

ADHERENCE

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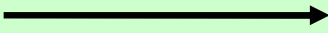
What causes a High Viral Load?

**NORMAL
ARV
LEVEL**

**LOW
ARV
LEVEL**



Low ARV Levels

- Incorrect Dosing
- Drug-drug interactions  Rifampicin
- Persistent vomiting
- Malabsorption
- **ADHERENCE**

INCORRECT DOSING

SCRIPT

health
Department of Health
REPUBLIC OF SOUTH AFRICA

ANTIRETROVIRAL DRUG DOSING CHART FOR CHILDREN 2013
Compiled by the Child and Adolescent Committee of the SA HIV Clinicians Society in collaboration with the Department of Health

South African Society of HIV/AIDS Clinicians Society

Target Dose	Abacavir (ABC)	Lamivudine (3TC)	Efavirenz (EFV)	Lopinavir/Ritonavir (LPV/r)	Raltegravir (RTV)	Stavudine (d4T)	Didanosine (ddI)	Nevirapine (NVP)	Zidovudine (AZT)	Target Dose		
Available Formulations	Sol 20mg/ml tabs 60mg scored dispersible, 300mg prof scored, ABC/3TC 600/300mg	Sol 10mg/ml tabs 150mg scored, 300mg ABC/3TC 600/300mg	Caps 30, 200mg Tabs 30, 200, 600mg prof scored	Sol 400/200mg/ml Adult Tabs 200/100mg Paeds Tabs 100/50mg	ORAL SOLUTION FOR LPV/r OR TABLETS FOR RTV TWICE daily (5.75x1.75 dose tab)	Sol 1mg/ml Caps 15, 20, 30mg	Tab 25, 50, 100mg (dispersible in 30ml water) Caps 250mg SC	Sol 10mg/ml Tabs 200mg scored	Sol 10mg/ml Caps 100mg Tabs 300mg prof scored, AZT/3TC 300/150mg	Available Formulations		
<p>Wt. (kg) Currently available tablet formulations of abacavir (except 60mg), efavirenz, LPV/r and AZT must be swallowed whole and NOT chewed, divided or crushed Wt. (kg)</p> <p><3 Consult with a clinician experienced in paediatric ARV prescribing for neonates (<28 days of age) and infants weighing <3kg <3</p>												
3-3.9	2ml bid	2ml bid	Avoid using when <10kg or <3 years; dosing not established	*1ml bid	1ml bid	sol	Avoid	5ml bid	6ml bid	3-3.9		
4-4.9	2ml bid	2ml bid		*1.5ml bid	1.5ml bid	7.5mg bid: open 15mg capsule into 5ml water; give 2.5ml	100mg od (250mg tabs)	8ml bid	9ml bid	4-4.9		
5-5.9	2ml bid	2ml bid				15mg bid: open 30mg capsule into 5ml water; give 2.5ml	175mg od (1750mg + 1025mg tabs)			5-5.9		
6-6.9	2ml bid	2ml bid				15mg bid: open 30mg capsule into 5ml water	175mg od (1750mg + 1025mg tabs)			6-6.9		
7-7.9	4ml bid	4ml bid	200mg/100mg (200/100 tabs)	2ml bid	1.5ml bid	15mg bid: open 30mg capsule into 5ml water	100mg od (250mg tabs)	10ml bid	1 cap bid OR 12ml bid	7-7.9		
8-8.9	4ml bid	4ml bid								15mg bid: open 30mg capsule into 5ml water	175mg od (1750mg + 1025mg tabs)	8-8.9
9-9.9	4ml bid	4ml bid								15mg bid: open 30mg capsule into 5ml water	175mg od (1750mg + 1025mg tabs)	9-9.9
10-10.9	6ml bid OR 2x60mg tabs bid	12ml od OR 6x60mg tabs od								200mg/100mg (200/100 tabs)	2ml bid	1.5ml bid
11-11.9	6ml bid OR 2x60mg tabs bid	12ml od OR 6x60mg tabs od	200mg/100mg (200/100 tabs)	2ml bid	1.5ml bid	20mg bid: open 30mg capsule into 5ml water (if the child is unable to swallow a capsule)	175mg od (1750mg + 1025mg tabs)	1 tab am 1/2 tab pm OR 15ml bid	2 caps am 1 cap pm OR 15ml bid	11-11.9		
14-14.9	8ml bid OR 2x60mg tabs bid	8x60mg tabs od OR 1x300mg tab od OR 15ml od	1x150mg tab bid OR 8x60mg tabs od	1x150mg tab od OR 15ml od	2x150mg tab od OR 1x300mg tab od	200mg/100mg (200/100 tabs)	2ml bid	2.5ml bid	200mg od (250mg tabs)	14-14.9		
17-19.9	8ml bid OR 2x60mg tabs bid	1x300mg tab + 1x60mg tab od OR 15ml od	1x150mg tab bid OR 8x60mg tabs od	1x150mg tab od OR 15ml od	2x150mg tab od OR 1x300mg tab od	200mg/100mg (200/100 tabs)	2.5ml bid	2.5ml bid	200mg od (250mg tabs)	17-19.9		
20-22.9	10ml bid OR 2x60mg tabs bid	1x300mg tab + 1x60mg tab od OR 15ml od	1x150mg tab bid OR 8x60mg tabs od	1x150mg tab od OR 15ml od	2x150mg tab od OR 1x300mg tab od	200mg/100mg (200/100 tabs)	2.5ml bid	2.5ml bid	200mg od (250mg tabs)	20-22.9		
23-24.9	10ml bid OR 2x60mg tabs bid	1x300mg tab + 1x60mg tab od OR 15ml od	1x150mg tab bid OR 8x60mg tabs od	1x150mg tab od OR 15ml od	2x150mg tab od OR 1x300mg tab od	200mg/100mg (200/100 tabs)	2.5ml bid	2.5ml bid	200mg od (250mg tabs)	23-24.9		
25-29.9	1x300mg tab bid	2x300mg tabs od OR 1x600/300mg tab od	1x150mg tab bid	1x150mg tab od OR 1x300mg tab od	2x150mg tab od OR 1x300mg tab od	400mg/200mg (200/100 tabs)	2ml bid	2ml bid	200mg od (250mg tabs)	25-29.9		
30-34.9	1x300mg tab bid	2x300mg tabs od OR 1x600/300mg tab od	1x150mg tab bid	1x150mg tab od OR 1x300mg tab od	2x150mg tab od OR 1x300mg tab od	400mg/200mg (200/100 tabs)	2ml bid	2ml bid	200mg od (250mg tabs)	30-34.9		
35-39.9	1x300mg tab bid	2x300mg tabs od OR 1x600/300mg tab od	1x150mg tab bid	1x150mg tab od OR 1x300mg tab od	2x150mg tab od OR 1x300mg tab od	400mg/200mg (200/100 tabs)	2ml bid	2ml bid	200mg od (250mg tabs)	35-39.9		
>40	1x300mg tab bid	2x300mg tabs od OR 1x600/300mg tab od	1x150mg tab bid	1x150mg tab od OR 1x300mg tab od	2x150mg tab od OR 1x300mg tab od	400mg/200mg (200/100 tabs)	2ml bid	2ml bid	200mg od (250mg tabs)	>40		

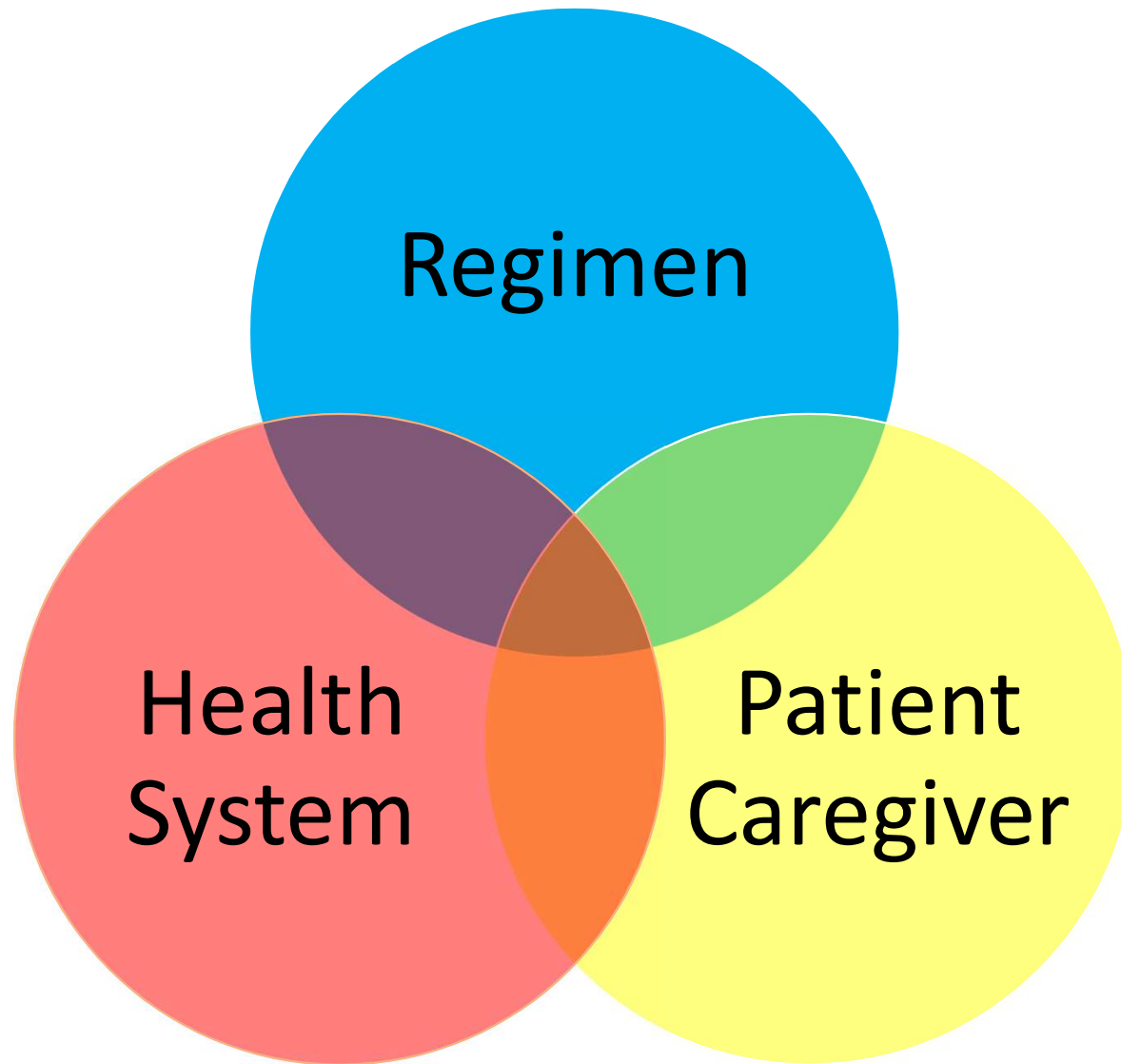
od :: once a day
bids :: twice a day
od :: once a day
bids :: twice a day

* Avoid LPV/r solution in any full term infant <14 days of age and any premature infant <14 days after their due date of delivery (40 weeks post conception) or obtain expert advice.
Children 25-34.9kg may also be dosed with LPV/r 200/50mg adult tabs: 2 tabs am; 1 tab pm

Weight (kg)	3-4.9	5-9.9	10-13.9	14-29.9	>30
Co-trimoxazole Dose	2.5ml od	5ml od	5ml od	10ml or 1 tab od	2 tabs od
Multivitamin Dose	2.5ml od	2.5ml od	5ml od	5ml od	10ml or 1 tab od

PHARMACY

PATIENT



Regimen

Health
System

Patient
Caregiver



Tablets
and
Timing

- No of tablets
- No times/day

Side
Effects

Tolerability

- Disease-related

Health System Related Factors





Attitude

Explanations

Errors

Services

Waiting
times

STOP
STOCKOUTS

Stock
Outs

Food
Insecurity

Conflict in
the Home

Unwell
Caregivers



Change in
caregivers

Lack of
Support

Substance
Abuse

**MENTAL
HEALTH**

ACCEPTANCE

FORGETTING

**PILL
FATIGUE**

STIGMA

DISCLOSURE



ABACAVIR (ABC) 20 mg/ml



LAMIVUDINE (3TC) 10mg/ml



KALETRA (LPV/r) 80/20mg/ml



ZIDOVUDINE (AZT) 10mg/ml



RITONAVIR (RTV) 80mg/ml



NEVIRAPINE (NVP) 10mg/ml



CO-TRIMOXAZOLE 80mg/ml



MULTIVITAMIN SYRUP



TASTE

- Order of syrups
- Mix syrups
- Mix with food/milk
- Peanut butter
- PILL SWALLOWING



TIMING

- BD ≠ 12 hourly

STORAGE

- Fridge
- Out of fridge for 6 weeks
- Alternative solutions

Children....

- Acceptance of status

- Often new diagnosis
- Impact on mental health, relationships
- Treatment of parents

- Disclosure

- To Family Members
- To the child



Adolescents....

- Timing/Forgetting

- Choose convenient times
- Same time as other family members
- Flexibility
- Ideas to assist remembering tablets

- Side Effects

- Lopinavir/ritonavir
- Efavirenz



Adolescents....

- Mental Health

- Common
- Affects adherence
- High Index of suspicion
- Lack of services

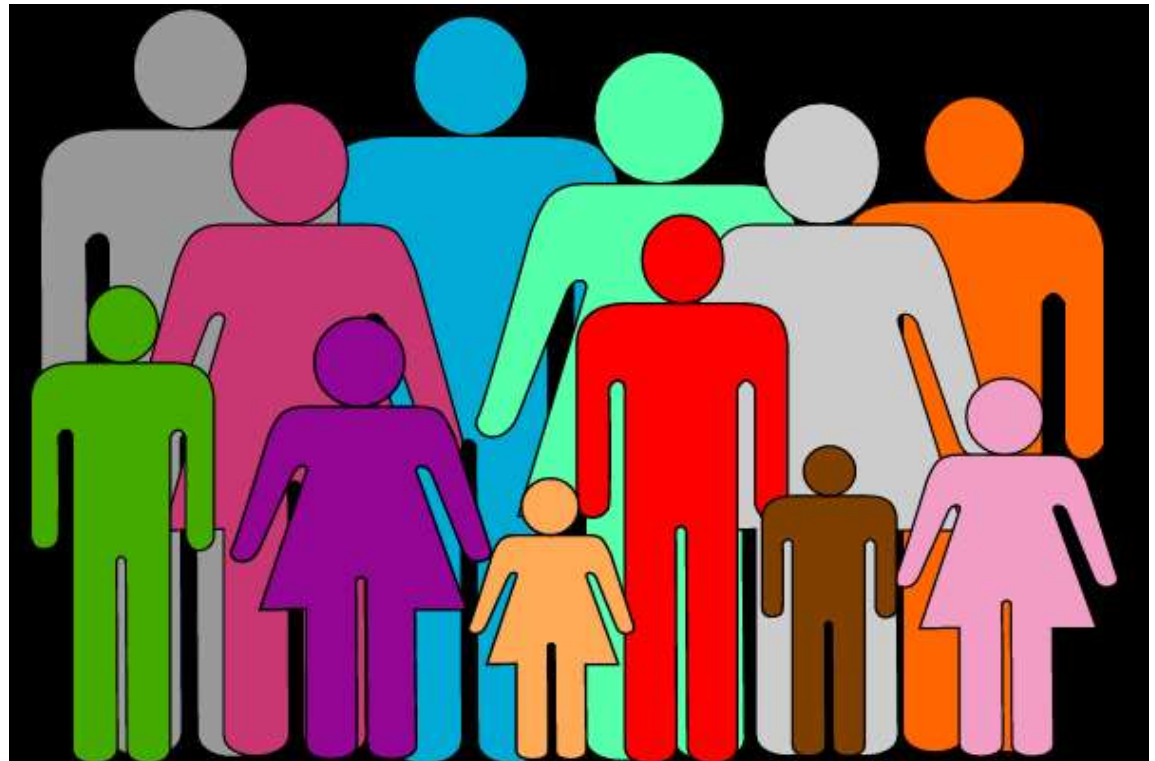


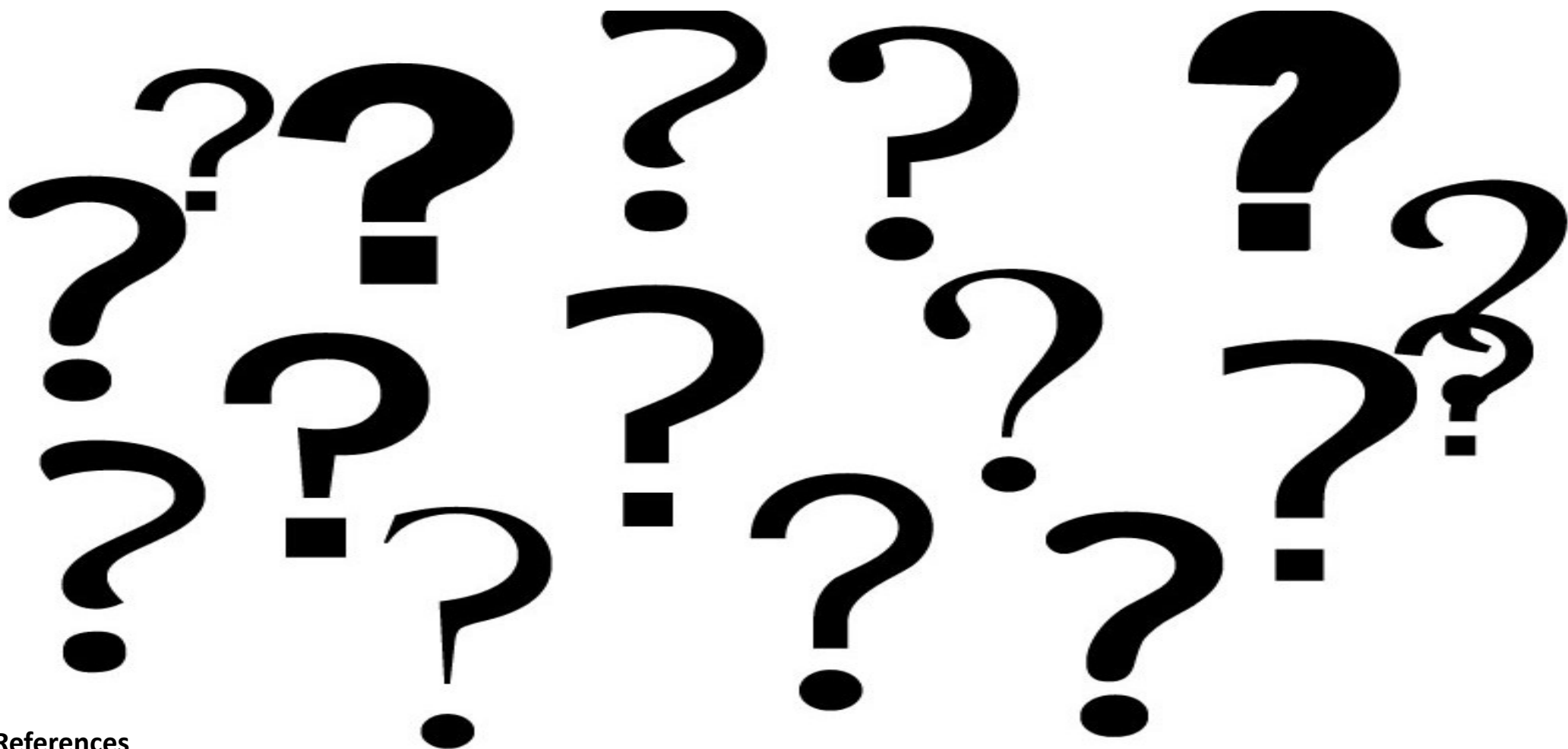
- Support

- Caregivers
- Medication
- Speak Openly

In Conclusion...

- Adherence is Multifactorial
 - Regimen
 - Health System
 - Patient/Caregiver
- Solutions specific to needs of each family





References

MSF (2018) *Paediatric Risk of Treatment Failure: a guide to programmatic implementation*. Available at: <https://samumsf.org/sites/default/files/2018-10/HIV%20Paediatric%20HIV%20Risk%20of%20Treatment%20Failure.pdf>. (Accessed 07 May 2019).

Colleagues at Rahima Moosa Mother and Child Hospital and Right to Care

<https://medium.com/100-naked-words/the-abuse-of-question-marks-67-c0ef353a00f6>