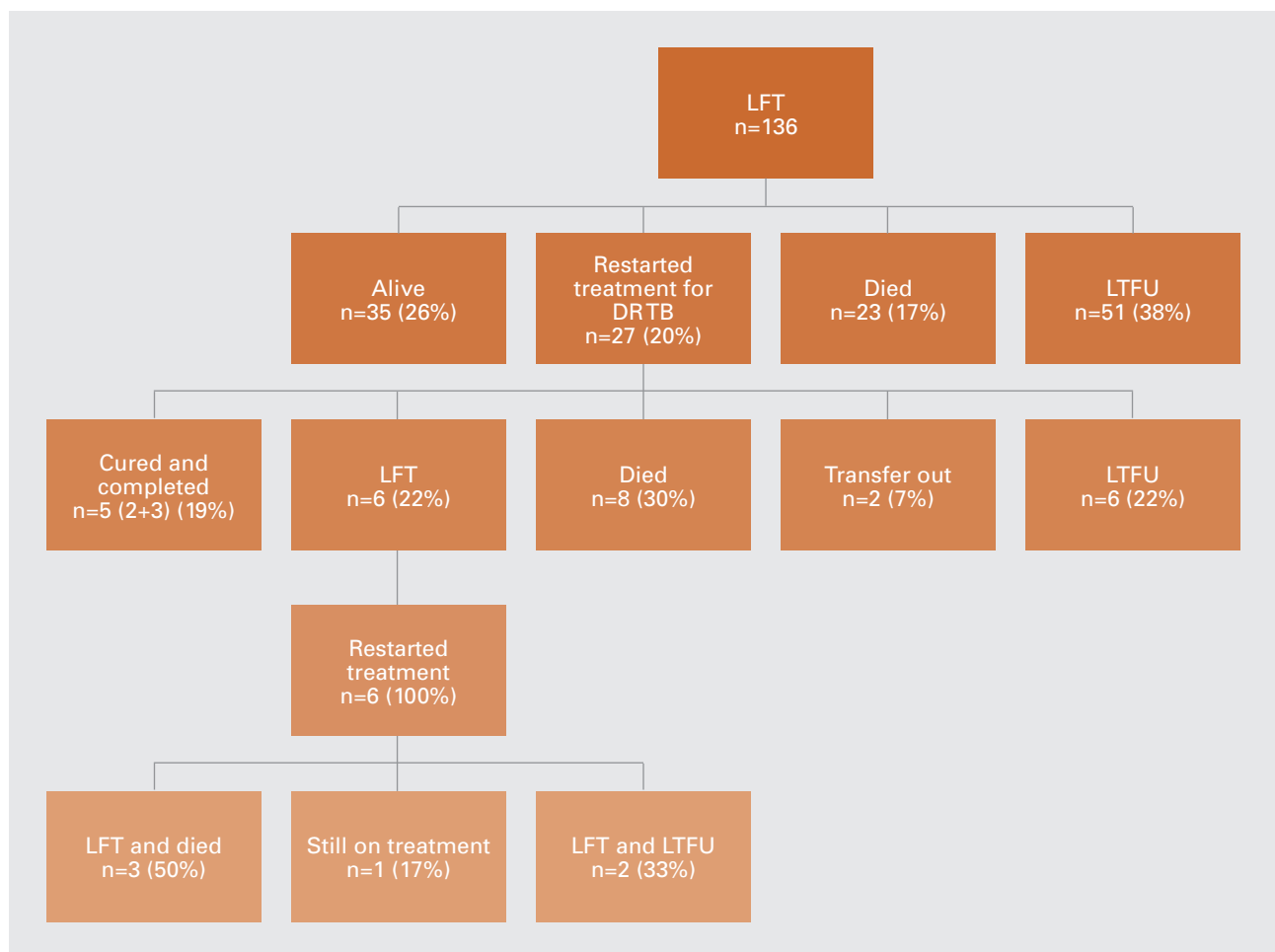
Khayelitsha: patients abandoning treatment

Patients who are lost from care and therefore do not complete treatment are of significant concern as they may continue to transmit TB in their communities. That is in addition to the many infected people who remain undiagnosed.

We analysed data on outcomes of patients who were diagnosed with drug-resistant TB in a community-based drug-resistant TB programme in Khayelitsha, Cape Town, over the period January 2009 to July 2011, assessing outcomes until July 2013.

Of the 452 patients included in our analysis, 215 patients (48%) were treated successfully. A total of 136 patients (30%) were lost from treatment (LFT), meaning they prematurely stopped taking treatment for a period of two or more consecutive months; 79 (17%) died while on treatment, and the remaining five patients (22%) experienced failure of treatment. Among the 136 patients who were lost from treatment, 27 (20%) were known to have returned to treatment again at some point (Figure 1).

Figure 1: Post treatment outcomes of patients lost from DR-TB treatment Khayelitsha, Cape Town (January 2009–July 2013)



LFT – lost from treatment: patients who prematurely stopped taking TB treatment for two or more consecutive months

LTFU – loss of follow up-patients who prematurely stopped taking TB treatment for two or more consecutive months and for whom there was no further information after their last known date of treatment.



TB patients visit the clinic daily to receive their medication and must take it under supervision. It is recommended that patients take their pills after meals.

Loss from treatment occurred from early in the treatment phase and persisted throughout the entire treatment period, with 67% of patients remaining on treatment 18 months after treatment initiation (treatment for drug-resistant TB is taken for 18-24 months). Loss was more common in younger patients (15-25 years old) and in males. Among patients who were successfully tracked after prematurely stopping treatment, 62% were alive after two years. Those who had taken treatment for a long period (>12 months), and those younger than 35 years were more likely to be alive at this time point.

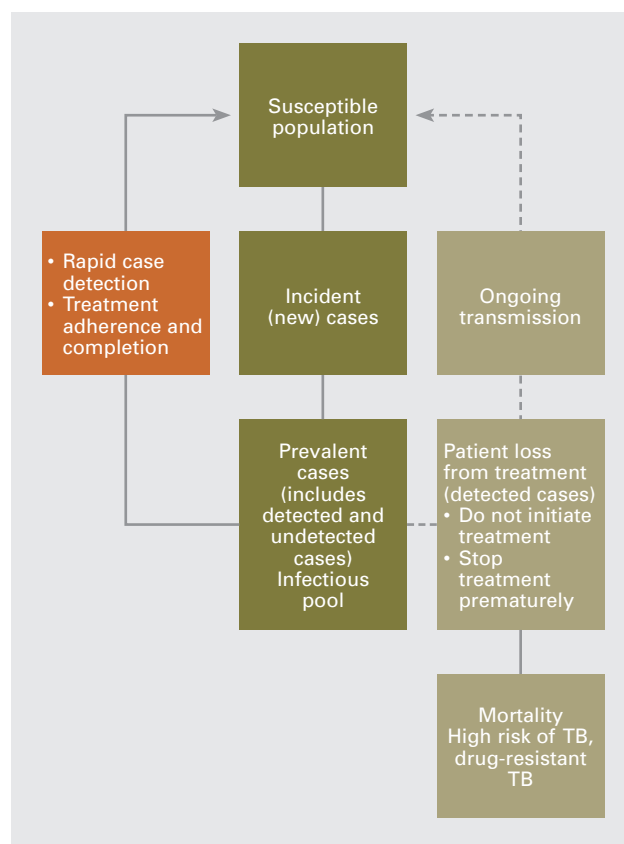
Loss from TB treatment is a problem common to many TB programmes around the world.

Loss from TB treatment is a problem common to many TB programmes around the world. However the losses observed in this setting where a high number of patients were initiated on treatment were higher than previously reported from other settings, including those in South Africa. Treatment for drug-resistant TB is particularly challenging due to the large number of tablets that have to be taken, their severe side effects, a painful injection that is part of the treatment regime, and the long duration of treatment.

Completion of treatment is a significant element in the fight against the spread of TB.

More research is needed to improve the drugs, shorten the treatment period and to support patients undergoing treatment. Completion of treatment is a significant element in the fight against the spread of TB. Figure 2 depicts the relationship between patient loss from treatment and i) poor outcomes (mortality, development of drug-resistant strains of TB and ii) continued spread of the disease.

Figure 2: Significance of patient loss from treatment



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