



BAYLOR COLLEGE OF MEDICINE Children's Foundation UGANDA

BIPAI Baylor International Pediatric AIDS Initiative

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SWITCH CASES, FROM BAYLOR-UGANDA

Dr.Sabrina Bakeera-Kitaka

Baylor-Uganda Vision and Mission

Vision: A healthy and fulfilled life for every HIV infected and affected child & their family in Africa

Mission: To provide high-quality family-centered paediatric and adolescent health care, education and clinical research world wide.

CASE 1

- Acknowledgement:
  - Dr. Kyazze Solomon
  - Counsellor Jane

- Date: 05/08/14

Case 1

- Name: N.C ,ID No; PIDC19851;Age: 15yrs
- Sex: Female
- Occupation: Student in Standard S. School.
- Primary Caretaker: Father.

PAST MEDICAL AND HAART

- Enrolled on 10/10/11; Stage 1, Asymptomatic. CD4-133 cells
- ARV initiation on 31/10/11(AZT/3TC/NVP)
- 10/07/12: progressed to stage 2 , Recurrent genital herpes
- 04/12/12: Stage 3 with PTB, Sputum +ve,NVP substituted with EFV

Laboratory results

Date	CD4 Abs	CD4 %	Viral load	ART REGIMEN/ COMMENTS
10/10/11	133	6		AZT/3TC/NVP
08/05/12	171	18		AZT/3TC/NVP
30/10/12	158	14		AZT/3TC/NVP(Immuno discordance suspected
27/11/12				ZN stain; +++ AFB's. NVP substituted with EFV
10/12/12			< 20 cp/ml	
15/04/13	157	12		AZT/3TC/EFV
08/07/13				ZN stain ; Nil. Completed PTB Rx
15/01/14	147	8	65468	Treatment Failure.
27/07/14	91	7		Treatment Failure.

PSYCHO SOCIAL SUMMARY

- 2013; Poor Adherence by Pill Counting.
- 2014; Reported missing morning doses ; She also complained about EFV dizziness. The father is a bus driver & Step mum does not care.
- Patient requested for a ‘grace period’ before switching to 2nd line
- Limited adult supervision & support noted.

WAY FORWARD

- Switch to Duovir-N, Do baseline VL prior to 2nd line switch
- Involve the father & step mother in care(scheduled counsellor visits)
- Repeat CD4 after 3 months.
- Introduce her to peer support , promote adherence.

Case 2

Acknowledgements:

Dr Naiga Fairuzi

Counselor Rose

22nd/ April/14

Demographics

Name; Nalwadda Solome ,PIDC no; 1813

Age; 22/F Sex; Female

Address; Wobulenzi, Luweero, N.O.K NB , Mother

Date of enrollment into care; 24/April/14

Current ART regimen; CBV/NVP

Clinical stage; III(PTB)

Mode of transmission; Vertical

Medical and ART history

Started ART on 06/July/04- CBV/NVP

Vaginal candidiasis- 2004

- PTB- 2005
- Pregnant – 2009
- 2nd Trimester abortion- 2010(May)

CD4 Trends and VLs

DATE	CD4 s(%)	Viral load	ART regimen
May 2004	24(2.2%)		
Sept 2006	408(27%)		
Mar 2007	964(36%)		
April 2008	941(36%)		
May 2007	901(42%)		
Sept 2010	647(29%)		
May 2011	521(25%)		
Jan 2012		674cp/ml	
May 2012	389(26%)		
Aug 2012		726cp/ml	
Nov 2012	358(26%)		
Jun 2013	219(19.98%)		
Sept 2013		16541cp/ml	
Dec 2013		12130cp/ml	

Psycho social summary

- Pt joined the clinic in 2004 when she was 13yrs after testing positive from Namungoona health center and was escorted by the parental aunt

- At this point mother was in denial but later went to seek medical care at IDC,father's status is unknown ,.

- In 2009,at the age of 18 years she delivered a baby who tested sero-negative and later d/c at 18mths

Pyscho-social

- Patient was taken back to school but still got pregnant again in 2010, and pt is reported to have aborted

- She was given a scholarship and joined vocational school for hair dressing

Psycho social summary….

- Pt had history of adherence challenges with time mgt when she was still in O' level because of school schedules and claimed food insecurity , yet mum had good adherence in the same home.

Discussion and wayforward

- Switch to an OD regimen; TDF/3TC/ATV/RI
- Involve her spouse, offer him RCT and if positive then enroll him into care
- Link to SRH team to sort out family planning issues

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Case 3

Aknowledgement

Dr Naiga Fairuz

24th/Jun/14

Patient Bio-data

- A.C,18/Female Registered with Baylor on the 24th/Nov/2004
- Was a Stage III at that time due severe bacterial pneumonia
- N.O.K- K.A who is the mother

Past Medical and ART history

- She has had no major Ois while in care
- She was initiated on ART on 21st/FEB/14
- Has had no ART changes since initiation
- Still in stage III

Laboratory results

Date	CD4(%)	VIRAL LOAD	ART regimen
2004	9(0.7%)		AZT/3TC/EFV
2005	291(11.27%)		
2006	648(25%)		AZT/3TC/EFV
2007	704(25%)		
2008	789(28%)		AZT/3TC/EFV
2009	941(27%)	286cp/ml	
2010	685(27%)	<20cp/ml	AZT/3TC/EFV
2011	831(28%)	TND	
2012	623(30%)	3505cp/ml	AZT/3TC/EFV
2013	369(16.03%)	130265cp/l	
2014	254(15%)	19807cp/ml	AZT/3TC/EFV

Psycho social summary

- Initially she had good adherence as mom was monitoring the medicine ;she was still in primary school and was a day scholar.

- Poor adherence was noted when her CD4 started declining and she disclosed that she was getting dizzy with EFV of which she had given herself a drug holiday for that particular regimen

Psycho social summary

- Her meds were kept by the school secretary. Adherence was assumed to have improved but it was not the case with EFV

- She seems to have restarted taking EFV well in Jan. 2014

- Is under preparations for 2nd line, she is in senior six and in boarding school

Way forward

- Has had adherence challenges especially in the boarding school
- Switch to an OD regimen- TDF/3TC/ATV/RI
- Reinforce adherence to the new drugs.
- Choose the most appropriate time for the drugs especially after a meal for Ritonavir.

CASE 4

- Switched to 2nd line on 1st April 2014

- Acknowledgements:
  - Kiconco Lilian(Clinical Officer)

Dermographics

- Name: L.C;PIDC no. 7429;Age: 21yrs;Sex: Male
- Address: Kayunga
- NOK: Initially Sister ,then father
- Date of enrollment in care: 25/10/2005
- Current ART regimen: AZT/3TC/EFV
- Clinical stage: 3 at initiation of HAART

Medical and ART History.

- Medical history:
  - No major clinical events since HAART
  - Last reviewed 21/9/2012

- HAART History:
  - Duration on HAART 8years, 8months.

Labs

Date	CD4	Viral load	ART regimen
30/8/2006	244		CBV/EFV
14/2/2007	433		
29/8/07	396		
13/2/08	666		
1/9/08	580		
19/3/09	550		
8/9/09	436		
30/3/10	698		
20/10/10	410		
6/4/11	312	15,927	
26/10/11	230		
4/4/2012	254	28,807	
27/3/2014	42		

Psychosocial

- Aug 2011: Family house got burnt
- Sept 2011: Joined a gang , and became irregular in the clinic
- Feb-Aug 2012: Confessed poor adherence , had been arrested for 7mo for pick pocketing.
- Dec 2012: Told Home Health Visitor he did not want to come back to the Clinic anymore

Management Plan

- Do baseline VL and Re-start on current regimen i.e CBV/EFV
- Repeat VL after 3months of good adherence VL still detectable then we switch to 2ndline[TDF/3TC/ATV/r].
- Meanwhile empower the boy, explain the meaning of life and encourage to attend peer support meting.
- Involve treatment buddies.
- Request for a home visit.

Summary

- Non-Aderence is the major cause of treatment failure
- Disclosure improves adherence ; issues of boarding schools should be addressed
- Integration of SRH services in the HIV clinic is critical
- Safe and easy regimens improve adherence

Adherence requires discipline, determination and support from family and significant others.

HOW TO ASSESS?

Before administering long term medication ensure family readiness:

- Has the caregiver disclosed to the child.
- Do other people in the household know about the child's diagnosis?
- Does patient/family want to start therapy?
- Does the patient/family have a support system?
- What are the living conditions of the patient or family.
- Does the patient /family have transport?

The Importance of adherence

- Maintaining excellent adherence to HAART is the single most important factor in ensuring successful treatment outcomes.

- In ART a patient should achieve 95% adherence to achieve virologic suppression and avoid emergence of resistance.

- Short-term lapses in adherence may lead to resistance to medications and loss of treatment options.

Benefits of Good Adherence

- Maintain or reverse immune system damage
- Virologic suppression
- Increases CD4 cell count
- Decreases opportunistic infections
- Promotes growth and development

Dangers of non-adherence

- Viral resistance
- HIV/RNA not suppressed to undetectable level after 6 months of HAART
- HIV /RNA level becomes detectable after being undetectable
- Increase in HIV/RNA level
- Decrease in CD4 cell count

Role of a Family in Adherence

- Motivate and reward the child for good adherence.
- Provide physical care for the child including administration of complex regimens.
- Provision of psycho-emotional and social support.
- Provide financial support for associated costs including

Disclosure of HIV Status to Children and Adolescents.

In general children with chronic and life-threatening diseases benefit from early disclosure

Why?

- Better understanding of the medical condition
- Better psychosocial adjustment and self-esteem
- Potential for more open involvement in medical care decisions
- Increased opportunities for peer support
- May allow for closer relationship between child and

When?

There is no “right” age for disclosure!!!!

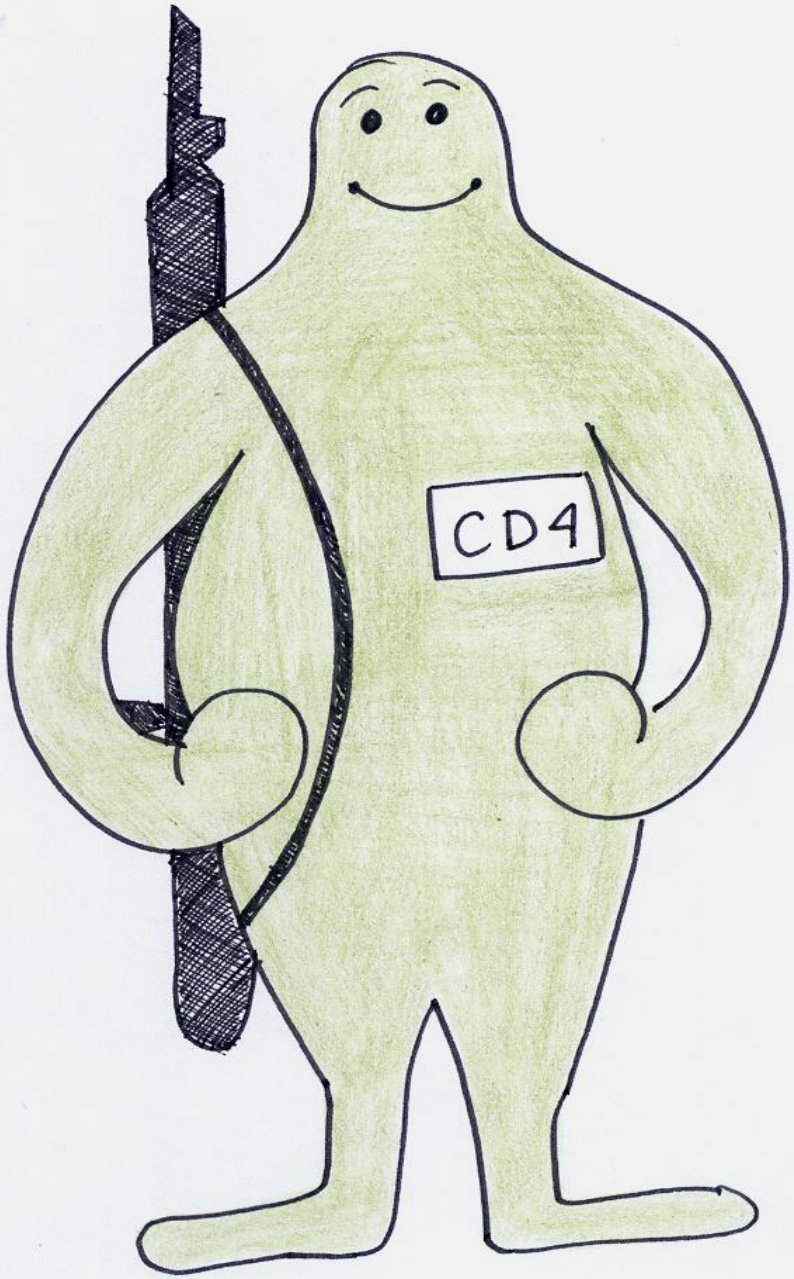
Disclosure is a process and there is always an age-appropriate way to communicate about chronic illness to children

When?

"I will do it when she is ready."

How?

- Age appropriate
- Incremental
- Supportive
- Involving the family and the health care team



SOLDIER

Acknowledgements, Baylor-Botswana

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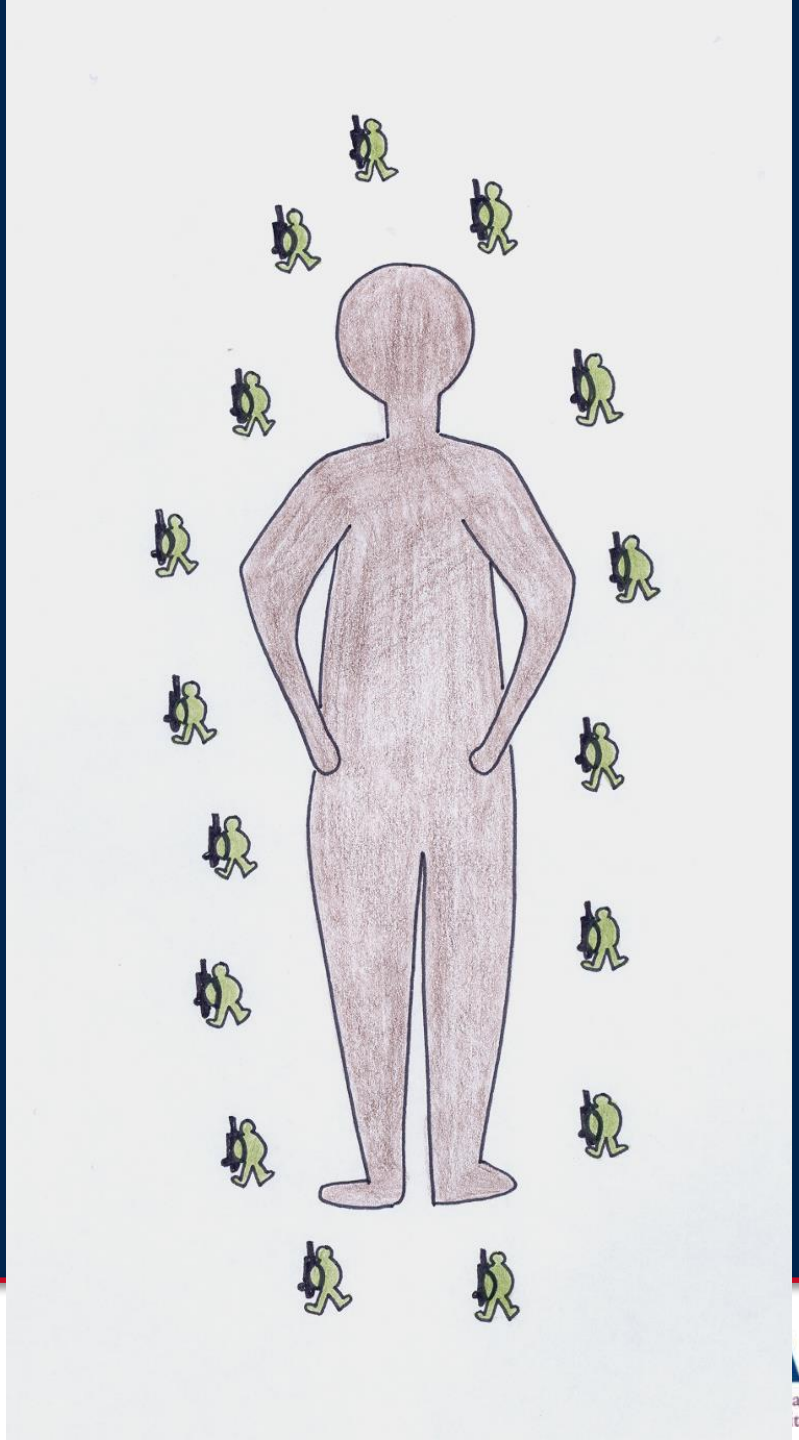

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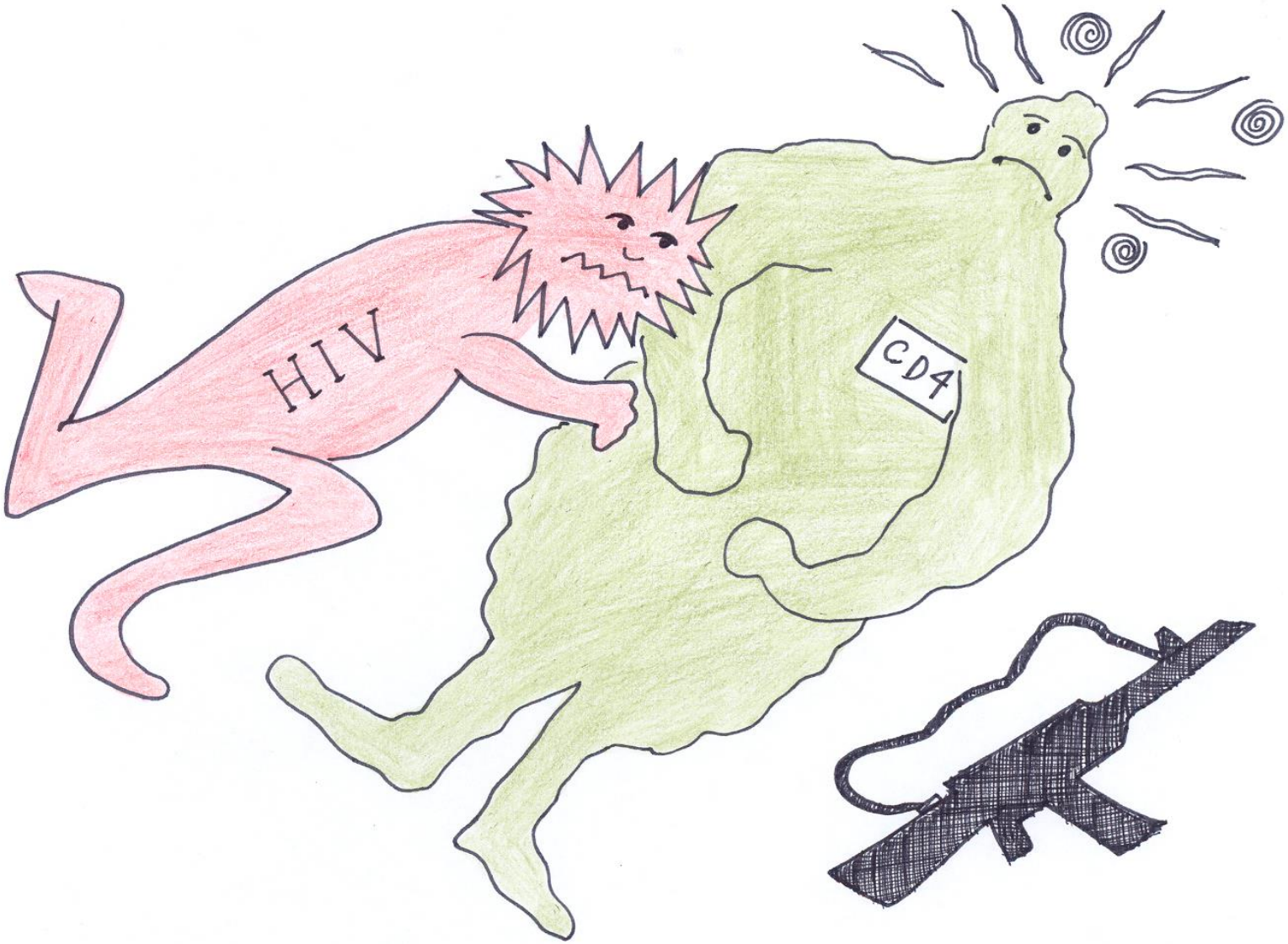

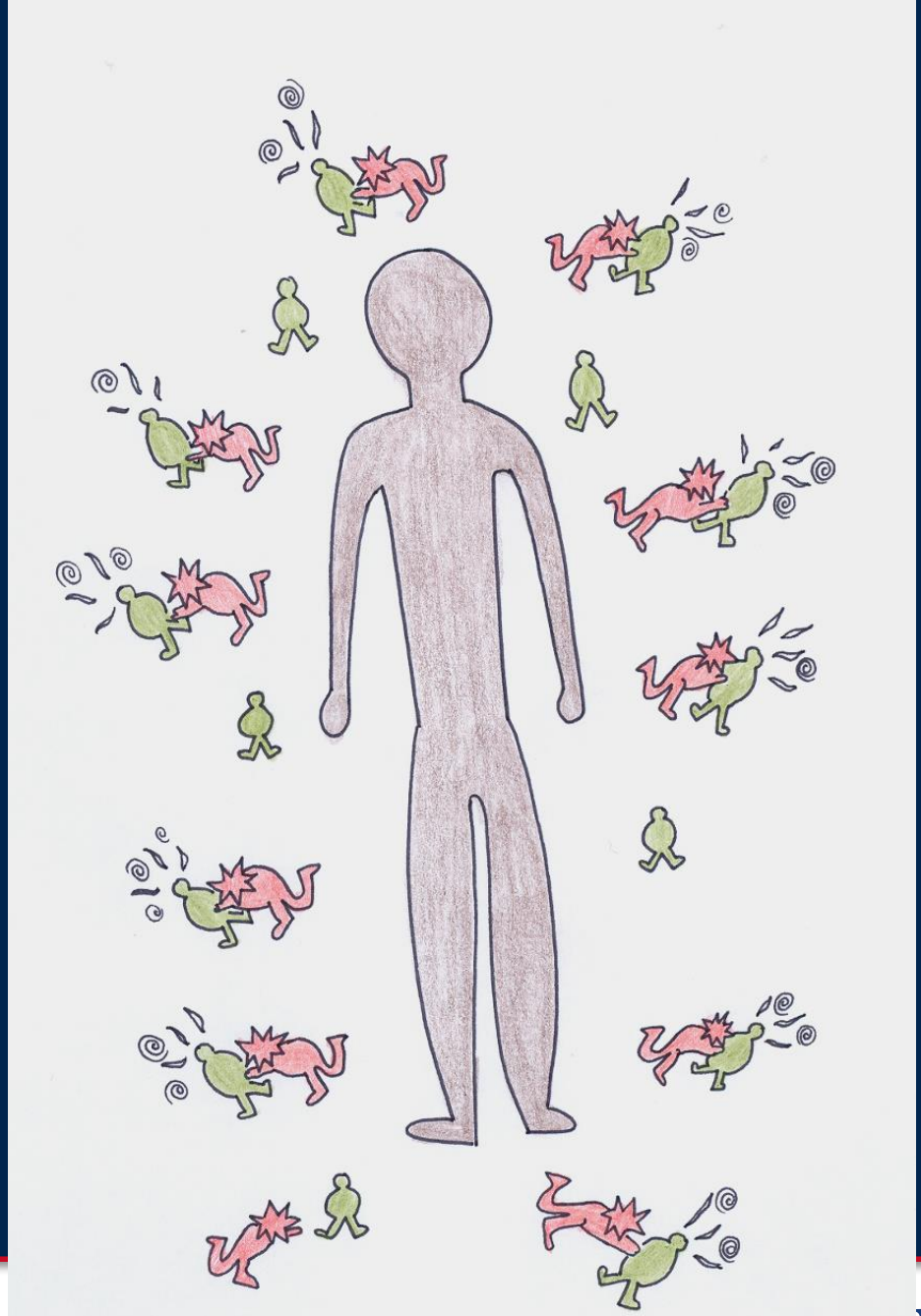

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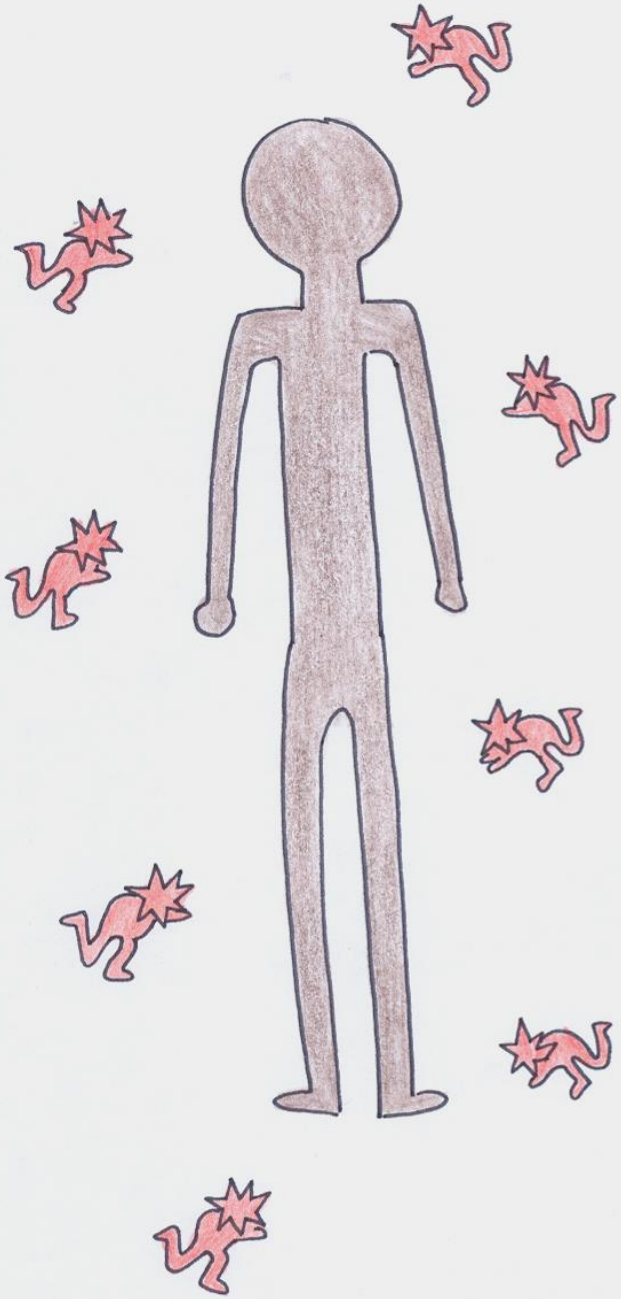

Becoming sick

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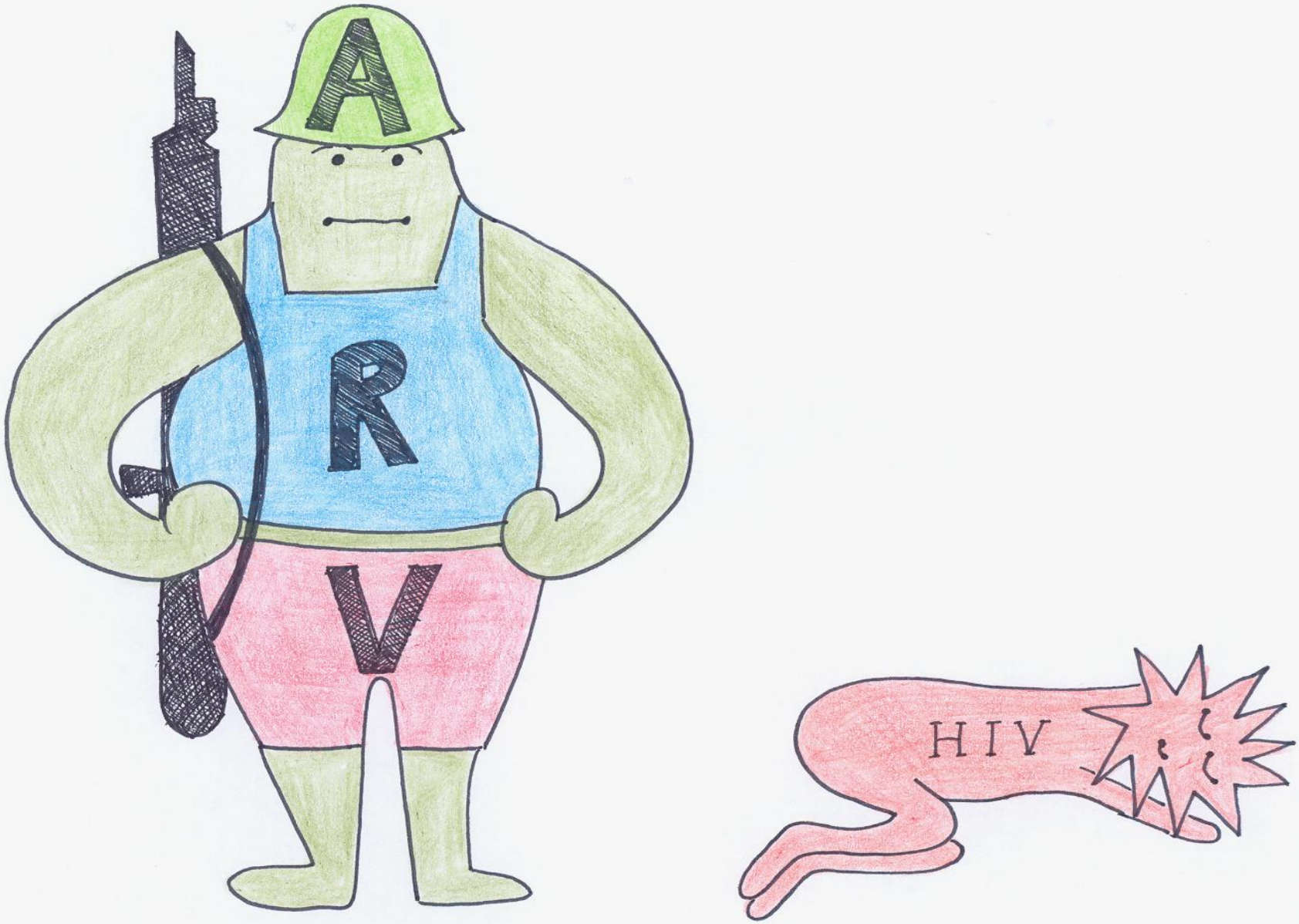
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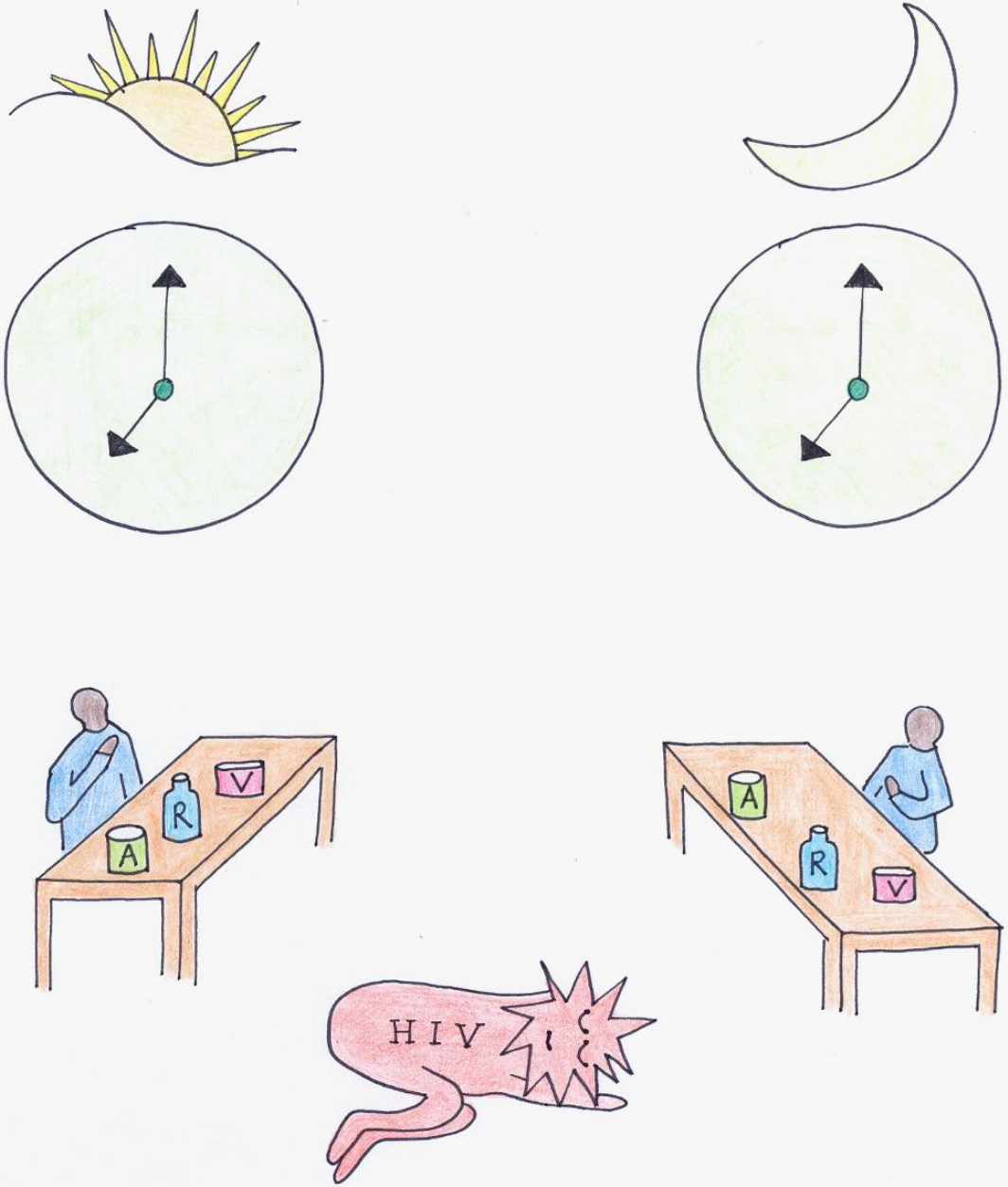
HIV



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V
A
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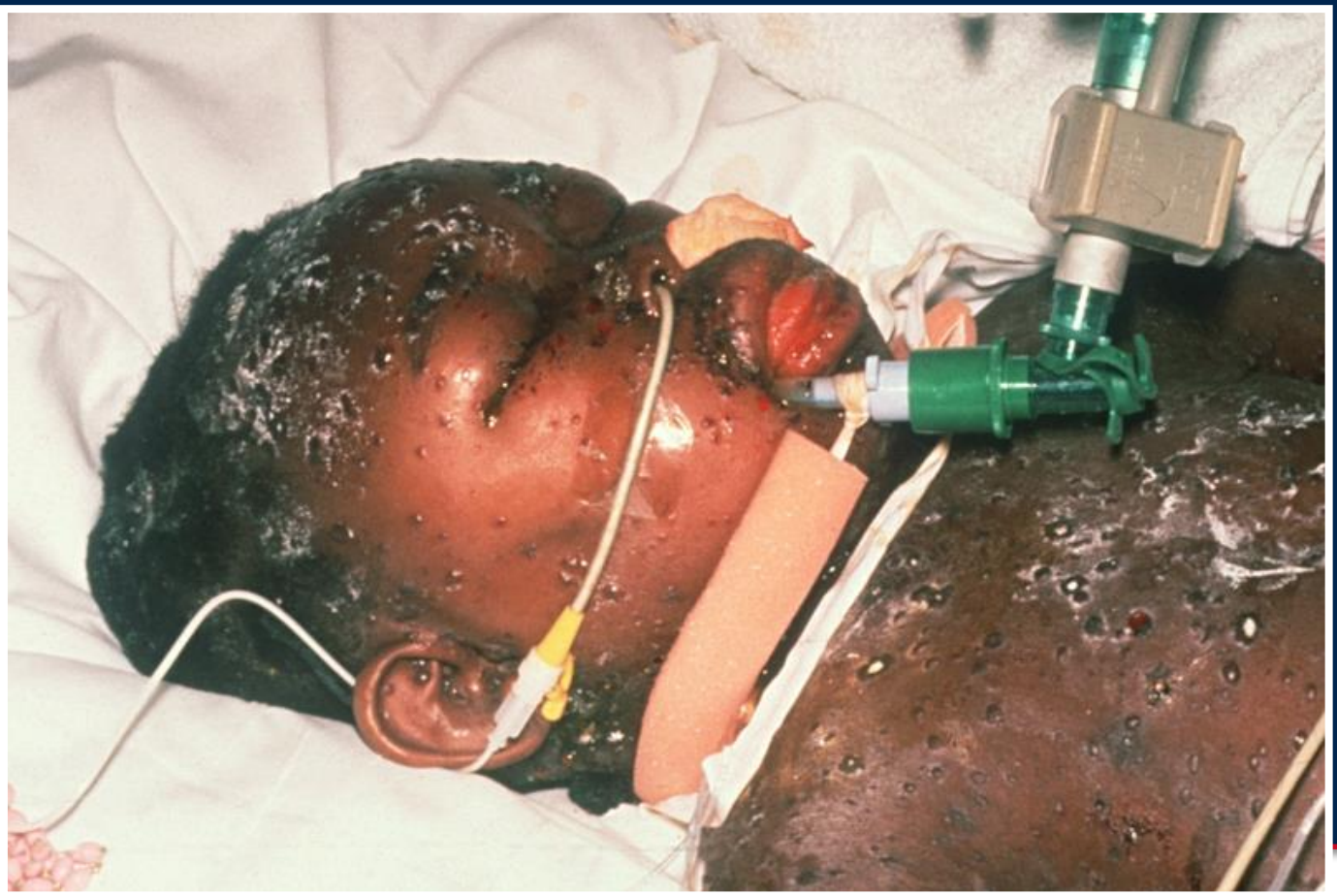
LACK OF ADHERENCE AND OIs



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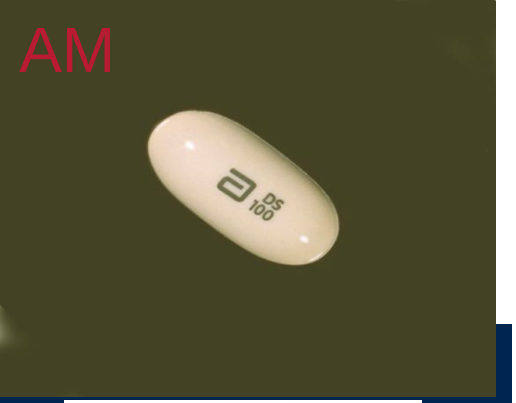
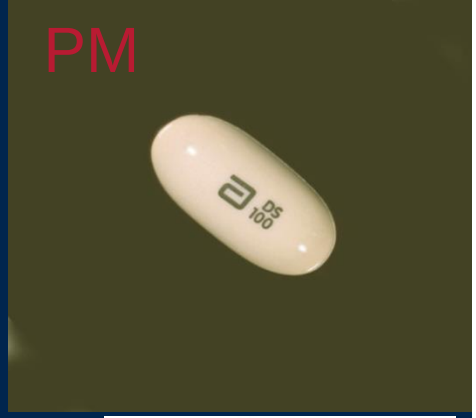
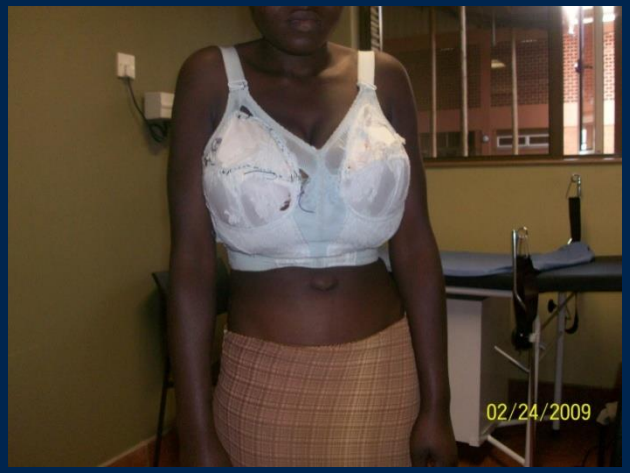
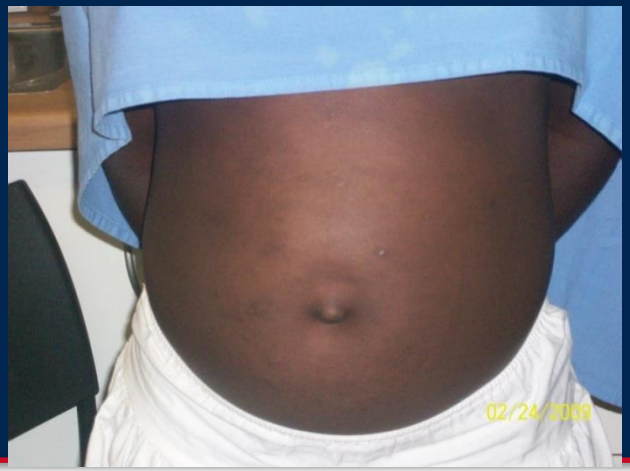


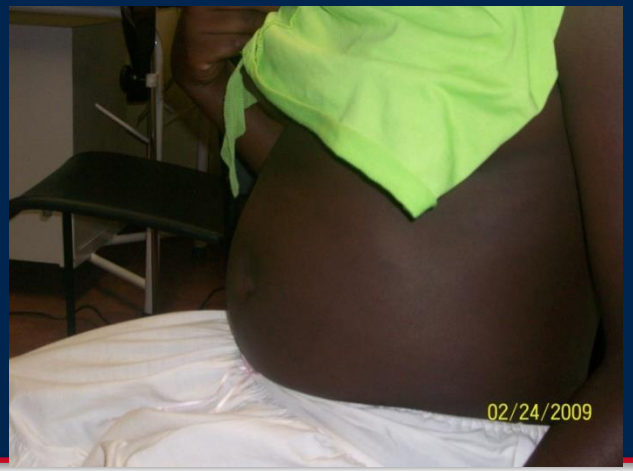
PM



Fear to Start on ART because of Toxicities (Acceptability)







Ref. Piloya T- Dissertation 2009

Severe gynaecomastia in a 12 yr old boy on Cart Courtesy photo from ARROW TRIAL

Psychosocial challenges

- Multiple caretakers if orphans
- Children become the caretakers to sick parents
- Stigmatization in school
- Depression and disclosure
- Poverty
    - Lack of school fees

Skovdal M et al Global Health 2009

Adherence requires discipline, determination and support from family and significant others.