HIV Nursing matters

A publication of the Southern African HIV Clinicians Society

Common perinatal mental disorder and HIV

Quality improvement initiatives for optimal care with maternal child health programs

A brief review on maternal mortality

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A brief review on maternal mortality

inside

HIV Nursing matters focuses on HIV and Maternal Health

· T H E · M O N U M E N T · T R U S T ·

guest editorial

Dr Sindisiwe VanZyl, MBChB (UP), Programme Manager, Anova Health Institute, Tirisanong Project, Soweto.

My first encounter with pregnant HIV-infected women was in 2009 at Lenasia South CHC. I had served my internship at CH Baragwanath Hospital and the death and despair due to HIV that I had witnessed there was still haunting me. Paediatrics had been a particularly difficult rotation and I believe that is where my passion for Prevention-of-Mother-to-Child-Transmission (PMTCT) was sparked. When I joined the then PHRU, the PMTCT guidelines had just been updated to "dual therapy" and that is the training that we got busy with. In the short time between then and now we have gone right through to our latest guidelines where triple therapy is given to every pregnant HIV-infected woman at the first antenatal visit. It has been a joy to be part of this ground breaking programme and I still believe that we can eliminate MTCT.

In South Africa, the PMTCT programme has achieved enormous success, with a national PCR positivity rate among infants at 6 weeks sitting at less than 2%. But we dare not rest on our laurels. Two children testing positive out of every 100 born to HIV-infected mothers is still two children too many.

How do we, the carers of these pregnant women, help improve services to ensure that no child is born with HIV? Firstly, we need to make sure that we keep up-to-date with any and all PMTCT guideline changes. At the moment, we would like a woman to book as soon as she finds out that she is pregnant. She should be encouraged to test for HIV and if positive, she starts antiretroviral treatment on the very same day. Any delay in starting treatment gives the virus a chance to replicate and thus increases the risk of HIV transmission from mother to baby. It is essential to remember that each change is one step closer to the goal of an AIDS-free generation.

Secondly, we need to be the champions in making sure that the message about early booking is spread to everyone. It is well-acknowledged that late-booking is a major challenge within the PMTCT programme and on the face of it the problem seems to lie squarely with the patient: women are simply not coming to the clinic early enough. Let us not forget that in days gone by, women were encouraged to book once there was physical evidence of pregnancy – usually after the first trimester. Let us use our knowledge and power to break that myth amongst our communities. Be the change that you want to see!

I have heard of and seen women being turned away from facilities for various reasons. Women from neighbouring countries are sometimes turned back because they do not have a passport. Some women with no referral letters or visitors from other provinces are also turned away. Whatever the reason, it can never be sufficient enough to justify turning away a woman who has done her part and presented herself at a health care facility. Without realising it, our actions could be the reason that patients choose not to book early.

Loss to follow up is another challenge of the PMTCT programme. There are patients who attended their initial antenatal visit and maybe even follow-up one but fail to return to the facility. There are a number of reasons for these women to get lost within the system. We need to identify the reasons that we can do something about.

We need to always be asking ourselves – "how best can I provide the very care that I would want my daughter to receive?"

As health care workers, we can make it our mission to end mother-to-child transmission of HIV. We can make sure that every single pregnant woman in South Africa is offered an HIV test – regardless of age, race, colour, ethnicity, or socio-economic status. Let us encourage and support women who book early to stay within the PMTCT programme. Let us ask the patients themselves what else we can do to assist them. Let us screen for other challenges that may impact a woman's ability to remain adherent such as mental health issues or even substance abuse.

Let us embrace modern technology – in particular mobile health to provide additional information and support to the patients. My blog – www.qooh.me/DoctorSindi - is one such platform. People are able to ask me HIV-related questions anonymously and I also get the chance to share important PMTCT principles.

We are at the front lines of the HIV epidemic. We are the force that will end mother-to-child-transmission of HIV. Thank you for all the work that you have done. It has not gone unnoticed. Let us all continue to touch and change lives through the provision of quality PMTCT services. Ⓡ

HIV Nursing matters

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Message from the president

Dr Francesca Conradie
President Southern African HIV Clinicians Society

When the Minister of Health announced that the National Department of Health was introducing Fixed Dose combinations (FDC) into the antiretroviral program in December 2012, we as HIV clinicians welcomed the decision. The FDC simplifies prescription, dispensing and adherence messages.

As of the 1 October 2013, the National Department of Health announced that the FDC should be offered to all HIV infected adults who are on first line therapy in the absence of any contra-indications. The previous priority groups no longer apply as the stock levels have now reached the required amounts. As the president of the Southern African HIV Clinicians Society I encourage all those health care workers who are responsible for antiretroviral prescriptions to look actively for any remaining patients who are on single drugs and to change them to the FDC if clinically appropriate as soon as possible.

- For patients who are on TDF, 3TC and EFV as single drugs can be changed to the FDC at their next dispensing or medical visit. Their monitoring visits and bloods will remain on the same schedule as if they were still on the single drugs.
- For patients who were on d4T, 3TC and EFV, prior to the switch, clinicians please ensure that the patient has a recent undetectable viral load (less than 1000 copies/ml) and normal creatinine clearance within the last 3 - 6 month.
- For patients who were on d4T, 3TC and EFV, who have a detectable viral, do additional adherence counselling and repeat the VL in 2-3 months. If the repeat VL is undetectable (less than 1000 copies/ml) change to the FDC. IF the repeat VL is detectable, change to second line therapy).

Please remember to reinforce the patient counselling messages

- The dosage is one pill once daily, not 3 pills once daily.
- Although the FDC is 'one pill once a day', it does contain 3 different ARV medications – it is easy to take, highly effective and in no way inferior to taking 3 individual drugs.
- For any clinical questions or advice on other scenarios , please email us at sahivsoc@sahivsoc.org

Also, check out our guidelines on FDC at http://www.sahivsoc.org/upload/documents/Fixed%20dose%20combination%20for%20adults%20accessing%20antiretroviral%20therapy.pdf

Let us work together and make sure that all of the patients, who are eligible for the FDC, receive it as soon as possible. Let us stand behind the Minister and the Department of Health and get this done.

Celebrating nurses and midwives international nurses' day

By Nelouise Geyer

NURSES: A FORCE FOR CHANGE; *A VITAL RESOURCE FOR HEALTH*

The theme for 2014 certainly is strongly echoed in South Africa where the health system is a nurse-based health system as highlighted in the Human Resources for Health (HRH) Strategy of the Department of Health. In 2013 at the launch of the Nursing Strategy for Education, Training and Practice 2013/14-2016/17 the Minister, Dr Aaron Motsoaledi, stated that:

"the nursing services are the heartbeat of primary health care... it might be easy to forget that the nursing fraternity helped achieve something we couldn't have in three years - (increasing) life expectancy (from 56 to 60 years). People may wonder what it has to do with nursing, but in terms of expanding HIV programmes, we couldn't have done it without nurses"[1].

So certainly in South Africa it has been acknowledged that the role of nurses and midwives have been making a significant difference to the lives of our people in spite of the shortage of nurses. The 2006 World Health Report, Working Together for Health[2] , recognised that the shortage of health workers is most severe in the poorest countries, especially in sub-Saharan Africa,

where health workers are most needed. South Africa has not been classified by the WHO as one of the countries with a health worker shortage as our shortage is not as severe as some of South Africa's neighbours. But that we have challenges in terms of providing safe quality care cannot be disputed[3,4] .

South Africa generally has poor health outcomes for the GDP spent on health, in particular mother and child care as highlighted by the MDG Progress Report [5]. This has been reported to be due to an increased burden of disease related to HIV&AIDS, weak health systems management and low staff morale in spite of the significant progress that has been made post 1994 in terms of access to healthcare and rationalisation of health management[6] . Just adding more nurses is not the solution to improve the situation as improving the work environment is a key aspect of improving patient safety and the quality of health care. The well-known Lancet-report further highlights the low investment in health worker training and the fundamental importance of well-trained healthcare professionals to strengthen health systems. Addressing these two important aspects, namely positive practice environments and appropriate educational preparation of nurses and midwives, will result in stronger and better performing health systems that will benefit populations and health workforces alike in every corner where health services are offered. The SA HIV Clinicians Society therefore wants to pay tribute to the nurses and midwives who continue to make a difference to the patients in their care. Thank you for your commitment, dedication and perseverance to make a difference. ℞

So certainly in South Africa it has been acknowledged that the role of nurses and midwives have been making a significant difference to the lives of our people in spite of the shortage of nurses.

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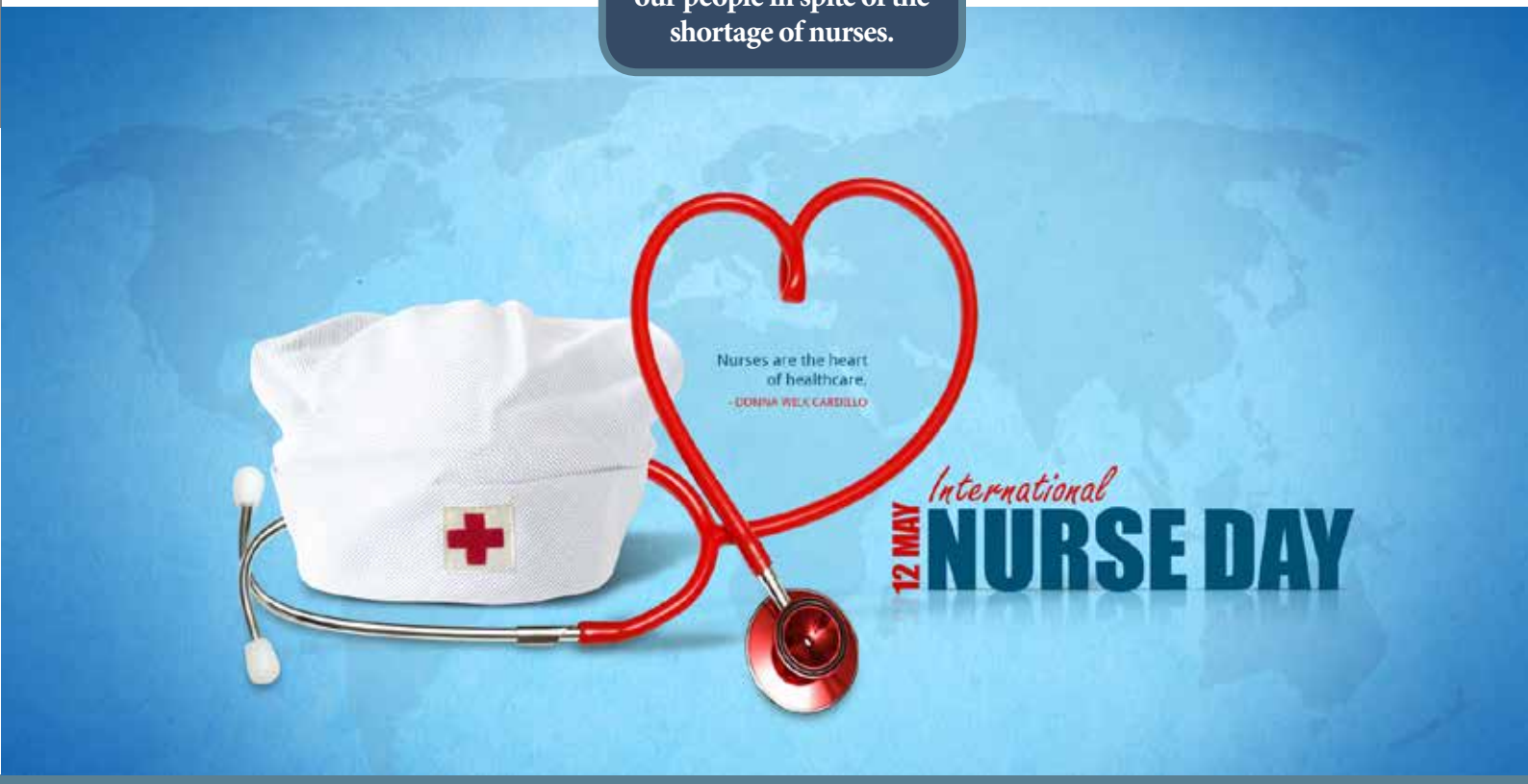

DOCTOR TURNS PATIENT
after contracting XDR-TB

By Laura Lopez Gonzalez on March 24, 2014 in Multimedia, Tuberculosis (TB)

It took one cough and a sputter to change the life of a West Rand doctor after she contracted extensively drug-resistant tuberculosis (XDR-TB) at Johannesburg's Leratong Hospital.

After contracting XDR-TB through her work in the public sector, Dr Thato Mosidi enrolled in a clinical access programme allowing some patients to access a new drug, bedaquiline.

Now, her choice to be part of a clinical access programme aimed at introducing a new XDR-TB treatment in the country could help pave the way for thousands of XDR-TB patients to get better faster.

"I work up one morning and I was getting ready to go to work like every other normal person," remembers Dr Thato Mosidi. "I coughed into the basin and I coughed up some blood." The sight of blood in the basin was enough to send her straight to the doctor. "It was literally only one cough," she tells Health-e.

"One cough and I was ready to rush and get tested and get treatment."
TB is usually treated with a six-month course of drugs however drug-resistant strains often require more drugs for longer and take up to two years to treat.

Mosidi's doctor tested her sputum samples for drug resistance. While this kind of testing is available in the public sector, Mosidi benefited from what was likely a faster turn around in results by going through her medical aid. She remembers the exact moment her doctor called to tell her she had XDR-TB, which is resistant to not only common anti-TB drugs but also at least half the second-line medicines used to treat multi-drug resistant TB.

"I literally started crying right then and there – same time – and I was in the middle of a mall," she says.

Infection control starts at home

"It's any mother's nightmare to even imagine that you could give your little child something so serious"

In 2012, South Africa diagnosed about 1,540 XDR-TB cases however with limited space in the facilities that can treat it, only about half of these cases were ever treated, according to Dr Norbert Ndjeka, who heads the Department of Health's division on HIV, TB and drug resistant TB. What started as shock quickly evolved into terror – and then concern for her three-year-old daughter.

With weaker immune systems, children, the elderly and people living

with HIV are very susceptible to contracting TB if they live with someone who has it. "I think it's any mother's nightmare to even imagine that you could give your little child something so serious," she adds. "I was more scared about that then I was about myself being sick."

Mosidi was admitted for a short time into the East Rand's Sizwe Tropical Diseases Hospital. In the weekend between being diagnosed and admitted, she says she made sure all the windows in the house were open to prevent infecting her husband. If guests came, they sat outside in the yard to chat and her daughter spent the weekend at her mother's house. Her daughter never contracted XDR-TB.

Bedaquiline clinical access programme expands

"I thought for myself that it would be a great opportunity to lend a hand in trying to improve the treatment, care for XDR-TB"

Mosidi is now seven months into XDR-TB treatment. For the majority of her treatment, she has also been receiving a drug called bedaquiline.

Approved for use in the United States and Europe, bedaquiline is the first new drug developed to treat TB in 40 years. Although not yet approved for use in South Africa, a government clinical access programme is allowing patients to take the drug under close monitoring.

President of the Southern African HIV Clinicians Society and Clinical Advisor at Sizwe Hospital, Dr Francesca Conradie was involved in early bedaquiline trials that paved the way for South Africa's clinical access programme. She was also the first person to tell Mosidi about the programme.
"I thought for myself that it would be a great opportunity to lend a hand in trying to improve the treatment and care for XDR-TB," Mosidi tells Health-e.

Government is using the programme to collect more data on the drug before it is approved for wider use in the country. Conradie says she has already seen the difference the drug can make in speeding up patients' recoveries if she reflects on the earlier trials.

"We as doctors weren't told which patients were on bedaquiline but we could tell as the doctors looking after the patients who was getting the active drug by how quickly the patients got better," she says. "That's one of the features of this drug – patients get better a lot faster."

Initially launched at four sites in Klerksdorp, Edenvale, Khayelitsha and Durban, government has already added an additional two sites and more are planned, according to Conradie.

If safety data obtained during the programme meets Medicine Control Council standards Ndjeka said government will push for fast-track approval of bedaquiline. – Health-e News Service. Ⓡ

An edited version of this story first appeared in the 24 March edition of the Pretoria News.

Read more from Health-e's World TB Day Coverage

FREE UNDER-THE-SKIN CONTRACEPTIVE FOR ALL SA WOMEN

By News 24.com

South African health minister Aaron Motsoaledi announced that a small under-the-skin contraceptive device would be made available free of charge to all SA women.

A small under-the-skin contraceptive device will be made available free of charge to all women from next week, Health Minister Aaron Motsoaledi told MPs on Wednesday.

Speaking during debate in the National Assembly on last week's state-of-the-nation address, he announced what he called "the biggest family planning programme South Africa has ever seen".

From Thursday next week, the tiny sub-dermal contraceptive device, about the size of a match, would be available to women at public hospitals around the country.

More on the device

The device, which had to be inserted by a medical professional under the skin of the upper arm, conferred protection from pregnancy for three years.

"This device costs R1 700 if you go to a private doctor. But, we shall give it free of charge to every woman in South Africa, regardless of her socio-economic status. "It will be available in all public hospitals by 27 February, and will reach all public clinics by the middle of this year."

Advantage of the device

The advantage of the device over contraceptive injections – which could take up to 12 months for the effects to wear off – is that users of the sub-dermal implant could become pregnant within weeks of its removal.

In a statement issued on Tuesday, Motsoaledi said it offered women more freedom. It gives women freedom to control their own lives. It can be taken out any time and if they want to [fall pregnant], it only takes few weeks to conceive."

Some nurses had undergone training on how to properly insert the implant, and 4 000 more were set to do so, he said. Ⓡ

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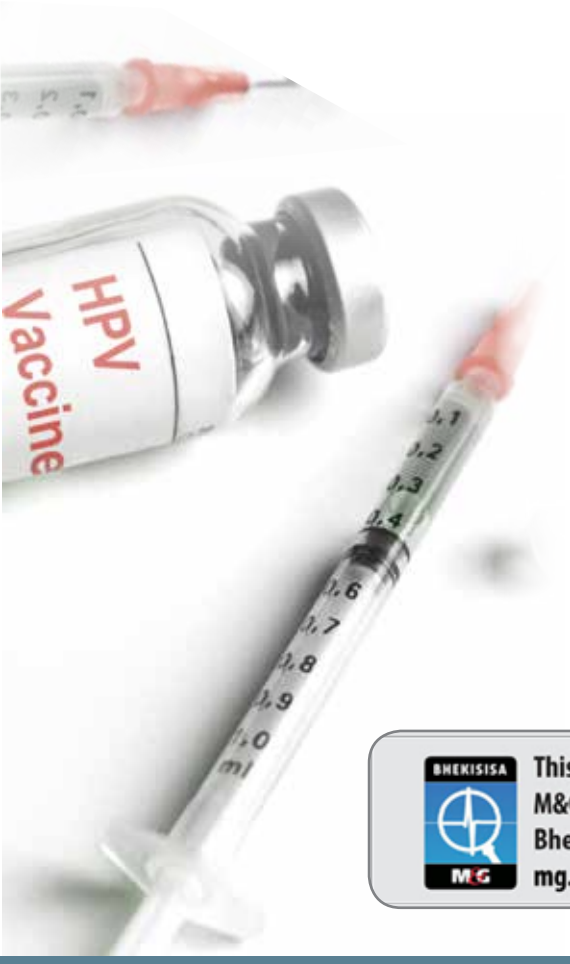
AFRICA'S BEST READ

MOTSOALEDI LAUNCHES FREE HPV VACCINE FOR SCHOOLGIRLS

Amy Green

Health Minister Aaron Motsoaledi has launched an HPV vaccine programme for grade four girls in all government schools.



South Africa became the first African country on Wednesday to provide grade four girls in all government schools with an expensive cervical cancer vaccine at the state's cost. Health Minister Aaron Motsoaledi launched the vaccine programme at Gonyane Primary School in Bloemfontein.

The vaccine protects against the sexually acquired human papilloma virus (HPV), which causes about 70% of cervical cancers, according to Helen Rees from the Wits Reproductive Health and HIV Institute.

Cervical cancer is the second most common cancer among South African women, but is the most deadly because it is often detected too late. Of the 6 000 annual cervical cancer cases, more than half of those who contract it die. Women infected with HIV are five times more likely to develop cervical cancer than uninfected women.

Per dose, the vaccine costs R595.39 in the private sector, according to the medicines price register published by the department of health. Ideally, three doses are needed, but the government will only be providing two. "Although the vaccine was originally developed to be given in three doses, some research shows that two doses are as effective," said Rees. According to the health department's deputy director general Yogan Pillay, the health department gets the vaccine, Cervarix, at about a fifth of the cost from the manufacturing pharmaceutical company, GlaxoSmithKline.

"Virtually all sexually active people will at one time in their life be exposed to HPV. We also chose this age [nine years and older] because we know that these girls are least likely to have started sexual activity," said Motsoaledi. He said the government's antenatal survey showed that girls as young as 10 are falling pregnant.

According to the minister, more than 3 000 health professionals have been trained to administer the vaccine in more than 17 000 schools across the country. The first dose is being given in March and April and the second in September and October. Men can develop cancers from HPV too, namely cancers of the penis or anus, but Rees said these kill much fewer people than cancer of the cervix.

"Also if we vaccinate a significant number of girls, we will see less HPV in the community as a whole, called herd immunity, which will benefit boys too." She said about 80% of girls need to be vaccinated for herd immunity to develop. R

This story was produced by the M&G Centre for Health Journalism, Bhekisisa
mg.co.za/health

NURSES TO LEAD CHARGE AGAINST DR-TB

By Laura Lopez Gonzalez on March 24, 2014 in Policy and Legislation, Tuberculosis (TB)

In a country of more than 50 million people, it is hard to be a "first" but Ntombasekaya Mlandu is. She is the first nurse trained to initiate and manage multi-drug resistant tuberculosis (MDR-TB) patients.

The KwaZulu-Natal woman became the first South African nurse trained to initiate patients on MDR-TB treatment in 2012. Her training is part of government's moves to take MDR-TB treatment out of scarce specialised hospitals and closer to patients. MDR-TB is resistant to both of the most commonly used anti-TB drugs and only about half of MDR-TB patients survive, according to medical humanitarian organisation, Médecins Sans Frontières.

Doctors used to assume that MDR-TB only developed in patients who had been unable to adhere to regular TB treatment. Not so anymore, according to Dr Francesca Conradie, president of the HIV Clinicians Society and clinical

advisor at Edenvale's Sizwe Tropical Diseases Hospital outside Johannesburg.

"We always thought that you got MDR-TB because you weren't adherent to TB treatment," said Conradie speaking at a recent MSF briefing. "That is not true in South Africa in 2014." According to Conradie, about 60 percent of MDR-TB patients in Gauteng have never had TB before, which means they were infected with the drug-resistant strain. She says colleagues in other provinces report similar figures.

Monitoring and mobiles

About 60 percent of Gauteng MDR-TB patients have never had TB before, which means they were infected with the drug-resistant strain.

Mlandu knew the frightening high mortality associated with MDR-TB before she underwent training through the US-based Johns Hopkins University, which is partnering with the Department of Health to train at least 180 nurses like Mlandu by 2016. Armed with guideline-laden smart phone tablets, these nurses will initiate, monitor and eventually prescribe MDR-TB treatment in clinics.

"I still had that fear of contracting MDR-TB, (which) to me was even more than the fear of contracting HIV," she said during an interview shortly after completing the Johns Hopkins course. "I had the understanding that once you contracted MDR-TB, you wouldn't survive."

Although she had never worked with MDR-TB patients, her experience in nurse-initiated antiretroviral treatment, made her a prime candidate for the five-month training during which she learned about MDR-TB treatment and side-effects as well as how to refer tough cases – like diabetic MDR-TB patients – to a doctor for treatment. Now, Mlandu says her patients have become like family. "I tell them, 'if you face any problem with MDR-TB treatment, please contact me because I am your sister...don't rely to the next person to tell you other things that will confuse you," said Mlandu, adding that she uses sms, What's App and Blackberry Messenger to stay in touch with them. "I have to have my phone with me wherever I go because if they don't find me they feel like I've deserted them."

TB numbers just don't add up

Only 63 0f the country's more than 4,000 health facilities can treat MDR-TB. Do the maths of MDR-TB in South Africa and you can understand why nurses like Mlandu and moving care out of hospitals is so important.

In 2012, South Africa diagnosed about 14,000 MDR-TB cases but only half were ever treated. The country has enough hospital beds to accommodate less than half of those diagnosed. Only 63 0f the country's more than 4,000 health facilities are equipped to treat the disease, according to the Department of Health's Dr Norbert Ndjeka, who heads the department's division on HIV, TB and drug resistant TB.

"People travel hours to collect treatment and then when they fail to show up, we label them 'defaulters' – that's stigmatising and not right," he said. "That's why it's important to enable patients to get treatment closer to home – this will reduce transmission and make more beds available."

"A hospital is hospital," he added. "Nothing can beat your home even if it's a five-star hotel."

To deal with the shortage of beds and doctors, the Department of Health introduced a policy to decentralise treatment and move care closer to patients in August 2011. More than two years later however, progress is slow, Ndjeka admits.

Decentralisation without a dedicated budget

Decentralising MDR-TB care and treatment would mean providing, for instance, adherence counselling, psychological support and regular hearing screenings to monitor drug side effects at the primary healthcare level. While the National Department of Health is encouraging provinces to integrate services like these, they have not been allocated additional budget to do this.

Instead, the National Department of Health hopes that provinces will prioritise MDR-TB as they continue to strengthen primary health care, and integrate HIV and TB services. Provinces are able to use part of their HIV conditional grants to decentralise treatment as people living with HIV make up the majority of TB patients in the country.

To improve access to drug resistant TB medications, the Department of Health also plans to fast-track Medicines Control Council (MCC) approval of the generic drug resistant treatment linezolid manufactured by Indian pharmaceutical Hetero Drugs, according to Ndjeka.

While the last TB tender included the drug, the only MCC-approved version of the drug – manufactured by Pfizer – would have cost government R676 per pill. Linezolid is available in India for about R25 per pill. – Health-e News Service Ⓡ

Ntombasekaya Mlandu became the first South Africa nurse trained to initiate MDR-TB patients in 2012 after training at King George's Hospital in Durban.

Quality improvement initiatives for optimal care within Maternal and Child Health Programs

PJ Wessels
Clinical Advisor, Beyond Zero, Nelson Mandela Bay Health District
MBCHB (Stellenbosch), DipHIVMan (CMSA), HCM (FPD)

Development of tools within a public health system should speak to an identified need within that system.

HIV is known to be a leading contributor to maternal mortality. Non-pregnancy related infections (mainly deaths in HIV infected pregnant women complicated by tuberculosis and pneumonia) accounted for 40.5% of maternal deaths[i] in the period from 2008 to 2010. Mother to child transmission is the leading cause of HIV infection in children, which is in turn a leading contributor to the under 5-mortality rate (U5MR). It is estimated that effective PMTCT programmes (including appropriate infant feeding choices) could prevent 37200 children's lives per year by 2015 compared with 2008 [ii]

If we are going to reach the Millennium Development Goals (MDG's), as well as the targets set in our National Strategic Plan (NSP) i.e. zero preventable deaths form HIV, as well as zero transmissions from mother to child, it is critical that basic antenatal care, including management of HIV

infected mothers and their infants, be performed appropriately. Quality assurance and quality improvement initiatives are very important to ensure this.

In the Nelson Mandela Bay Health District (NMBHD) we are utilizing 2 methods to measure the quality of the PMTCT program implementation:

1. DHIS (District Health Information Systems) PMTCT and MCH (Maternal & Child Health) indicators. This data monitors performance in key areas, such as the maternal and infant mortality rates, eligible women initiated on ART, the PCR positivity rate, etc.

2. The PMTCT Quality assurance tool. Although some similarities exist, this tool complements the DHIS data by taking a deeper look at factors important to maternal and infant mortality, but that are not necessarily measured in DHIS, e.g. TB screening and IPT initiation in pregnant women, and time from HIV diagnosis to ART initiation. It involves quarterly examination of assessment results and work processes by management and front line staff alike to identify and prioritize opportunities for improvement.

How the PMTCT QA Tool came about

A need for a quality assurance tool for PMTCT was identified in the district. In a collaborative effort by the district HAST (HIV, AIDS, STI) team, the MCH team, the District Clinical Specialist Team (DCST), and Beyond Zero (facility based PEPFAR partner), a tool was created, piloted and implemented to meet this need. The format of the tool was based on an existing QA tool used in adult HIV/TB care, originally introduced to the district by the International Centre for AIDS Care and Treatment Programs (ICAP)

How the PMTCT QA Tool works

Assessing the quality of care provided within the PMTCT program has in the past been challenging due to the lack of facility held maternal records. For this reason, assessments are done in facilities with MOU's / labour wards where archived maternal records can be retrieved.

A predetermined total of 40 files are drawn of women who delivered in the previous quarter. Each file is reviewed for all the different elements of antenatal care. The tool consists of 4 pages:

1. The first page pertains to all pregnant women, whether HIV negative or positive, and includes the following elements of care:
   a. Testing for HIV
   b. Retesting if previously tested negative
   c. TB screening in ALL pregnant women
   d. Measurement of mid upper arm circumference (MUAC)
   e. Determination of HB, Rhesus, RPR

Facility name: _____

Period evaluated: ____/____/_____ to ____/____/_____

	All pregnant women attending **ANC**												
	HCT	**HCT**	**Retesting**		**TB**	**Examination and special investigations**					**Supplements/ vaccinations**		**Feeding**
Patient file no	Pregnant woman that attended ANC first visit with **unknown HIV status**	Pregnant woman that **received HCT** at first ANC visit	Pregnant woman that tested **HIV negative** at first visit, and was **eligible for retesting**	Pregnant woman who tested **HIV negative** at first visit, that was **retested** at any gestation	Pregnant woman, **screened for TB** at first visit	Pregnant woman that had **urine tested** at first visit	Pregnant woman with mid upper arm circumference (**MUAC**) measured	Pregnant woman that was **screened for syphilis** (RPR) at first visit	Pregnant woman that had **Rh factor** evaluated at first visit	Pregnant woman that had **haemoglobin** (Hb) evaluated at first visit	Pregnant woman that had **Tetanus Toxoid** administered	Pregnant woman that was given **iron supplementation**	Pregnant woman counselled on **infant feeding**
	0=NO 1=YES	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N?A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A
1													
2													
3													

Facility name: _____

Period evaluated: ____/____/_____ to ____/____/_____

	HIV positive pregnant women in **ANC and MOU**													
	CD4 count	**WHO stage**	**ART eligibility and initiation**			**IPT**		**Cotrimoxazole prophylaxis**		**Labour and delivery**	**NVP To infant**		**Feeding**	**Family planning**
Patient file no	HIV+ woman that had **CD4 test done** at same visit she tested positive	HIV+ woman that was **staged** at first visit	HIV+ pregnant woman **eligible for HAART**	HIV+ pregnant woman that **initiated HAART**	Time from HAART eligibility to initiation of HAART was <1 week	HIV+ woman who screened negative for TB and is **eligible for IPT** at any point during this pregnancy	HIV+ woman eligible for IPT that was **initiated on IPT** at any point during this pregnancy	HIV+ pregnant woman with CD4 ≤350 or stage 2, 3 or 4, i.e. **eligible for CTMX prophylaxis**	HIV+ pregnant woman with CD4 ≤350 or stage 2, 3 or 4, that **initiated CTMX** prophylaxis	HIV+ woman who received **episiotomy** or **artificial rupture of membranes**	HIV exposed infant that received **NVP prophylaxis within 72 hours** of delivery	HIV exposed infant that was given **NVP prophylaxis TTO for 6 weeks**	HIV+ pregnant woman that was **counselled on infant feeding** options prior to discharge from MOU	HIV+ pregnant woman that was counselled on **family planning** prior to discharge from MOU
	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A
1														
2														

status and urine analysis.
f. Administration of Tetanus toxoid and Iron supplements
g. Counseling on infant feeding practices

2. The second page pertains to those women who do test HIV positive, and includes the following elements of care:
   a. CD4 count performed
   b. WHO Clinical staging performed
   c. ART initiation, as well as the time taken from eligibility to ART initiation
   d. IPT initiation in eligible women
   e. Cotrimoxazole (CTMX) initiation in eligible women
   f. Artificial/prolonged rupture of membranes during labour
   g. Nevirapine given to infants within 72 hours of birth and for 6 weeks on discharge
   h. Counseling on infant feeding and provision of family planning methods prior to discharge

Facility name: _____

Period evaluated: ____/____/_____ **to** ____/____/_____

Patient file no	All women presenting **in labour** with **unknown HIV status**														
	HCT					**PMTCT**						**Feeding**			**Family planning**
	Pregnant woman presenting in labour with **unknown HIV status**	Pregnant woman presenting in labour that was **screened for TB**	Pregnant woman presenting in labour with unknown HIV status that **received**	Woman with unknown status that received HCT in labour and **tests positive** for	Pregnant woman who tests HIV positive in labour and was **WHO staged**	Newly diagnosed HIV+ woman who received **sd NVP** at onset of labour	Newly diagnosed HIV+ woman who received **sd Truvada** (TDF/FTC) at onset of	Newly diagnosed HIV+ woman who received **AZT 3 hourly** in labour	Newly diagnosed HIV+ woman who received **artificial rupture of membranes**	HIV exposed infant that received **NVP prophylaxis within 72 hours** of delivery	HIV exposed infant that was given **NVP prophylaxis TTO for 6 weeks**	HIV+ pregnant woman that was **counseled on infant feeding** options	HIV+ woman who opted to **breastfeed**	HIV+ woman who opted to breastfeed and was **initiated on FDC**	HIV+ pregnant woman that was counseled on **family planning**
	0=NO 1=YES	0=NO 1=YES	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N?A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A	0=NO 1=YES N/A
1															
2															
3															

Facility name: _____

Period evaluated: ____/____/_____ **to** ____/____/_____

Patient file no	**HIV exposed infants**									
	NVP	**CTMX**	**DNA PCR**	**Testing post breastfeeding cessation**			**ART initiation**		**Feeding**	**Family planning**
	HIV exposed infant who received **NVP prophylaxis** for at least 6 weeks post delivery	HIV exposed infant that was started on cotrimoxazole preventive therapy (CPT) around 6 weeks of age	HIV exposed infant that had a DNA PCR test done around 6 weeks of age	HIV exposed infant that initially tested **HIV negative** at 6 weeks PCR, and was **subsequently breastfed**	HIV exposed infant that initially tested HIV negative and had a **DNA PCR** test 6 weeks **post cessation of breastfeeding**	HIV exposed infant that initially tested HIV negative, and had a final infection status by means of a rapid **HIV test at 18 months**	HIV exposed infant that tested **positive for HIV** at any stage	HIV exposed infant that tested positive for HIV and was **initiated on HAART** within 2 weeks of HIV diagnosis	HIV+ mother that was counselled on **infant feeding** at 6 weeks postnatal follow up	HIV+ mother that was counselled on **family planning** at 6 weeks postnatal follow up
	0=NO 1=Yes	0=NO 1=Yes	0=NO 1=Yes	0=NO 1=Yes N/A	0=NO 1=Yes N/A	0=NO 1=Yes N/A	0=NO 1=Yes N/A	0=NO 1=Yes N/A	0=NO 1=Yes	0=NO 1=Yes N/A
1										
2										
3										

3. The 3rd page is for un-booked mothers who present with unknown status in labour, and the purpose is to assess whether or not this category of women are actually being tested in labour or before discharge.

4. The 4th page is for HIV exposed infants (HEI's), but is not currently being used during assessments due to the lack of a facility held record or register for follow-up of HEI's. This will soon change with the implementation of the new facility based EPI tracer card in the NMB-HD, which will enable us to evaluate the care provided to HEI's.

Each file is reviewed to see if appropriate care was provided. If a mother received appropriate care, and it is correctly documented, she scores a "1" for that particular element. If not, she scores a zero. For each element of care we then total all the "1"s to get the final score, which can be converted into a percentage. E.g. Out of 40 files assessed, 30 have been screened for TB, and thus they score 75% for that element.

Once the assessment is completed, a report is compiled for each facility. A score above 90% is shaded in green. 75%-89% is shaded yellow. Less than 75% is shaded red and requires urgent attention. Current scores are compared to previous scores achieved to determine the trend. Feedback is given to the facility staff, and an action plan is drawn up to address

any areas where performance is not optimal. These feedback sessions also provide the opportunity to acknowledge and praise facilities for good performance. All 3 sub-districts were assessed during August and September 2013. Many areas of care are very well performed including basic antenatal care elements (BANC), HIV counseling and testing (HCT) in pregnant women and timeous ART initiation. Gaps to note were the lack of TB screening and IPT initiation in pregnant women, as well as lack of mid upper arm circumference (MUAC) measurements.

Any PMTCT quality assurance tool is only as good as the quality improvement cycle within which it is used.

Resultant PMTCT quality improvement strategies

During the above mentioned assessment process it was identified that the current maternity record does not make provision for recording of TB screening. As a result, a TB screening tool has been designed and implemented in the district to assist with proper recording of TB screening, as well as any investigations performed, and any TB treatment/ IPT initiated. This one-page document is stapled to the inside of each maternal record. The TB screening tool has an additional tear off section, which is transferred to the baby's road to health chart (RTHC), to ensure that baby receives the correct management should they be born to a mother with active TB.

Results from re-assessment in March 2014

At a large district hospital in NMBHD the following improvements were noted:

- WHO Clinical staging has improved from 20% of patients to 50% of patients.
- ART initiation within 1 week of HIV diagnosis has improved from 66% to 100%
- Documented TB screening has improved from 11% to 35%
- In those screened for TB, 50% had IPT initiated, an improvement from 20% measured previously

Conclusion

Development of tools within a public health system should speak to an identified need within that system. Involving all stakeholders in the development and implementation of such tools contribute to successful implementation. Any PMTCT quality assurance tool is only as good as the quality improvement cycle within which it is used.

An effective PMTCT quality improvement system should include the following elements:

- Review of maternal records/data to assess the current level of care provided.
- Identification of gaps in basic antenatal, maternity, postnatal, as well as HIV related care.
- Analysis of the current systems that contribute to those gaps.
- Collaborative planning as to the best quality improvement strategies.
- Implementation of quality improvement plans accordingly.
- Periodic reassessment to evaluate effectivity of quality improvement strategies.
- Feedback to management teams and staff at facilities.

Successful implementation of quality improvement systems will promote provision of quality antenatal care and contribute towards reduction in maternal and infant mortality rates. R

References

[i] National Committee for Confidential Enquiries into Maternal Deaths (NCCEMD) Saving Mothers Report 2012 Page 3

[ii] Chopra M *et al.* (2009) Saving the lives of South Africa's mothers, babies, and children: can the health system deliver? Lancet

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Heads of Pharmaceutical Services
Provincial Depot Managers

Dear HOPS/Depot Managers

RE: URGENT FDC ROLL OUT

It has come to our attention that many facilities continue to delay their rollout of the fixed dose combination of Tenofovir / Emtricitabine and Efavirenz (FDC, TEE) to all clinically eligible patients.

As per a circular sent out on the 1 October 2013 **all** eligible patient groups should have been offered the opportunity to switch to FDC. That is, previous priority groups 1 to 7 should **all** have begun switching, as clinically appropriate:

1	All HIV positive patients eligible for initiating ART, including all pregnant women (regardless of CD4 count).
2	HIV positive pregnant women and breastfeeding mothers currently stable on singles 3TC, TDF and EFV.
3	Virologically suppressed patients on a d4T-based regimen who have normal renal function.
4, 5, 6,7	Stable patients receiving singles TDF, 3TC and EFV, with or without co-morbidities, as clinically appropriate.

Concerns about single agents expiring, or the need to use up single agents, are not acceptable reasons for delaying FDC rollout. Facilities with excess or short dated single agents should contact their depots for stock upliftment.

As with any product, continued monitoring and evaluation should be adopted to maintain sustainable supply to all facilities.

Please ensure that you work with your programmatic partners and networks of pharmacy personnel to convey the message that all priority group patients need to be switched as a matter of urgency.

Failure to comply with this policy is a contravention of national policy on ARV treatment and the necessary disciplinary steps will be taken against such persons.

DR T PILLAY
DEPUTY DIRECTOR GENERAL: HEALTH REGULATIONS AND COMPLIANCE
DATE: 03-02-2014

KNOWING THE FUTURE THE KEY TO PROTECTING OUR YOUTH

Written by Brad Mears Managing Director for Atomo Africa.

As South Africa finds itself in the midst of enduring epidemics such as HIV and Tuberculosis, we now have many years of experience to draw upon to guide us going forward. With extensive scientific and behavioural research, sufficient financial and human resources, and visionary leadership, one would think that we should have turned the corner. Alas, the recent Human Sciences Research Council S.A. National Prevalence, Incidence and Behaviour Survey 2012 has shown us that there are still some surprises, and many more hills to climb.

Whilst behavioral research will always be open to vigorous debate, worrying trends have emerged amongst some key populations in South Africa. Declining condom usage amongst youths, increased intergenerational sex between young girls, and older men, and younger sexual debut by young men, are just some of the concerns facing Government, and all other sectors in South Africa.

The developers of the National Strategic Plan (NSP) on HIV, STIs and TB 2012 – 2016 placed an enormous emphasis upon increasing the number of patients accessing testing, and then subsequent referral to Antiretroviral Therapy (ART). This was evidenced by the first HIV Counseling and Testing Programme led by Government, where close to 20million South Africans were screened for HIV and other diseases. Testing has continued, resulting in significant numbers of South Africans knowing their status – something which is unprecedented internationally. Between 2009, and 2013, the number of patients accessing ART therapy doubled, to just below two million, and is currently in the region of 2.5 million.

The HSRC Survey states that the ART programme, along with infection rates that remain stubbornly high, has caused a significant increase in the prevalence of HIV. Clearly, a narrow focus upon a biomedical solution to South Africa's HIV epidemic is not working – or at least not working as well as some may have thought.

At the conception of the NSP 2012 – 2016, many were concerned that there was insufficient attention being given to the psychosocial and behavioural drivers of the epidemic. We still have high levels of denialism, especially amongst men. Stigma, although significantly lower, prevents patients from accessing early diagnosis, and the prevalence of multiple concurrent partnerships has increased. Perhaps the availability of the very drug that is designed to treat those infected, has lulled many South Africans, especially the youth, into lowering their guard, and accepting HIV infection as a blasé fait accompli.

Not only have the strategic interventions of the NSP 2012 – 2016 become outdated, but South Africans have also moved forward, holding certain views and perceptions. Rightly or wrongly, these perceptions and behaviours are no longer in sync with the strategies contained in the NSP 2012 – 2016, and something needs to be done urgently.

Whilst a glib response may be to provide youths with flavoured condoms, surely a deeper, more scientific understanding of the behaviour of key populations needs to be undertaken – not only to understand where we are in 2014, but what behaviour will look like in in 2025. Behaviour change is a difficult, uncertain science, which takes many years to take effect. Just ask anyone who has tried to stop smoking. But surely our leaders need to understand, that we need to make long term investments into changing the behavioural make-up of our people – especially our children. If not to prevent infection with HIV, then to protect ourselves against the next social challenge that will inevitably come along. R

A good hockey player plays where the puck is. A great hockey player plays where the puck is going to be."
- Wayne Gretzky

HOW TO GUIDE FOR IMPROVEMENT

Lauren de Kock, Deputy Director for Quality Improvement and Training
Aurum Institute (BSC (Hons), MA)

Over the past few years, quality improvement has been bantered about with the expectation that's acquisition and implementation will bring about sustained change and improved clinical outcomes. However, in my experience, there is a lack of understanding of exactly what the science of improvement involves, that without addressing this void as well as the skill set required for implementation through extensive training and mentoring, this expectation will simply remain just that.

On this premise, the Aurum Institute, in partnership with the Institute for Healthcare Improvement, have developed 10 standalone but complementary HOW TO guides, designed to provide a standard knowledge base, a common language as well as universal practical tips for implementation for all quality improvement users.

The HIV Clinicians Society will be distributing copies of these guides with their quarterly magazine over the next year. The 10 modules you can look forward to receiving are:

1. HOW TO USE THE MODEL FOR IMPROVEMENT

This guide provides a brief introduction into the science of improvement through the use of the Model for Improvement, testing change ideas through a PDSA cycle and developing measures to understand if a change was indeed an improvement.

2. HOW TO DEVELOP IDEAS FOR CHANGE THAT MAY LEAD TO AN IMPROVEMENT

Every improvement needs a change, but not every change is an improvement. This module will provide information on choosing and developing ideas that are more likely to lead to an improvement.

3. HOW TO PRODUCE AND ANALYSE AND PROCESS MAP

A process map is a powerful tool to help visualise the key activities and tasks in a process and how they relate to each other. This guide will assist one in the development and analysing of processes through the skill of utilising process maps.

4. HOW TO SELECT MEASURES TO KNOW YOUR CHANGE IS AN IMPROVEMENT

In order to be able to know if you've made an improvement you need to be able to identify a measure that tells you whether you have achieved your aim (outcome) as well as measures that determine the impact of a change idea being tested (process). This guide will unpack the importance of both and help you distinguish between them in order to determine if your change was indeed an improvement.

5. HOW TO USE PLAN-DO-STUDY-ACT CYCLES TO TEST WHETHER A CHANGE IS AN IMPROVEMENT

If we continue to do the same thing over and over again, we will get the same results. This HOW TO guide introduces us to the concept of testing ideas in the environment in which they will be implemented by the actual implementers themselves. This testing process allows one to adapt ideas, slowly increasing their scale and

exposing them to varied conditions, to increase their likelihood of success and decrease any negative consequences on the system in which the ideas was being tested.

6. HOW TO PLOT AND INTERPRET DATA OVER TIME USING ANNOTATED RUN CHARTS

Run Charts present data in a given order, usually over time. When you track performance over time it is possible to establish with a high degree of confidence whether there has been improvement. Knowing this is essential when you are trying to work out what changes are leading to an improvement.

7. HOW TO RUN AN IMPROVEMENT TEAM MEETING

While improvement activity can be done by someone working alone, it is often undertaken as part of a team. This guide unpacks the importance of the team, their role and provides tips to improve the efficiency of improvement team meetings.

8. HOW TO DESIGN AND RUN AN IMPROVEMENT COLLABORATIVE

Improvement methodology can be applied at individual, team, organisational and systems levels to help achieve fundament and lasting improvements in performance. Many who have applied this methodology have found the magnitude, speed and reach of improvement is enhanced if the activity is organised using a programme design known as an Improvement Collaborative.

9. HOW TO SUSTAIN AND SPREAD IMPROVEMENT

Having secured improvements through the testing and implementation of a change, it is important to ensure these gains are not lost. We must make a plan to sustain our improvements.

10. HOW TO USE PSYCHOLOGY TO HELP SECURE AND SUSTAIN IMPROVEMENTS

Change would be easy if it wasn't for the people! We all react differently to change and, for some, it can leave them feeling anxious and disempowered. But there are a number of psychological theories we can draw on to help make the process of change much easier, even enjoyable. This guide will take you through some of these theories which will empower the reader with essential information when working with people with an anticipation of change.

Should you require any additional information on quality improvement or to obtain individual guides, please contact the Aurum Institute at ldekock@auruminstitute.org or on (010) 590-1300.

STEPS TOWARDS ELIMINATION OF MOTHER TO CHILD TRANSMISSION OF HIV – A REVIEW OF HIV POSITIVE INFANTS

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The introduction of universal ART for HIV positive pregnant or breastfeeding women regardless of CD4 count in April of 2013 has simplified PMTCT policies and will undoubtedly improve PMTCT outcomes in South Africa.

Background

It is unquestionable that in the last decade, South Africa has experienced dramatic improvements in its prevention of mother to child transmission (PMTCT) programme. The first nationally introduced PMTCT intervention was in 2002 and included single-dose nevirapine (Sd NVP) during labour for the mother and to the baby post delivery; modified obstetric practices; infant feeding counselling; and the provision of free infant formula to HIV-positive mothers who chose not to breastfeed[1]. In 2005, pregnant women with CD4 counts less than 200 were eligible for antiretroviral therapy (ART) for their own health, and in 2008 pregnant women with CD4 counts greater than 200 were offered "dual therapy" (AZT from 28 weeks with Sd-NVP in labour) and Sd-NVP with AZT postnatal infant prophylaxis[2]. In 2010, there were further improvements to the PMTCT programme. These included routine HIV testing and counselling for pregnant women, dual therapy to prevent MTCT of HIV, HAART for pregnant women with CD4 cell count ≤350 cells/µl, postnatal infant prophylaxis with NVP for breastfeeding HIV-positive women and intensified efforts to integrate PMTCT services into routine maternal and child health (MCH) services.[3] The success of the National PMTCT programme was seen in the 2010 SAPMTCTE study (the first national evaluation of the PMTCT programme in South Africa), which demonstrated a significant reduction in MTCT rate from 25% - 30% (no PMTCT interventions) to 3.5%.[2] This SAPMTCTE study also showed high uptake of PMTCT services nationally, with more than 98% of women getting an HIV test during pregnancy and 91.7% of HIV-positive mothers receiving ARV treatment or prophylaxis.[2] South Africa's latest and arguably most controversial PMTCT improvements came in April of 2013: South Africa followed WHO recommendations by offering ART to all HIV positive pregnant or breastfeeding women regardless of CD4 count.[4] In the light of such achievements, what more is needed to close the gaps in the PMTCT cascade and reach the Millennium Development Goal of elimination of MTCT by 2015?

In an attempt to answer this question, Médecins Sans Frontières (MSF) partnered with the Western Cape Department of Health (WC DOH) to review and document case histories of all polymerase chain reaction (PCR)* positive infants found in the HIV exposed infant register of one of Khayelitsha's Community Health Centres (CHC) from 2012 to 2013. The aim of the review was to establish possible cause(s) of transmission for HIV infected infants in order to identify on going obstacles to elimination of MTCT. Antenatal and PMTCT history, delivery information, and feeding options were obtained from routinely collected data held in antenatal clinic registers and clinical files.

** A PCR is a laboratory technique used to replicate a fragment of DNA many times; it allows us to identify infections like HIV at an early stage. If an infant is PCR positive for HIV it means they are infected with HIV.*

Study findings

1158 infants were found in the HIV Exposed Infant Register of Khayelitsha Site B Community Health Centre over the 16 month study period (01.01.2012 to 30.04.2013). All infants entered in this register should have a PCR test performed and recorded; the review found a significant proportion (80%) of infants with no recorded PCR test result. Multiple possible causes were identified for the suboptimal PCR testing, including poor patient education of the need to return at around 6 weeks for a PCR test; poor staff knowledge (because of staff turnover and shortages) of the need to ensure a PCR is done in infants presenting between 6 weeks and 18 months; the fragmentation of child health services within the facility; and insufficient staff motivation to follow up missing PCR results or infants not returning for their initial PCR test. Further research is required to analyse in more detail all the causes of inadequate infant PCR testing coverage, along with intensified effort to improve the post natal linkage to care of all HIV exposed infants and their mothers.

15/926 (1.6%) infants with PCR results were found to be PCR positive (infected with HIV). Analysis of the maternal antenatal histories for these 15 infants revealed further gaps in the PMTCT cascade. These

gaps included on-going late presentation in pregnancy as the norm (median gestational age at antenatal presentation was 21.5 weeks) and highlighting the need to intensify community awareness of the importance of early antenatal booking. To address this gap, MSF and WC DOH have partnered with the Treatment Action Campaign (TAC) to launch a community awareness campaign that aims to improve patient literacy particularly on the issue of early antenatal booking. *(Figure 1 provides a snapshot of the patient IEC material used in this campaign. All 3 patient IEC postcards used are available on the MSF website: http://samumsf.org/blog/portfolio-item/the-pmtct-b-patient-education-and-counseling-toolkit)*

A lack of viral load monitoring for pregnant or breastfeeding women on ART were also identified as a significant gap. The absence of routine viral load monitoring for women on ART at antenatal booking and subsequently through pregnancy and breastfeeding resulted in failures to detect women who had defaulted ART prior to or during pregnancy. Vigilance in viral load monitoring for women on ART during pregnancy is essential, and infant feeding choice should take into account a woman's actual or likely viral load at delivery. HIV transmission may occur due to breastfeeding in the presence of a high viral load.

The common perception that pregnant women can "booking too early" for PMTCT antenatal care, was identified as a further cause of MTCT. Women who booked before 14 weeks gestation were often sent away and asked to return post 14 weeks. This review found that in one such case, a woman booked at 6 weeks gestation and despite returning a further five times in her pregnancy, she did not receive any PMTCT prophylaxis as it was not initiated on the 1st visit and antenatal staff failed to detect she had not received ARVs on each subsequent visit. The introduction of universal ART for HIV positive pregnant or breastfeeding women regardless of CD4 count in April of 2013 has simplified PMTCT policies and will undoubtedly improve PMTCT outcomes in South Africa. In accordance with the 2013 ART guidelines, nursing staff are encouraged to initiate and/or support all HIV positive pregnant women on ART irrespective of their gestation to avoid such failures in the future.

A lack of viral load monitoring for pregnant or breastfeeding women on ART were also identified as a significant gap.

Conclusion

The main risk factors for MTCT identified in our review were:

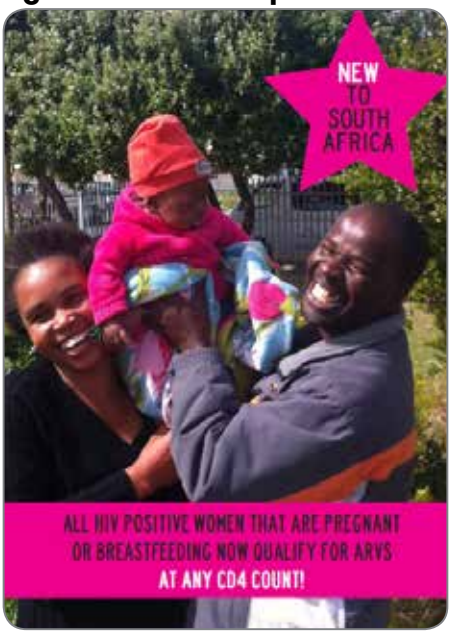
- Late presentation to antenatal care
- Short duration of ART prior to delivery or defaulting ART during pregnancy
- A lack of viral load monitoring to determine whether the pregnant woman is virologically suppressed at delivery and during breastfeeding

Women presenting late in pregnancy (post 20 weeks gestation at 1st booking) or who are known to default ART during pregnancy should be urgently identified as high risk for transmission and provided additional adherence support and home visits by community care workers wherever possible. Where a woman is found to have a high viral load in pregnancy or she has had less than 6 weeks on ART at the point of delivery, an infant PCR test should be provided at birth with tailored infant feeding advice and extended infant prophylaxis (until maternal viral load is suppressed).

Elimination of MTCT in South Africa will require intensified efforts to strengthen each step in the PMTCT cascade, from promotion of early antenatal booking to timely identification and appropriate management of high risk pregnant and breastfeeding women. PMTCT programmes must consider each PCR positive infant as a sentinel event that can provide valuable insight into correcting ongoing clinical and programmatic reasons for HIV transmission.

The introduction of routine PCR testing at birth and the use of dual infant PEP (with AZT and NVP) for high risk infants in the Western Cape this year is welcomed. The Western Cape PMTCT Guidelines deviate from the National PMTCT Guidelines in opting for option B+ (in 2013) and now in introducing additional guidance for high risk infants. The potential benefits of infant PCR at birth and use of dual infant PEP for high risk infants include: reduced risk of post-partum transmission amongst breastfeeding mothers with high viral loads; early detection of infants infected with HIV; reduced risk of lost to follow up in HIV positive infants prior to diagnosis; and allows for rapid initiation of ART. Such policies are urgently needed at National level.

Figure 1: Patient IEC postcards



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COMMON PERINATAL **MENTAL DISORDERS AND HIV**

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People with mental illnesses have higher risk of drifting into or remaining in poverty from increased health expenditure, reduced productivity, stigma and loss of employment[7].

'Perinatal' refers to the time from conception to the end of the first year post delivery. In this article, 'Common Perinatal Mental Disorders' (CPMDs) include Major Depressive Episode and the anxiety spectrum disorders (e.g. Generalised Anxiety Disorder, Post Traumatic Stress Disorder, Obsessive Compulsive Disorder and the Phobias). These differ in diagnostic criteria but have overlapping risk factors, symptomatology and management. Substance and alcohol misuse disorders are excluded for the purposes of this article.

CPMDs in South Africa

South African women experience depression around pregnancy three times more than women in developed countries[1]). Women's risk for depression increases considerably during pregnancy, particularly if they are from disadvantaged communities[2]. In Khayelitsha, Cape Town, 33% of women suffer from postnatal depression[1]. In Hlabisa, KwaZulu-Natal, 47% experienced depression during pregnancy[3]. The proportion of mental disorders among HIV-infected individuals is high and is generally attributed to the stress associated with HIV-diagnosis, although the direct effect of HIV on the nervous system plays a role in mental disorders later in the course of the disease[4]. Anxiety disorders are common in the perinatal period with a higher incidence than in the general population[5].

Maternal mental health affects how a woman looks after herself and her child and how she accesses maternity, HIV and child health services[6]. For HIV positive women, this may translate to poorer treatment adherence for both mother and child. Pregnant HIV-positive women generally have poorer mental health than HIV-negative women.

Risk factors for CPMDs

Poverty is a strong risk factor for mental illness and the two factors interact in a vicious cycle[7]. Poor women have increased risk of CPMDs through social exclusion, heightened stress, decreased social capital, malnutrition, increased obstetric risks, violence and trauma. People with mental illnesses have higher risk of drifting into or remaining in poverty from increased health expenditure, reduced productivity, stigma and loss of employment[7].

HIV/AIDS**:** Many women learn about their HIV positive status for the first time during pregnancy. Additionally, many are faced with an unplanned or unwanted pregnancy. Many women experience anxiety and guilt about potential mother-child transmission in a time of disclosure. Women need to make difficult decisions about Women who disclose, risk accusations of infidelity, abuse, or being thrown out of home. If women choose to bottle feed, they risk their friends and family becoming suspicious that they are HIV positive.

Violence: HIV, mental ill-health, poverty and violence often overlap; each factor increasing the risk of the other. HIV positive women are more likely to become victims of violence (and vice versa). Pregnant women in KwaZulu-Natal with known HIV positive statuses were twice as likely to be victims of domestic violence compared to women whose status was unknown[8]. Men in

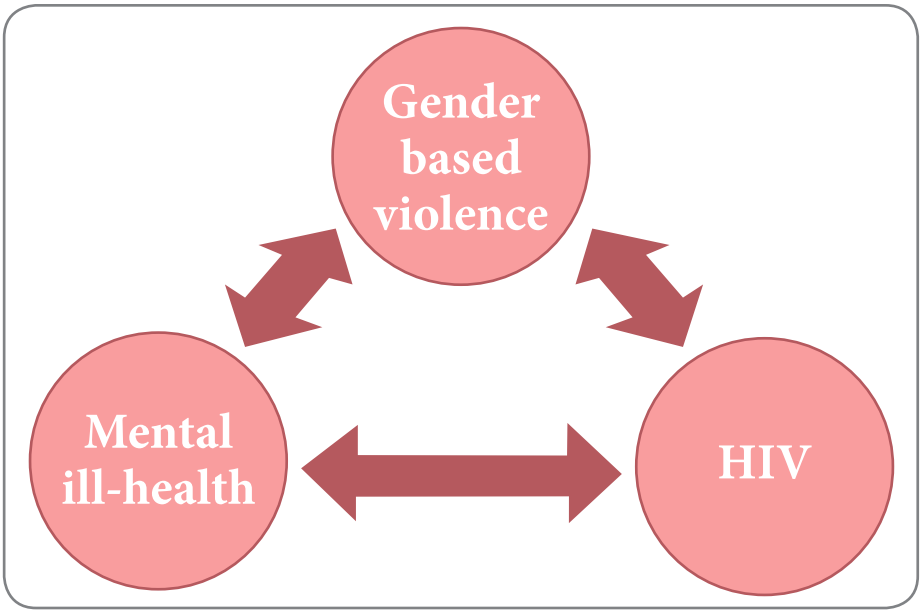

Figure 1 Relationships of risk: gender based violence, HIV and mental ill-health

relationships with HIV positive women may fear viral transmission and be reluctant to engage in sexual relations so turn to physical violence instead[8].

Other women at risk include those who lack partner or family support, particularly refugees, teenagers who are pregnant, women with previous mental illness and women struggling with substance abuse or physical illness.

Signs and symptoms

Many of the symptoms and presenting features of depression and anxiety may overlap. In fact, it is common for depression and anxiety to co-exist in one patient.

Some of these symptoms may be similar to the 'ordinary symptoms' of pregnancy, so careful history-taking and examination are required to distinguish which mothers require further attention and which require more simple management approaches and reassurance.

Sometimes, physical conditions can give rise to psychological distress or they can make existing distress much worse. For instance, tiredness and breathlessness may be a result of the CPMDs and/or anaemia associated with pregnancy, poor nutrition or HIV. One may need to manage all these causes to get an improvement in symptoms.

The box below summarises features of major depressive episode (MDE) and the anxiety spectrum disorders.

MDE

1. Depressed mood or irritable most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g. appears tearful).
2. Decreased interest or pleasure in most activities, most of each day
3. Significant weight change (5%) or change in appetite
4. Change in sleep: Inability to sleep or sleeping too much
5. Change in activity: Psychomotor agitation (restlessness or excessive physical activity) or retardation (slowed down physical movements, speech, blunted face and responses)
6. Fatigue or loss of energy
7. Guilt/worthlessness: Feelings of worthlessness or excessive or inappropriate guilt
8. Concentration: diminished ability to think or concentrate
9. Suicidality: Thoughts of death or suicide, or has suicide plan

Several of these features need to be present for more than two weeks before a diagnosis can be made.

ANXIETY

1. Restlessness or feeling 'worked up' or on edge
2. Fearfulness
3. Being easily fatigued
4. Difficulty concentrating or mind going blank
5. Irritability
6. Muscle tension, palpitations, sweaty
7. Sleep disturbance

There are specific features of each of the different anxiety disorder types

Difficulty with breastfeeding, a lack of interest in the baby or over-intrusive interactions with the baby may be clues that the mother is depressed.

It is critical to remember that the CPMDs, like all mental disorders, impact feelings as well as thoughts and behaviours. Thus, a depressed woman may have very low self-esteem (feeling of self-loathing), may believe that she is unable to change her circumstances (thought of powerlessness) and thus may end up not adhering to her PMTCT regimen (behaviour).

A diagnosis of CPMDs is made when symptoms cause clinically significant distress or impairment in social or occupational functioning.

Consequences of CPMDs

The enduring adverse physical, cognitive and emotional effects of CPMDs on the mother and child are well-documented [9-11]. Serious consequences include increased maternal vulnerability to HIV infection, substance abuse, poverty, violence, self-harm, loss of employment and poor health, for example:

- Higher incidence of miscarriage, bleeding during pregnancy, Caesarean-section delivery, pre-term delivery and prolonged labour[12-15]
- Poorer uptake of proper antenatal care and defaulting on PMTCT or infant immunisation schedules[16-18])
- Early cessation of breastfeeding and interference with the mother-baby bond[19]

The mother's mental health impacts on the baby's health during pregnancy as well through her ability to bond with and care for her child.

Potential child consequences are:

- Low birth weight, failure to thrive and longer-term neuro-behavioural problems[11,14,15]
- Loss of development potential in children under five years[20]
- Increased diarrhoeal episodes[21]
- Increased admission to neonatal care units and hospital admissions[18]
- Adolescent depression or conduct and substance abuse disorders in adolescence[22]

Dysfunction in the child affects the next generation of adults, perpetuating an intergenerational cycle of mental ill-health.

Six practical steps for managing CPMDs in your clinical work

Nurses need to care for their own mental health to avoid burnout and to ensure that they practice in a nurturing and empathic way. Practical steps nurses can implement:

1. Learning more about CPMDs

Health workers can be advocates for increasing mental health literacy and reducing stigma with colleagues and clients. Common myths are summarised in Box 2.

Box 2: Common mental disorders (CMDs) – myth busting

Myth	Truth
CMDs are rare	CMDs are more prevalent than most physical illnesses
If someone has a CMD • they're mad • they're lazy • they're stupid • they're bewitched • they're at fault	None of this list is true
People with CMDs never get better	People generally recover from CMDs, especially if treated properly
It is difficult to treat people with CMDs	Simple talking therapies, social support and sometimes antidepressant medication has been shown to be highly effective for the CMDs
Only specialists should treat people with CMDs	It has been shown that primary care workers can be highly effective in treating CMDs

The Perinatal Mental Health Project (PMHP) has developed materials for primary care workers and health specialists that are freely available from http://pmhp.za.org/learn/pmhp-resources. Resources include client pamphlets, issue briefs (e.g. Adolescent pregnancy, Violence, Refugees) and short textbooks:

- *Maternal Mental Health Handbook*
- *Basic Counselling Skills*
- *How to develop a maternal mental health service*

2. Early identification of women at risk for CPMDs

Nurses can identify women at risk from the categories below:

- Lacking partner support
- Unplanned/ teenage pregnancy
- Past/ current abuse
- Substance abuse in the mother or in the home
- Financial or housing concerns or stressful change in circumstances (e.g. recent unemployment or bereavement)
- Previous mental health problems
- Previous miscarriage, abortion, stillbirth, death of a child or a frightening birth experience
- A bad relationship with her mother or an absent mother
- HIV/AIDS or obstetric problems

PERINATAL MENTAL HEALTH PROJECT

www. pmhp.za.org

Access for all women to mental health care during and after pregnancy

The PMHP provides an integrated, on-site mental health service at 3 obstetric facilities in Cape Town. It has developed a model for providing screening, counselling and psychiatric services during pregnancy based on a local, evidence-based model for care in which mental health care is routinely integrated into maternal care. Poor women need not spend extra resources nor deal with issues of stigma. While they are attending for their pregnancy care, they can access mental health care on-site.

Pregnant adolescents with HIV need special care. Health interventions need to be tailored to the understanding level of each adolescent because psychiatric disorders can limit learning capacity, impair judgment or diminish capacity to plan and negotiate safe behaviours[23].

3. Mental health screening

Ensure adequate and appropriate referral sources before screening. The Whooley screening questions[24] can be used during routine history taking without the stigma of mental health screening. The PMHP is in the process of validating a screening tool for the South African context.

4. Appropriate referral

The combination of CPMDs and poverty makes it difficult for women to keep appointments[25]. In the South African context of poorly integrated mental health/ maternal/ child/ HIV services[4,26], ineffectively managed referrals can exacerbate defaulting. Community-based Organisations (CBOs) play a crucial role in providing mental health care and support for families. Culturally-adapted, psychoeducational interventions, implemented in local communities are effective in reducing CPMDs and their effects[10]. Interventions may be beyond the scope and capacity of your clinic but may be offered by local CBOs.

5. Provide empathic care to the mother

As part of the ordinary interactions with the mother, health workers have the opportunity to make a significant difference through the quality of their interaction. A genuine greeting, with an introduction and use of the mother's name shows the mother she is respected and important. If the mother's feelings are acknowledged and not judged, she may feel safe in the clinical environment. Nurses emphasising what the mother is doing well, or has previously done well, can improve her self-esteem and sense of her own ability to be well. When busy and overwhelmed, health workers can easily forget the power of gentleness and kindness in their interactions with vulnerable clients.

THE WHOOLEY QUESTIONS

During the past month,
1. Have you often been bothered by feeling down, depressed or hopeless?
2. Have you often been bothered by having little interest or pleasure in doing things?
If yes to either of the above, ask a third question:
3. Is this something you feel you need or want help with?
Scoring: "Yes" to either question 1 or 2 AND "yes" to the question 3, the 'help question' = a positive screen. This means that it is necessary to refer them for additional counselling and support.

6. Helping families access appropriate social support

The South African Social Security Agency (SASSA) can provide support in the following ways to alleviate poverty and suffering:

- Maintenance orders if a woman's partner has left her
- Child support grants for South African women who are the primary caregivers of a child.
- Urgent support grants for women who have applied for a grant but are yet to receive it. People in desperate need can apply for temporary assistance called Social Relief of Distress which is normally issued with a food parcel but can also be a voucher or cash payment. A woman can apply for Indigency status for assistance with the cost of water, electricity and property rates.
- SASSA Toll free: 0800 601011 www.sassa.gov.za

Conclusion

CPMDs are highly prevalent in the South African setting. HIV-positive mothers or those at risk of HIV infection are particularly vulnerable to mental ill-health. Simultaneously, mental ill-health impacts on HIV and child health outcomes.

Given the national coverage of antenatal care and HIV services, primary care workers are uniquely placed to disrupt the vicious cycle of mental ill-health and impact on several health and development outcomes simultaneously. R

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PRACTICAL REFERRAL TIPS

Establish collegial relationships between referring centres and referral sources. Know a *person's* name and telephone number at the referral contact (not just the organisation's name).

Nurture relationships with contacts by inviting them to events (e.g. staff teas). Let them know that you are interested in attending their activities.

Display a map of organisations, contact names and regularly updated telephone numbers. Follow up: Ask referral organisations to report back; do the same when patients are referred to you.

Ensure your referral is feasible for the mother. Consider the time/ place/ impact on her employment/ her willingness to attend the recommended service.

Have an open-door policy: Even if you feel frustrated by a mother defaulting, it is important not to judge her, to be angry or to punish her. When a mother returns by choice, she is more likely to adhere to her appointments and treatment.

TREATING TB IN PREGNANCY

Page 30-33, is extracted from AURUM Institute Managing TB in a new era of diagnostics, version 2, June 2013 book

WHAT ARE THE RISKS ASSOCIATED WITH TB IN PREGNANCY?

MOTHER

- TB is a major cause of maternal mortality, especially in HIV-infected women

BABY

- Prematurity
- Low birth weight
- Perinatal death
- TB infection and disease, either before or after birth
- Increased risk of HIV transmission to the baby in HIV-infected pregnant women with TB, compared to HIV-infected pregnant women without TB

HOW IS TB DIAGNOSED IN PREGNANCY?

- Use the four TB screening questions in all pregnant women at every visit; which are:
    1. Are you coughing?
    2. Are you losing weight (or not gaining weight adequately)?
    3. Are you sweating at night?
    4. Do you have a fever?
- If any one of these symptoms is present, investigate for TB as per national diagnostic algorithms (see pages 8-11)

WHAT TB TREATMENT CAN BE USED FOR THE MOTHER?

Pregnancy:	Breastfeeding:
First-line TB drugs	All first-line TB drugs are safe
DO NOT USE streptomycin (ototoxic to foetus)	

Please see MDR section for treatment of M/XDR-TB in pregnancy

HOW SHOULD TB TREATMENT IN AN HIV-INFECTED PREGNANT WOMAN BE APPROACHED?

If already on ART	If not on ART
• Start TB treatment • Continue ART • If on Lopinavir/ritonavir, the dose should be doubled slowly over 2 weeks • Monitor for hepatotoxicity • Decrease the dose of LPV/r to the standard dose 2 weeks after completing TB treatment	• Start TB treatment • Start AZT monotherapy • Change from AZT monotherapy to the FDC (TDF+FTC+EFV) after about 2 weeks of TB treatment (once stable on treatment) • Counsel and monitor for IRIS

TREATING TB IN PREGNANCY....CONTINUED

ARE HIV-INFECTED PREGNANT WOMEN ELIGIBLE FOR IPT?

- Yes, pregnancy is not a contra-indication to IPT
- All HIV-infected pregnant women with a negative TB symptom screen must be considered for IPT
- However ART is the priority and IPT should be started once the patient is stable on ART
- TST should be done to determine duration of IPT:
  - If TST positive and on lifelong ART – IPT for 36 months
  - If TST positive and on PMTCT prophylaxis – IPT for 12 months
- If TST not done - IPT for 6 months

HOW SHOULD MDR-TB IN PREGNANCY BE TREATED?

- Refer to a specialist site

TREATING AN INFANT BORN TO A MOTHER WHO HAS TB

WHICH PREGNANCIES SHOULD I BE CONCERNED ABOUT?

- A mother diagnosed with TB in the last two months of pregnancy
- A mother who has not shown good clinical response to therapy and/or whose smear microscopy has not converted

HOW DO I EXCLUDE TB IN THIS INFANT?

- Do a clinical examination, including an abdominal examination
- Look for the following signs and symptoms:
  - respiratory rate ≥60/min OR difficulty breathing
  - feeding problems OR poor weight gain
  - abdominal distension, enlarged liver OR spleen
  - jaundice

CAN A MOTHER WITH TB STILL BREASTFEED HER INFANT?

- YES
- Maternal TB infection is not an indication to separate mother and child, and is not a contraindication to breastfeeding

ALL MOTHERS, INCLUDING THOSE ON TB TREATMENT AND/OR HIV-INFECTED, SHOULD BE ENCOURAGED TO BREASTFEED

WHAT ARE SOUTH AFRICA'S CURRENT GUIDELINES REGARDING INFANT FEEDING?

South Africa adopts the 2010 WHO Guidelines as follows:

- All mothers can safely breastfeed
- SA supports and promotes exclusive breastfeeding for 6 months irrespective of HIV status, followed by appropriate complementary feeding
- If mother is HIV-uninfected continue breastfeeding for 2 years and beyond
- SA Guidelines recommend that HIV-infected women breastfeed for maximum 12 months

WHAT ARE THE INFANT FEEDING RECOMMENDATIONS FOR HIV-INFECTED MOTHERS?

- Exclusive breastfeeding for 6 months
- Introduction of complementary feeding after 6 months with continued BF for 12 months, AND
  - the mother should be on lifelong ART or
  - the infant should be on daily nevirapine prophylaxis for the duration of breastfeeding, to a maximum of 12 months

HOW DO I MANAGE AN INFANT BORN TO A MOTHER WITH TB?

- Vitamin K should be administered as part of routine care at birth, especially if the mother is taking rifampicin (to avoid postnatal haemorrhage)

TREATING AN INFANT BORN TO A MOTHER WHO HAS TB

A Baby Born to a Mother with TB

- Send a portion of the placenta in sterile saline for TB culture and another portion in formalin for histology
- Assess baby for TB symptoms and do not give BCG to the baby at birth
- Make a record in the Road-to-Health Booklet that the child was exposed to TB in utero
- All mothers should be encouraged to breastfeed, regardless of TB and/or HIV status

TB signs/symptoms in infant

Refer baby to hospital for assessment to exclude TB. At the referral centre, the TB work-up in the baby should include:

- submission of gastric aspirates and blood for TB culture, DST
- CXR
- abdominal sonar (as the liver is often the primary site in congenital TB)

TB Diagnosed

Start Regimen 3 at the referral centre to ensure correct dosage. Fast-track for ART if baby is HIV-infected

- Once TB treatment is completed, BCG should be given if HIV-uninfected
- If HIV-infected, give BCG if asymptomatic

No TB signs/symptoms in infant

No TB Diagnosed

Isoniazid preventive therapy 10 mg/kg/day for 6 months

- Stop INH and give BCG if HIV-uninfected
- If HIV-infected give BCG if asymptomatic

BCG can be given if HIV-uninfected or asymptomatic infection

TB treatment should be initiated at a referral centre as dosing may be difficult in small infants

Patient education and counseling guide for

PMTCT OPTION B AND B+

with same day antiretroviral treatment initiation

Maryirene Ibeto[1], Eveline Cleynen[1], Saar Baert[1], Martin Vandendyck[1], Vivian Cox[1]
[1] Médecins Sans Frontières

This counseling guide aims to support healthcare workers involved in the counseling and education of HIV positive pregnant or breastfeeding women.

Background

In April 2012, the World Health Organization (WHO) issued a programmatic update on the use of antiretrovirals (ARVs) for prevention of mother-to-child transmission (PMTCT), proposing a phase out of option A, AZT dual therapy from 14 weeks gestation for women with a CD4 above 350, and a move towards option B and B+: providing ARV treatment (ART) to all HIV positive pregnant women, regardless of CD4 count, and either stopping after cessation of breastfeeding (option B) or continuing treatment for life (option B+). Many countries have since designed new PMTCT guidelines accordingly. In 2013, South African followed suit by releasing new PMTCT guidelines that allows all pregnant or breastfeeding women to start ART regardless of CD4 count. These new guidelines include another important change in policy – same day ART initiation. Not only are all HIV positive pregnant women offered ART irrespective of their CD4 count, they are encouraged to start their ART as soon as possible after diagnosis, to achieve viral suppression rapidly before delivery, thereby decreasing the risk of transmission of HIV to the infant. Potential benefits of Option B and B+ include programmatic simplification; no need for CD4 immediate results to decide the treatment pathway; one regimen for all pregnant women, and continuation of treatment into future pregnancies in settings with high fertility rates with the potential to decrease transmission in future pregnancies (in the case of Option B+). Concerns or

potential pitfalls with this approach center on challenges of retention in care and adherence after same day ART initiation. A number of studies have indicated a higher risk of loss to follow-up (LTFU) for pregnant women living with HIV in comparison to non-pregnant women.[1,2,3] Research also shows that adherence levels worsen after delivery,[3,4] highlighting the need for continued and specific support after PMTCT ART initiation and after delivery.

Rationale

The current approach for ART initiation, with 2 to 3 counseling sessions prior to starting ART, can be a barrier to timely treatment initiation. One study in Uganda showed that adherence did not improve with patients who underwent ART counseling before initiation, compared to patients who received adherence counseling concurrent with ARV initiation.[5] In Cape Town, it was found that delaying ART initiation in HIV positive pregnant women to provide ART preparation counselling was not associated with improved maternal outcomes.[6] Concerns over loss to follow up after same day ART initiation in our PMTCT programs must be weighed against the potential consequences of delays in ART initiation and the rate of pre-ART LTFU seen before introduction of the same day initiation policy.

To address the balance of the medical urgency of initiating pregnant or breastfeeding women on ART with the need for treatment support, MSF partnered with the Western Cape Department of Health to implement an adapted ART preparation approach for PMTCT ART initiation. In this approach a substantial part of the ART counseling and education is shifted from pre-initiation to post-initiation adherence support.

This counseling guide has a patient centered approach by facilitating practical support for specific adherence barriers faced by HIV positive pregnant and post-partum women.

PMTCT Option B and B+ counseling guide

The counseling guide consists of a series of counseling and education sessions during which a pregnant or breastfeeding woman is encouraged to practice certain skills related to adherence to treatment, delivery and feeding practices. The sessions are conceived as a dialogue between the provider and the patient instead of a one-directional transfer of information, from the provider to the patient. The aim is for the provider to understand the situation of the individual patient in order to provide tailored adherence support. Ideally, a patient should go through the complete cycle, receiving guidance during their pregnancy and after delivery. The complete cycle consists of 4 sessions in the antenatal period and 6 sessions in the postnatal period. The sessions are designed to coincide with routine clinical visits and do not require a pregnant woman or mother to visit the facility any more often than she would have in their absence. In addition, sessions have also been designed and are presented in a step wise manner so they can be carried out by a trained nurse, lay counselor, or expert patient, depending on the context and availability of staff (see Table 1).

This guide comes with additional tools: a visual aid to facilitate communication during the educational sessions (see figure 2); a template to write down the personal adherence plan of the patient to be kept in the patient's file and if possible, a copy is given to the patient; and a logbook for monitoring purposes, where counselors keep record of the number of sessions received by each patient.

Figure 1 shows the flow of the complete PMTCT counseling cycle as suggested by the guide. The order followed is for a woman testing positive in pregnancy for the first time. However, different points of entry into the PMTCT programme are commonplace: some women will already be on ART when they become pregnant, while others will present and be diagnosed HIV positive during labour or while breastfeeding. The counseling flow has been designed so that it can be adapted to each of these cases. The guide includes four flow diagrams similar to Figure1 but with the order slightly varying and some content being omitted to suit different presentations: women testing positive in pregnancy; women already on ART in pregnancy; women testing positive in labour; and women testing positive during breastfeeding. For women arriving late in pregnancy and are unable to attend the health facility four times before delivery, counseling sessions should be combined.

This counseling guide has a patient centered approach by facilitating practical support for specific adherence barriers faced by HIV positive pregnant and post-partum women. Throughout the counseling sessions, there is a strong emphasis on motivation for taking treatment and for living a healthy life. The counseling and education activities allow for immediate ART initiation on the day of HIV diagnosis, with emphasis placed on continued support and active learning while on ART.

Additional strategies for retention in care

The high rate of LTFU in pregnant women, particularly after the first antenatal care visit, calls for additional interventions to retain pregnant or post-partum women in care which go beyond counseling and education of patients. Additional strategies to support adherence in this patient population include:

- Active tracing of all HIV positive pregnant women and their exposed babies who miss appointments by nursing staff, lay counselors, or peer educators
- Facility or community based peer support groups or the use of expert patient counselors
- Involvement of men (husbands, partners) in PMTCT
- Access to Maternity Waiting Homes

linked to health centers where women can stay towards the end of their pregnancy – most suitable for rural areas with birthing sites that are long distances from patients' homes
- Involvement of traditional birth attendants for timely referrals and postnatal care
- Voucher schemes to reimburse certain costs such as transport and food
- Non-financial incentive schemes (e.g. providing free food or free nappies for mothers who attend support groups)
- Pre-packed drugs for women who are not able to deliver at health facilities
- Partners testing strategies such as outreach testing and oral self-testing with rapid oral HIV tests.

Conclusion

This counseling guide aims to support healthcare workers involved in the counseling and education of HIV positive pregnant or breastfeeding women. The session plans and tools are designed to facilitate an open dialogue and problem solving approach between the counselor and patient; the quality and time dedicated to the counseling sessions is of paramount importance. Successful implementation of this counseling guide requires sufficient training and support to staff providing counseling. In addition, patient pathways need to be adapted to ensure all patients re-present to the counselor for post initiation support. Given the "triple burden" of disease that HIV positive pregnant women encounter - pregnancy, HIV positivity, and the need for timely initiation of ART – the adherence support strategies for successful retention in care and virologic suppression are critical to the success of evolving PMTCT programmes.

Full copy of the Patient Education & Counseling Guide for PMTCT (designed by MSF, adaptable for use in several contexts) with accompanying tools, can be found at http://samumsf.org/blog/portfolio-item/the-pmtct-b-patient-education-and-counseling-toolkit/ Ⓡ

Table 1: Session plan for same day ART Initiation session as found in the Patient Education and Counseling Guide for PMTCT

ART INITIATION SESSION			
TARGET GROUP	Women who come for ANC consultation and are found to be HIV positive		
OBJECTIVES	Defining life goals and motivation for treatment Being able to take ART correctly and developing strategies for good adherence		
TIMING	On day women come for 1st ANC visit, after they are found to be HIV positive.	**Mode**	Individual
DURATION	30 min	**Tools**	PMTCT flipchart
1. INTRODUCTION - Explain objectives of the session - Emphasize confidentiality			
2. GIVE EMOTIONAL SUPPORT - Ask the first concerns the woman has, now that she found out she is HIV positive. Leave space for emotions.			
3. EDUCATION IN A NUTSHELL Finding out you are HIV+ is a lot to deal with today but it is important that we already speak for a moment about the health of your baby. You could have a HIV negative baby if you take the right precautions: - *Start ART as soon as possible:* HIV has no cure but there is a treatment to control HIV in your body. All pregnant women are to start this treatment as soon as possible as this gives a high chance of preventing the transmission of the virus from you to your baby. We invite you to start taking the treatment today, but it is up to you to decide if you feel ready for this. - *Delivery in a health facility:* It is safest to go to a health facility for delivery and inform the staff you are HIV positive; then the staff will be able to take all precautions to protect the baby during delivery. - *Correct feeding of the baby:* After delivery, it is important to feed your child exclusively with breast milk for the first 6 months. After 6 months other foods can be introduced, while continuing breastfeeding until at least 12 months.			

Table 1: Session plan for same day ART Initiation session as found in the Patient Education and Counseling Guide for PMTCT

ART INITIATION SESSION
- *Correct treatment of the baby* The baby will be given different protective syrups right after birth until you stop breastfeeding. Through these 4 actions you will protect your baby and the chances of him or her becoming infected are very small. Today we will focus on how to take your treatment correctly. We will make a plan together to enable you to take the medication correctly. => Fill out the adherence plan template (See Table 2)
4. ADHERENCE STEP 1: MY MOTIVATION TO START TREATMENT *"Can you tell me 3 main reasons why you would want to stay healthy and start this treatment? Think about things that matter to you in life, or people who are important"* Write this down at the top of the adherence plan. => Direct the woman towards the importance of starting treatment today to prevent transmission to her baby
5. ADHERENCE STEP 2: IDENTIFY SUPPORT SYSTEM - Explain adherence goal: *"It can be a big help to tell someone about your HIV status. This person could help remind you to take your drugs, be a listening ear, accompany you to the hospital, etc."* - Identify barriers: • *"Can you think of someone you could tell about your HIV status (any family member, friend, and/or co-worker)?"* • *"What are the reasons you feel unable to talk about your status to some people?"* - Make a plan: • *"Do you have a person close to you that can support you in your treatment?"* • *"Can you think of someone who could help you in disclosing to your partner?"*
6. ADHERENCE STEP 3: PLANNING FOR FUTURE APPOINTMENTS - Explain the adherence goal: *"During the coming months, you will need to come regularly for your medical check-up, to check the baby and to get a new supply of drugs."* - Identify barriers: • *"What might cause you to miss monthly appointments?"* - Make a plan: • *"How will you get to your medical appointments? Could you come with someone else from your village or neighbourhood?"* • *"What could you do if something prevents you from coming to your appointment (e.g. no money for taxi, train not working, raining when you usually walk, sick child, being too sick yourself)?"* • *Would you agree to have a Community Health Worker or a member of a peer support group visit you in case you didn't make it for your appointment in time?* • *"How can you make sure you remember your appointments?"(e.g. mobile phone, number of pills left)*
7. CHECK READINESS TO START ART TODAY - Explain **the adherence goal:** *"To ensure the health of you and your baby, you should start your treatment as soon as you are ready."* *Review patient's 3 reasons to start treatment.* - Identify barriers: • *"What are some of your concerns regarding starting ARV treatment?"* • *"Do you think you will be ready to start ARV's today?"* - Make a plan: • *"If some of your concerns haven't been addressed in this session, we may discuss them in the coming sessions and see how to overcome them. Always feel free to express your concerns and we can discuss them"*

Table 1: Session plan for same day ART Initiation session as found in the Patient Education and Counseling Guide for PMTCT

ART INITIATION SESSION
• *If the patient feels ready to start ARV's today: continue the counseling session and the patient pathway for ART initiation today.* • *If the patient does not feel ready to start: explore her concerns further and fix a day for a next appointment to discuss this again, preferably within a week.* • *Explain that the first goal for her is to start treatment to ensure we do our best to keep her healthy and prevent transmission to the baby. Other steps can be dealt with at the next session.* **When the patient indicates she is not ready to start, the adherence steps below will form the counselling session on ART initiation date. Close the session with the following:** - Express understanding and provide continued motivation to start ART "Being diagnosed with HIV and needing to start ARVs is a lot to think through. You can be proud of what you have accomplished so far and it is okay to take a little time to think through everything you have heard today. Remember that it is important to start ARVs as soon as possible to keep yourself healthy and give your unborn baby the best chance of not getting HIV. Can we make a date for you to start ARVs and have your next counselling session to prepare you? " - Check if patient has any further questions. - Add the adherence plan to the patient's file and give a copy of the adherence plan to the patient for completion at the next session. **When the patient is ready to start, continue below.**
8. ADHERENCE STEP 4: CREATION OF A MEDICATION SCHEDULE - Review adherence goal: *"HIV treatment is one pill a day that needs to be taken every day at the same time."* - Identify barriers: • *"Can you tell me how a regular day looks like for you (wake up time, work time, meals and bed time)?"* • *"Do you have any rituals or routines that could be linked to taking your medication on a daily basis?"* • *"How does that day look different for week/weekends?"* • *"What moments of the day/days of the week might be difficult to take your medication?"* - Make a plan: • *"According to your schedule, what would be the best time for you to take your HIV treatment?"*
9. ADHERENCE STEP 5: REMINDER STRATEGIES - Explain adherence goal: *"Having reminders can help you to focus on the reasons to stay healthy, keep your baby negative and to remember when to take your HIV treatment"* - Identify barriers: • *What difficulties have you previously faced with remembering to take medication (like antibiotics, vitamins or other pills)?* • *How have you previously reminded yourself to take these medications?* - Make a plan: • *"Can you think of an object that could help you to remember the reasons to stay healthy and alive and take treatment? Some people use stickers, a little piece of fabric or whatever they have available."* • *"These reminders can be put in your house/workplace to remind you of your reasons to stay healthy and to take your treatment. Where could you place each reminder so that you can see them at each dosing time?"* • Place the sticker or piece of fabric on the patient's adherence plan next to the 3 main reasons for staying healthy. Explain to the patient that the purpose of putting it on the adherence plan is in order for the patient to make the link between the sticker/fabric and their treatment so when they see the stickers/fabric in their home they will remember their adherence plan and positive reasons for taking treatment.

Table 1: Session plan for same day ART Initiation session as found in the Patient Education and Counseling Guide for PMTCT

ART INITIATION SESSION
NOTE: you don't have to use stickers/fabric; anything that is readily available in your facility can be used in place of the stickers/fabric. • Encourage the patient to read these reasons to stay healthy every day preferably right before they take their medication. • *"What other things could you use to remind you to take your medications (set cell phone alarm, get family members to remind you)?"*
10. ADHERENCE STEP 6: MANAGING MISSED DOSES - Explain adherence goal: *"As HIV treatment has to be taken every day, it is necessary you know what to do in case you miss a dose. Everybody can miss a dose, but it's important to know what to do in case this happens"* - Identify barriers: • *"In which situation could you forget (or be unable) to take your medication?"* • *"What will you do if you forget to take your treatment or if you are late for a dose?"* - Make a plan: • *"Take your medication immediately when you remember. Then continue on the same (initial) medical schedule. Remember to inform your doctor, nurse or counselor of any missed doses"*
11. ADHERENCE STEP 7: STORING MEDICATION AT HOME AND KEEPING EXTRA DOSES - Explain adherence goal: *"It is important to identify a convenient place to store your drugs and to carry some with you in case you can't access your treatment on time"* - Identify barriers: • *"Do you worry about people seeing your medication?"* • *"Where could you keep your medication at home?"* • *"What type of situation could happen where you would not have access to your medication?"* - Make a plan: • *"Which safe and convenient place can you identify to store your drugs at home or at the place where you would take your drugs?* • *"Where could you carry extra doses of drugs in case you do not make it home on time for your scheduled dose (in pocket of jacket or bag that you usually take when you go out)?"* • *"What could you keep them in (eg. envelope, little plastic bag or container)?"*
12. ADHERENCE STEP 8: DEALING WITH SIDE-EFFECTS - Review adherence goal: *"In the first few weeks of the treatment you might experience some side effects such as nausea, headache, feeling fatigued or dizziness, difficulty sleeping and unusual dreams. Severe side effects are rare. Remember that if you do not feel well, you should continue your treatment and come to the clinic so the nurse/doctor can help decide what is wrong. Please don't stop taking drugs as this will prevent the medication from working properly. The pills do not harm your baby, on the contrary, they prevent the HIV to pass from your body to the child".* - Identify barriers: • *"What kind of side effects do you think might prevent you from taking your medication?"* • *"How could you deal with these side effects?"* - Make a plan: • Identify a plan for what to do when experiencing minor side effects *"If side effects appear, they may just last for a few days. Remind yourself the reasons why you want to stay healthy and alive and keep taking your treatment."* *"If you vomit in the first hour after taking your treatment, take all of them again. If one hour or more has passed, don't."* • Identify a plan for what to do when experiencing severe problems: *"If the side effect is bothering you so much that it may prevent you from taking your medication then DO NOT STOP*

Table 1: Session plan for same day ART Initiation session as found in the Patient Education and Counseling Guide for PMTCT

ART INITIATION SESSION
YOUR TREATMENT. Continue to take your medication and go to the clinic as soon as possible to see your doctor/ nurse."
13. CLOSURE OF SESSION • Check if patient has any further questions. • Add the adherence plan to the patient's file and give a copy of the adherence plan to the patient.

Figure 1: Diagrammatic representation of the series of sessions found in the PMTCT Education and Counseling Guide

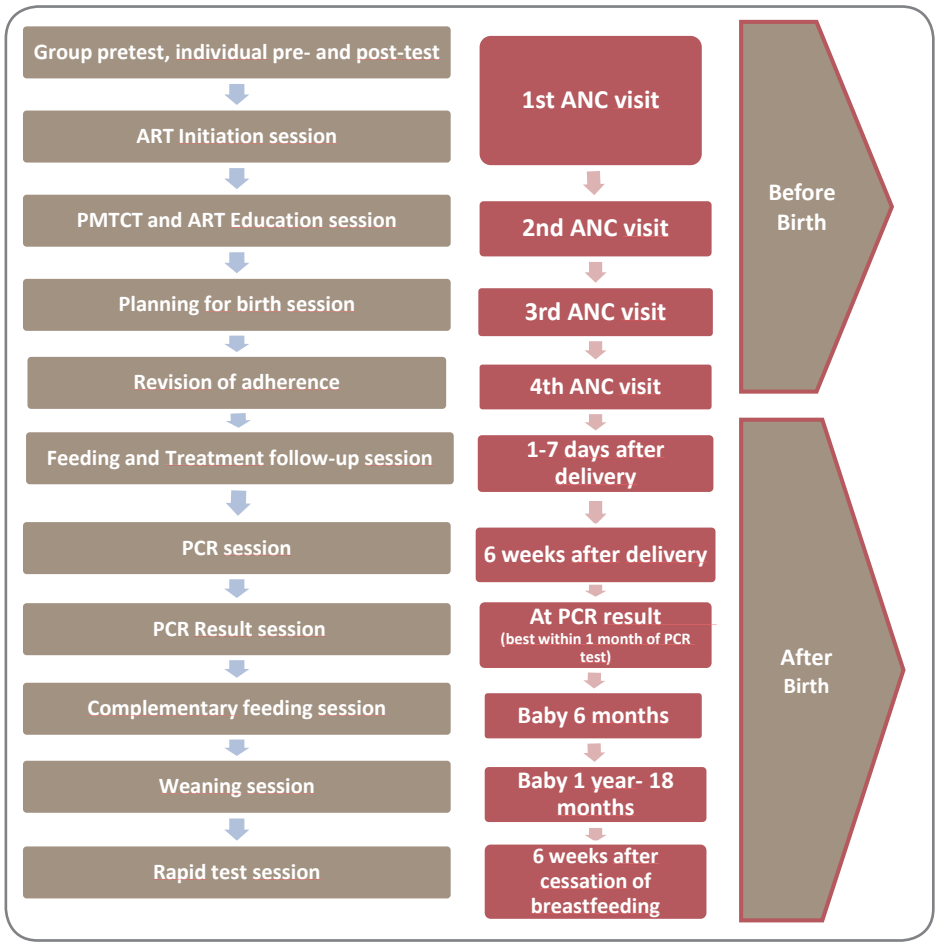

Figure 2: PMTCT Flipchart - Visual aid to facilitate communication during the counseling sessions

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Table 2: Adherence plan template - Accompanying tool for the PMTCT Education and Counseling Guide

Session 1 *(date)*
Adherence step 1 - My 3 reasons to stay healthy and alive: 1. _____ 2. _____ 3. _____
Adherence Step 2 - Patient Support system Agree for CCW home visit: Yes ☐ No ☐ Members of my support system: _____ Who else I can support me in my treatment: _____
Adherence Step 3 - Getting to appointments How to get to appointment: _____ Back-up plan to get to appointments: _____ How to remember appointments: _____
My readiness to start treatment I don't feel ready and will go to ARV treatment readiness group on: _____ I do feel ready and will start ARV treatment on: _____

Session 2 *(date)*
Adherence Step 4 - Medication schedule The best time for me to take my treatment is: _____
Adherence Step 5 - Reminder strategies I will put my reminder stickers on: _____ I will read my reasons for taking treatment at: _____ My other reminder tools are: _____
Adherence step 6: Managing missed doses If I miss a dose, my plan is _____
Adherence Step 7 - Storing medication and extra doses I will store my medication in: _____ I will carry extra supply and keep it in: _____
Adherence Step 8 – Dealing with side-effects My plan for minor side effects is: _____ My plan for side effects that worry me is: _____

Interpretation of Hepatitis B Serologic Test Results

Hepatitis B serologic testing involves measurement of several hepatitis B virus (HBV)-specific antigens and antibodies. Different serologic "markers" or combinations of markers are used to identify different phases of HBV infection and to determine whether a patient has acute or chronic HBV infection, is immune to HBV as a result of prior infection or vaccination, or is susceptible to infection.

HBsAg **anti-HBc** **anti-HBs**	negative negative negative	Susceptible
HBsAg **anti-HBc** **anti-HBs**	negative positive positive	Immune due to natural infection
HBsAg **anti-HBc** **anti-HBs**	negative negative positive	Immune due to hepatitis B vaccination
HBsAg **anti-HBc** **IgM anti-HBc** **anti-HBs**	positive positive positive negative	Acutely infected
HBsAg **anti-HBc** **IgM anti-HBc** **anti-HBs**	positive positive negative negative	Chronically infected
HBsAg **anti-HBc** **anti-HBs**	negative positive negative	Interpretation unclear: four possibilities: 1. Resolved infection (most common) 2. False-positive anti-HBc, thus susceptible 3. "Low level" chronic infection 4. Resolving acute infection

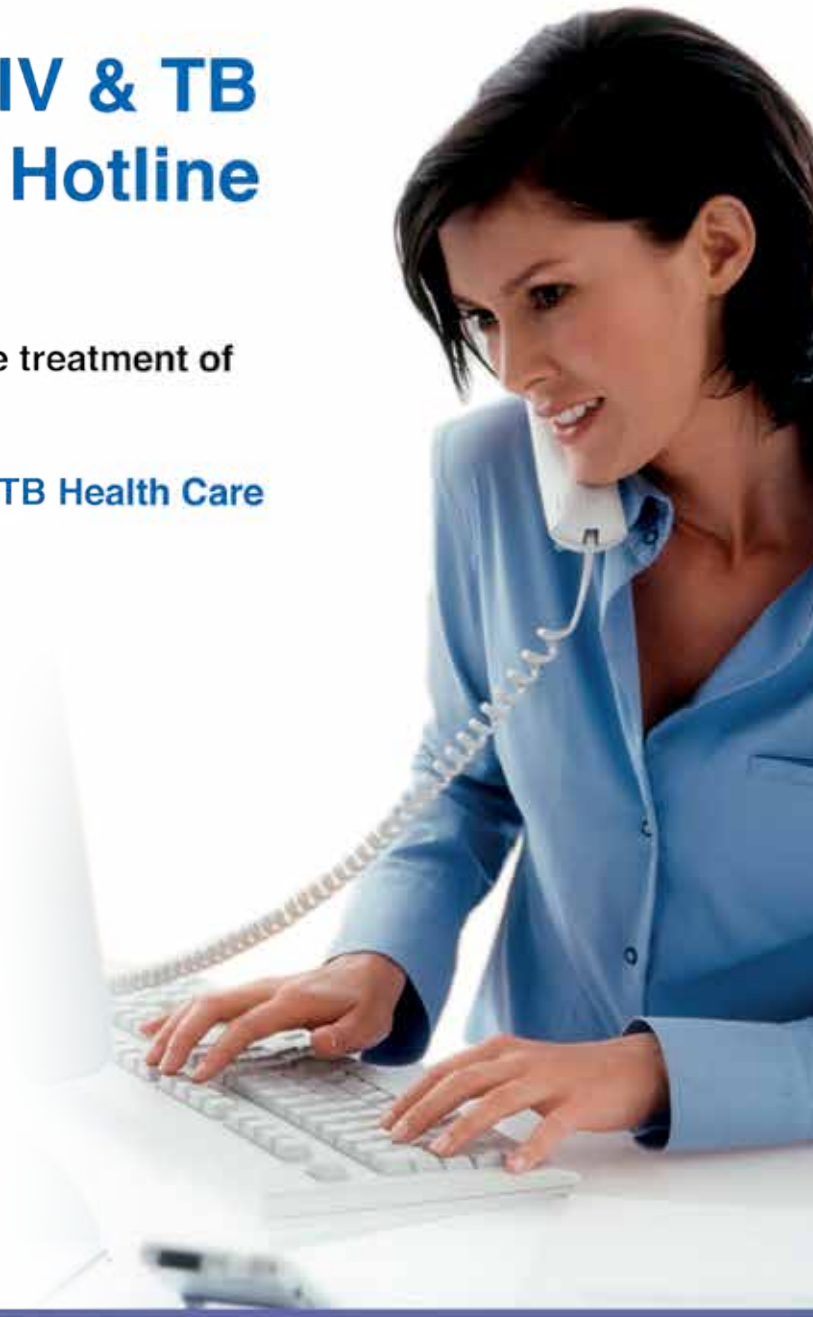
Adapted from: A Comprehensive Immunization Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices. Part I: Immunization of Infants, Children, and Adolescents. MMWR 2005;54(No. RR-16).

- **Hepatitis B surface antigen (HBsAg):** A protein on the surface of hepatitis B virus; it can be detected in high levels in serum during acute or chronic hepatitis B virus infection. The presence of HBsAg indicates that the person is infectious. The body normally produces antibodies to HBsAg as part of the normal immune response to infection. HBsAg is the antigen used to make hepatitis B vaccine.
- **Hepatitis B surface antibody (anti-HBs):** The presence of anti-HBs is generally interpreted as indicating recovery and immunity from hepatitis B virus infection. Anti-HBs also develops in a person who has been successfully vaccinated against hepatitis B.
- **Total hepatitis B core antibody (anti-HBc):** Appears at the onset of symptoms in acute hepatitis B and persists for life. The presence of anti-HBc indicates previous or ongoing infection with hepatitis B virus in an undefined time frame.
- **IgM antibody to hepatitis B core antigen (IgM anti-HBc):** Positivity indicates recent infection with hepatitis B virus (≤6 mos). Its presence indicates acute infection.

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention
Division of Viral Hepatitis

www.cdc.gov/hepatitis

Toll-Free National HIV & TB Health Care Worker Hotline



Are you a doctor, nurse or pharmacist?

Do you need clinical assistance with the treatment of your HIV or TB patients?

Contact the TOLL-FREE National HIV & TB Health Care Worker Hotline

NATIONAL HIV & TB HEALTH CARE WORKER HOTLINE
0800 212 506

0800 212 506 / 021 406 6782

Alternatively send an SMS or "Please Call Me" to 071 840 1572

www.hivhotline.uct.ac.za

The Medicines Information Centre (MIC) situated within the Division of Clinical Pharmacology, Department of Medicine at the University of Cape Town is the largest and only clinically-based medicine information centre in South Africa.

In collaboration with the Foundation for Professional Development and USAID/PEPFAR, the MIC provides a toll-free national HIV & TB hotline to all health care workers in South Africa for patient treatment related enquiries.

What questions can you ask?

The toll-free national HIV & TB health care worker hotline provides information on queries relating to:

- HIV testing
- Post exposure prophylaxis: health care workers and sexual assault victims
- Management of HIV in pregnancy, and prevention of mother-to-child transmission
- Antiretroviral Therapy
  - When to initiate
  - Treatment selection
  - Recommendations for laboratory and clinical monitoring
  - How to interpret and respond to laboratory results
  - Management of adverse events
- Drug interactions
- Treatment and prophylaxis of opportunistic infections
- Drug availability
- Adherence support
- Management of tuberculosis and its problems

When is this free service available?

The hotline operates from Mondays to Fridays 8.30am – 4.30pm.

Who answers the questions?

The centre is staffed by specially-trained drug information pharmacists who share 50 years of drug information experience between them. They have direct access to:

- The latest information databases and reference sources
- The clinical expertise of consultants at the University of Cape Town's Faculty of Health Sciences, Groote Schuur Hospital and the Red Cross War Memorial Children's Hospital

MIC MEDICINES INFORMATION CENTRE

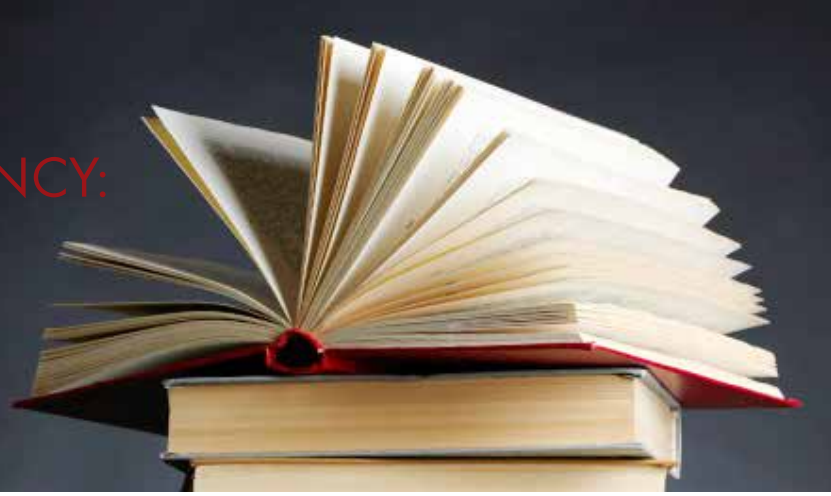
USAID FROM THE AMERICAN PEOPLE

FPD

Call us - we will gladly assist you! This service is free.

This service is brought to you as a result of the generous support of the American people through USAID/PEPFAR

TUBERCULOSIS IN PREGNANCY: A CASE STUDY



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In 2012 an estimated 8.6 million adults and children had TB, yet only two thirds were actually identified as having symptoms and diagnosed. A curable disease caused by mycobacteria, TB kills nearly as many people globally as HIV (1.3 million in 2012). Tuberculosis is the fourth leading cause of years of life lost[a] globally and the second leading cause of death in Southern sub-Saharan Africa among women of reproductive age (15-49 years)[1]. TB has a negative impact on both maternal and child morbidity and mortality.

Nomalanga Tshezi is a 21-year-old female who presents to the Primary Health Clinic (PHC) for her first antenatal care visit. In reviewing her past medical and obstetrical history, you learn that she was diagnosed with HIV 3 years ago during an HIV testing campaign in her neighbourhood, but she has never received consistent care. She has no other known medical issues and has had no prior pregnancies. Her current partner's HIV status is unknown and he is unaware of her status. Nomalanga's last menstrual period was approximately 14 weeks ago; her current complaints include fatigue, shortness of breath, sore throat, and cough for 4 days. She reports that she does not currently take any medications, vitamins, or traditional treatments. She has no known allergies.

True or false: Nomalanga's symptoms are likely due to TB because active TB during pregnancy is very common.

False. TB can occur in pregnancy, although it does not occur more frequently than in non-pregnant adults. As with all people with TB disease, early detection and initiation of treatment is important to mitigate the negative consequences on the mother and unborn infant from untreated disease.

Pregnancy does not appear to accelerate the disease progression of TB; however, it does result in negative outcomes for both mother and newborn[2]. In Zambia, one out of four maternal deaths have been attributed to TB[3]. Infants born to women with TB have an increased risk of being born prematurely, being small for gestational age and having low birth weight when compared to those born to mothers who do not have tuberculosis[4]. In addition, there is an increased rate of transmission of HIV from mother to child when the mother also has TB[5].

True or false: Given Nomalanga's HIV status, your priority today is to counsel her and initiate antiretroviral therapy (ART).

False. Nomalanga has symptoms that could be indicative of an opportunistic infection, including TB. It is important to take a further history and do a physical exam to diagnose what is causing her symptoms. Identification and treatment of opportunistic infections is essential prior to initiating ART in any person living with HIV, particularly TB. Immune reactivation in the setting of ART may lead to worsening of symptoms and have negative effects on both the mother and unborn child. Knowledge of the client's immunological status (CD4) would assist the clinician with the ability to determine potential causes of Nomalanga's symptoms – the lower her CD4 count, the larger spectrum of disease she is at risk for. For example, *pneumocystis jirovecii* pneumonia would only be likely if her CD4 were 200 cells/mm^3 or lower – it is very unusual for someone with a high CD4 count to be diagnosed with PJP pneumonia. Remember that TB can occur at any CD4. Pregnant women living with HIV have 10 times the risk of TB when compared to their HIV-negative counterparts, and maternal TB/HIV co-infection has been show to increase the risk of postpartum mortality by 2.2 and probability of infant death by 3.4.[6]

Diagnosis of active tuberculosis can be more complicated in pregnant women, and symptom screening can be labour and resource intensive. Often signs and symptoms of TB are masked by general pregnancy symptoms, such as general-

[a] *Years of life are lost* (YLL) take into account the age at which deaths occur by giving greater weight to deaths at younger age and lower weight to deaths at older age.

ised fatigue and increased respiratory rate[7]. In addition, women with tuberculosis during pregnancy are more likely than non-pregnant women to have non-specific symptoms[8]. Some studies have shown that pregnant women have higher rates of extra pulmonary TB and smear negative TB, both of which complicate and often delay diagnosis[9]. Despite challenges to diagnosis, it is essential to promptly and accurately diagnose TB during pregnancy in order to improve maternal and newborn outcomes.

Upon further assessment of Nomalanga, you observe the following:
Temperature: 37, 9 C
Respiratory rate: 24 breaths per minute
Pulse: 90 beats per minute
Blood pressure: 112 / 64 mm Hg
Weight: 66 kg

- White patches on hard palate
- Enlarged cervical lymph nodes
- Decreased lung sounds in right lower lobe

What further assessments would you consider during today's visit?

Nomalanga's vital signs give you essential information: she has a fever and elevated respiratory rate. Looking in the mouth of every client is another essential aspect of a targeted physical exam. Every nurse caring for people living with HIV (PLHIV) should become comfortable with listening to the heart and lungs with a stethoscope – to be able to understand 'normal' vs. 'abnormal'. Working closely with a clinical mentor can assist nurses with attaining this competency.

You diagnose Nomalanga as having oral candidiasis and query whether or not she possibly has oesophageal candidiasis, given her complaints of sore throat. You decide to treat her with topical antifungal lozenges for 5 days and to follow her closely. You are concerned that Nomalanga has pneumonia or possibly TB, considering her elevated temperature and respiratory rate, as well as decreased breath sounds and decide to refer her to the district hospital. Nomalanga indicates she will not be able to travel to the hospital 30km away since she is caring for her sister's 2 children and must get home before they return from school today.

You contact the district medical officer providing clinical support to your clinic to seek advice. Dr. Makholo advises you to take a sputum sample from the client today and send it to the district hospital for molecular testing using Gene Xpert. She encourages you to presumptively treat Nomalanga for mild pneumonia today and have her return to the clinic in two days for follow-up, or sooner if her condition gets worse. You prescribe amoxicillin, 1g PO three times daily for 5 days as well as paracetamol, 1g every 6 hours as required for fever. Nomalanga agrees to come back in two days. You also take Nomalanga's bloods for baseline CD4 count and creatinine, anticipating you will initiate her on ART in near future.

Remember, severe pneumonia in adults with an underlying medical condition is when 2 or more of the following signs are present: confusion or decreased level of consciousness; respiratory rate of 30 breaths or more per minute; systolic BP less than 90 mmHg; diastolic BP less than 60 mmHg; or age over 65 years.[10]

Nomalanga returns to the clinic two days later. You have received the Xpert results from the district hospital and they read: Xpert MTB Positive / RIF Negative. The CD4 count is not yet available. What do these results mean and what are your next steps in caring for Nomalanga?

Nomalanga has drug-sensitive pulmonary tuberculosis. You start first line treatment today (rifampicin, isoniazid, pyrazinamide, ethambutol) according to her weight. You encourage her to complete the course of antibiotics. Co-morbidities are not uncommon, particularly among PLHIV, and it is quite possible that Nomalanga had both bacterial pneumonia and tuberculosis concomitantly. You also ask Nomalanga to continue with the topical antifungal as prescribed. You make a follow-up appointment with Nomalanga for one week.

When will Nomalanga start ART?

PLHIV, including pregnant women, should complete 2-8 weeks of TB treatment before initiating ART unless severely immunocompromised (CD4 <50), then ART should be started as soon as tolerated. You asked Nomalanga to return one week after initiating TB treatment so that you may assess her clinical state – to see if the oral candidiasis resolves, if her shortness of breath and cough improves, as well as to provide adherence support for TB treatment while preparing her to initiate ART. You also ask Nomalanga to consider bringing her partner with her at her next visit. Ⓡ

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SISTER SUE ROBERTS

A nurse, an activist and an inspiration

Her voice becomes slightly emotional as she recalls the days when patients were given Vitamin B, Bactrim and Mycostatin as treatment for HIV and the frustration of not being able to offer them adequate treatment

When Sister Susan Roberts moves through the hallways of the Themba Lethu Clinic at Helen Joseph Hospital, she can't go for more than two steps without stopping to be consulted for advice, to give an opinion or a comment on a patient, or simply to share a quick smile and word of encouragement. As the activity of the largest antiretroviral treatment site in the country swirls around her, her pride is evident – as is the fact that she has been an integral part of shaping the clinic into what it is today. As she prepares to retire, handing the clinic and her legacy over to others to take it forward, we wanted to find out more about her career in nursing, which spans over 40 years, and to highlight the enormous contribution she has made in the lives of many people in South Africa, including those living with HIV.

Sister Roberts laughs as she recalls that she wanted to become a nurse "from the age of five". She trained at Groote Schuur, before moving to Bloemfontein to work in midwifery. Her passion for infection control resulted in her taking on a post at Helen Joseph in the late 1980s, but the arrival of a 1991 Department of Health circular on HIV changed the course of her career. Recognising the need for health care workers who cared enough to try and combat this much-stigmatised illness in the face of fear and ignorance, she began working to set up a clinic. The space they were given was sparse, bare concrete to begin with, a far cry from the bustling, well-equipped facility which can be seen today. This is a testimony to the dedication and energy which Sister Roberts, and the many others involved, put into creating a space in which to adequately care for patients. She worked with staff at the clinic to prepare for the arrival of patients who

"I met Sue Roberts about 13 years ago in the Themba Lethu clinic at Helen Joseph Hospital. Sue exemplified to me, my understanding of a 'nurse' and I have measured all other nurses I have met subsequently against her extremely high standards. Sue is passionate about her patients receiving the best possible care, and very willing to take on the role of activist in order to do so. We at the Society are very sorry to see her go. She will be missed." – Lauren Jankelowitz, CEO, SA HIV Clinician's Society

Sister Roberts on her advice to other nurses and health care workers: "Learn from your patients and find your inner strength. Realise that you make your own opportunities. When things don't go the way you want them to, don't get angry, but rather, find another way to make things work. Many things are possible with passion and strength of mind. "

would need HIV testing and care, and remembers the day the doors of the clinic opened in 1992 with fondness. There were numerous challenges, such as refusal by doctors to do HIV tests, testing without consent and the sheer volume of patients. Even so, she recalls how the nurses would seek out each person in the wards who had been tested, painstakingly counselling each of them. She was also instrumental in pioneering a wellness course for people living with HIV, supported by Marc Heywood, which tackled issues such as positive living, how to make a living will and preparing for the future. Given that patients couldn't afford the staggering fees for HIV, they also tried to enrol patients into clinical trials wherever possible. Sister Roberts also helped to negotiate with the Department of Health and Pfizer for a donation of Diflucan for patients who could not afford it.

Her voice becomes slightly emotional as she recalls the days when patients were given Vitamin B, Bactrim and Mycostatin as treatment for HIV and the frustration of not being able to offer them adequate treatment. This only strengthened her resolve, however, and she and her team worked to empower patients to become activists. They assisted patients to sell paintings and beaded crafts to make money for ART, and found people to sponsor treatment for patients. In 2004 the National ART programme was launched, but for Sister Roberts the work had only just begun. The clinic worked furiously to accommodate the patients coming in on a daily basis, some travelling as far as from Port Elizabeth due to their faith in the Themba Lethu Clinic. Adherence and wellness courses were hosted regularly and the clinic began work on tuberculosis, becoming a TB focal point and starting a TB testing database that has served as a model for many other clinics. Today the clinic also does male medical circumcision and has helped set up many MMC units, has a staff complement of 70, including medical doctors, primary health care nurses, other nursing categories, pharmacists and assistant pharmacists, therapeutic counsellors, general counsellors, and clerical and cleaning staff, and is constantly innovating on the way in which it serves its patients. As Sister Roberts points out how each component of the clinic runs, her role in motivating people and her enthusiasm for her work is very clear.

Now, she is preparing to retire and enjoy some much needed rest and relaxation at home with her family. However, the compassion and patient focus that drove her throughout her career is still ever-present, and Sister Roberts says she will be volunteering once a week at the clinic. For the rest of the time she plans to explore her creative side with painting and photography lessons, and work in her garden.

Sister Susan Roberts is an inspiration to health care workers, a reminder that despite the many obstacles and difficulties faced by those who choose to work in this profession

Sister Susan Roberts is an inspiration to health care workers, a reminder that despite the many obstacles and difficulties faced by those who choose to work in this profession, it is a powerful opportunity to touch the lives of others. She has made a difference to so many people, people who remember her so well that she is often stopped in the post office or while shopping for groceries by a beaming smile and someone saying, "Do you remember me sister? You helped me feel well again." And that, she says humbly, is the best reward she could ask for. R

About Themba Lethu Clinic : Themba Lethu Clinic (TLC) started operating in April 2004 in partnership with the Gauteng Department of Health, as part of the Government's Comprehensive HIV and AIDS Care Management and Treatment (CCMT) programme. The clinic is a division of the Medicine Department at Helen Joseph Hospital, which forms part of the academic complex of the University of the Witwatersrand. TLC has a strong link with the Clinical HIV Research Unit (CHRU) and is a three-way partnership between Right to Care, CARE and the Department of Health. TLC serves patients across Gauteng and beyond, due to its reputation for high quality care. It offers comprehensive HIV care (voluntary counselling and testing, adherence training, antiretroviral treatment and support services), TB/HIV/STI integrated services and referrals to and from other health facilities.

A BRIEF REVIEW ON MATERNAL MORTALITY

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Obstetric haemorrhage, pregnancy-related sepsis, hypertensive disorders, and complications related to unsafe abortions account for 80% of the global total of maternal deaths

Background

Maternal mortality remains a challenge in low-resource settings where 99% of the global total of maternal deaths occur, and 56% of these are in sub-Saharan Africa.[1] As the deadline for achieving the Millennium Development Goal 5 (MDG 5) target of decreasing maternal mortality by 75% between 1990 and 2015 approaches, countries are reflecting on progress made and taking stock of goals yet to be achieved.[2-5] There has been a significant decline in maternal deaths globally, a decline of almost 50% between 1990 and 2013, but this still falls far short of the MDG 5 target.[1,5] There are several factors that are thought to have contributed to the decline – decrease in fertility rates; improvement in socioeconomic conditions, including maternal education; availability of skilled birth attendants; and the global scale-up in availability of antiretroviral therapy (ART) for life-long treatment.[5] While some countries in Eastern and Southern Asia, and in Northern Africa have already achieved the target, there are countries that have made no progress and some have even seen a reversal in gains.[5] South Africa is one of the countries that saw a reversal in gains, largely due to the HIV epidemic. The maternal mortality ratio (MMR) increased from 155 per 100 000 live births in 2000, to 237 per 100 000 live births in 2008.[3] However, an interim report on Confidential Enquiries into Maternal Deaths in South Africa for 2011 and 2012 showed a decrease in the institutional maternal mortality ratio (iMMR), mainly due to the reduction in HIV-related deaths.6 The reported decrease is from 176.2 per 100 000 live births in the period 2008-2010, to 146.7 per 100 000 live births in 2012.[6]

While there has been reported progress globally and in South Africa, the number of maternal deaths remains

high, and each death a tragedy.

Why do mothers die?

It is estimated that globally approximately 800 women die from pregnancy- or childbirth-related complications every day, and that the majority of these deaths could have been prevented.[1] Obstetric haemorrhage, pregnancy-related sepsis, hypertensive disorders, and complications related to unsafe abortions account for 80% of the global total of maternal deaths.[1] In low-resource settings where there is a high burden of HIV disease, non-pregnancy related infections, largely attributable to HIV infection, are one of the leading causes of maternal deaths. It is estimated that over 90% of worldwide maternal deaths due to HIV/AIDS are in sub-Saharan Africa.[5]

The questions asked centre around why there is still a significant proportion of maternal deaths that could have been prevented. There are several reasons put forward, and these include lack of access to appropriate antenatal care; lack of skilled healthcare workers and inequities in provision of services; delays in initiation of ART for those eligible; and high rates of unplanned pregnancies.[1,5] A large number of pregnant women in low-resource settings still do not receive the minimum of four antenatal care visits, as recommended by the World Health Organization (WHO).[5] Antenatal care provides an opportunity to identify and manage complications of pregnancy, and also identify women at risk of complications later in pregnancy, intrapartum and/or postpartum. Several inequities still exist between poor- and well-resourced countries, and between urban and rural settings in the availability of maternal health services.[1,5] Also, despite the widespread availability of ART, there is still a large proportion of those in need who do not receive life-saving treatment.[7] While ART coverage among eligible women living with HIV has increased, very few priority countries had achieved the 90% coverage target by 2012.[7] There also remains a high unmet need for family planning, i.e. women of reproductive age who report a desire to delay or avoid pregnancy, but are not using any form of contraception.[5] Pregnancies that are unplanned are at an increased risk of complications, largely related to lack of access to antenatal care or accessing care late.

In South Africa, the leading causes of maternal deaths are non-pregnancy related infections; obstetric haemorrhage; hypertensive disorders; medical and surgical disorders; and pregnancy-related sepsis.[6] Non-pregnancy related infections, obstetric haemorrhage and hypertensive disorders accounted for 66.3% of all avoidable deaths in 2012.[6] Respiratory tract infections, pneumonia and tuberculosis, account for the majority of non-pregnancy related infections, while cardiac disease is the most important sub-category of medical and surgical disorders, and there has been a reported continued increase in this category as a cause of maternal deaths.[6] Bleeding during or after caesarean section was responsible for almost a third of maternal deaths due to obstetric haemorrhage in 2011 and 2012 combined, and there was an increase in the proportion observed for 2012, and over 90% of these deaths were assessed as avoidable.[6]

How can we decrease maternal deaths?

There are several widely recognised, evidence-based interventions to decrease maternal deaths, and at the core of these are family planning; early access to antenatal care; availability of skilled birth attendants at delivery; and appropriate postpartum follow-up.[1,5] Family planning is more than just the availability of contraception – there should be an expanded choice of contraceptive methods available, and appropriate counselling about the different methods; preconception care, which includes information on birth spacing and initiation of preventative measures to decrease pregnancy-related complications, should also be available. Access to appropriate antenatal care remains the cornerstone in decreasing maternal deaths as most contributing factors leading to antenatal, intrapartum and postpartum complications arise in pregnancy.[1] Availability of an appropriately-trained birth attendant can provide intrapartum care and manage life-threatening complications.[5] There are several initiatives to up-skill all categories of health workers in management of conditions and complications that contribute to maternal deaths, and in South Africa there is the Essential Steps in Management of Obstetric Emergencies (ESMOE) training.[8] There is evidence, although limited, that ESMOE training improves knowledge and skills of health workers.[9,10] However, evidence is lacking on whether there is long-term retention of knowledge and skills, and whether the training translates to changes in practice and impact on morbidity and mortality.[10]

Multidisciplinary teams need to be established to manage women with pre-existing comorbid disorders, to address the large proportion of maternal deaths attributed to indirect causes.

Postpartum follow-up is another key intervention in decreasing maternal deaths, and needs to be structured and standardized. While the definition of maternal mortality typically refers to the death of a woman whilst pregnant or within 42 days of delivery, or termination of pregnancy, recommendations have been made that surveillance of late maternal mortality be included in surveys and censuses.[11,12] Late maternal mortality refers to deaths after 42 days, but less than one year postpartum, and there are suggestions that some cases of severe maternal

morbidity might lead to increased late maternal deaths, and HIV infection has also been described as a risk factor for late deaths.[12]

While there are clearly-defined interventions and clinical guidelines, health system, and patient-related factors all contribute to short-comings in implementation of appropriate interventions to decrease maternal deaths. There is a need for health system strengthening and this includes the availability of skilled health workers able to manage high-risk pregnancies and obstetric emergencies, integration of services and also adequate infrastructural resources for facilities.[12] Multidisciplinary teams need to be established to manage women with pre-existing comorbid disorders, to address the large proportion of maternal deaths attributed to indirect causes.[13] As the tide is turning on HIV-related maternal deaths with widespread availability of ART, other comorbid disorders such as cardiac and endocrine diseases need greater synergy between obstetric and other medical specialities.[13]

Patient-related factors and the underlying social determinants also need to be addressed. Women may not access appropriate care whether due to a lack of services; inability to access services; or poor knowledge, which may be related to education levels about availability of services, or need to access services. The inequities that still exist between poor- and well-resourced countries, and between urban and rural settings, in the availability of maternal health services, must be addressed.[1,5] Even in South Africa, where great strides have been made in the healthcare system, significant disparities still exist between urban and rural settings.[14] It is a well-recognised fact that women in low-resourced countries and those in rural areas have a much higher risk of dying.

Conclusion

The death of a mother remains a tragedy for both the family and health-care workers. With all the available evidence-based interventions, there is a need for accountability and to strive for elimination of avoidable maternal deaths.[15] There is a need to build on past successes, and there is also much to learn from countries that have achieved rapid and significant decline in maternal deaths.[16] R

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Efavirenz-based ART matches lopinavir/ritonavir for perinatal HIV TREATMENT

Carole Leach-Lemens
Published: 12 March 2014
This article was originally published on the HIV information website www.aidsmap.com

Efavirenz-based treatment more likely to suppress viral load at the time of delivery, Ugandan trial shows

Pregnant women taking efavirenz-based antiretroviral therapy had significantly better virologic outcomes at the time of delivery compared to those taking lopinavir/ritonavir in a randomised study in rural Uganda, Dr Deborah Cohan, reporting on behalf of the PROMOTE study team, told attendees at the 21st Conference on Retroviruses and Opportunistic Infections (CROI) in Boston last week.

However both regimens, overall, had very high virologic suppression rates and were extremely effective in preventing HIV transmission during pregnancy and breastfeeding Dr Cohan noted.

These data provide reassurance that high levels of viral suppression are achievable, [and] demonstrate that infants have a low risk of HIV acquisition with these regimens.

The findings from this secondary analysis of a randomised open-label study evaluating efavirenz (Sustiva, Stocrin) compared to lopinavir boosted with ritonavir (Kaletra) for the prevention of placental malaria, support the 2013 World Health Organization (WHO) guidelines recommending efavirenz-based combination anitretroviral therapy (cART) for all pregnant women regardless of CD4 count (known as 'Option B+') as a first-line option with cART based on lopinavir/ritonavir as an alternative.

These new guidelines, however, were recommended within the context of significant research gaps that included maternal and infant outcomes, antiretroviral toxicity and alternative ART regimens.

PROMOTE enrolled pregnant women living with HIV who had not previously taken HIV treatment at between 12 and 28 weeks of gestation. The women were randomised to receive AZT (zidovudine,Retrovir) and 3TC (lamivudine, Epivir) with either lopinavir/ritonavir or efavirenz at enrolment up until one year of breastfeeding and followed-up for six weeks after cessation of breastfeeding. The dose of lopinavir/ritonavir increased from 400mg/100mg twice daily to 600mg/150mg twice daily at thirty weeks. All women received cotrimoxazole prophylaxis and insecticide-treated bednets, and infants received AZT or nevirapine (Viramune) prophylaxis in accordance with Ugandan guidelines. Women received nutritional counselling to breastfeed for one year after delivery.

This substudy compared virologic, immunologic and safety outcomes between the two arms of the study. Of the 593 women screened, 389 were eligible and enrolled, of whom 348 completed the study, and data were available for 377 at delivery. At baseline, there were no significant differences in the two arms of the study. Mean age was 29 years and median gestation at enrolment was 21 weeks. This was a first pregnancy for fewer than 10%, with over two-thirds

having three or more children at home. Median CD4 cell count in both arms was over 350 cells/mm3 yet over 90% were WHO stage 1. Malnutrition was a significant issue, with a mean body mass index (BMI) at enrolment of 21.8. At baseline, median log10 HIV RNA was 4.3 and 4.1 for the efavirenz and lopinavir/ritonavir arms, respectively.

Women taking efavirenz were significantly more likely to achieve viral suppression (<400 copies/ml) at delivery compared to women on lopinavir/ritonavir, 98% (166/170) and 86% (153/178), respectively (p<0.001). However, no differences were seen at eight weeks after starting ART while pregnant, with close to 90% of women achieving viral suppression in both arms of the study, and with similar findings at weeks 24 and 48 after delivery.

Looking at all viral loads measured (1335 measurements in 374 women), a 50% lower odds of viral suppression among women on lopinavir/ritonavir (OR:0.51, 95% CI: 0.31-0.82, p = 0.0062) was seen. Dr Cohan noted, however, this is within a context of overall very high levels of virologic suppression for both regimens.

Women taking lopinavir/ritonavir had greater CD4 cell count recovery compared to women taking efavirenz at delivery, (+57 and -7 cells/mm3, p = 0.002, respectively) and at 24 weeks postpartum (+178 and +109 cells/mm3, p<0.01, respectively),

WHO grade 4 adverse events were rare and did not differ by arm. Kaposi's sarcoma was diagnosed in one woman in the efavirenz arm and pulmonary TB in one woman in the lopinavir/ritonavir arm. However, diarrhoea and nausea and vomiting (grades 1 and 2) were significantly more likely among women taking lopinavir/ritonavir both before and after delivery.

There were no differences in preterm birth, miscarriage, stillbirth or neonatal death between the arms.

The HIV transmission rate was 0.5% (2/374 live births). Both were in the lopinavir/ritonavir arm, onein utero and one during breastfeeding. HIV-free survival was high and did not differ between the efavirenz and lopinavir/ritonavir arms, 97.2% and 92.9%, p = 0.10, respectively. Grade 3 and 4 events, mostly anaemia and neutropaenia, were similar between the arms; the incidence rate ratio (IRR): 1.25; 95% CI: 0.87-1.81, p = 0.21 (lopinavir/ritonavir compared to efavirenz).

Differences at delivery may potentially be explained by efavirenz being more potent than lopinavir/ritonavir as well as by adherence and drug exposure during pregnancy Dr Cohan noted. Self-reported adherence rates were high in both arms but self-reporting is vulnerable to social desirability bias, she added.

While pharmacokinetic (PK) studies suggest lopinavir/ritonavir exposure may be inadequate before delivery, it is unclear whether this explains the differential virologic suppression Dr Cohan said.

Dr Cohan concluded "these data provide reassurance that high levels of viral suppression are achievable, demonstrate that infants have a low risk of HIV acquisition with these regimens, and show that women can successfully initiate ART when they present to the antenatal clinic and maintain therapy thereafter."

She added "the ultimate goal of lifelong therapy is to keep these women healthy."

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COMPETITION
HIV/TB NURSING

COMPETITION

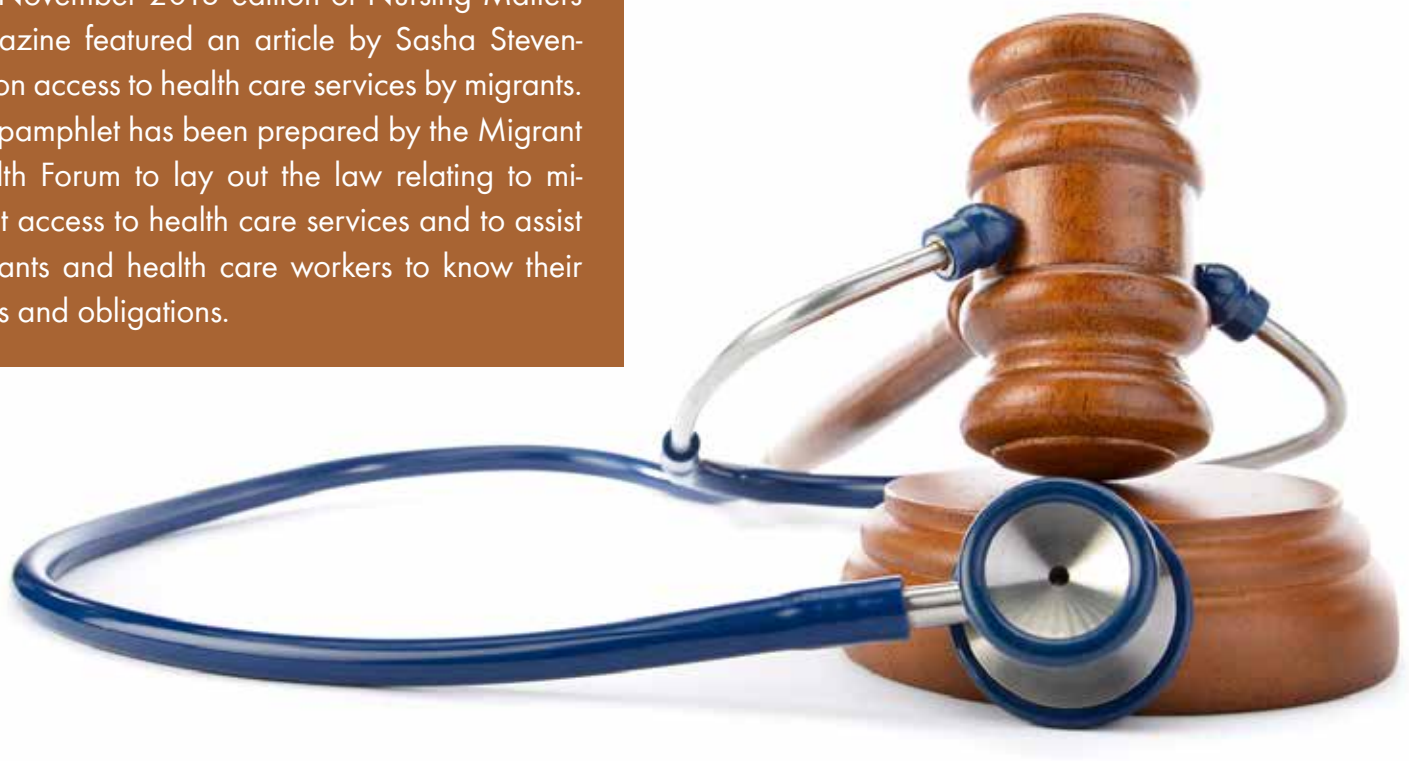
Working in the TB room as a nurse is a very challenging task because you are faced with more than TB. Most patients with TB are also co infected with HIV/AIDS, so the TB nurse has to be extremely knowledgeable about both infections. A TB nurse has to work with a high volume of patients and she/he risks becoming infected with TB her/himself.

We want to hear about your experiences working as an HIV/TB nurse. What strategies do you use to support patients through treatment for both diseases? How do you keep them motivated, ensure they come for their appointments, make sure people living in the household are investigated, etc.? We would love to publish your strategies for success in *HIV Nursing Matters*.

Submit your typed piece, not to exceed 1000 words, by 1 August 2014 and stand a chance to win a free one-year membership to the Southern African HIV Clinicians Society (the Society); complimentary registration to the Society's 2014 conference; and have your piece published in *HIV Nursing Matters!*

One winner will be chosen by 15 August. The winner agrees to the publication of the story in the September 2014 issue of *HIV Nursing Matters* and to submit a picture to accompany the article. The judges' decision is final and no correspondence will be entered into. Please note that only typed stories will be considered. Please submit via email to Nonhlanhla@sahivsoc.org.

The November 2013 edition of Nursing Matters magazine featured an article by Sasha Stevenson on access to health care services by migrants. This pamphlet has been prepared by the Migrant Health Forum to lay out the law relating to migrant access to health care services and to assist migrants and health care workers to know their rights and obligations.



ACCESSING HEALTHCARE AT GAUTENG HOSPITALS & CLINICS: I KNOW MY RIGHTS

Sasha Stevenson, Attorney, Section 27

SOUTH AFRICA'S HEALTH CARE SYSTEM

South Africa's health care system consists of different levels of care, from clinics to community health centres and different levels of hospitals. In order for the system to work it is necessary that patients are seen at the lowest level of care possible. This means that patients should enter the system at the primary health care level (at clinics and community health centres), except in emergencies.

WHAT ARE MY RIGHTS?

Section 27 of the Constitution says:

- Everyone has a right to have access to healthcare services.
- No one may be refused care in an emergency

The Refugees Act says:

- Asylum seekers and refugees have the right to the same basic healthcare services as citizens

The National Health Act says:

- The following persons are eligible for free healthcare services at all levels (except those covered by medical aid schemes)
  - Pregnant and lactating women
  - Children below age of 6
- **All persons** (except those covered by medical aid schemes) are entitled to **free primary healthcare services**

The national Uniform Patient Fee Schedule says:

- As a patient for admission to a hospital or clinic, you will be classified into:
  - Full paying patients
  - Subsidized (partial) paying patients
  - Patients receiving free services
  - Exempted patients
- Full-fee paying patients include all non-South Africans (e.g. foreigners, tourists, etc) but **EXCLUDE**
  - Permanent residents
  - Those with work or residence permits (including documented refugees and asylum seekers)
  - Undocumented persons from SADC states

So, if you are a refugee, asylum seeker,

or a person from SADC state, you are to be treated as a South African and means tested. You need the ID documents to prove you are a refugee, asylum seeker, or a person from SADC state.

HOW WILL I BE CLASSIFIED?

The Gauteng Patient Classification Manuel says:
Every person admitted should provide ID documents, including Identity Document; Medical aid card; Appointment card; Pay slip/salary advice; Proof of address; Documentation from other Organs of State

WHAT HAPPENS IF I HAVE PAPERS?

If you are a refugee, asylum seeker or undocumented migrant from a SADC state **with papers and ID documents**, you will be classified as a 'subsidized patient' based on your pay slip (income). Your income determines the category of classification and how much you need to pay for healthcare.

There are five categories:
H0: unemployed/grant recipients
H1: income less than R36,000 a year
H2: income less than R72,000 a year
H3: income more than R72,000 a year
Exempted patients: pregnant or lactating women and children under 6

You need to prove your income or lack of income either with a pay slip or through filling in a Form GPF4 at the hospital

WHAT IF I DON'T HAVE PAPERS OR ID?

The Gauteng Act No. 4 of 1999 says:

- When a patient applies for admission to a hospital, every person shall be classified into fee-paying categories.
- The CEO or delegated officer of the hospital may require ID documents to be presented prior to admission to hospital, **EXCEPT where they think delaying treatment may have danger or detrimental consequences to the person seeking treatment**

The Gauteng Patient Classification Manuel says:

- If you do not have the required ID documents, you are to be classified as H3 unless you are likely to be in **danger or suffer detrimental consequences** if treatment is delayed.

So, if you are a refugee, asylum seeker, undocumented migrant or South African citizen without ID documents AND your condition, if left untreated can cause danger or further harm to your health, hospitals must not turn you away if you cannot pay the H3 fee.

WHAT CAN I DO TO ENSURE I GET TREATMENT?

If you:

- are a refugee, asylum seeker, un documented migrant or South Afri can citizen without ID documents; AND
- cannot pay the fee upfront; AND
- need treatment or else your health is in danger and you are at risk of suffering further harm AND
- the hospital officer will not admit you for treatment

You should:

1. Ask for the hospital officer's name (do not be scared, you have a right to ask this and he or she has an obligation to tell you. The hospital officer must not withhold this information)
2. Tell the hospital officer assessing you that you have a right under the Constitution, the Refugee's Act, and the National Health Act to access healthcare services.
3. Tell the hospital officer:
   a. that provincial legislation and policy says that hospitals can not turn you away if you don't have ID and if you don't have money to pay upfront **if** turning you away means your condition will worsen and become dangerous to your health
   b. why you need treatment at a hospital (include information about your medical condition, your medical history, the treatment you seek and why)
   c. the consequences to your health if you do not receive treatment – how will delaying treatment cause further harm to your condition?
4. If the hospital officer cannot make a decision you should ask him or her to call upon a supervisor to come and assess your situation
5. If the hospital officer calls upon the supervisor, repeat Steps 1 – 4 with the supervisor
6. Make sure you write down the names of the hospital officers
7. Ask about the complaints procedure at the facility and make a complaint in terms of that procedure
8. If you are still turned away, you should report the incident as soon as possible to
   a. Consortium for Refugees and Migrants in South Africa (CoRMSA)
   b. South Africa Human Rights Commission; or
   c. Public Protector ®

Consortium for Refugees and Migrants in South Africa (CoRMSA)

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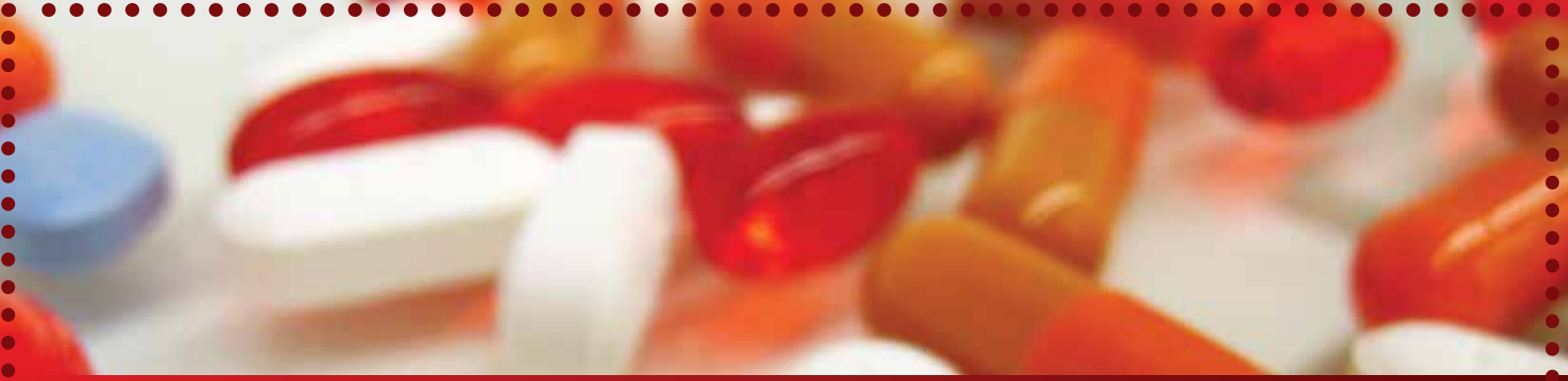


STOP STOCKOUTS

What is the Stop Stock Outs Project?

The Stop Stock Outs Project (SSP) is an organisation that monitors availability of essential medicines in government clinics and hospitals across South Africa. The SSP aims to assist healthcare workers in resolving stock outs and shortages of essential medicines at their facilities, enabling them to provide patients with the treatment they need.

How do you report a stock out to the SSP?

Our hotline number is 084 855 7867

- **Send us a Please Call Me**
- **Send us an SMS**
- **Phone us or missed call us**

We will then phone you back to get some more information.

You can also email us at report@stockouts.co.za

What information do you need to report to the SSP?

The name of the medicine that is out of stock

The name of the clinic or hospital where you work

Reporting is an anonymous process and your name, if provided, will not be disclosed to anyone outside of the SSP.

HIV

MEDECINS SANS FRONTIERES

SOUTHERN AFRICAN HIV CLINICIANS SOCIETY

+SECTION27 catalysts for social justice

RUDASA

TAC TREATMENT ACTION CAMPAIGN

Rural Health Advocacy Project

QUIZ ANSWERS

FROM MARCH 2014 ISSUE

1. *Common risk factors for the development of DILI in patients with HIV on TB treatment include being a child or older than 35 years old, chronic hepatitis B infection, alcohol use, disseminated TB and malnutrition.*
2. *It is often impossible to clinically differentiate between IRIS and DILI. The only way to tell them apart is be to perform a liver biopsy.*
3. *The WHO suggests that all persons entering health care facilities, regardless of the reason, be screened for TB by asking for four key symptoms: cough, loss of weight, fever and night sweats.*
4. *True*
5. *It is essential that VL measurements are performed at the correct times according to the guidelines (at month 6, month 12, and then every 12 months if VL <400 copies/ml).*
6. *True*
7. *South Africa (SA) has the third highest burden of tuberculosis (TB) in the world, with an annual TB incidence of 1003/100 000 population*
8. *The TB/HIV co-infection rate is 65-70%*
9. *False*
10. *False*

QUESTIONS

1. *For correct feeding of the baby, up to how many months must a mother exclusively breastfeed her baby?*

   Answer .....

2. *True or False: Is it common for symptoms of depression and anxiety to overlap?*

   Answer .....

3. *True or False: Many women learn about their HIV positive status for the first time during pregnancy?*

   Answer .....

4. *According to our National Strategic Plan, what targets were set to prevent deaths resulting from HIV?*

   Answer .....

5. *True or False: HIV is known to be a leading contributor to maternal mortality?*

   Answer .....

6. *At what CD4 count level can ART be introduced when a woman is HIV positive and pregnant?*

   Answer .....

7. *When is the deadline for achieving the Millennium Development Goal 5 (decreasing maternal mortality)?*

   Answer .....

8. *By how many percent has the maternal deaths declined by globally between 1990 and 2003?*

   Answer .....

9. *True or False: All maternal health services that exist between urban and rural setting are equal?*

   Answer .....

10. *What does E.S.M.O.E. stands for?*

    Answer .....

NATIONAL HEALTH LABORATORY SERVICE

RESULTS HOTLINE

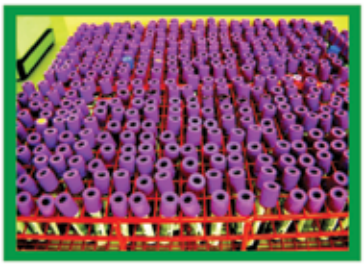
0860 RESULT 737858

This line is dedicated to providing results nationally for HIV Viral Load, HIV DNA PCR and CD4 to Doctors and Medical Practitioners, improving efficiency in implementing ARV Treatment to HIV infected people. This service is currently available to members of Health Professionals Council of the South Africa and the South African Nursing Council. The hotline is available during office hours from 8am to 5pm Monday to Friday.

Register to use the RESULT HOTLINE

Follow this simple Step-by-step registration process

Dial the HOTLINE number 0860 RESULT (737858)
Follow the voice prompts and select option 1 to register to use the hotline
A hotline registration form will be sent to you by fax or e-mail.
Complete the form and return it by fax or e-mail to the hotline to complete your registration process.
Once you are registered, you will be contacted with your unique number. This number is a security measure to ensure that the results are provided to an authorized user.



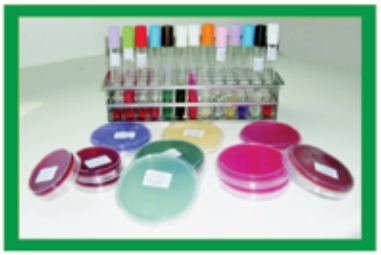
To use the hotline dial 0860 RESULT (737858)

Select option 2 to access laboratory results.

- You will be asked for your HPCSA or SANC number by the operator.
- You will be asked for your Unique Number.
- Please quote the CCMT ARV request form tracking number (bar coded) and confirm that the result requested is for the correct patient.

Should the results not be available when you call, you will be provided with a query reference number which must be used when you follow up at a later date to obtain the result.

Once you have a Reference number



Select option 3 to follow up on a reference number
Should the requested results not be available, a query reference number will be provided to you.
A hotline operator will call you within 48 hours of receiving the laboratory results.

Registering for this service from the NHLS, will assit in improving efficiency, providing improved patient care and streamlining clinic processes. Call now and register to access results for HIV Viral Load, HIV DNA PCR and CD4.

NDOH/SANAC Nerve Centre Hotlines

• Any HCT concerns from facility and district managers should be reported to the NDOH/SANAC

Nerve Centre Hotline and, specific emails for each province:

- **Western Cape:** 012-395 9081 sanacwesterncape@gmail.com
- **Northern Cape:** 012-395 9090 sanacnortherncape@gmail.com
- **Eastern Cape:** 012-395 9079 sanaceasterncape@gmail.com
- **KZN:** 012-395 9089 sanackzn@gmail.com
- **Free State:** 012-395 9079 sanacfreestate@gmail.com
- **Mpumalanga:** 012-395 9087 sanacmpumalanga@gmail.com
- **Gauteng:** 012-395 9078 sanacgauteng@gmail.com
- **Limpopo:** 012-395 9090 sanaclimpopo@gmail.com
- **North West:** 012-395 9088 sanacnorthwest@gmail.com

AIDS Helpline 0800 012 322

The National Toll free AIDS Helpline was initiated in 1991 by the then National Department of Health's (NDoH) "HIV/AIDS, STD's and TB Directorate". The objective of the Line is to provide a national, anonymous, confidential and accessible information, counselling and referral telephone service for those infected and affected by HIV and AIDS, in South Africa.

In 1992, LifeLine was requested by NDOH, to take over the management of the Line by rotating it between the thirty-two existing community-based LifeLine Centres, and manning it with volunteer counsellors. In 2000, in response to an increasing call rate, a centralised Counselling Centre was established in Braamfontein, Johannesburg, to house the AIDS Helpline

The AIDS Helpline a national toll-free, operates on a 24/7 basis and is utilized by people from all walks of life in urban and rural areas, in all eleven languages at no cost from a landline telephone.

Annually, the Line provides anonymous, confidential and accessible telephonic information, counselling and referrals to over 300 000 callers.

The AIDS Helpline plays a central role in providing a deeper preventative and more supportive service to those infected and affected by the disease, but also serving as an entry point in terms of accessing services from government, private sector and other NGOs/ CBOs

Cases presented to the range from testing, treatment, transmission, TB, Medical Male circumcision, etc.

The AIDS Helpline incorporates the Treatment line. The treatment support services were included to complement the services provided by lay counsellors on the line. The Treatment Line is manned by nurses who provide quality, accurate, and anonymous telephone information and/or education on antiretroviral, TB and STI treatment

If you have any HIV/TB clinical questions, Send your questions to "Ask the Expert" via Nonhlanhla@sahivsoc.org & you will get an answer in the next issue of HIV Nursing matters. If your question is urgent, please state it on your e mail & the answer will be e mailed back to you and still be published in the magazine.

Dear Clinician

One of my patients is on 3TC, AZT and EFV; can I change her to FDC?

Answer

Dear Nurse Clinician

For patients taking individual 3TC, AZT and EFV. Take a full history and check medical records to determine reason for AZT. If AZT was started because of previous renal dysfunction DO NOT switch to FDC. If AZT was started due to lipodystrophy or peripheral neuropathy then check a viral load and eGFR BEFORE SWITCHING to FDC. If viral load below 1000 and eGFR > 60 switch to FDC.

SAVE THE DATE

24 – 27 SEPTEMBER 2014

SOUTHERN AFRICAN HIV CLINICIANS SOCIETY

CONFERENCE

2014

24-27 SEPTEMBER AT CTICC

Southern African HIV Clinicians Society 2nd Biennial Conference

International Convention Centre, Cape Town, South Africa

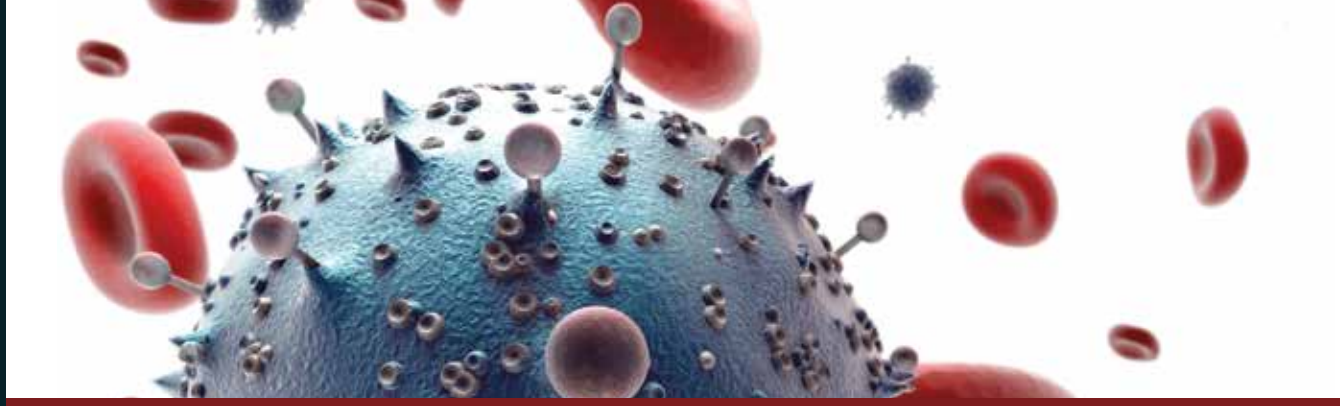
Following on from the success of our inaugural conference in 2012, our second SA HIV Clinicians Society Conference will be taking place from 24 – 27 September 2014 at the CTICC.

Focusing on clinical content, our conference is aimed at doctors, nurses and pharmacists, and will be fully CPD accredited.

Please diarise this event and keep an eye on our website: www.sahivsoc2014.co.za , for the latest updates.

We look forward to welcoming you in Cape Town.

Contact: Scatterlings Conference & Events
Tel +27 (0) 11 463 5085 Email: fiona@soafrica.com



UNITING NURSES IN HIV CLINICAL EXCELLENCE, BECOME A MEMBER.




Who are we?

We are a member-based Society that promotes quality, comprehensive, evidence-based HIV health care, by:

1. **LEADING • PIONEERING**
   We are a powerful, independent voice within Southern Africa with key representation from the most experienced and respected professionals working in the fight against HIV.

2. **CONNECTING • CONVENING • ENGAGING**
   Through our network of HIV practitioners, we provide a platform for engagement and facilitate learning, camaraderie and clinical consensus.

3. **ADVOCATING • INFLUENCING • SHAPING**
   With our wealth and depth of clinical expertise, we can help health care workers take their practice to a new level. We are constantly improving and expanding our knowledge, and advocating for clinical and scientific best practice.

Member Benefits

Join today and gain instant support from a credible organisation. The Society helps connect you with the best minds in HIV health care. Build your knowledge, advance your profession and make a difference by getting involved now!

- Free quarterly subscriptions to the *Southern African Journal of HIV Medicine*
- Free monthly subscription to the Society's e-newsletter, *Transcript*
- E-learning through CPD-accredited clinical case studies and on-line discussion group forums
- Free quarterly subscriptions to *HIV Nursing Matters*
- Weekly SMS clinical tips for nurse members
- Free CPD-accredited continuing education sessions
- Listing in the Society's online HIV provider referral network

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