

EQUAL

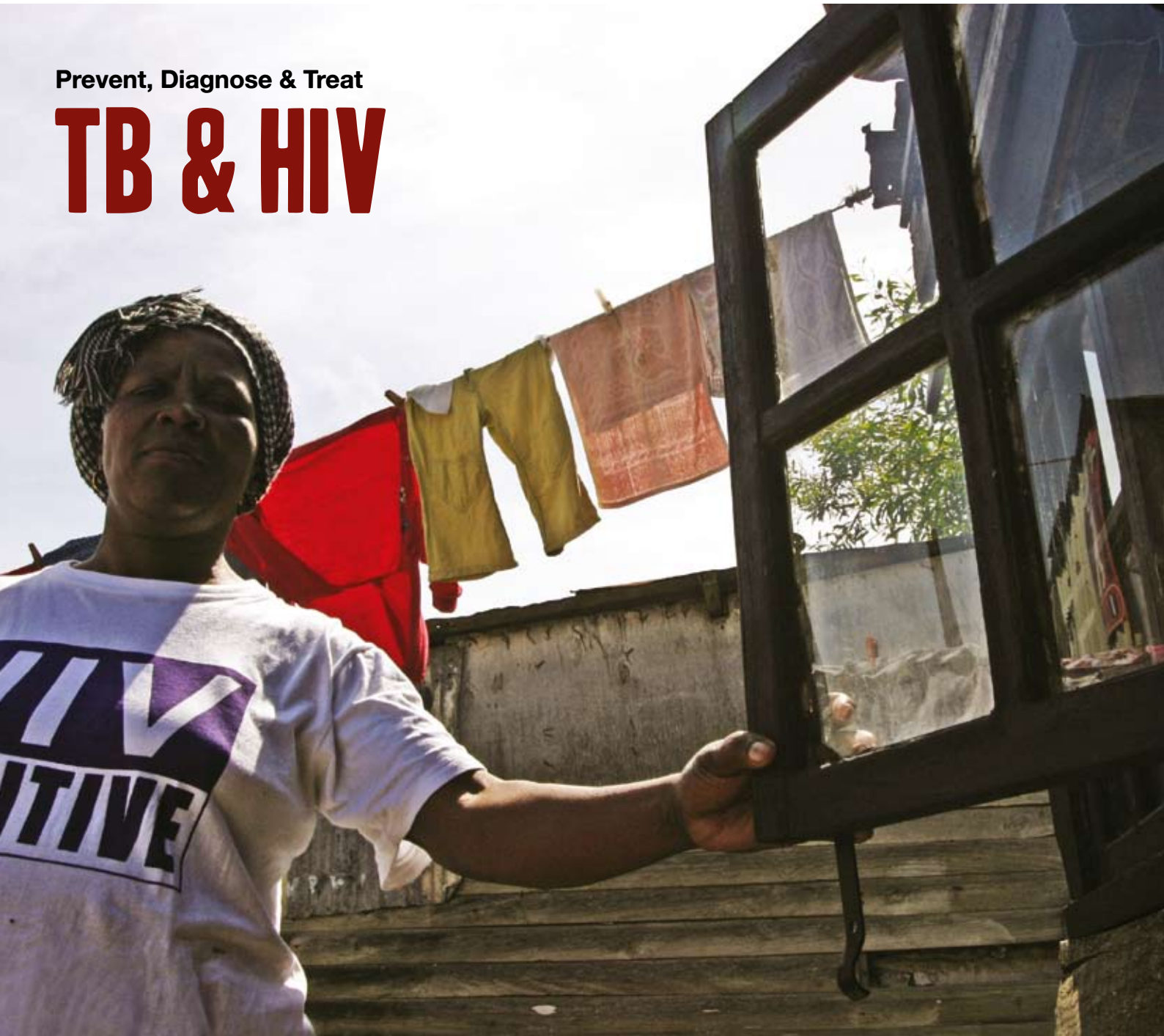
treatment

Magazine of the Treatment Action Campaign

November 2008

Prevent, Diagnose & Treat

TB & HIV



• **Editor:** Jo-Anna Gorton

Sub-Editor: Nathan Geffen

Front Cover Photo by Sofia Tasolari

Writing contributors: Andrew Warlick, Lesley Odendal, Hannan Braun, Katie Flannery, Lutti Ewers, Paula Akugizibwe, Johanna Ncala, Teryn Allen, Javid Syed, Nosisa Mthlathi, Nokhwezi Hoboyi, Claire Wingfield, Fatima Hassan, Scott Dunlop, Vatiswa Kamkam, Jessica Kiddle, Micheal Mackenzie, Thandeka Vinjwa and Adam Malapa.

Photos: Nick Fletcher, Sofia Tasolari, Damien Shuman, Kristian Dubrawski, Michael Maurel, TAC Policy Communications and Research Department

Special thanks to Sharon Ekambaram, Professor Ben Marais, Polly Claydon, Eric Goemare, Graeme Meintjies, Francois Venter, Sister Phumi, the staff of the Khayelitsha Ubuntu Clinic, Helen Cox, Thami Ndlovu (Infection Control Practitioner for MSF) and Busisiwe Beko (MSF DR TB counsellor).

We thank the John Lloyd Foundation for their support for this issue.

Distribution: Faniswa Filani

Layout: Designs4development, info@d4d.co.za

Printing: CTP Book Printers

TAC is committed to providing people with HIV, their families and caregivers accurate information about life-saving medicines and treatment. However, TAC and its leaders are independent of the pharmaceutical industry and have no financial interests with it.

Equal Treatment is
published by the
Treatment Action
Campaign.



Postal Address: PO Box 2069, Cape Town 8001.

Physical Address: Westminster House, 122 Longmarket Street, 3rd Floor, Cape Town 8000.

Phone: 0861 END HIV

Fax: +27 21 422 1720

Website: www.tac.org.za

Provincial and District TAC offices

Western Cape Province: 021 447 2593

Khayelitsha District: 021 364 5489

Gauteng Province: 011 339 8421

Ekurhuleni District: 011 873 4130

Limpopo Province: 015 291 5448

Elim District: 015 556 3341

Mpumalanga Province: 013 755 2298

Eastern Cape Province: 043 722 2645

Lusikisiki District: 039 253 1951

Queenstown District: 045 838 1364

Kwazulu-Natal Province: 031 304 3673

Pietermaritzburg District: 033 394 0845

Ilembe District: 032 552 5160

CONTENTS

Issue 26 - November 2008

page 2



Diagnostics

Diagnosing TB includes a physical exam of your symptoms and a TB bacteria test. We need access to better TB testing tools, especially those that will detect TB in those co-infected with HIV and TB.

page 10



Treatment

TB can be cured. This section explores first-line TB treatment, drug interactions, side-effects, alcohol and TB as well as treatment for children and during pregnancy.

page 22



Drug-Resistant TB

TB that is resistant to first-line TB treatment is a growing problem in South Africa. This section includes articles on the science of drug-resistant TB, different methods of care for people with MDR and policies South Africa has taken towards treating people with drug-resistant TB.

page 31



TAC News

Xenophobia in South Africa

In May 2008 violence broke out against foreign nationals. TAC helped to lead the response against the attacks.

Editorial



TB is a curable disease. Yet each year more and more people are becoming sick and dying of TB. Many of these individuals are co-infected with HIV and TB. This current TB crisis is the result of years of poor functioning TB programmes together with the effect of the HIV epidemic that places millions of people at higher risk of getting TB. TB is weakening all the progress made in the fight against AIDS. People who would otherwise be living healthily with HIV are dying of TB. TB is not only the number one cause of AIDS-related deaths in Africa but also the number one cause of all deaths in South Africa. This is outrageous. TB can be cured if people are given the right health care.

The tragedy is that our TB programmes have failed to correct the mistakes that created this crisis in the first place. Only 1% of people living with HIV across the world have been screened for TB. The basics of TB control which are infection control, early detection of cases, patient support and follow-up to ensure completion of treatment still remain far from the reality that we know today. In addition communities have not been properly consulted or supported in the fight against TB. This causes misunderstanding and stigma against people with TB. Our government should be doing much more. We have the right to demand this as well as the responsibility to make sure that we get actively involved in managing and treating TB in our communities. This issue of *Equal Treatment* will explore different ways that we can all help to stop TB. We have a long way to go but through treatment literacy we can all become actively involved as effective advocates, implementers and monitors of TB care and management programmes in our communities.

Johanna Ncala, *TAC Treatment Literacy*

Paula Akugizibwe, *Aids and Rights Alliance for Southern Africa*

TB in South Africa

HIV-related TB is the leading cause of death in South Africa. The number of deaths caused by TB nearly tripled between 1997 and 2005. TB is undermining the progress we have made in the fight against HIV.

TAC has always worked to help manage and treat TB. Now more than ever we are strengthening our efforts. We must ensure government, the private sector and civil society as well as individuals seriously commit to stopping TB. Through treatment literacy we can all become effective advocates and work to implement and monitor TB programmes in our districts. We must also campaign on these critical issues:

- Ensuring that **HIV and TB care are given together** at clinics and hospitals. Political leadership at all levels is needed to make this happen.
- **Universal infection Control:** Practicing good infection control in our homes, workplaces, on transport and in health care settings will reduce the spread of TB. We must educate our communities about infection control (see page 19-20 on IC).
- **Continued roll out of antiretroviral therapy:** ARV therapy for those who need it reduces the risk of getting active TB by 50%.

outhern Africa

- **Preventative therapy for all HIV-positive people:** Studies from around the world have shown that HIV-positive people who take preventative treatment can significantly reduce their risk of getting active TB (see page 20 for more information on IPT).
- **More people are tested early for TB:** People living with HIV should be regularly tested for TB. People diagnosed with TB should be counselled to get an HIV test. We must work to recognize the symptoms of TB and gain access to better and decentralized TB tests.

Support and protect those isolated with TB:

People isolated with drug-resistant TB have their social grants cancelled. We must campaign for the government to uphold its constitutional responsibilities and provide more support for families affected by drug-resistant TB (see page 25 for more on human rights and TB).

- **Support and follow up with people on TB treatment.** Poor adherence to TB treatment puts individuals and communities at risk of developing drug-resistant TB.

Sources: STATS SA, TAC IPT Brief 2008



Photo: Damien Shuman

Mama Maposela cares for children in the township of Gugulethu in the Western Cape. Most of the children previously lived on the street. Many of them have TB. With support from the Desmond Tutu Foundation, Mama continues to give care and support for children on TB treatment.



Just like with HIV we need to better understand the science of TB. We need to understand what TB is and when we should get a TB test. We also need to understand how TB treatment works so we can help create and monitor TB programmes in our communities.

TB bacteria can only be seen under a microscope



The scie

What is TB?

TB is caused by bacteria called *Mycobacterium Tuberculosis*. Bacteria are tiny germs that can only be seen under a microscope. Bacteria are found in our bodies and also in water, plants, soil and animals.

TB has existed for thousands of years. TB can stay in the body for many years without making you sick. This happens because healthy immune systems can fight the bacteria and stop it from reproducing. When there is TB inside your body but you are able to stop it reproducing it is called **Latent TB**. When a person has a weakened immune system, like someone infected with HIV, they can no longer fight off the TB bacteria. When this happens and the bacteria can reproduce it is called **Active TB**.

TB passes from one person to another through the air.

Active TB commonly develops in the lungs. This is called Pulmonary TB. When someone with Pulmonary TB coughs, sneezes or even sings TB bacteria are released into the air in microscopic particles called droplet nuclei. These droplets, which have the TB bacteria inside of them, can stay in the air for a long time. This is especially true if the area is crowded. If a person inhales air filled with these droplets the bacteria can get into their lungs.

Your risk of inhaling TB bacteria increases if you spend time with someone who has TB or in places that are crowded.

The best way to prevent TB spreading is to practice good infection control like keeping windows open or covering your mouth when you cough.

Prevalence of TB

HIV and Extra-pulmonary TB

When people have weakened immune systems TB can spread from your lungs to other parts of your body. This is called **Extra-pulmonary TB** and it is common in people who have HIV. If you have TB in other parts of your body your symptoms will be different from people who have TB only in their lungs. Your TB tests might also have different results. It is important that people with HIV tell the TB clinic they are HIV-positive so they know to look for symptoms of extra-pulmonary TB.

If I have TB, does it mean I am HIV-positive?

No. Anyone can get TB. People with HIV are just more likely to get sick from TB because their immune systems are weakened. Starting ARVs when you need to will greatly reduce the risk of getting active TB. If you have HIV you should be screened for TB every 6 months. People who

Tuberculosis/HIV Co-infection

HIV weakens a person's immune system. This puts them at risk of getting active TB. People with HIV are much more likely to get active TB than those living without the virus.

have TB but do not know their HIV status should be counselled to get an HIV test.

Can TB become HIV?

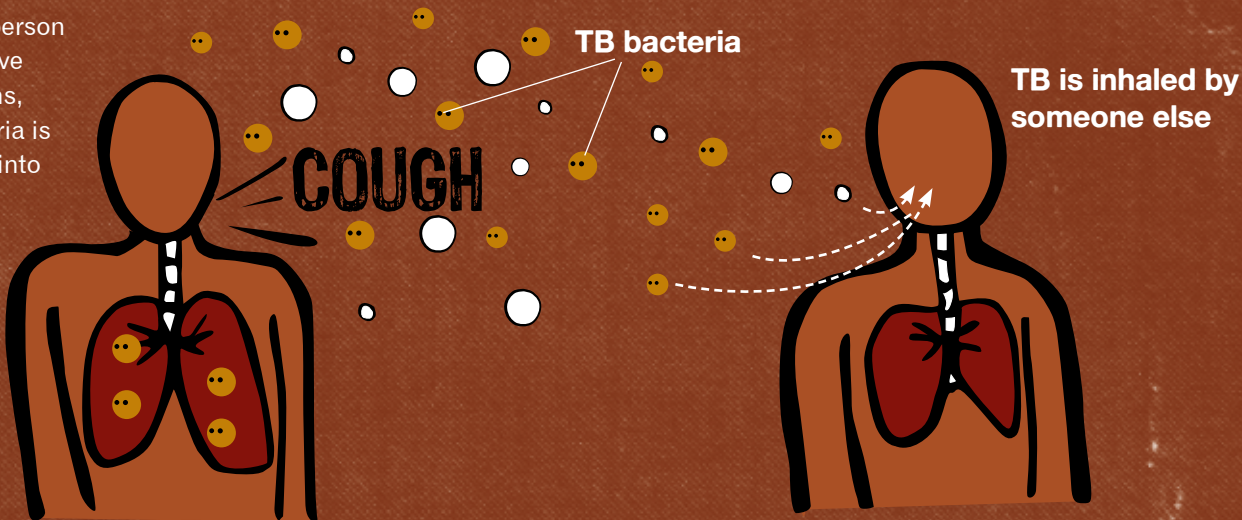
No. TB and HIV are different germs. TB is a bacteria and HIV is a virus. There is no way that TB can become HIV.

Is there a cure for TB?

Yes. With treatment a person can be cured of TB (for more information see pg 10-14).

TB passes from one person to the other through the air.

When a person with active TB coughs, TB bacteria is released into the air



Testing for TB

Not enough people are tested and diagnosed with TB. This is especially true for people living with HIV. It is estimated that only 2% of people living with HIV are regularly tested for TB in South Africa. People can be tested for TB by looking at their symptoms and also having TB bacteria tests. Getting diagnosed with TB means a person can begin treatment and be cured.

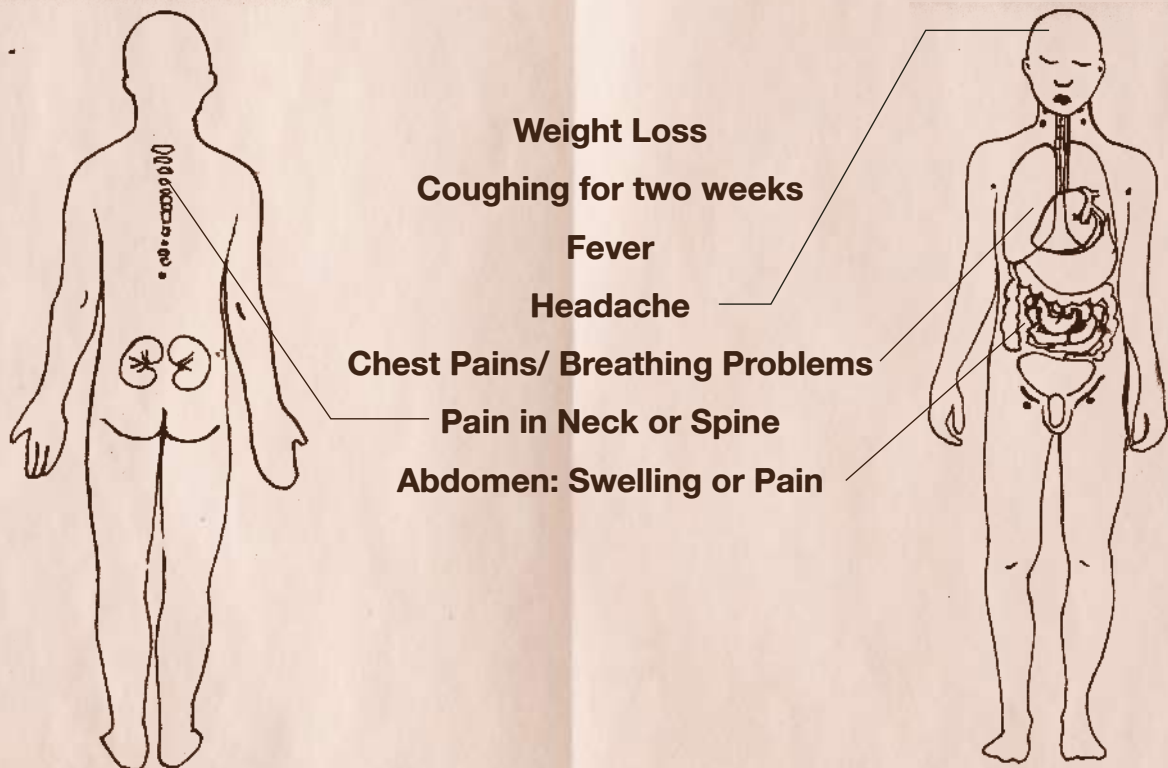
If you test positive for TB, members of your family and other close contacts should get tested for TB

The Signs and Symptoms of TB

The most common symptoms of TB are unexplained weight loss and coughing for two weeks. Often people do not realize they have TB because the symptoms can take weeks or even months to become obvious. If you have any of the symptoms described below you should get tested for TB.

If you are co-infected with HIV and TB your health worker should look for symptoms of both extra-pulmonary and pulmonary TB. If there are no bacteria tests available, World Health Organisation (WHO) guidelines say a doctor may diagnose someone with extra-pulmonary TB based just on their symptoms so they can begin treatment immediately.

Common Symptoms of Pulmonary and Extra-Pulmonary TB



TB Bacteria Tests

Collecting Sputum



If you go to the clinic for a TB test your appointment with the health worker should include a bacteria test in addition to a physical examination of your symptoms. If you are HIV-positive it is important to let your health care worker know this. This is not only because your TB symptoms might be different but also because HIV/TB co-infection can affect the results of your bacteria test.

Smear-microscopy testing



Collecting Sputum

Sputum is required for almost every TB test. Sputum is thick fluid from inside your lungs. It is different from saliva, which is the water in your mouth. Getting a good sputum sample will increase the chance of getting a correct TB diagnosis. To collect sputum the health worker will give you a sputum container to cough into. Coughing up sputum can be painful and difficult. Take several deep breaths and cough as hard and as deep as you can. If you are having trouble some clinics will give you nebulisation. This involves wearing a mask that will send small droplets of water into your lungs that will make you cough.

accurate. Some studies have shown that the smear test fails to diagnose active TB in people with HIV almost 50% of the time. To increase the chance that your test will give the correct result the clinic should take at least two sputum samples from you. They will most likely ask you to do one test at the clinic and another at home. The at-home test should be done in the morning before breakfast. Bits of food can mix up the results of the test so it is important to cough up sputum before you have eaten anything. When you take back the container to the clinic they might ask you for one more test. All of your smear tests will be used to determine whether you have TB.

Chest X ray



It is important that the sputum test takes place in a room with lots of open windows or air flow. This is because coughing up the sputum will release TB bacteria into the air if you have TB. Taking the test outside will also work.

Chest X-ray

A chest x-ray is a picture of the inside of your chest that shows your lungs. If a person has TB there can be scarring and marks on the lungs. These marks will help the doctor or nurse determine if you have TB.

TB Culture Test



Different types of TB tests

The Smear Microscopy

The smear test is the most common test for TB. It was invented in the 1880's and involves identifying TB from your sputum under a microscope. It is used widely because it is simple and can be done almost anywhere. Unfortunately smear tests are not always

TB Culture

For this test TB is grown in a lab from sputum or tissue samples. TB does not grow quickly so this test can take up to six weeks for results to come in. It is the most accurate test for TB though, especially in those co-infected with TB and HIV.



TB being cultured in Cape Town. Most people in southern Africa do not have access to TB cultures despite it being the most accurate way to diagnose smear-negative TB.

Difficulties diagnosing TB in people living with HIV

People living with HIV are twice as likely to have sputum smear-negative TB. This is when the results of the smear test come back negative even though you have active TB. This can happen because the TB has spread to other parts of your body or because your immune system is not strong enough to fight off the bacteria using sputum.

If you have the symptoms of TB but your smear tests are negative you should be given more tests. This includes a TB culture test. TB culture tests are very good

at making the correct diagnosis but they are limited to central areas and the results take up to 6 weeks to come.

Because TB can progress very quickly in people with HIV you should be started on treatment while waiting for the results of your culture test. In settings where culture is not available health workers must diagnose smear-negative TB using symptoms, blood tests and measuring responses to TB treatment.

Andrew Mosane, Treatment Literacy Trainer, speaks to Equal Treatment about getting diagnosed with TB.

I went to the clinic with this cough that was not bearable. Having a treatment literacy background, I asked to be checked for TB and also complained of having night sweats. I did smear tests but the results were all smear-negative. I insisted on having a TB culture because I know that for people living with HIV it can be very difficult to have a correct diagnosis using smear tests, even though you have active TB. For my culture test I had difficulty producing sputum. I was referred to a hospital for nebulisation. During nebulisation I managed to produce sputum. In the meantime, the clinic started me on treatment until my culture results were ready. The results came back positive for TB. I took TB treatment for 6 months. It was difficult to take both TB treatment and antiretrovirals (ARVs). The side effects were awful. I finished my treatment though and never want to have TB again. I am healthy now and working for TAC in Gauteng.



Andrew Mosane campaigning for the rights of people with HIV

Developing Better TB Tests

In order to speed up the time it takes people to get a correct TB diagnosis we need access to better TB tests. We also need to advocate for the development of new TB tests. In this article Javid Syed of New York's Treatment Action Group discusses improvements in TB testing technology that can save lives in the absence of a perfect TB test. The technologies discussed are only available in some pilot sites across South Africa and not in the public sector.

As discussed in this issue of *Equal Treatment*, there are problems with the most common TB tests we use. Smear tests are simple but fail to diagnose TB in up to 50% of people co-infected with HIV and TB. TB culture tests are very good at getting the correct diagnosis but they require a lot of infrastructure and results take weeks. The perfect TB test would be one that is fast, cheap, easy to use and also able to detect smear-negative and drug-resistant TB. We don't have this tool yet and with current levels of funding we won't have one soon. There are, however, new tests that are an improvement over what we have now. We need access to these tools in our districts.

1. Fluorescent microscopes

TB can be stained to make it glow brightly. This can improve how well the bacteria is seen under the microscope. This method is expensive and requires reliable electricity. Researchers are now developing a battery operated microscope. This method is only commercially available in South Africa.

2. The BACTEC MGIT (Mycobacteria Growth Indicator Tube)

The MGIT is a TB culture testing machine. It can test for normal and drug-resistant TB. Studies show that the MGIT machine is correct in its diagnosis of positive TB samples almost 100% of the time. Results take two weeks. Unfortunately MGITs require reliable power and

need skilled technicians and environmental controls to get correct results and keep workers safe. MGITs could be used on a regional level in partnership with safe and reliable transport and information systems.

3. MODS (Mycroscopically Observed Drug Susceptibility Test)

This is a very similar system to the MGIT except the product is not restricted by patent. It is currently being standardised and tested for use in South Africa.

4. Hain MDR TB Plus

This test is used to detect drug-resistant TB. It is a blood test that identifies isoniazid and rifampicin resistance from sputum and TB cultures. Results take only a couple of hours and it is currently being tested in South Africa. It is more accurate and speedy than culture tests for drug-resistant TB but only works in big central reference laboratories.

Sources: Siddiqi K, Lambert ML et al. 2003. Lancet
Lambert ML et al. 2003. Lancet infect Dis.
WHO summary report 2007
Mello FC et al. 2007. J Clin Microbiol
Steingart et al. 2006. Lancet infect Dis.
KRHenry M, Ng V et al. 2006. Lancet Infect Dis.
Barnard M et al. 2008. Am J Respir Crit Care Med.



Photos: Sofia Tasolari

Positive TB Culture



TB being prepared for a culture test



Fluorescent microscopy testing

Treatment

If you are diagnosed with active TB you can take treatment that will cure you. This section of Equal Treatment explains what treatment you will take and how to take it properly.

TB treatment taken properly can destroy all of the active TB bacteria in your body. Which treatment you take will depend on the results of your TB tests, where the TB is growing in your body, how severe your infection is and your history with TB. People living with HIV receive the same treatment as those without the virus.

Treatment for normal TB takes 6-8 months. You will take either four or five drugs. These are isoniazid, rifampicin, ethambutol, pyrazinamide and streptomycin. Streptomycin is only used for re-treatment. See the diagram below for more details.

Streptomycin injection shortages?

Streptomycin is used in re-treatment regimens. If your clinic says there is no streptomycin you should still be given the other four TB medicines.

If you follow your treatment regimen your symptoms will get better in about two weeks. After about three weeks you are usually no longer able to spread TB but it is always a good idea to practice good infection control.

First line TB treatment (6-8 months)

Who	Treatment	
People with pulmonary or extra-pulmonary TB who have not been treated before	First 2 Months	Next 4-6 Months
	4 medicines: isoniazid, rifampicin, pyrazinamide, ethambutol (taken together as Rifafour)	2 medicines: isoniazid and rifampicin (taken together as Rifinah)

TB Re-treatment

Who	Treatment		
People who have previously taken TB treatment including people whose treatment was interrupted or is not working.	First 2 months	Next 1 month	Next 5 months
	5 medicines: isoniazid, rifampicin, pyrazinamide, ethambutol and streptomycin injections.	4 medicines: isoniazid, rifampicin, pyrazinamide, ethambutol	3 medicines: isoniazid, rifampicin, and ethambutol

nt for TB

Adhering to TB Treatment

Even though you may start feeling better after a few weeks of treatment there will still be TB bacteria in your body. If you stop treatment or don't take the TB treatment properly the bacteria can grow again and make you sick. This can also create bacteria that are resistant and more difficult to treat (see page 24 for more information on drug-resistant TB).

Monitoring smear-positive TB

If you are diagnosed using a smear test the same type of test will be used to monitor your treatment. You should be given a smear test after the first two months of treatment and after treatment is completed. If after the first two months you have

a smear-positive test result you should stay on the same treatment for one more month. After this month you should be tested again. If the results of this test are still smear-positive this means your treatment has failed. You should be considered for different treatment and tested for drug-resistant TB.

Monitoring smear-negative and extra-pulmonary TB

If available, TB cultures are the most accurate way to monitor TB for people with smear-negative or extra-pulmonary TB. If culture testing is not available people are usually monitored clinically. Your body weight, blood tests and symptoms will be used to measure how treatment is working.



FINISHING MY TB TREATMENT

Treatment Literacy educator Oscar Mabela speaks to *Equal Treatment* writer Adam Malapa about being diagnosed and treated for TB.

My name is Oscar Mabela and I am 29 years old. I reside in Tickeyline in the Limpopo Province of South Africa. I have been openly living with HIV since 2003. I have been taking ARVs since 2005.

In September 2007 I developed symptoms that made me suspect that I might have TB. I had chest pain and was having trouble breathing. I had to be taken to the hospital I was so short of breath. I took two smear tests. One result was smear-positive and the other was smear-negative. My hospital confirmed that I had TB by doing an x-ray which showed the damage TB was causing in my lungs.

Immediately after being diagnosed in September 2007 I started taking TB treatment. I completed my treatment in March 2008. It was difficult to take so many pills but as a Treatment educator I knew about the importance of adherence. I was also able to help others who were having problems taking their TB medication.

I am now healthy and I am continuing with my ARVs.

Challenging DOTS

Directly Observed Therapy Shortcourse (DOTS) is the World Health Organisation's approved method for treating TB. South Africa uses this model for TB care. The main feature of the program is that people are observed taking their treatment. This means that people on treatment have to travel to their DOTS supervisor or clinic five days a week. Although the program does work in other areas it is not working well enough in South Africa. DOTS

has been the model for 20 years and yet our TB crisis only gets worse.

We need to reconsider how we care for people being treated for TB. We need to take the lessons we have learnt from HIV care and use them to design better TB treatment and care programmes. This includes treatment literacy, adherence support, community education and decentralized care.



Photo : Nick Fletcher

Novungile is 25 years old. She weighs 26 kg and is taking TB treatment for the third time. She has virtually no muscle left and has been bed ridden for over a year. Still, despite her physical state, she is expected to make it to the clinic five days a week to receive her streptomycin injection as part of a re-treatment regimen. To get there, her mother takes her in a wheelbarrow. Having ten other children, her mother cannot always push her the 3km's each way. Novungile risks failing her treatment. The DOTS model does not work for people like Novungile

ARV Therapy and TB Treatment



It is common to take ARVs and TB treatment at the same time. If the right medicines for TB and HIV are given and properly monitored the two treatments can work together.

If you are already on ARV treatment

If you are already on ARVs when you are diagnosed with TB your ARV regimen might have to change. For this reason it is important that your health worker knows which ARVs you are taking. It is a good idea to bring your ARVs to the clinic with you when you are starting TB treatment. While you are taking both ARVs and TB treatment you should be monitored closely by the clinic for side effects and possible drug interactions.

Most TB treatments include rifampicin. Rifampicin can reduce the effectiveness of nevirapine. If your ARV regimen includes nevirapine it is recommended that you switch to efavirenz. Rifampicin can also reduce the effectiveness of ARVs such as the protease inhibitor kaletra and the NRTI abacavir.

If you have HIV and TB but are not on ARVs

If you are co-infected with TB and HIV but are not on ARV treatment, the clinic should not start you on both HIV and TB treatment at the same time. TB treatment should always come first. When you begin ARV treatment will depend on your CD4 count. Current South African guidelines say that if your CD4 is below 200 you should start ARVs two weeks after starting TB treatment.

A recent study in South Africa showed that anyone with a CD4 count of less than 500 should

be started on ARVs no more than 2 months after starting TB treatment.

TB treatment and Oral Contraceptives

Rifampicin can reduce the effectiveness of oral contraceptives. When you start TB treatment your health worker should adjust your pill.

Immune Reconstitution Inflammatory Syndrome (IRIS)

After beginning ARVs some people experience Immune Reconstitution Inflammatory Syndrome (IRIS). This is when you begin to show signs of illness or even feel worse after starting ARVs. It does not mean that your ARVs are not working. It is just that your body is becoming strong enough to fight off infections that were already in your body.

TB is one of these infections that your body begins to fight back against once you begin ARV treatment. In this case symptoms become obvious after beginning ARV treatment. If you experience TB symptoms two to six weeks after beginning ARVs, you should tell your health worker to test you for TB. If you are diagnosed with active TB you should start TB treatment.



The Side Effects of TB Treatment

TB medicines have many side effects. Experiencing side effects can make it difficult to adhere to treatment. We need to be able to recognise these and report them to clinics if they become too severe. Some side effects can be reduced with other medication. It is important that you do not stop taking your TB medicines unless your health worker tells you to.

You might get these side effects from TB treatment:

Isoniazid:

Peripheral neuropathy,* tiredness, joint pain, hepatitis,** skin rash, fever

Rifampicin:

Loss of appetite, nausea, abdominal pain, itching, hepatitis**

Pyrazinamide:

Joint pain, hepatitis**

Ethambutol:

Peripheral neuropathy,* joint pain, progressive loss of eye-sight,*** skin rash

Streptomycin:

Rash, fever, dizziness, disturbed balance, loss of hearing

***Peripheral neuropathy** is numbness and/or pain in your feet and lower legs. You should be given pyridoxine (vitamin B6) and/or amitryptiline in severe cases to manage this pain.

****Hepatitis** is when your liver is damaged. Most TB drugs put strain on your liver that can cause damage. This damage can be worse if TB medications are taken in combination with other medication such as co-trimoxazole and some ARVs.

***Those on ethambutol should have their eye-sight checked regularly. Ethambutol should not be given to children as it can cause blindness.

New TB drugs?

There is a need for more research into effective new TB treatments. Currently there are five new TB drugs in the early phase of human trials. This is an improvement over the last 40 years but there are still too few potential candidates in the pipeline. Better TB drugs could decrease the duration of treatment time, decrease side effects, decrease the pill burden, have less of a chance of interacting with ARVs, improve treatment for latent TB, be effective against drug resistant TB or be able to better treat TB in children. The first new TB drug is not expected to be ready until 2012. We must advocate for more research that finds simpler and more effective ways to treat TB.



TB AND ALCOHOL

Heavy alcohol drinking is a serious problem in many of our communities. When it comes to TB, studies have shown that drinking three beers or more a day triples your risk of getting active TB. This is because of alcohol's effect on your immune system and liver and also because of the behaviours associated with heavy drinking. In this story, Josephine Mthembu tells TAC researcher Nokhwezi Hoboyi about getting diagnosed with TB and the effects of drinking while she was on TB treatment.

My name is Josephine Mthembu. I am 44 years old and live in Extension 28 Vosloorus, Gauteng. In 2007 I had pains in my chest and I was coughing for about one month. Sometimes I also coughed up blood and I was losing weight. I went to the clinic and was given medicines for a chest infection. Two weeks went by but I did not get better. Instead I was losing strength and felt tired. I went back to the clinic and the nurse told me I had symptoms of TB. She gave me a sputum container at the clinic and one to fill at home the next morning. When I went back to the clinic for my results they told me that my results were smear-negative. Because I had the symptoms of TB the nurse decided to send my sputum for a TB culture test. I had to wait six weeks to get my test results. During this time I became worse. I coughed up blood and had sores in my mouth and throat. I went back to the clinic and I was given some medication to treat the sores while I was waiting for my test results. The nurse asked me to do an HIV test but I told her that I would come

back for the test. I never did though because I am scared.

After six weeks my culture test came back positive. I was started on TB treatment. I took my tablets every day for six months. It was difficult because I had bad side effects that were made worse because I drank a lot of alcohol. I already drank about six quarts a day before I started TB treatment. I still drank this much during my TB treatment. I had severe pain in my abdomen and problems with my liver. It was also hard for me to get to the clinic every day when I drank although most of the time I managed to make it.

I still drink each day and now I am having symptoms of TB again. I have done a sputum test that is going to be cultured so I am waiting six weeks for the results. I am always tired and my chest is very painful. I am still trying to find the courage to get an HIV test.

Source: Barclay, L. 2008. BMC Pub. Health

TB and Pregnancy

If you are planning to have a baby make sure that you are tested for TB. If you have TB and are taking treatment it is a good idea to finish all of your treatment before getting pregnant.

Antenatal clinics should test for both TB and HIV

If you are pregnant, HIV-positive and have TB there is a risk of transmitting both infections to your baby. All clinics should offer TB and HIV testing to pregnant women. Although the treatment can be complicated, taking the right treatment can keep you healthy and your baby from getting HIV and/or TB.

Diagnosing and treating TB when you are pregnant

If you are pregnant you should be tested for both latent TB and active TB. Tuberculin Skin Testing (TST) will test for latent TB and is considered safe. Other types of tests for active TB such as a smear test are also safe for your baby. (For more information on testing see page 6-10).

If you have HIV and do not have latent or active TB

You should be referred to a Prevention of Mother-to-Child Transmission programme.

If you have Latent TB

Preventative therapy will decrease the risk of you getting active TB. For this therapy, you should be given Isoniazid (INH) either daily or twice weekly for 9 months. Women taking INH should also take pyridoxine (vitamin B6) supplementation.

If you have Active TB

The preferred initial treatment regimen is isoniazid, rifampicin and ethambutol daily for 2 months followed by isoniazid and rifampicin daily or twice weekly for 7 months. This is 9 months of treatment. Streptomycin is not recommended in pregnancy as it

can cause permanent deafness in the baby. In most cases, pyrazinamide is also not recommended because the effect on the baby is not known. Some second-line TB medicines are not recommended in pregnancy. If you need second-line TB treatment you should see a specialist.

Is it safe to breast feed my baby while I am taking TB medicines?

If you are HIV-positive it is recommended that you use formula milk if it is safe and available. If you have TB you can transmit it to your baby through breastmilk so using formula is also recommended. If you have TB it is recommended that your baby be given preventative TB therapy. Preventative therapy will also decrease the risk of you transmitting TB to your child.

Can I take HIV and TB medicines together?

The TB drug rifampicin, which is part of first-line treatment, interferes with the way some ARVs work. It is important to tell your health worker that you are taking ARVs before you start TB treatment.

Sources:
TB in our Lives, WHO, SA Health Info.
Division of Tuberculosis Elimination (DTBE)

TB in children

TB in children is a large problem. We need to improve testing and treatment for children and ensure that children in high-risk settings get preventative therapy.

Why are children at high risk of getting TB?

Young children are at high risk of getting TB because their immune systems are not yet fully developed. HIV infection and malnutrition make them even more vulnerable. Children are likely to get more severe forms of TB. These include TB of the brain (TB meningitis) and TB in the blood (miliary TB). Children with these advanced forms of TB need specialized care and may have permanent brain damage. The best thing we can do is try to prevent children getting TB in the first place.

If anyone in your family is diagnosed with TB all the children under the age of 5 and those vulnerable to TB (such as those with HIV or malnutrition) should be tested for TB. Those who test negative for TB should be given preventative therapy. Practicing proper infection control in at home will reduce the risk of children getting TB.

How are children diagnosed?

TB in children can be very difficult to diagnose. Children do not easily cough up sputum, the smear test is frequently negative and the x-ray may be difficult to interpret. Diagnosis can be made by asking about TB in the home and using cultures where they are available. Treatment should begin while waiting for the results if symptoms are present.



Photo: Damien Schumann.

How are children with TB treated?

Children are treated similarly to adults except that dosages are reduced and ethambutol is avoided if possible. Children with TB meningitis require special intensive treatment.

What about TB prophylaxis?

TB can be prevented by providing preventive therapy. This medicine (isoniazid, INH) should be given to children with HIV, those younger than five and those who live in high-risk settings. INH is taken for 6 months.

BCG (Bacillus Calmette-Guerin): This is a vaccination that provides some protection against severe forms of TB. The protection is not complete though and very young children are still vulnerable. BCG is routinely given at birth and should be continued, although it is not recommended for HIV-positive children.

Sources: TB in Our lives, TB SANTP 2008 draft guidelines, Dr. Ben Marais

Infection

Everyone is at risk of getting TB. Many of us are even more at risk because we are living with HIV. We need to change the ideas in our community around infection control. People should not be stigmatised because they have TB. Just like we wear a condom each time each time we have sex, we must all take measures to protect ourselves from TB and protect others. These are examples of steps we can take to stop the spread of TB.

Cover your mouth when you cough:



with your elbow;



with a tissue;



wear a mask.



Infection Control at Home

- **Fresh air:** Allow fresh air into your home by opening windows and doors during the day.
- **Cover your mouth when you cough.**
- If someone has TB it is a good idea that they sleep in a **separate room** if possible.

Control

Taxis

Taxis are crowded. Opening the windows will reduce the chance of TB spreading.



Open the windows in taxis.

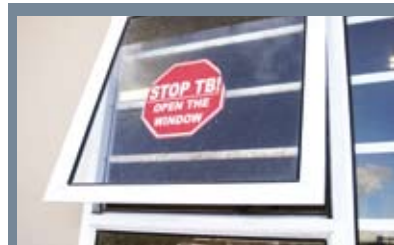


Health-Care Settings

Crowded waiting rooms and wards in our hospitals and clinics are high-risk environments for spreading TB.

Health Workers

- Should be trained to better recognise and screen people with symptoms of TB.
- Should be given N95 Masks. Normal surgical masks will not protect against TB bacteria.
- Should be given isoniazid prophylaxis.



Clinic windows should be open.



A health worker wearing an N-95 respirator.



Clinics and Hospitals

Proper Air Flow. Waiting rooms and clinics need to have good air flow even if this means breaking down walls. Waiting rooms need fresh air and sunlight or a fan in a room with open windows.



The Ubuntu Clinic in Khayelitsha has fans and good air flow.



TREATMENT TO PREVENT TB in People Living with HIV

Preventative therapy is the use of the TB drug isoniazid (INH) to prevent latent TB becoming active TB. In April 2008 the World Health Organisation (WHO) recommended that INH be given to all people living with HIV in areas where the prevalence of latent TB infection is greater than 30%. In South Africa our latent TB infection rates are as high as 90% in some areas. TAC believes INH is urgently needed for all HIV positive people and for health workers who work in high prevalence TB settings. We need to follow current debates on how to effectively roll-out INH.



What is isoniazid preventive therapy (IPT)?

IPT is a single dose of isoniazid (INH) taken daily for 9 months. It prevents the progression of latent TB to active TB. INH is a drug used in first line TB therapy but studies have shown that if people with HIV who have latent TB take INH, it can reduce their risk of getting active TB disease by about half. People living with HIV (PWAs) who have been cured of TB previously can also be given INH. The latest research suggests that the benefits of taking INH will last up to 48 months although more research must be done on this.

Currently INH implementation across the world has been very slow with only 0.1% of PWAs receiving it. The slow implementation is due to a lack of political commitment to address the issue with the urgency it requires. It also reflects uncertainty about the best way to roll-out INH.

Importantly IPT needs to be integrated into HIV programmes. HIV programmes would have to assume the major responsibility for implementation of IPT. This would require that HIV and TB services be given together. INH and most ARVs can be safely taken together. If you are taking the antiretrovirals d4T or ddI there is a risk of developing peripheral

neuropathy (pain in your feet). This is a serious side effect although it can be reduced by taking pyridoxine (vitamin B6). INH should be avoided in people with active liver disease or those who drink excessively because of its impact on your liver.

Two big challenges for us in South Africa would be to rule out active TB and to ensure that people adhered to IPT.

Ruling out Active TB: If a person is mistakenly given preventative therapy when they in fact have active TB there is a risk that that person could develop resistance to INH. This is the most common reason people oppose the implementation of IPT. Studies show that there is not a significant risk as long as active TB is ruled out.

Adhering to IPT: Studies in South Africa have shown that stigma, lack of money for food and transport and a reluctance to take TB medication when they have no symptoms all affect people's adherence to IPT. We need treatment literacy around this issue to promote understanding and adherence and also provide adherence support for IPT.

Source: TAC IPT Brief 2008

Groups who are vulnerable to TB

TB in Prisons

Prisons are ideal settings for the spread of TB. All the main risk factors are present such as overcrowding, poor ventilation, inadequate nutrition and HIV. Failure to pay enough attention to this issue violates a prisoner's right to health. It also undermines all other TB control efforts, as TB spills into the community when prisoners are released and through visitors and prison staff.

The Department of Health and the Department of Correctional Services have to work together on strategies to address TB in prisons. This includes improving infection control and TB testing in prisons. It is also important to ensure there are strong links between prison health facilities and the broader health system so that prisoners have the same access to treatment and care for TB. All of these interventions will be limited as long as we do not change the prison conditions that promote the spread of disease in the first place. We need to advocate for minimum human rights standards to be implemented in all prisons.

TB in Miners

Levels of TB in the mines are up to ten times the national level. Miners are at particularly high risk for getting TB because they live and work in cramped settings and there are high levels of HIV in mining communities. Most significantly, workers in mines (gold mines especially) are exposed to silica dust. If this dust is inhaled over a long period of time it can result in a lung condition called silicosis. People with silicosis are extremely vulnerable to TB.

While some mining companies have made efforts to put strong TB/HIV programmes in place there remains a great deal to be done. Infection control and TB testing needs to be improved and government needs to better monitor TB programmes in mines. Mining companies need to develop comprehensive prevention and treatment programmes and need to address the barriers miners face when they try to get occupational compensation for contracting TB because of their work.

Drug-Resistant

Part of the reason TB is a crisis in South Africa is the rising number of people who have drug-resistant TB (DR TB). So far more than 10,000 people have been diagnosed with DR TB in South Africa. Other countries in southern Africa also have a growing number of DR TB cases and these figures are probably higher as many people do not get properly diagnosed. We need better testing and treatment for DR TB.

The Science of Drug-Resistant TB

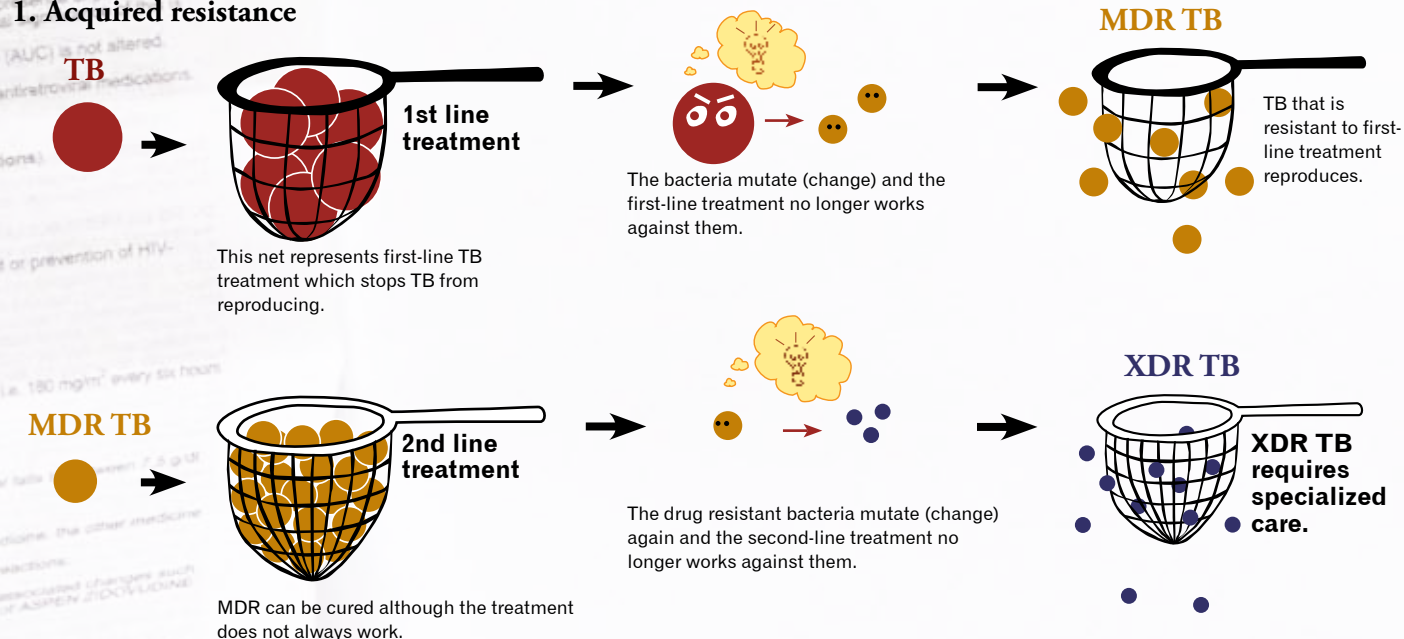
As we have discussed earlier in this issue, TB is caused by bacteria called Mycobacterium Tuberculosis. DR TB is caused by the same kind of bacteria. The difference is that these bacteria have learnt to resist the best TB medicines.

DR TB can be acquired but is mostly transmitted through the air

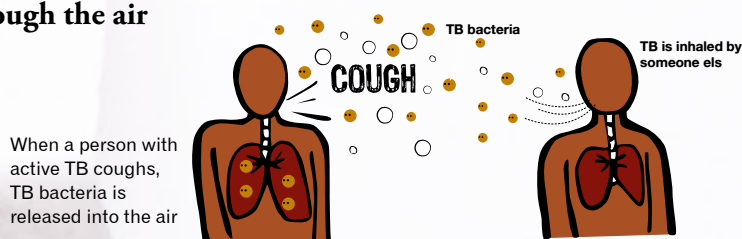
Initially the spread of DR TB was caused by interruptions to people's TB treatment. This is called **acquired resistance**. Now, however, the main way DR TB spreads is from one person to another through the air, just like normal TB. This is called **primary resistance**. Practicing good infection control will reduce the chance of getting DR TB (see page 18-19 for more information on infection control).

How does drug-resistant TB spread?

1. Acquired resistance



2. Spread through the air



MDR and XDR TB can also spread from one person to another through the air, just like normal TB.

Tuberculosis

Diagnosing Drug-Resistant TB

Getting diagnosed with DR TB can be a difficult and long process. Often people come for testing at the clinic when they are already very sick. Just like with regular TB it is important to recognise early signs and symptoms of TB and go to the clinic for testing. It is extremely important that you tell your health worker if you are HIV positive, have taken TB treatment before or have been in contact with someone who has DR-TB.

The signs and symptoms of DR TB are the same as for normal TB. Unexplained weight loss, chest pain, and prolonged coughing should be reported to your health worker. DR TB can develop in the lungs (pulmonary TB) or in other parts of the body (extra pulmonary TB).

You should be suspected of having MDR-TB if you have been around someone with DR TB. You should also be suspected if you are started on first line TB treatment but it does not work. The most accurate test for DR TB is a drug-sensitivity test (DST). The new HAIN PCR blood test is also used to detect resistance and only take a few hours to get the results. Both of these test methods are only available in central laboratories. We must campaign to get better access to these tests.

Treating MDR TB

MDR TB can be cured. Treatment regimens are complex and require specialised monitoring, testing and care.

In South Africa all people with MDR receive the same treatment. National policy states that those with MDR should be admitted to hospital for the first four months of treatment. Stopping MDR treatment puts you at risk of developing XDR TB.

Treating XDR TB

Drug-sensitivity testing (DST) should be done if you are suspected to have XDR TB. This will tell health workers which drugs you are resistant to. Your treatment will

depend on your tests. People on treatment for XDR TB are hospitalised and their treatment monitored closely.

Side Effects

Treatment for MDR and XDR TB have serious side effects. Treatment needs to be closely monitored so you can be treated for side effects if necessary. Possible side effects include seizures, peripheral neuropathy, hearing loss, psychosis, depression, nausea and vomiting, liver disease, loss of eyesight and kidney failure.

If you are HIV-positive and have MDR or XDR TB, you should start ARVs regardless of how high your CD4 count is.

MDR and XDR TB can be cured

The four forms of Drug-Resistant TB

Mono-Resistant TB is resistant to any one TB medicine.

Poly-Resistant TB is resistant to more than one of the first-line TB medicines.

MDR TB can be cured. It is resistant to the first-line medicines isoniazid and rifampicin. You should be suspected if you have had contact with someone with MDR-TB, have had TB treatment before, or are taking first-line drugs and do not start to feel better after two months.

XDR TB is resistant to most first-line and second-line TB medicines. It is difficult to treat but in places where there are good TB programmes up to 50% of people with XDR TB have been cured. It should be suspected if you have been in contact with someone with XDR-TB, or if both first and second-line treatment regimens do not make you feel better.

Scheduling status: 54
Proprietary name and dose

Composition:
Each tablet contains:
Rifampin 150 mg, Isoniazid 75 mg

Pharmacological classification:
Antitubercular agent

Pharmacological action:
Antitubercular agent

Indications:
Pulmonary tuberculosis for adults in the first

Contra-indications:
This medicine is contra-indicated in patients
contra-indicated in the presence of suicidal
tendency during pregnancy and lactation
Caution is advised in patients with impaired
liver or kidney function, patients with impaired

Warnings:
Rifampin: Patients with impaired
and those with history of liver disease
especially women taking oral contraceptives
should be warned not to use therapy of
hepatotoxicity. Damage to liver, blood
A report showing a moderate risk of
interacting treatment with the liver
and considering them in consultation
Isoniazid: Use of isoniazid should
renal dysfunction. Severe and sometimes
develop even after many months of
be monitored for peripheral neuropathy
worsening. If these symptoms appear
discontinued promptly. Continued
damage.
May exacerbate convulsive disorder

Dosage and directions:
Rifampin 150/75 tablets are
tuberculosis. During this phase,
daily dose.
The total dosage recommended

DR TB

South Africa must join the Green Light Committee

South African spends 70% of its entire TB budget on treating MDR and XDR TB.

The Green Light Committee (GLC) is a programme within the World Health Organisation's Stop TB partnership. It aims to help countries prevent and treat DR TB. Launched in 2000 the GLC negotiates directly with pharmaceutical companies for lower priced second-line treatment. It tries to guarantee the supply of DR-TB treatment so there are no shortages. It also provides technical and programme support to countries with DR TB.

TAC believes the South African government should apply to be part of the GLC. As it stands now we spend 70% of our entire TB budget on treatment for DR TB. If we applied to the GLC at least one important benefit would be access to cheaper second-line drugs. This would mean we could spend more on other TB/HIV programmes.

Testing for Drug-Resistant TB across Southern Africa

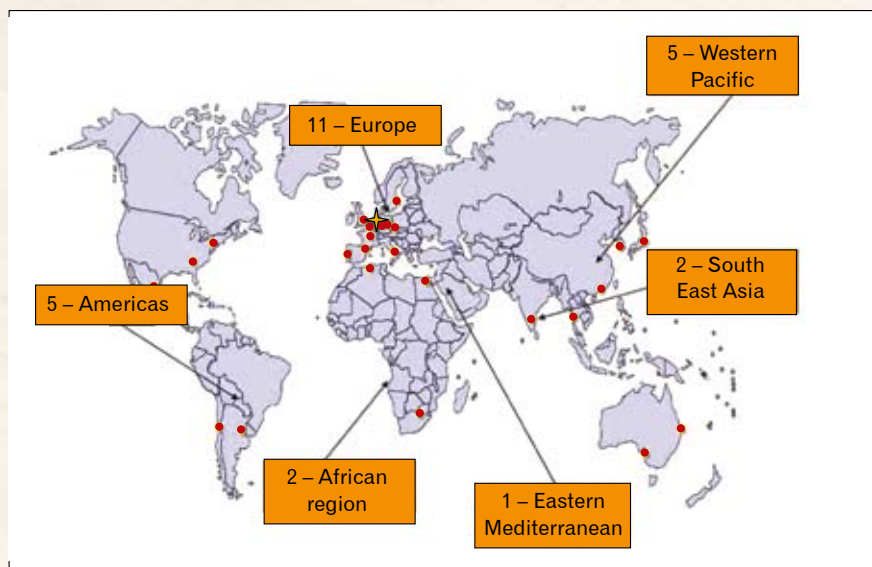
As we have discussed in this issue of *Equal Treatment*, delays in diagnosing all forms of TB cause people to suffer and even die without the right treatment. Improved and more accurate testing for TB would save lives. This is especially true for drug-resistant TB as many countries do not have access to the complex testing equipment required.

Worldwide there are 26 Supranational Reference Laboratories (SNRLs). These labs help countries diagnose DR TB. Despite the fact that we have one of the highest DR TB prevalence rates in the world there are only two of these labs in Africa. One lab is in Egypt and the other in Cape Town.

Identifying, establishing and supporting SNRL labs was identified as a priority in the 2006-2010 WHO Regional Office for Africa (AFRO) strategic plan. The plan set the deadline for establishing this laboratory network as 2006. This is over two years ago and still no labs have been built.

We urge WHO AFRO to urgently follow through on its commitment. Although WHO AFRO is not solely responsible for the non-establishment of these regional labs we urge them to lead the process and provide clarity on when countries in southern Africa can expect increased access to these specialised labs.

This is a map of the world's Supranational Reference Laboratories (SNRL) which offer testing for DR-TB. Despite having one of the world's highest DR TB prevalence rates there are only two of these labs in Africa.



TB IS A HUMAN RIGHTS ISSUE

Our struggle to uphold the rights of people with HIV must be extended to those with TB. TB is the leading cause of death in South Africa even though it is a curable disease. Communities need good infection control and those living with TB must be treated effectively and with dignity. We all need to commit to protect the rights of people with TB.



Protecting the Rights of People in Isolation

This year government is spending an extra 50 million rand on building isolation beds for people with drug-resistant TB (DR TB). Current policy says that people must be isolated after being diagnosed with DR TB. This is the policy because it is thought that isolating those with DR TB will protect communities from transmission. Besides problems with the policy itself, the current realities of isolation compromise the human rights of individuals with DR TB.

Isolated patients face traumatic living conditions with limited access to family, no income, confinement to a state facility, mental and physical pain from the illness and severe side-effects from treatment. Improved conditions at the hospitals and better counselling and treatment services are required to meet basic standards of living.

As people who stay in isolation are being robbed of their freedom of movement despite having done nothing wrong, we believe the government is obliged to properly compensate people. Unfortunately, as policy stands now, the opposite is true. Instead of providing compensation to those who are isolated our policy is to cancel the social grants of those being isolated. This often robs whole families of their income. It also pushes people to leave isolation to try and find work or get their grant back. Having people defaulting on their DR TB treatment puts them and their communities at risk of contracting TB.

TAC is launching a campaign to ensure that grants do not get cancelled. We are also advocating for a grant to be given to all isolated patients even if they were not receiving a grant before.

TAC holds a press conference to push for action on social grants for those affected by HIV and TB in Sept 2008. Photo: TAC PCR



Photo: Sofia Tasolari

Decentralised Drug-Resistant TB care

Decentralised MDR TB care is now being piloted in Khayelitsha.

Medecins Sans Frontieres (MSF) and the City of Cape Town with support from the Western Cape Department of Health are bringing DR TB care to the community. People are now being treated in clinics close to their homes instead of being isolated. Many people were sceptical that this model of care could work but after only one year the programme is beginning to show signs of success. Just like we did with HIV, TAC must help to educate our communities and prepare them for decentralised DR TB care. Treating people with DR TB this way could bring down DR TB incidence rates

Isolating patients does not always protect communities

Many people fear that at home care for DR TB will put communities at risk. While this could be true if there is not good infection control in homes, current isolation policies are also not protecting communities. There is a shortage of isolation beds so people with confirmed DR TB are being placed on waiting lists and are staying at home while they wait. In addition, because it currently takes so long to diagnose people with MDR, many have already spread it to those around them by the time they are properly diagnosed.

We need to encourage people to get tested for DR TB early if their first-line or re-treatment is not working or if they have been in close contact with someone who has DR TB. Instead of promoting testing, isolation policies scare people away from testing and treatment. Centralized care also causes hardships as people are kept away from their families. This leads to depression and people trying to escape from hospitals.

Making Decentralised Drug-Resistant TB Care Work

In October last year, Brooklyn Chest Hospital (BCH) established a MDR outpatient unit where all newly diagnosed MDR TB patients are seen. All patients with XDR TB are hospitalised but MDR TB patients are only admitted to the hospital if they are too ill to attend clinics daily or if their side effects are too severe. MDR TB patients are counselled and treated at clinics in their communities. They receive treatment based on the DOTS model.

According to Dr Eric Goemaere of MSF, which helps run the project in Khayelitsha, communities must be prepared for DR TB decentralisation. For the Khayelitsha project, staff had to be trained and people with MDR TB counselled before beginning treatment in the community. The project has specialised infection control practitioners and works from a clinic that has integrated TB and HIV care.

The decentralised programme begins after someone with MDR TB is diagnosed. At this time they receive counselling from a dedicated drug-resistant TB counsellor. Busisiwe Beko, or 'Busi' as she is commonly known, is the adherence counsellor in Khayelitsha. In her counselling sessions she explains what MDR TB is, how the treatment works, the possible side effects of treatment and the importance of adherence. Those starting the programme are also advised to disclose to their families. Busi also visits isolated patients once a week. She helps to monitor their adherence to treatment and counsels patients who are defaulting.

Busi visits each person who has MDR TB at their home. Along with a professional nurse and an infection control practitioner, they counsel the family on the importance of infection control. They talk about wearing masks, leaving doors and windows open and advise people to sleep in separate rooms if they can. If there are no windows the programme has installed fans and addition rooms are built for separate sleeping.

In addition to infection control education, the at-home counselling session advises all members of the family to get tested for TB. Busi explains that they should be tested as soon as possible after their family member is diagnosed and then again six months later. Family members are also given a letter that explains that they have been in close contact with someone with MDR TB. This letter can be taken to the clinic if they ever experience any symptoms of TB so health workers know to screen for MDR TB immediately.

People who live in Khayelitsha pick up their medicines at the clinic closest to them each day. MSF is working to improve infection control in each clinic and train health workers about infection control. At Ubuntu clinic for example, the staff have taken extra precaution to practice good infection control in the waiting rooms and with the staff. MDR TB patients are fast tracked when they come to the clinic so they don't have to wait too long in the waiting room. Importantly, this clinic also offers HIV care so people do not have to travel again to get their HIV medication. There are also plans to renovate a former hospice to be dedicated DR TB care facility in Khayelitsha where patients can be hospitalized closer to home if they need to be.

So far, patients taking MDR TB treatment in Khayelitsha are doing well. Busi explains to *Equal Treatment* that people are happy that they are not isolated. This pilot is a model of care that we must work towards. With dedicated and well trained staff, community education, involvement of all community stakeholders and necessary political support this programme could be replicated in other parts of southern Africa.

Looking to Lesotho

We should replicate the lessons learnt in Lesotho where high-level political commitment to treating, caring and supporting people with HIV and TB has saved lives.

The Kingdom of Lesotho is located in the middle of South Africa. It has a small population but the third highest adult HIV prevalence and the fourth highest estimated TB incidence in the world. About 80% of people with TB are co-infected with HIV. Delivering health services is challenging but through political commitment, improved lab infrastructure and support for health workers, Lesotho is a model we can learn from.

Delivering health services is challenging in Lesotho because most of the population live in rural and mountainous areas. There is little transport infrastructure so most people do not have access to central hospitals or clinics. Lesotho is also facing a human resource crisis. There are only about 40 doctors working in the whole country. Many nurses leave to work in countries that offer higher wages.

Kingdom of Lesotho

Population: est. 2 million
Life expectancy: 41 males, 39 females
Languages spoken: Sesotho, English, Zulu and Xhosa

Photo: Kristian Dubrawski.

Despite these obstacles Lesotho's Ministry of Health has shown strong leadership. They have developed a progressive and comprehensive national TB and HIV plan. Lesotho's minister of health supported the creation and implementation of the plan. Under the plan, TB treatment and care has been integrated into the primary health care system in all ten health districts. In 2006, Lesotho's smear positive detection rate was 69%. 73% of people who started treatment were successful.

Government in Lesotho has worked with partners to improve and decentralize TB testing. In 2007, Partners in Health and the World Health Organisation's (WHO) helped the government build a new TB facility which can test for extra-pulmonary TB and drug resistant TB. These are very advanced labs which practice good infection control that keep workers safe. Results for all types of TB tests only take days at the central labs and are then transported to more rural clinics so people do not have to travel long distances to get their results.

Lesotho's government has also worked to secure the supply of drugs that treat drug-resistant TB. This project, which has been undertaken in partnership with the WHO, has also resulted in the reduction of prices for second-line TB medication.

Like South Africa, Lesotho is facing a health worker shortage. In response to this, government has attempted to re-organise health workers through task shifting. This means changing the responsibility of workers in the health care system and also bringing on new workers. In particular Lesotho has worked with community health workers (CHWs). Their role in the health system has been expanded. They have been trained to administer injections for re-treatment and MDR-TB treatment. This has allowed for people to be treated in their communities. The model in Lesotho shows that with the right training and supervision, CHWs can take on the traditional responsibilities of nurses. This means that nurses can take on other necessary tasks. More workers means more people can access health care services at a primary health care level.

We should replicate the lessons learnt in Lesotho where high-level political commitment to treating, caring and supporting people with HIV and/or TB has saved lives.

TB What's our Government's Plan?

South Africa has a national TB plan. It envisions a country that is free of TB. While we agree with many of the goals TAC believes the plan must be improved. Specifically, the plan needs:

- **Political Will:** Improving and implementing the plan will take high-level political support.
- **Support for Human Resources:** Currently the plan decreases funding for health workers. We need to work on keeping our workers in the health system and supporting them to meet challenges at all levels of care.
- **A Plan for Infection Control:** Too many cases of TB are spread in health facilities and not enough workers are protected from TB. We must ensure proper ventilation and infection control in hospitals and clinics. Infection control measures also need to be standardized in high risk areas such as prisons and mines.
- **TB/HIV Services Together:** The plan itself states that TB and HIV services are not given together as much as they should be. We need political commitment to make sure these services are given together in every district.

This photograph of the Hendricks family was taken in 2006 in the townships surrounding Cape Town. Each member of the family, except the baby has been diagnosed and treated for TB. Mrs. Hendricks had disseminated TB and her daughter was in TB isolation for more than one year. They are still living in Cape Town and surviving from a disability grant.

Photo: Damien Schuman



Damien Schuman is a South African photographer who is currently working on photographing and recording stories of people living with TB in South Africa. Damien met the Hendricks family in 2006 and continues to photograph them each year in their home.



TAC Taking Action

TAC members work in districts on issues related to TB. Here are two stories about our district campaigns, one in the Western Cape and the other in Limpopo.

Door-to-door TB Education and Testing in Limpopo

By Adam Malapa

In July 2008 TAC members in the Vhembe District of Limpopo campaigned to teach the community about TB. TAC members went door-to-door and organized a mobile clinic to attend the campaign. In total 394 people tested for TB that day. Out of these people who were tested, 84 of them had positive smear tests. These door-to-door campaigns are necessary in the district because there is not very much public awareness about how TB spreads or why it is important to get tested.



Photo: Adam Malapa

TAC Khayelitsha takes on TB

By Vatiswa Kamkam

Since 2004 the TB cure rate has increased from 44% to 72% in Khayelitsha. We are happy with the progress but we know we must all work harder to stop TB. In Khayelitsha TAC has been conducting workshops on TB symptoms, treatment and infection control. We have also been doing door-to-door campaigns. More recently we formed a TB task team made up of stakeholders in the community including politicians, local churches and community groups. We will work with our partners to stop the spread of TB in Khayelitsha.

TAC's response to Xenophobic Violence in South Africa

In May 2008 violence broke out in South Africa against foreign nationals. TAC immediately partnered with many other organisations to lead the response to the crisis in Cape Town.





A man, of Pakistani descent, clears stock from a shop belonging to relatives after the shop was burnt and looted earlier, (18 May 2008). According to police a number of people were killed and injured in suspected xenophobic attacks in Johannesburg.

In May 2008 there was an outbreak of attacks on people who were not born in South Africa – otherwise known as xenophobic violence.

Fearing for their safety over 100 000 foreign nationals were displaced by the end of May. As a result many lost their businesses and possessions. By the end of August 68 people had died in the attacks.

From the first night of the attacks TAC aided in the humanitarian relief. We began by helping people with humanitarian assistance then with advocacy, health assessments and legal advice. We mobilised with displaced people, other members of civil society and international allies. Most importantly we helped to mobilise local men and women of all races, faiths, nationalities, professions and income groups.

Alongside the displaced refugees we held rallies, marches, press conferences and parliamentary briefings.



TAC held rallies, press conferences and mobilised with partners during the crisis

May 2008

- 11 May: Violence breaks out in Johannesburg. Mobs loot businesses belonging to foreign nationals and drive them from their homes. Nearly 60 are murdered.
- 23 May: Violence escalates in Du Noon, Cape Town. An estimated 30 000 flee seeking shelter in mosques, churches and police stations.
- TAC immediately forms a coalition with other organisations to assist and sets up a control room at the TAC National Office. Food, blankets, toiletries and other supplies are donated to TAC and distributed to the sites where refugees are staying. TAC uses funding to buy bulk supplies of goods.

June 2008

- TAC coalition assess camps and sites. We lobby for better conditions (improved food, shelter and security). Demonstrations, pickets and press conferences are held.

July 2008

- TAC goes to the Cape High Court to ensure that norms and standards in humanitarian aid are instituted. Advocacy continues and pressure is put on the Department of Home Affairs to process legal status applications and put a moratorium on deportation of displaced people. Home Affairs begins registering people and giving them a temporary legal status card.

August 2008

- Provincial Government publishes a list of norms and standards, making the court case unnecessary.
- TAC continues to monitor and report on inadequate relief supplies.
- Government starts to consolidate camps, and close community halls. More than 3 000 remain displaced.

THOSE WHO We answer your letters

Comment on PMTCT

Dear Equal Treatment,

On your letters page in the last issue you answered a query from a young woman who was diagnosed with HIV in pregnancy. The answer was that she should receive AZT from 28 weeks of pregnancy and single dose nevirapine at onset of labour. This answer is in accordance to SA PMTCT guidelines for someone who does not need treatment for her own health but I would like to add:

- If she is five months pregnant and HIV-positive the most important thing is that she knows her CD4 count. The new PMTCT guidelines say that a CD4 count should be done on the same day HIV status is established or at the earliest opportunity. This is something very important to have in the guidelines and should be well known, advocated for and implemented.
- As 5 months is about 28 weeks, if she doesn't yet know her CD4 she should receive AZT anyway.
- If she does not need treatment for her own health then she should receive AZT and single dose NVP according to SA guidelines.
- If she is indicated for treatment, currently CD4 count less than 200 cells/mm³ in SA guidelines she should be treated urgently. Note other international guidelines recommend treatment start at CD4 count 350, we expect the SA guidelines to increase to CD4 count of 250.

Identifying and treating women in pregnancy who need HIV treatment should be a priority both as a woman's own right to health and for the success of the PMTCT programme. I would strongly reinforce this message at every possible opportunity.

Polly Clayden (HIV i-Base and TAC member)

Counselling after finding out we are HIV-positive

Dear Equal Treatment,

Where can I find a counsellor? My boyfriend and I are HIV-positive. We argue a lot about who infected the other. This is making it very difficult for us to live together. I am quite desperate for help because he is starting to waste as he is battling diarrhea. Where can I get someone to counsel us as well as access medical help?

-Yoliswa Maphosa (name has been changed)

ET: Your local clinic should offer counseling. You can also try to contact the TAC office closest to you. They can arrange for TAC in your area to come and give you counseling and advise you on where to get medical treatment. You can also call the AIDS helpline at 0800 012 322.

In regards to your health, you and your boyfriend need to have a CD4 count and a viral load test done as soon as possible. This can also be done at your local clinic. These tests will let you know if you need to begin taking ARVs. A clinic should do this for free.

Send your letter to:

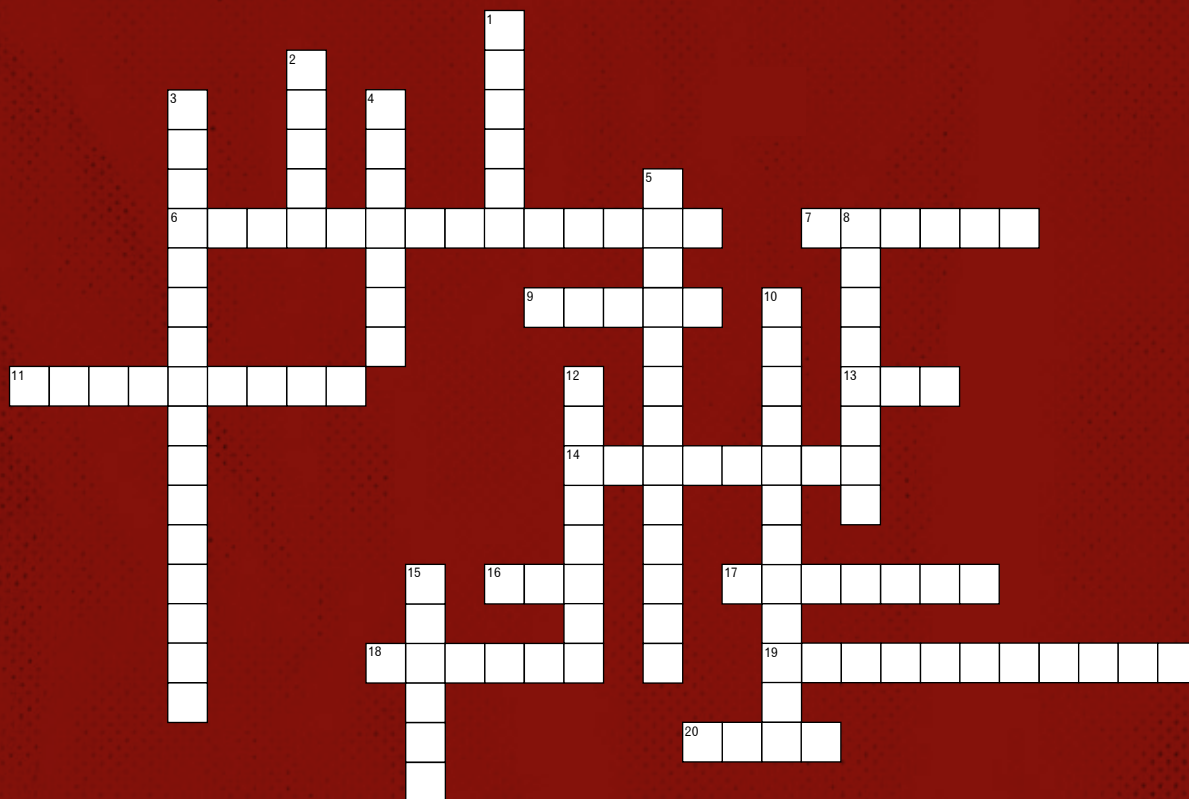
Equal Treatment,
PO Box 2069, Cape Town, 8001
Fax: 021 422 1720
Email: et@tac.org.za

We will give a R200 Pick n' Pay gift voucher to the first crossword drawn from a hat with all the correct answers. The answers can be found in this issue of *Equal Treatment*.

The winner of last issue's crossword was Shirly Khosa.

Fax or post your completed crossword, with your name, address and contact number.

Address: Equal Treatment, PO Box 2069, Cape Town 8001 Fax: 021 422 1720



Crossword Puzzle

Down:

1. Thick fluid from inside your lungs which is required for almost every TB test is called _____.
2. If you have TB it is very important to _____ your mouth when you cough.
3. What do we all have to practice in our homes, workplaces, on transport and in clinics to reduce the spread of TB? (2 words)
4. Recorded TB deaths almost _____ between 1997 and 2005.
5. What does "DR" in "DR TB" stand for? (2 words)
8. Doing this for more than two weeks is a symptom for TB.
10. This is the number one cause of AIDS-related deaths in Africa.
12. TB is caused by _____.
15. When there is TB bacteria inside your body but you are able to stop it reproducing it is called _____ TB.

Across:

6. If TB spreads from your lungs to other parts of the body it is called _____ TB. (2 words)
7. A person with a weakened immune system cannot fight off the bacteria. When the bacteria can reproduce and spread it is called _____ TB.
9. Active TB commonly develops in your _____.
11. TB of the lungs is called _____ TB.
13. In South Africa many people are co-infected with TB and _____.
14. _____ are at special risk for TB because their immune system aren't yet fully developed.
16. TB passes from one person to another through the _____.
17. The side effects of treatment are worse when you drink a lot of _____.
18. People with TB experience _____ in our communities. We must support people with TB.
19. TB medicines may have many _____. (2 words)
20. If you show symptoms for TB you have to go for a TB _____.

Equal Treatment's



A PLATFORM FOR

- **Networking** and community profiling
- **Discussions and debates** on topical and controversial HIV and AIDS related issues
- **Skills transfer** and empowerment through researched information
- **Sharing** community news and events
- **Expressing** views, which can influence strategy at local, provincial and national level

bua@AC brings together over 300 community based, faith based, non-government organisations and individuals across three provinces. A different theme is addressed each month.

Join us for bua@AC Gauteng on the last Tuesday of each month and in North West and Limpopo provinces on the first Tuesday of each month.

SERVICES

TRAINING-

- **Organisational Development**
- HIV Technical training workshops.

INFORMATION AND RESOURCES-

- **Library** — Offers latest and comprehensive information on HIV and AIDS. It also has information and resources dating back to the mid 1980's about HIV and AIDS
- **Distribution** — Offers HIV and AIDS information pamphlets, posters and other materials from different AIDS Service Organisations
- **Cyber Café** — Offers internet access and basic computing to AIDS Consortium affiliates

For more information on becoming an AC affiliate, call 011 403 0265 or send an email to info@aidsonsortium.org.za.
AC offices: 7th floor, Sable Centre, 41 De Korte Street, Braamfontein

THE AIDS CONSORTIUM IS A FULLY ACCREDITED SETA SERVICE PROVIDER!

2008 PROGRAMME

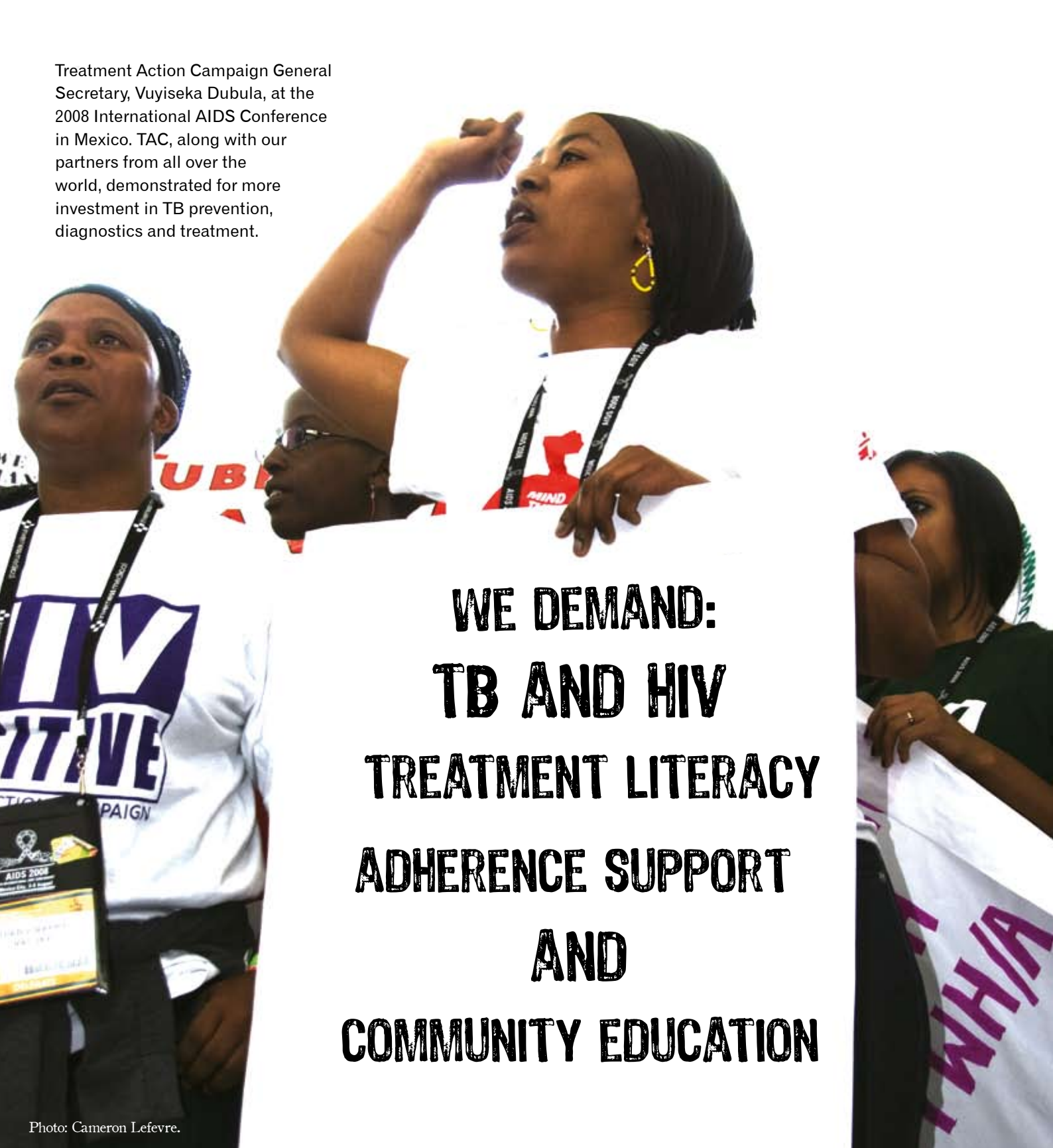
SEP- HIV MANAGEMENT

OCT- TB

NOV- MULTIPLE CONCURRENT PARTNERSHIPS

DEC- WORLD AIDS DAY

Treatment Action Campaign General Secretary, Vuyiseka Dubula, at the 2008 International AIDS Conference in Mexico. TAC, along with our partners from all over the world, demonstrated for more investment in TB prevention, diagnostics and treatment.



**WE DEMAND:
TB AND HIV
TREATMENT LITERACY
ADHERENCE SUPPORT
AND
COMMUNITY EDUCATION**

Photo: Cameron Lefevre.

TAKING ACTION TO STOP TB