Non-disclosure of prior antiretroviral therapy exposure among treatment initiators in South Africa: estimates and barriers

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More than half of patients presenting for ART initiation have **prior treatment experience,** but only a third voluntarily self-report re-engaging in HIV care**.** Clients feared that disclosure of prior ART use would cause **delays accessing treatment** and potential negative behavior from healthcare workers.

BACKGROUND

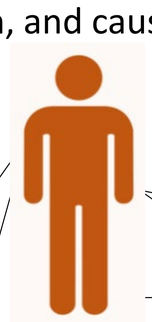
- South Africa suffers high frequencies of antiretroviral therapy (ART) treatment interruptions of >3 months.
- Many clients returning to care after an interruption are reluctant to self-report prior exposure and instead present as ART-naïve.
- Because the existing electronic medical record (EMR) system does not fully capture prior exposure, we estimated actual prior exposure proportions and explored barriers to self-reporting prior ART use.

RESULTS: QUANTITATIVE

- Enrolled 89 participants (median age 33, 62% female).
- 16/89 (18%) self-reported previously taking ART but with a current interruption >3 months.
- An additional 33 clients not self-reporting prior exposure had EMR or laboratory evidence of prior ART use.
- **A total of 49 (55%) 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.
- Of 73 self-reporting never having taken ART, 24 (33%) had other indicators of prior use.
- Gender, age, and location were not associated with a detectable TDF metabolite result.
- Sensitivity of self-report was 33%, of EMR records 61%, of metabolite testing 39%, and of VL 62%.

RESULTS: QUALITATIVE

- 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."

METHODS

We enrolled a sequential sample of adults presenting to initiate or re-initiate ART after an interruption >3 months at three clinics. We collected:

1) Self-reported previous treatment experience (Self);
2) Electronic medical records from facilities indicating evidence of prior ART clinic visits or scripting (EMR);
3) Dried blood spot testing for metabolites of tenofovir diphosphate (TDF), which are typically detectable for ~90 days (Metabolite); and
4) Laboratory records of HIV viral load tests (VL) which, if undetectable, indicate recent ART use (Lab).

Clients self-reporting ART ≤3 months were excluded from study. Interviews were conducted with a sub-sample of clients who self-reported no prior ART use but had evidence of ART metabolites.

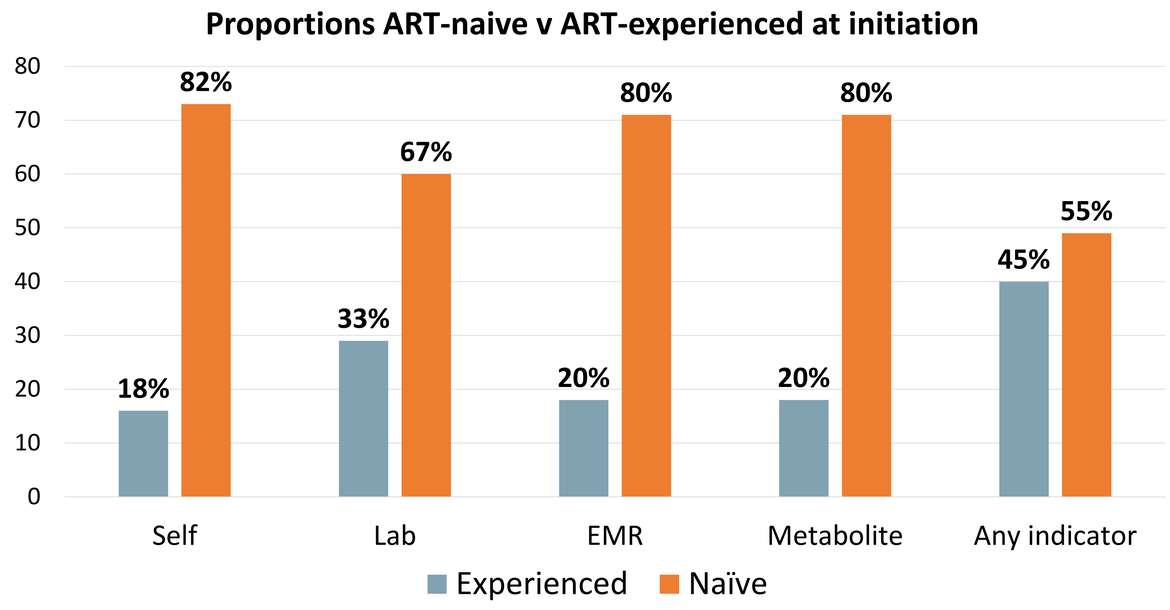


Table: Sensitivity and negative predictive value (NPV) of prior treatment exposure indicators

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%

CONCLUSIONS

- At least 55% of clients initiating ART in South Africa have prior treatment experience, but only 1/3 of re-initiators voluntarily reveal this.
- EMR records, which reflect long-term experience, and VL, which shows recent ART use, 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.

Further information about the study sites and populations can be found at sites.bu.edu/ambit

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