Guidelines on safer conception in fertile HIV infected individuals couples

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26 November 2012

THE SOUTHERN AFRICAN JOURNAL OF HIV MEDICINE: June 2011

Patient-provider communication

- Patient-provider communication about fertility is an important part of HIV prevention
- Fertility intentions change over time
- Speak to both male and female patients
- Don’t ignore adolescents…

Special Groups

Perinatally Infected Women/Youth

- UK Ireland cohort of 252 women >12 year
- 42 pregnancies among 30 women
- Median age 18 (14-22 years)
- 81% unplanned
- >50% of partners unaware of HIV status
- 36% elected termination of pregnancy
- 33% had detectable VL
- 1/21 infants infected with HIV

Kenny J *et al*. HIV Med 2012

Towards a Solution

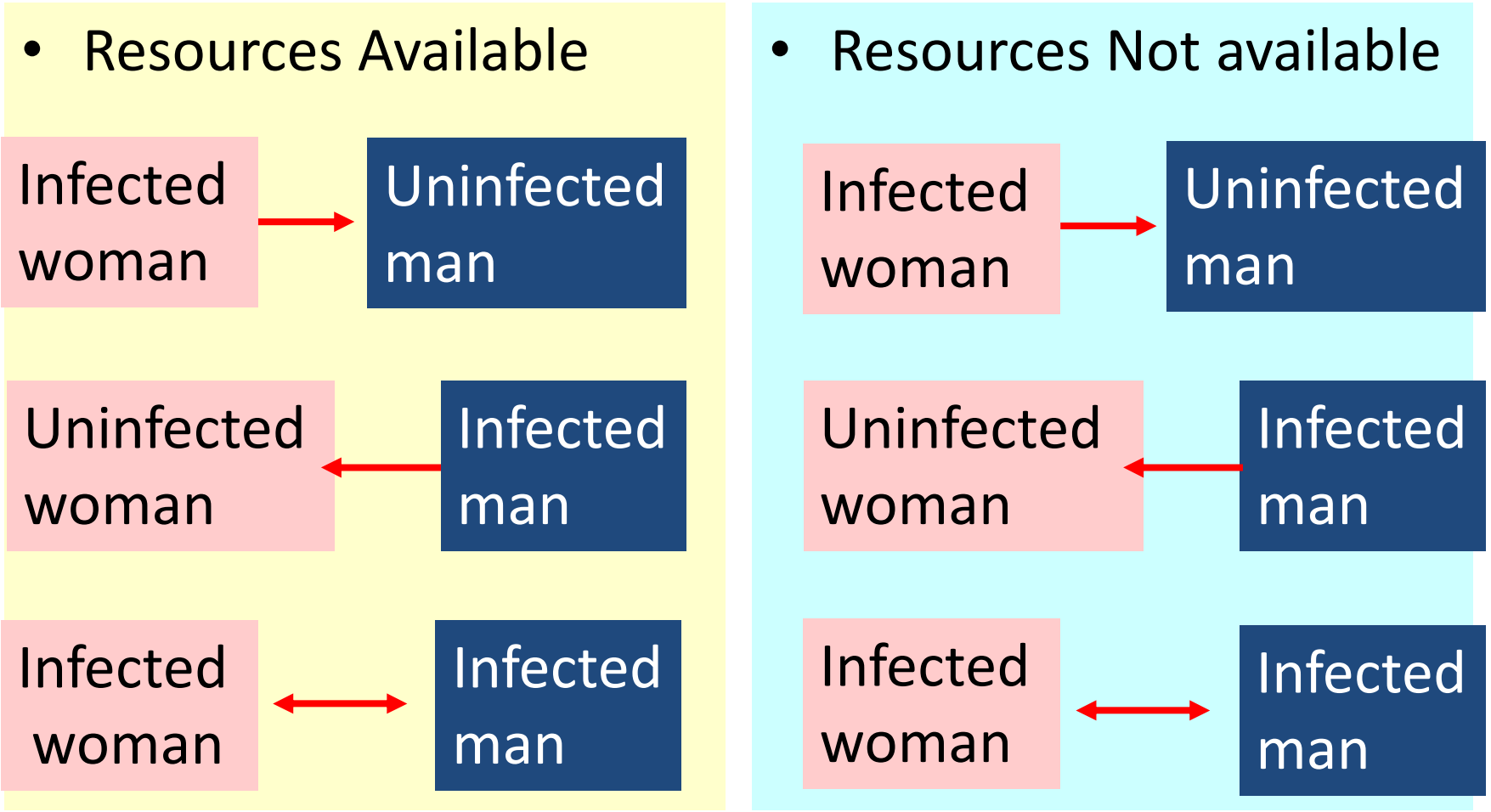
- Health care workers working with HIV infected people need to talk to their patients about fertility intentions regularly.

- Integration of family planning services into HIV services.

Aim to establish patients own informed choice

- Wanting to become pregnant immediately (i.e. actively trying to conceive)
- Not now, but considering a possible pregnancy in the future
- Do not want to become pregnant at all.

Different approaches to supporting fertility in HIV infected couples



Pre-conception counselling

- Reasons for reproductive desire
- Disclosure of status
- Reproductive options, including risks, risk reduction, costs and chances of success
- Balance the risk of natural conception with established risk-reduction methods
- Consequences of failure to prevent transmission to partner and child and importance of regular testing
- Health of infected partner and woman

Pre-conception work-up

Minimum

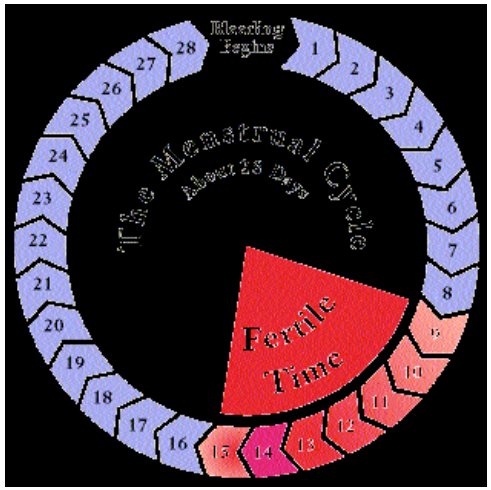
- syphilis serology and clinical assessment
- Exclude AIDS: Medical examination and CD4 cell count
- Those on ART - viral load
- Screen for infertility through history
- Pregnancy: RH, haemoglobin

Well resourced

- Viral hepatitis; syphilis, CMV, rubella, HSV, toxoplasmosis clinical assessment
- Exclude AIDS: CD4 and medical examination
- HIV viral load
- Screen for infertility through history *If difficulty conceiving:* LH referral for fertility assessment
- full blood count;

Medical management

- Optimise medical condition including HIV
- Treat any current infection
- Treat co-morbid illnesses
- Determine ovulatory cycle



Fertility and HIV

Scenario 1: Negative woman and positive man

- The man should be on ART and have suppressed viral load

- Assisted techniques – sperm washing , insemination

OR in “Resource limited” settings

- The couple practice safe sex for most of the woman’s cycle using condoms.
- Use ovulatory method and have sex without condom on alternate days during ovulation

Criteria for Natural Conception

- The responsibility of adherence rests with HIV positive partner
- The decision of consenting to unprotected intercourse lay with the HIV negative partner
- Limited to 6 months during ovulation period only
- Condoms should be used at all other times
  - HIV positive partner on ART for ≤ 6 months
  - VL undetectable
  - Perfect adherence to treatment and medical follow-up
  - Mutually faithful relationship
  - No concomitant STI

Barreiro, Human Reproduction 2007

Fertility and HIV

Scenario 2: Positive woman and negative man

Ideally woman on ARTs with suppressed viral load

- No need to expose man to risk of becoming HIV infected
- Conception: sperm collection with insemination at the time of ovulation
  - Man ejaculates in clean receptacle
  - Semen drawn up into a large syringe (10 - 20ml)
  - Syringe placed about 4 – 6 cm in woman's vagina in prone position and semen pushed out of the syringe
  - Can be done at home or in clinic.

Fertility and HIV

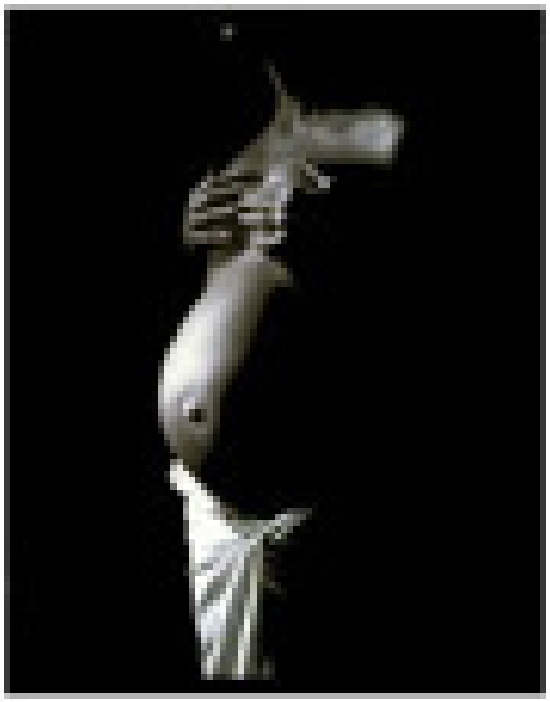
Scenario 3: Concordant positive couple

- Optimise health
- Ensure not on any teratogenic drugs
- Risk of horizontal transmission not a concern
- Vertical transmission needs to be considered
- Natural conception

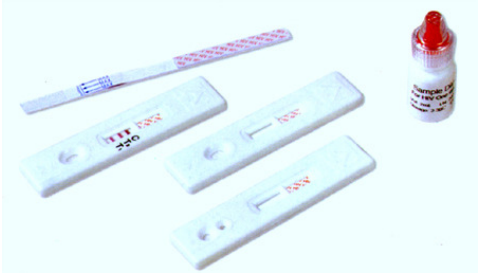
Unsuccessful

- After attempting 6 ovulation cycles unsuccessfully, consider reduced fertility. Risk of continuing naturally exposes the partner to risk of HIV infection and may not result in conception
- Counsel and if appropriate refer for further work-up
- Repeat HIV testing of exposed partner

Successful



- Repeated HIV antibody testing for exposed partners



- If woman seroconverts during pregnancy, provide ART as soon as possible as seroconversion is associated with high rates of mother-to-child transmission

Important to protect partner after conception

Increased risk of HIV-1 transmission in pregnancy:

Prospective study among African serodiscordant couples

- HIV viral load in genital secretions during pregnancy is increased
- Increased risk of HIV transmission from a pregnant woman to her sexual partner

Mulago NR *et al*, AIDS 2011

PMTCT

- If woman HIV infected, ideally she was on ART prior to conception. She should continue ART throughout pregnancy.

- If the woman was not on ART, provide ART if feasible (guideline limitations in some settings), or else provide PMTCT as per local guidelines.

Thank-you