



## Adolescence and HIV: Whatever or What-about-me?

A/Prof Penelope Bryant  
Paediatric and adolescent HIV physician  
The Royal Children's Hospital Melbourne  
University of Melbourne Department of Paediatrics  
Murdoch Children's Research Institute



## Adolescents

- Think they know everything
- Are irrational
- Are socially immature
- Are irresponsible and unreliable
- Don't understand where we're coming from



## Adults

- Think they know everything
- Are bossy and overbearing
- Think we're immature
- Have never had sex or got drunk
- Don't understand where we're coming from



## Issues affecting HIV-infected teenagers

- Long term HIV
- Long term ART
- Adherence
- Disclosure
- Risk-taking
- Psychosocial issues

**The issue**  
**How to address it**




## 1. Long term complications of HIV

**The issue**

- Poor access to ART
  - Effects of HIV at critical times in development
    - Neurological
    - Poor growth, delayed puberty
- Good access to ART
  - Complications of low grade HIV replication
    - Cardiovascular<sup>1</sup>, bone<sup>2</sup>, renal<sup>3</sup>


1. Patel AIDS 2012; 2. Jacobson AIDS 2010; 3. Andiman PIDJ 2009



## 1. Long term complications of HIV

**How to address it**

- Cure!
- Improved access to ART for all
- Monitoring for complications
  - Lipids, urine albumin, bone mineral density
  - Retention in follow up
- Management of complications
  - Lifestyle management
  - Drug management




## 2. Long term complications of ART

**The issue**

- Lipodystrophy and dyslipidaemia<sup>1</sup>
- Insulin resistance and diabetes<sup>2</sup>
- Bone disease<sup>3</sup>
- Mitochondrial toxicity<sup>4</sup> – lactic acidosis, cardiomyopathy, neuropathy, pancreatitis


1. Vignano J AIDS 2003; 2. Jacquet AIDS 2000; 3. Mora J Clin Endocrin Metab 2004; 4. Nogra PIDJ 2003



## 2. Long term complications of ART

**How to address it**

- Monitor for side effects
  - Lipids, fasting glucose, lactate, urine albumin, bone minerals
- Start with newer drugs
  - Eg tenofovir > AZT > d4T
- Switch to newer drugs
  - Eg raltegravir




## 2. Long term complications of ART

**The biggest issue**

... not taking ART


- Replicating virus
- Development of mutations
- Permanent class resistance



## 3. Adherence (or lack thereof)

**The issue**

- Every chronic disease in adolescence
  - Can't see long term benefit
  - Want to be the same as their peers
  - Other things become more important
- Stigma of being seen
- Side effects, esp affecting appearance and body image



### 3. Adherence (or lack thereof)

#### How to address it

- Understand what is important to them
  - Change ART to minimise side effects
  - Drug breaks – PENTA 11<sup>1</sup>, BREATHER<sup>2</sup>
  - Peers
- Make it easy – one tablet once daily
  - Atripla, eplivera – weigh against robustness
- Use of technology/social media
- Use of incentives

1. Gibb AIDS 2010; 2. Butler CROI 2015



### 4. Disclosure

#### The issue

- Parental fear of consequences
  - Emotional, blame
  - May tell others – discrimination
- Risks of not disclosing
  - Decreased adherence/increased transmission
  - Decreased retention in follow up<sup>1</sup>
  - Harms psychological development

1. Arrive PLoS ONE 2012



### 4. Disclosure

#### How to address it

- Process versus event
- Start early – aim to disclose by 12 years
- Age/stage/cognitive understanding/ART
- Support families eg MDT
- Documentation
- Repeat and check understanding



### 5. Risk taking

#### The issue

- Sex, alcohol, drugs – normal adolescence
- Born with an STI
  - Risk of transmission<sup>1</sup>
  - Disclosure issues<sup>2</sup>
  - Legal issues
- Alcohol and drugs heighten all risks
- IVDU and HCV co-infection

1. National AIDS/STI Kenya 2009; 2. CHIPS cohort 2014



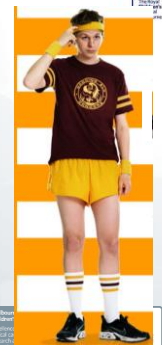
### 5. Risk taking

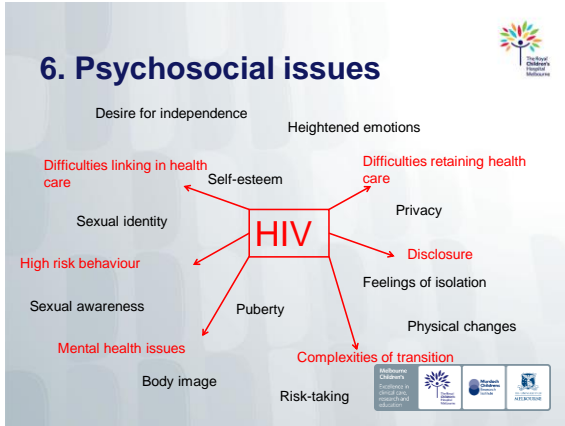
#### How to address it

- Talk about risks as with any adolescent
  - No parents
  - Ideally sexual health worker
- Support them to have safe sex
- Support them to disclose when necessary
- Understand the legal implications but don't scare them



### 6. Psychosocial issues





- ## 6. Psychosocial issues
- How to address it
- Listen to the teenager
  - Multidisciplinary team
    - psychologist, sexual health worker
  - Social networking
    - Social media, websites eg HYPNet, game apps
  - Peer groups
  - Role-model buddies
  - Camps
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## Whatever or what-about-me?

- Listen
- Respect
- Individualise
- Change expectations

HIV Action  
The Royal Children's Hospital Melbourne  
The Victorian Government  
The Australian Government