CHANGES TO THE ART GUIDELINES – AN OVERVIEW

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In 2009 the South African National AIDS Council (SANAC) Treatment Technical Task Team (TTT) finalised recommendations for changes to the national standard treatment guidelines for adult and paediatric management and treatment, as well as changes in the prevention of mother-to-child transmission of HIV (PMTCT) guidelines, moving away from monotherapy to dual therapy. President Zuma announced changes in the national antiretroviral therapy (ART) programme on World AIDS Day 2009. Subsequently additional changes were made to the treatment guidelines to be in line with these new Presidential mandates, which came into effect on 1 April 2010.

The purpose of the changes to the guidelines is not just to meet the Presidential mandates, but also to bring the guidelines in line with international recommendations and ensure the use of more efficacious drugs, including the phasing out of stavudine from the national ART programme. Electronic versions of the treatment guidelines are available on the SANAC website (www.sanac.org.za). The following is a brief summary of the key changes.

PRIORITY GROUPS

Owing to the high cost associated with ART, and the high burden of people in need of ART in South Africa, eligibility criteria have been adapted only for priority groups. These are:

- HIV-infected pregnant women
- HIV-infected infants
- People with both tuberculosis (TB) and HIV infection
- People with multidrug-resistant (MDR) or extensively drug-resistant (XDR) TB.

ELIGIBILITY TO START ART

- CD4 count <200 cells/µl, irrespective of clinical stage, OR
- CD4 count <350 cells/µl in patients with TB/HIV co-infection, or pregnant women, OR
- WHO stage 4 disease, irrespective of CD4 count, OR
- MDR/XDR TB, irrespective of CD4 count.

In addition, certain patients are fast-tracked to be initiated on ART, which means they should be started within 2 weeks of receiving their CD4 result and choosing to start lifelong ART:

- Pregnant women
- Patients with a CD4 count below 100 cells/µl
- Any patient with WHO stage 4 disease
- Any patient with MDR or XDR TB.

NATIONAL REGIMENS

National regimens for children and adolescents are set out in Table I.

National regimens for mothers and infants are set out in Tables II and III.

NATIONAL REGIMEN FOR INFANTS

CHILDREN

For children, eligibility criteria to start ART are:

- All children under 1 year of age, irrespective of CD4 level
- Children between 1 and 5 years with clinical stage 3 or 4, or a CD4 percentage of 25 or below, or an absolute CD4 count under 750
- Children over 5 and up to 15 with clinical stage 3 or 4, or CD4 350 and below.

The first-line regimens for children are:

- Infants and children under 3: abacavir + lamivudine + lopinavir/ritonavir
- Children 3 and older: abacavir + lamivudine + efavirenz.

TABLE I. NATIONAL REGIMENS FOR CHILDREN AND ADOLESCENTS

First line		
All new patients needing treatment	TDF + 3TC/FTC + EFV/NVP	For TB co-infection EFV is preferred For pregnant women or women of child-bearing age, not on reliable contraception, NVP is preferred
Currently on d4T-based regimen with no side-effects	d4T + 3TC + EFV/NVP	Remain on d4T if well tolerated Early switch with any toxicity Substitute TDF if at high risk of toxicity (high body mass index, older, female, TB treatment)
Contraindication to TDF: renal disease	AZT+ 3TC + EFV/NVP	
Second line		
Failing on a d4T or AZT-based first-line regimen	TDF + 3TC/FTC + LPV/r	Virological failure must be followed by intensive adherence management If repeat viral load remains >1 000 in 3 months despite adherence intervention, switch
Failing on a TDF-based first-line regimen	AZT + 3TC + LPV/r	Virological failure must be followed by intensive adherence management, as re-suppression is often possible If repeat VL remains >1 000 in 3 months despite adherence intervention, switch.
Salvage therapy		
Failing any second-line regimen	Specialist referral	Intensively explore and address issues relating to causes of non-adherence If VL remains high, refer where possible, but *maintain* on failing regimen

TABLE II. NATIONAL REGIMEN FOR MOTHERS

Woman	**Regimen**	**Comment**
Eligible for lifelong ART (i.e. CD4 ≤350/µl or WHO clinical stage 3 or 4)	TDF + 3TC/FTC + NVP	Start lifelong ART within 2 weeks
Currently on lifelong ART	Continue ART	Substitute EFV with NVP if in first 12 weeks of pregnancy
Contraindication to TDF (renal disease)	AZT + 3TC + NVP	
Not eligible for ART, i.e. CD4 >350/µl and WHO stage 1 or 2	AZT from 14 weeks sdNVP + AZT 3-hrly in labour TDF + FTC single dose (stat) post-delivery	
Unbooked and presents in labour	sdNVP + AZT 3-hrly in labour TDF + FTC single dose post-delivery	Assess maternal ART eligibility before discharge

TABLE III. NATIONAL REGIMEN FOR INFANTS

Infant	**Regimen**	**Comment**
Mother on lifelong ART	NVP at birth and then daily for 6 weeks irrespective of infant feeding choice	
Mother on PMTCT	NVP at birth and then daily for 6 weeks continued as long as any breastfeeding	If formula fed, baby can stop NVP at 6 weeks
Mother did not get any ARV before or during delivery	NVP as soon as possible and daily for at least 6 weeks continued as long as any breastfeeding	Assess ART eligibility for the mother-within 2 weeks
Unknown maternal status because orphaned or abandoned	Give NVP immediately Test infant with rapid HIV test. If positive, continue NVP for 6 weeks. If negative, discontinue NVP	Follow-up 6-week HIV DNA PCR

If a child is currently on a stavudine-based regimen, and is not experiencing any side-effects, the regimen should be maintained. Substitutions are only made once lipodystrophy is suspected.

The second-line regimens for children are:

- Children 3 and older: zidovudine + didanosine + lopinavir/ritonavir
- Children failing on the first-line regimen: zidovudine + didanosine + lopinavir/ritonavir

- Children failing on the zidovudine or didanosine-based regimen: abacavir + lamivudine + lopinavir/ritonavir

HIV-INFECTED PREGNANT WOMEN WITH CD4 ABOVE 350

These women follow the new national PMTCT guidelines, namely:

- Zidovudine from 14 weeks
- Single-dose nevirapine and zidovudine 3-hourly during labour
- Tenofovir and emtricitabine single-dose after delivery.

If a women presents in labour without having started either ART or the PMTCT regimen at 14 weeks, she should still receive the single-dose nevirapine and zidovudine 3-hourly and tenofovir and emtricitabine as per above.

FINAL COMMENTS

Even though these guidelines are focused on the public sector, it is hoped that they will also be adopted in the private and NGO sectors. Implementing these new guidelines would not just be of immediate benefit to the patient needing treatment. As has been shown in recent studies, patients on ART have a decreased viral load, and this impacts on HIV transmission. This meets the major objective of what President Zuma announced on 1 December 2009 – decrease mortality, and increase HIV prevention.