

Antiretroviral therapy for children

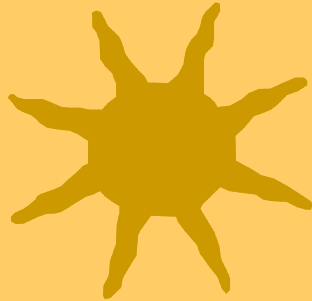
Dr Tammy Meyers, FCPaed(SA)

Chris Hani Baragwanath Hospital
Paediatric HIV Clinic



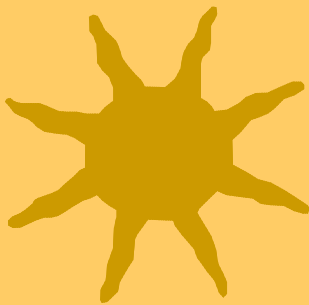
Antiretroviral therapy

- ★ Need to formulate optimal local strategy for treating children
- ★ With medical aid cover and with drug price reductions, more children are receiving treatment
- ★ MTCCT implemented on a wide scale, less children will be infected, may be cost effective for state to sponsor therapy



Private vs public

- ★ Minimum treatment regimen should be applicable to both
- ★ Initial regimen should be optimised
 - Options for changing therapy limited by paed formulations and expense



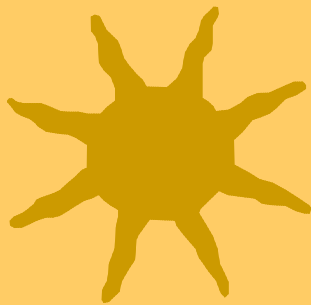
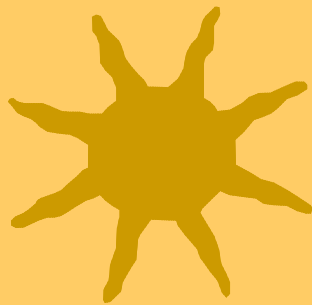
Problems in paediatric treatment

- ★ Require responsible adult to administer medication
- ★ Caregivers change (parents demise)
- ★ Disclosure to children
- ★ Limited paediatric formulations
- ★ Palatability
- ★ Price increases with growth



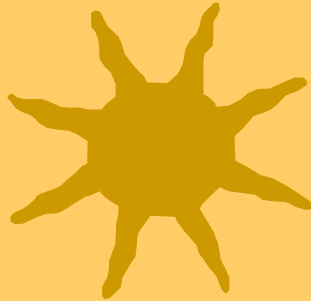
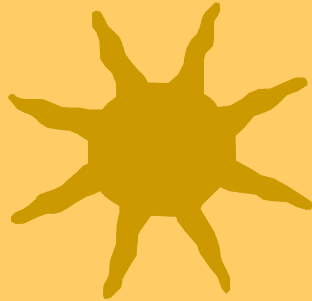
Education/counseling

- ★ Treatment should be commenced only when family ready
- ★ Family requires intensive counseling
 - Consequences of poor adherence
 - Lifelong commitment
 - Side effects
 - Financial readiness
 - Problems with getting drugs into children (e.g.taste of drugs)



monitoring

- ★ **Baseline:**
 - VL, CD4, FBC, chemistry (LFT/amylase)
- ★ **2 weeks**
 - Check for administration problems/adherence (phone call)
- ★ **1 month**
 - Toxicity bloods, clinical exam, adherence
- ★ **3 monthly**
 - CD4, VL toxicity (1st 6 months), clinical exam, adherence
 - clinical exam alone thereafter, adherence issues
- ★ **6 monthly**
 - CD4, VL, toxicity



When to start

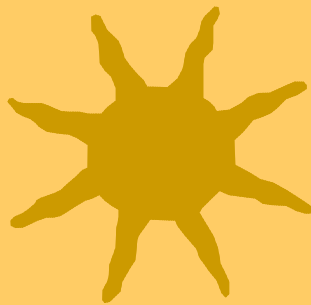
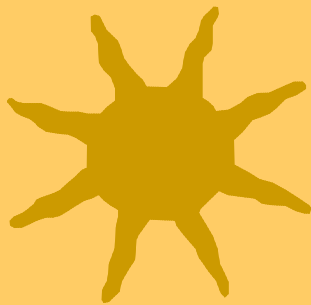
★ Europeans less aggressive than Americans

★ Infants (<1 y):

- Start early and hard (seroconversion phase usually 3-6 months) may lower viral set point
- Europeans not as aggressive in well infants with low VL

★ Older children:

- Approach generally more aggressive than adults
- American: recommend treatment for all but non-progressors
- European: may hold off treatment in less severely ill children (category N/A) except if significantly high VL >100 000, CD4 <15%, or rapidly increasing VL and CD4 decreasing





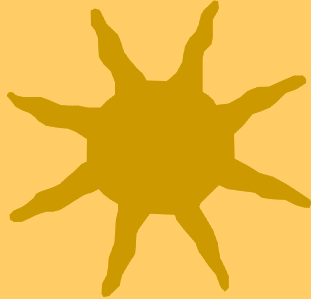
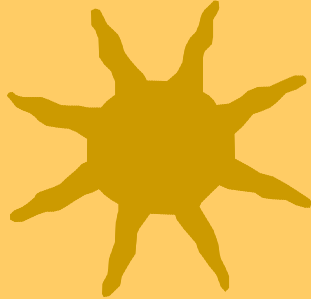
When to start

★ Adolescents:

According to pubertal stage

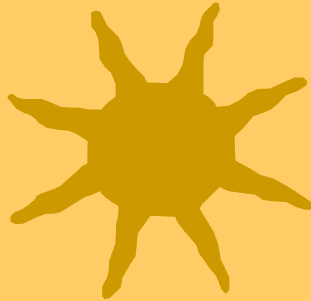
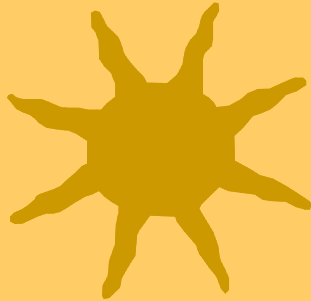
- Recently infected post-pubertal-treat as adult
- Pre/early pubertal- treat as older children

★ Research still needed-may be prudent to follow European guidelines locally



Where should treatment occur

- ★ Public/academic hospitals should provide model of care
- ★ Primary care workers/ nurse practitioners trained at these centres
- ★ Initial therapy can be started at clinics
- ★ Referrals to centres for complicated cases, side effects and failing treatment



What drugs?

★ Combination

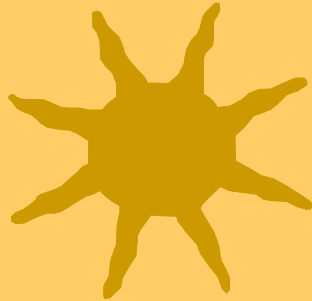
- 2 drugs (Zerit/Videx) if self-financed and depending on financial status of family
- 3 drugs
 - Zerit/Videx/Stocrin > 3 years
 - Zerit/Videx/Neviripine < 3 years
 - Zerit/Videx/Ritonivir if VL > 100 000

★ **NB** Neviripine should not be included if used to prevent MTCT



adherence

- ★ **Treat parents**
- ★ Intensive counselling pre-commencement of therapy
- ★ Counseling and monitoring of adherence every visit
- ★ Disclosure to child
- ★ Support groups



Side effects/adverse reactions/treatment failure

- ★ Regular monitoring
- ★ May not get undetectable levels in children
- ★ Treatment failure- **check adherence**
- ★ May need to change regimen if definitely failing/severe side effects
 - Confirm failure by repeating tests before changing
 - Consider clinical status of patient together with test results
- ★ Alternative regimens individualised, depending on either SE or failure
- ★ Limited, expensive options

