



Non-disclosure of prior antiretroviral therapy exposure among treatment initiators in South Africa

BACKGROUND

- ◆ South Africa suffers high frequencies of antiretroviral therapy (ART) treatment interruptions and disengagement from care.
- ◆ Many clients returning to care after an interruption or disengagement are reluctant to self-report prior exposure and instead present as ART-naïve.
- ◆ As the existing electronic medical record (TIER.Net) system does not fully capture prior exposure, we estimated proportions of actual prior exposure and explored barriers to self-reporting prior ART use.

METHODS

- ◆ We enrolled a sequential sample of adults presenting to initiate ART or re-initiate ART after an interruption >3 months at three clinics in Mpumalanga, KwaZulu-Natal, and Gauteng provinces.
 - ◆ Clients self-reporting ART use in the past 3 months were excluded.
- ◆ We collected:
 - ◆ **Self-reported** previous treatment experience at any time (Self);
 - ◆ **Electronic medical records** from facilities indicating evidence of prior ART clinic visits or dispensing at any time (EMR);
 - ◆ **Dried blood spot testing** for metabolites of tenofovir diphosphate, which are typically detectable for ~90 days (Metabolite); and
 - ◆ **Laboratory records** of HIV viral load tests (VL) which, if undetectable, indicate prior ART use at any time (Lab).
- ◆ We were **not** able to collect baseline (initiation) viral load results which, if undetectable, indicate recent ART use.
- ◆ Qualitative interviews were conducted with a sub-sample of clients who self-reported no prior ART use but had evidence of ART metabolites.

QUANTITATIVE FINDINGS

- ◆ Enrolled 89 participants (median age 33, 62% female).
- ◆ 16/89 (18%) self-reported previously taking ART but with a current interruption of >3 months.
- ◆ An additional 33 clients not self-reporting prior exposure had EMR or laboratory evidence of prior ART use.
- ◆ **A total of 40 (45%) of participants had at least one indicator of prior ART use.**
- ◆ 40% of participants had non-concordant indicators; prior lab tests in laboratory records were the most common indicator.
- ◆ 24 of 73 (33%) participants who self-reported never having taken ART had other indicators of prior use.
- ◆ Sensitivity of self-report was 40%, of EMR records 43%, of metabolite testing 45%, and of prior VL 73% (Table 1).

Figure 1. Proportions ART-naive vs. ART-experienced at initiation, by indicator of prior exposure (n=89)

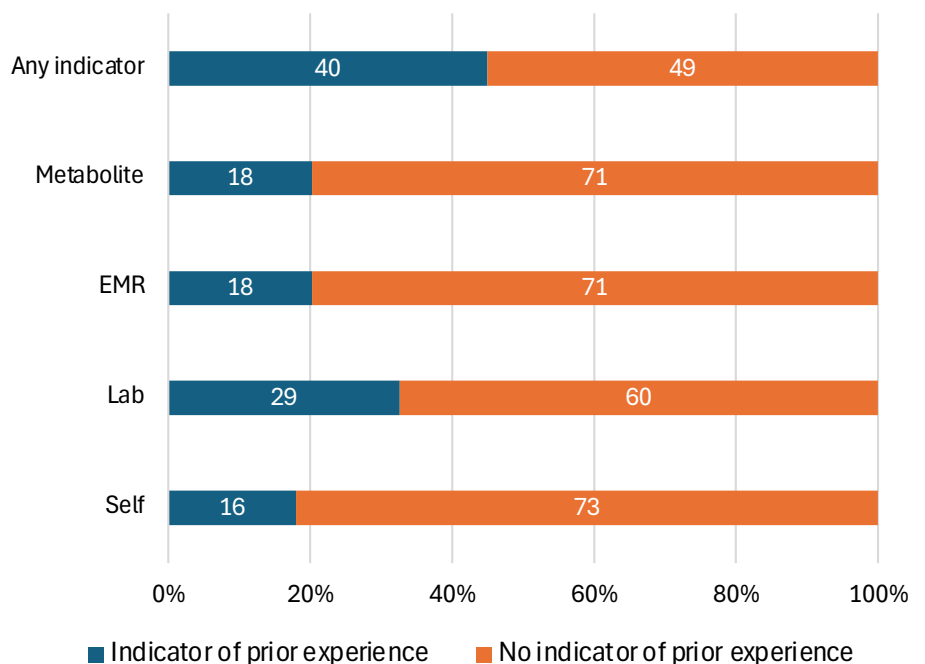


Table 1. Sensitivity and negative predictive value (NPV) of prior treatment exposure indicators

INDICATOR	Sensitivity	NPV
Self-report	40%	67%
Laboratory record of prior VL	73%	82%
EMR prior evidence	43%	68%
TDF metabolite	45%	69%
Self-report + Laboratory record of prior VL	75%	83%
Self-report + EMR prior evidence	45%	69%
Self-report + TDF metabolite	75%	83%
Laboratory record of prior VL + EMR prior evidence	80%	86%
Laboratory record of prior VL + TDF metabolite	95%	96%
EMR prior evidence + TDF metabolite	75%	83%

QUALITATIVE FINDINGS

- ◆ In qualitative interviews (n=11), clients either denied prior exposure (n=3), attributed metabolite presence to PrEP use (n=1), or explained that presenting as naïve is preferable for the patient (n=7).
- ◆ Respondents perceived that disclosure of prior ART use would cause delays accessing treatment, require additional documentation, and cause negative behavior from healthcare workers.



“I started treatment in 2017, but I stopped taking them because I had an issue with the nurse. I had skipped my next scheduled appointment, and when I went back to the clinic the nurse mistreated me so I decided to stop going to the clinic. I was in the queue the entire day and when I was in front of the queue, then she told me because I had missed my date I will have to go to the back she will attend me at last and I had asked at work so I was not treated well then, I stopped.”

“It just that the issue of job opportunities I move around a lot, so wherever I am at that point in time when I need treatment I go to the nearest clinic where I present myself as a new patient to avoid delays and asked a lot of questions. So, in order for me to access treatment easily without being shouted at or asked many questions or required documents such as transfer letters from previous clinics that may lead me not to get treatment, I just test then start treatment. So, this becomes an easy way to get treatment.”

CONCLUSIONS

- ◆ At least 45% of clients initiating ART in South Africa have prior treatment experience, but fewer than one out of five re-initiators voluntarily reveal this.
- ◆ Modeling studies estimate that the true proportion of clients initiating ART with prior treatment experience may be as high as 80%.
- ◆ Lab records of prior VL tests and EMR records, which reflect long-term experience, yielded the most accurate results for prior treatment exposure.
- ◆ As numbers re-engaging in HIV care after a treatment interruption increase, understanding reluctance to self-report ART experience and exploring opportunities to overcome barriers are critical for preventing repeated interruptions and targeting interventions.