ART adherence experiences of people living with HIV receiving a point-of-care adherence assay versus standard of care: qualitative data from Cape Town, South Africa

Mcinziba A, Wademan D, Viljoen L, Myburgh H, Jennings L, Decloedt E, Orrell C, van Zyl G, Nkantsu Z, van Schalkwyk M, Gandhi M, and Hoddinott G.



Desmond Tutu TB Centre
Department of Paediatrics and Child Health
Stellenbosch University



Background

- South Africa has the largest HIV epidemic in the world, with an estimated 8.2 million PLHIV in 2021.
- Efforts were made to scale up the availability of ART to achieve viral load suppression among PLHIV and reduce transmission.
- But still, only ~67% of all PLHIV were estimated to be accessing ART care in South Africa.
- Optimal ART adherence requires close adherence monitoring that includes early detection of patients at risk of treatment failure.
- However, ART adherence support is premised on patients' selfreported adherence (which can be unreliable) and verified by blood viral loads measurement (which is costly and with results not available in real-time).

The UTRA trial



- A randomized controlled trial is investigating the utility, feasibility, and acceptability
 of the UTRA as an adherence support tool.
- The study recruited 200 PLHIV taking TDF-based ART at risk of virologic failure (i.e., being late for refills, or returning to care after disengaging from service).
- Participants were enrolled 1:1 to the UTRA intervention versus adherence standard of care.
- Standard of care package: A VL driven counselling session with a clinician and peer counselling session
- Intervention package: Real-time urine adherence results, counselling, and education plus standard of care services.

Every breath counts

Socio-behavioral science work

Nested as a qualitative component to the UTRA parent trial.

 Aim: To describe the ART adherence support experiences of PLHIV receiving a point-of-care adherence assay versus standard of care.



Methods and data collection

Setting

 Hannan Crusaid Treatment Centre - a primary health care facility in Gugulethu, Cape Town, South Africa with more than 18000 patients initiated on ART in the past decade and more than 8500 currently enrolled

Sample	Gender		
	Male	Female	Total
Intervention	4	10	14
Control	6	5	11
Average age	39	35	-
Total	10	15	25



Methods and data collection

Data collection

- PLHIV participants were invited for interviews during parent study visit.
- We conducted a series of three longitudinal in-depth qualitative interviews with the
 25 PLHIV participants (a total of 75 interviews).
- <u>Timeframe:</u> April 2022 May 2023.

Data processing

 Data was processed through descriptive case summaries: included key emergent themes that were illustrated with examples and quotes from interviews.

Data Analysis

Constant Comparative Analysis: a grounded theory methodology identifying relevant texts from processed qualitative data, grouping them into codes and themes, and looking at the commonalities and differences in behaviour, and experiences of individuals.

Findings – contextual background

- We found that people's lives are difficult and that complicates their adherence.
- Participants reported that the socio-economic challenges were interfering with their adherence prior and during enrolment into the study.
- Challenges include food insecurity, side effects of medication, stress of daily life challenges, and alcohol consumption.
- However, those in the intervention arm had different adherence experiences compared to those in the control arm.
- Adherence experiences i.e., adherence support experiences (accountability, motivation, education and counselling, gaps)

Findings – accountability

Intervention	Control
People reported that since their first experience of the UTRA, they fear accountability and make alternatives to overcome barriers to ART,	People reported that they self-relied on themselves or family members for adherence accountability.
"When I got home, I told them that this is what [UTRA] will force me to stick to treatment because if I miss doses, it will report that I don't take them well. No chance to lie. That's why I just told myself that I should take them consistently so that when I come to the next visit, I come with my heart at ease" (39-year-old, woman, TDF present, 20230313).	"Even my sister, she likes to just come to me and be like 'Hey how is treatment treating you now? What's new? Can I see your things [clinic cards and appointment dates, and medication]?' and I'd show her. At the clinic they don't usually ask those things" (37-year-old, woman, 20221128).

Findings – motivation

Intervention	Control	
Participants reported that the immediate results offered by the UTRA empowered their adherence to ART in a sense that the test "acknowledges" that they are responsible with treatment.	Participants reported that, at times, they do not value honoring clinic appointments over other competing priorities because they are not always "applauded" and told when their adherence levels improved.	
"When I first tested [with UTRA] it felt good knowing that I'm taking treatment right. It shows that I value myself and I told myself I won't stop. This is good because it gave me purpose and a reason to take medication" (28-year-old, woman, TDF present, 20221122).	"They don't talk to us [nurses] about what's going on. No one says, 'Amos you picked up now, well done'. It's only when you do bad [treatment failure] then they just change your pills and send you to the counselling classes. Just like now, I'm coming from there. I didn't come on my date. I was busy with a piece job" (55-year-old, man, 20220924).	

Findings – counselling and education

Intervention	Control
Participants reported that the UTRA test offered them time to have adherence discussions with health workers related to their adherence challenges.	Participants reported that "no one says anything" about their adherence challenges particularly those who had not disclosed their HIV status or without supportive relatives.
"One of the nurses once said to me 'Brother even if you drink alcohol, you must still drink your ARVs. The ARV pill goes on its own place and the Savanna goes to its own place'. From that day I told myself that I should never have specific time to take doses as long as I take my medication even if I drank" (56-year-old, man, TDF present, 20230214).	"I only live with my grandchild. It's stressful because ever since my older son passed on I just think of that and sometimes forget pills. It's better when my other son is around from school we talk and he asks me how I'm doing on medication [tertiary resident]" (47-year-old, woman, 20220918)

Findings – gaps

Intervention	Control
Participants reported that the UTRA is not effective enough to help them overcome some adherence challenges such as ART side effects.	Participants reported that the HIV/ART support systems need improvements that goes beyond than just monitoring their adherence.
"First results showed I'm taking pills but now that changed. I don't take the morning ones [ARVs] because they cause running stomach so I can't promise I'll take them unless I get something to stop that or maybe take them with the ones I eat at night?" (42-year-old, woman, TDF absent, 20220826)	"I can't take medication when I didn't eat and my grandchildren are suffering, I need to sacrifice food for them. I'd be happy if the clinic can provide food parcels maybe things might change" (59-year-old, woman, 20220615)

Conclusion

 People were not always adherent to treatment, challenges and changes in life conditions prevailed and shaped their adherence patterns.

 Our data show that the UTRA, by allowing immediate results and opportunities for education and counselling, has the potential to hold patients accountable and motivate them towards adherence.



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Thank you for listening

