

Acceptability, motivations and attitudes towards analytical treatment interruptions in HIV cure trials in people living with HIV and their healthcare providers in Australia

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Background:

Some HIV cure trials employ Analytical Treatment Interruptions (ATI) to gauge the efficacy of new treatments. In 2017, we conducted surveys that identified significant medical and ethical challenges for people living with HIV (PLHIV) and their healthcare providers (HP). This research aimed to understand current motivations, attitudes and acceptability of ATI for PLHIV and HP in Australia.

Methods:

Anonymous online surveys were developed for PLHIV and HP in collaboration with local community-based HIV organisations. Surveys were distributed via mailing lists, social media posts and through a local HIV cure volunteers newsletter. Responses were collected from April to August 2025 and were compared using Pearson's Chi-squared test. A multivariate logistic regression model was used to determine predictors of willingness to participate in ATI in PLHIV.

Results:

184 PLHIV responded, median age 49 (range 20-82), 79% male. 106 HP responded, majority Infectious Diseases Specialists in tertiary hospitals. PLHIV were significantly more optimistic regarding cure prospects than HP, with 63 (45%) thinking cure achievable within 10 years compared to 18 (18%) HP ($p < 0.001$). Awareness of ATI was significantly higher among HP, $n = 72$ (72%) than PLHIV, $n = 71$ (50.4%) ($p < 0.001$) but is unchanged since 2017 ($p = 0.3$). Most PLHIV and HP agreed that ATI is necessary $n = 103$ (74%) PLHIV vs $n = 64$ (70%) HP and ethical $n = 93$ (70%) PLHIV vs $n = 63$ (68%) HP. PLHIV were significantly more concerned than HP about all potential risks ($p < 0.001$). In the regression analysis awareness of ATI was the only significant predictor of willingness to participate in ATI (OR 5.43, $p = 0.002$).

Conclusion:

Awareness of ATI has not changed since 2017, highlighting the need for ongoing accessible community engagement. While ATI was thought necessary, significant concerns about the risks remain, particularly among PLHIV. Researchers must

actively address safety concerns from PLHIV and HP when designing and conducting HIV cure focused clinical trials.

Disclosure of Interest Statement:

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