Right to care

TREATING AIDS SERIOUSLY

USAID

FROM THE AMERICAN PEOPLE

ADOLESCENTS WITH HIV

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Right to Care

Disclaimer

- This talk represents my personal experience in managing teenagers with HIV over the last 14 years.
- It does not purport to be a comprehensive treatise on the management of teenagers with HIV.

Adolescents with HIV

Horizontally Acquired

- Usually Normal height
- Normal development
- CD4 often normal
- ART naive or less experienced
- Relatively easy to suppress virus
- Sexually active (may have been abused)
- Pill fatigue less likely
- Adherence problems

Vertically Acquired

- Usually short
- Delayed Puberty
- CD4 often low (if not on ART)
- Often highly ART experienced
- May have multiresistant virus
- Whole spectrum of sexual activity
- Pill fatigue likely
- Adherence problems

Adolescents with HIV

- Speaking to teenagers
- Dosing and regimens for adolescents
- Adherence
- Disclosure
- Pill fatigue
- Depression
- ADHD
- Treatment failure
- Sexuality
- Adolescent Groups
- Transitioning to adulthood

Speaking to teenagers

- No disturbances
- Kick out adults if necessary
- Confidentiality
- Make eye contact
- Remove physical barriers
- Speak on their level but don't talk down to them

Adherence in Teens

- **Simplify!**
  - once daily dosing
  - Fixed Dose combinations
  - Reduce no of tabs to a minimum
  - No food restrictions/Medication all taken together
  - Fit meds into Teens lifestyle
    - Find out what their lifestyle is
  - Twice daily does not = 12 hourly
- **Supervision**
  - Treatment Buddy
  - Watch them swallow
- **Disclosure**
  - Complete
  - Partial

Drug Formulations

- Tablets/caps not syrup
- 3TC/ABC FDC- Kivexa®
- TDF/FTC FDC Truvada®
- TDF/FTC/EFV FDC Atripla®
- EFV 400mg from 25kg (2caps instead of 4)
- EFV 600mg from 35kg
- ddI EC instead of buffered tabs
  - Less GI side effects
  - Still give on empty stomach
  - Can give simultaneously with Aluvia (on empty stomach)

Kivexa®

- Fixed dose Combination tablet 3TC & Abacavir
- 300mg 3TC/600mg Abacavir per tablet
- Dose: 1 tablet once a day
- Very large tablet
- Use from 20kg if child can swallow it
- Expensive

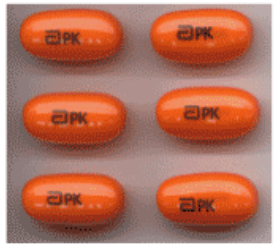
Stocrin® tablets and Aspen Efavirenz Tablets

- Efavirenz
- 600mg tablet
- Large tablet
- Use from 40kg if child can swallow it

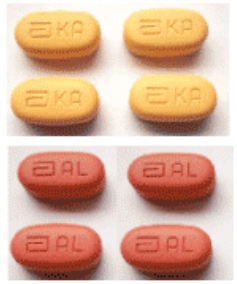
Aluvia®

- Lopinavir/Ritonavir tablet (Kaletra)
- Melt extrusion technology
- Lopinavir 200mg/Ritonavir 50mg per tab
- Stable out of refrigerator
- Adult dose 2 tabs bd (Kaletra caps 3 caps bd)
- Tabs Slightly smaller than Kaletra caps
- Can be taken with or without food
- Tablets cannot be broken
- Paediatric formulation (100/25) registered with MCC

Kaletra SGCs



Kaletra tablets



Viread®

Tenofovir

- Nucleotide Reverse transcriptase inhibitor
- Concerns about osteopaenia in children
- Renal toxicity in adults and children –worse in children < 5 years
- Dosage 8mg/kg/dose once daily
- No paediatric formulation
- Tablet awkward shape to divide
- 1st line in adults
- Can use routinely from age 16 if weight>37.5kg
- WHO says use from 12 years
- Reserved for salvage in older children
- Urine dipstix and U&E 3 monthly
- Dexa scan 6-12 monthly

Truvada®

- Fixed dose combination tablet- Tenofovir and FTC
- FTC equivalent to 3TC
- 300mg tenofovir / 200mg FTC per tablet
- From 37.5 kg in situation where one would used TDF & 3TC

Disclosure

- A process- not a once off event
- Depends of maturity- not age
- Parents often resistant to disclosure
  - Guilt
  - Worries about child disclosing indiscriminately
- Barriers to Communication
- Dishonesty
- Full disclosure needed by time sexually active
- Partial disclosure adequate before that
- Parents not at all resistant to partial disclosure
- Books and audiovisual material may be useful

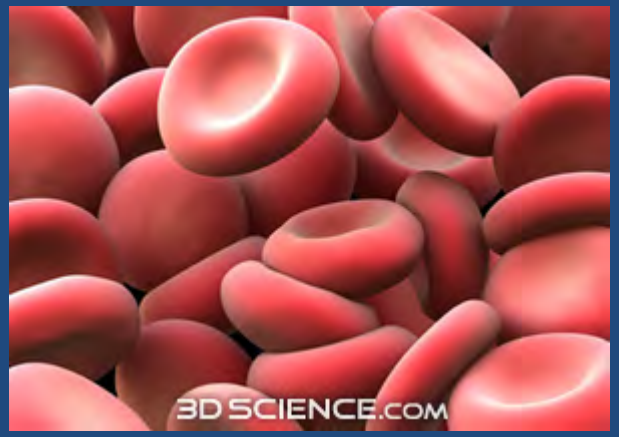
Partial disclosure

- Clinicians should be involved
- Pitch it at the child's level
- Use language that the child understands
- Use terms like white cell count rather than CD4 count
- Talk about germs rather than bacteria
- With time add to the story
- Make a note in the file how far you are in the story
- Test the child on what they learned last time and revise
- Example

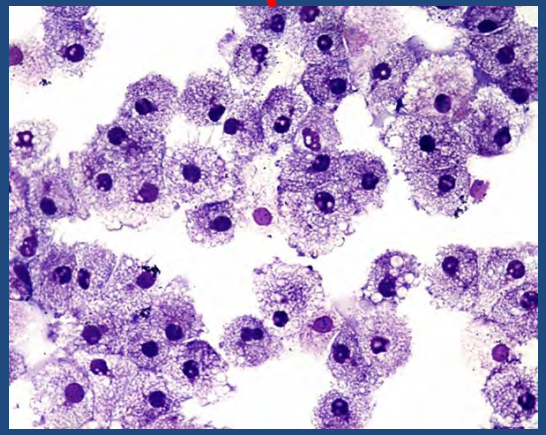
Note

- This example may not be appropriate in those countries where soldiers have a negative connotation

Blood



Red blood cells

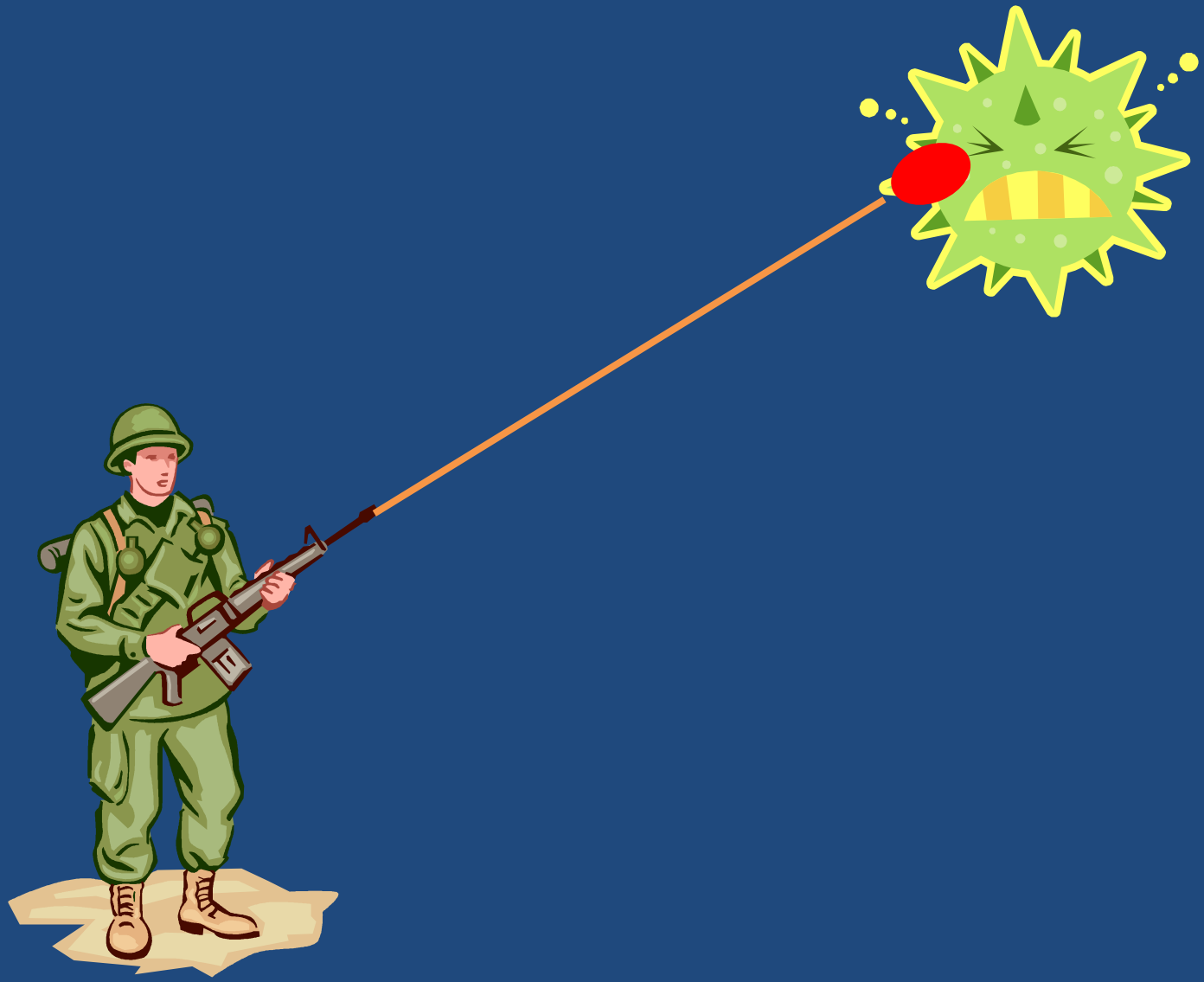


White blood cells

platelets

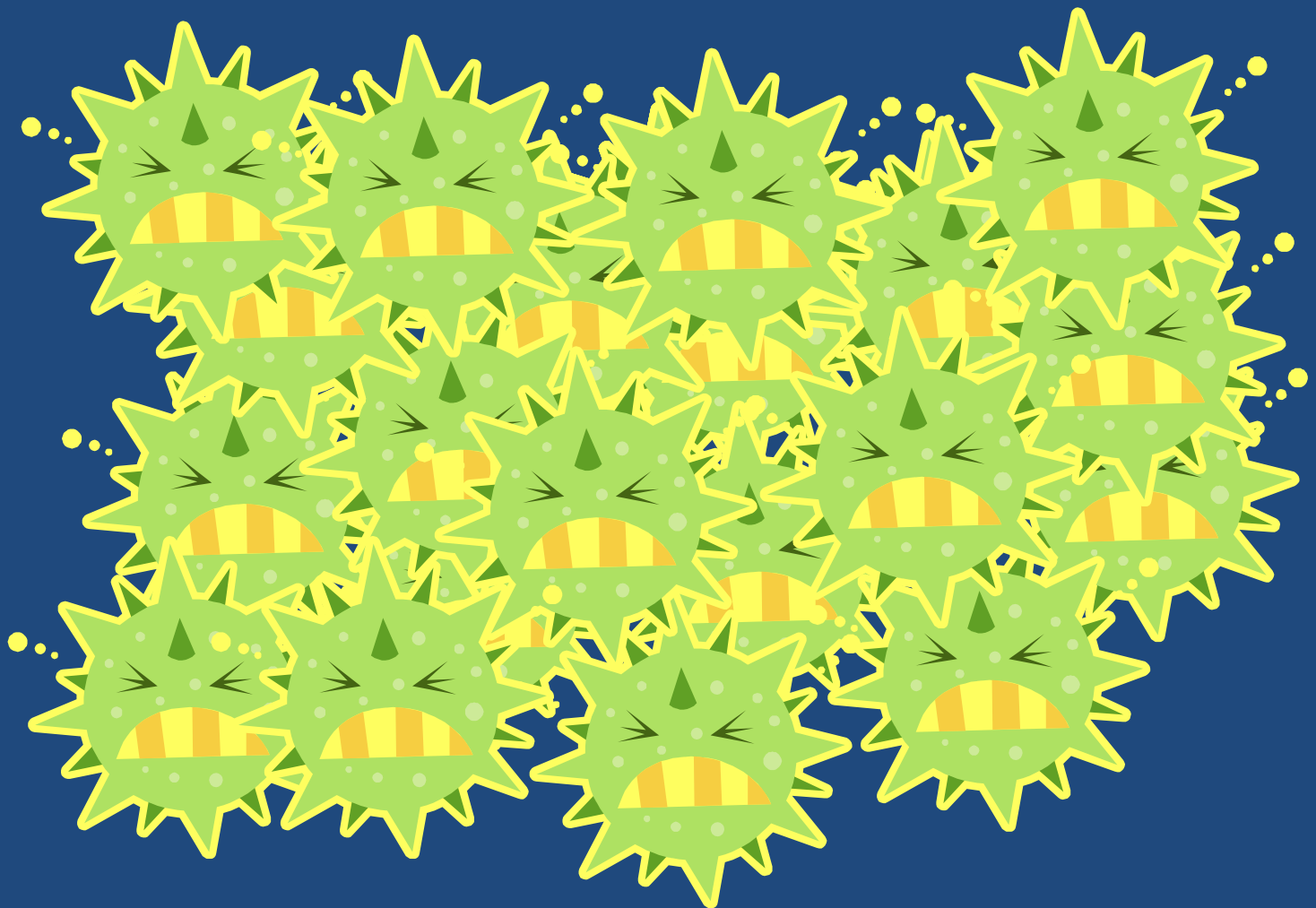
White Cells = Soldiers

Soldiers kill Germs & keep us well



Very few White Cells = few Soldiers

Few soldiers= many germs



Many germs = person gets sick

Pill Fatigue

- A condition occurring over time to chronically ill patients who have to take a lot of medication, in which the patient stops taking pills because of the stress and monotony of constant pill swallowing

Urban Dictionary

Pill Fatigue- Causes

Major obstacle to complying with treatment every day is:

too many pills - 67%,

side effects -61%

food restrictions -55%

frequency of having to take the pills -49%

timetable for taking pills-48%

Cost- 1%

drug regimen interferes with their daily

life-43%

lifestyle -30%

job-11%

GSK Survey

Pill Fatigue- Treatment

too many pills – **rationalize, drop non-essentials, FDC**

side effects –**identify and change offending agent**

food restrictions - **change offending agent**

frequency of taking the pills –**rationalize, change to once daily if possible**

timetable for taking pills- **as above not fixed times**

Cost- 1%

drug regimen interferes with their daily

life-43% **as above, twice/once daily not fixed times**

lifestyle -30% **as above**

job-11%

If above fail then what?

GSK Survey

Drug Holidays

- **Long term Structured Treatment Interruptions (STIs) not recommended (SMART study)**
- Short term ± 1month probably doesn't cause harm if done properly
  - Negotiate good time to do it
  - Do in conjunction with HCW
  - Drug holiday dependent on good adherence other times
  - PI regimen - stop all drugs simultaneously
  - NNRTI regimen - stop NNRTI 1 week before stopping others or substitute PI for NNRTI 1 month before stopping regimen
  - NVP – if interrupt for more than 7 days need to restart lead in once daily X 2 weeks

Depression

Mental Health in HIV infected Children

- Review of 8 studies including 328 HIV infected children 8-21 years
- Mental Health Disorders
  - Attention Deficit Disorder 24%
  - 6 fold increased risk ratio
- Anxiety Disorder 29%
  - 3.8 fold increased risk ratio
  - **Depression 25%**
  - 7.1 fold increased risk ratio

AIDS Care 2006:18:441-5

Attention Deficit Hyperactivity Disorder ADHD

Mental Health in HIV infected Children

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AIDS Care 2006:18:441-5

Attention Deficit Hyperactivity Disorder ADHD

- Rebellious 16 year old- ADHD worse in teenagers
- Impacts on disclosure
- Impacts on Adherence
- Often associated with Depression & poor self image
- Easily managed if recognized

Treatment Failure

Treatment Failure

- Almost inevitable in teenagers
- Rather prevent it-watch them swallow
- Don't Blame child if it happens
- Don't shout at Child
- Rather say-”I was expecting this. Don't worry it happens to many people”
- Your chances of success are much higher if you have an intact relationship with the child

Treatment Failure-Options*

- Different in adolescents
- New regimen
  - Last resort. only do if CD4 extremely low
  - Need to resolve adherence issues first (easier said than done)
- Delay new regimen
  - Treatment interruption
  - 3TC Monotherapy
  - Holding regimen

*Speakers personal opinion

Structured Treatment Interruptions

- Out of favour for adult patients (SMART study)
  - **Avoid in Multidrug experienced patients with low CD4 counts**
  - **Paediatric patients with immune reconstitution and virological failure**
- ? Superseded by 3TC monotherapy
- Consult an Expert

M184V mutation

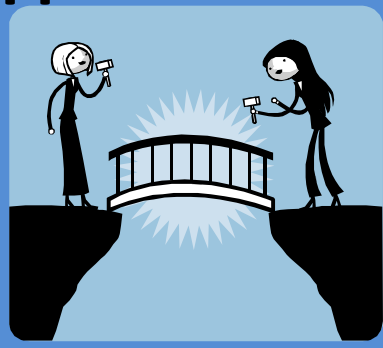
- Hallmark 3TC resistance mutation
- HIV virus with M184V has reduced viral fitness i.e. it replicates at a reduced rate
- E184V study showed that patients who had failed 3TC previously and were kept on 3TC monotherapy didn't not progress as rapidly as patients on no ART at all.

AIDS 2006,**20**:795-803

3TC Monotherapy

- Patient must have failed 3TC previously
- A type of holding therapy
- Await availability of new drugs
- or
- Wait for patient to learn to swallow capsules
- Or
- waiting for Teens BCUTB
- Only institute if CD4 reasonable
- Do 3 monthly CD4 test
- Dont do VL testing
- Once CD4 drops or patient develops symptoms then institute definitive regimen
- Consult an expert

Holding / Bridging Regimen



- Simplified regimen
- Unlikely to develop further resistance
- Await availability of new drugs
- Wait for patient to learn to swallow capsules
- Wait for Teens BCUTB
- E.g. AZT/3TC/ABC or AZT/3TC/ABC/TDF where there is extensive NRTI resistance
- Trizivar (Abaclamzid)2 tabs a day , TDF 1 tab a day
- Ideally only institute if CD4 reasonable
- Do 3 monthly CD4 test
- Don't do VL testing
- Once CD4 drops or patient develops symptoms then institute definitive regimen
- Consult an Expert

HIV Medicine (2008), 9, 508–513

Directly Observed Therapy (DOTS)

- Especially in older children
- Once daily regimen
- FDC tabs
- Drugs amenable to once daily dosing
  - 3TC
  - FTC
  - ABC
  - EFV
  - Kaletra (PI naïve patients)
  - ATV/rtv (PI naïve patients)
  - TDV
  - ddI

Sexuality

Effect of HIV on Sexuality in the Perinatally Infected Teen

- Impaired body image—lower self esteem
- Delayed puberty
- Threatened sexual intimacy
  - Transmission issues
  - Disclosure issues

Teen Perspective

Sexuality

- Anxiety regarding
  - Sexuality
  - Sexual relationships
  - Reproductive and sexual functions

HCW Responsibility
Guidance

- Discuss sexual anatomy and function.
- Discuss and provide or refer for contraception.
- Teach facts about transmission & safe and responsible sex.
- Sexual identity. Perinatally infected teens may be gay or bisexual.

Adolescent Groups

Adolescent Groups

- Teens only communicate with other teens
- Peer Pressure
- Peer Counsellors
- All have similar anxieties fears questions
- Eg Sexuality, prognosis, child bearing,disclosure ,preventing transmission,transitioning to adults
- Logical to discuss these in a group
- Run by responsible person that teens trust
- Can be run by older teens themselves with adult supervision
- Set programme of topics for discussion

Transitioning to Adult Clinic

Transitioning to Adult Clinic

- ? More traumatic for caregivers than patients
- Fear that new caregivers wont be able to manage patient
- Perhaps easier in family based clinics where no transitioning occurs
- Needs clear communication between patient, old clinic new clinic

Summary

- Adolescence is a challenging time for teen, parents doctor, nurse
- All the more so in situation of HIV
- Teens break many rules
- Sometimes we have to break rules to deal with teens
- Can be very rewarding when things go right
- Only consider that you have achieved success when patient turns 30!

Acknowledgement

- Dr Rana Chakraborty :Adolescent HIV Care; from the Cradle to the Rave!!. PowerPoint presentation for CHIPS. Downloadable at *www.freeppts.net/s-**adolescence**-aids-61.html*

10th ANNIVERSARY 2011

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THANK YOU

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