

PREP DISCONTINUATION AMONG ADOLESCENTS PREP USERS IN BRAZIL

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BACKGROUND

PrEP discontinuation is a challenge for PrEP programs as HIV seroconversion usually occurs in these stopping periods. Several studies with adult men who have sex with men (MSM) and transgender women (TGW) have been published, but it is still scarce for adolescent MSM (aMSM) and TGW (aTGW). Therefore, this study aims to analyze factors associated with PrEP discontinuation.

METHODS

PrEP1519 is the first PrEP demonstration cohort study in Latin America among aMSM and aTGW aged 15-19 years. It takes place in 3 large Brazilian capital cities. We included individuals enrolled in PrEP from February 2019 to September 2021. PrEP discontinuation was defined as no possession of PrEP pills for more than 90 days. Participants who seroconverted or possessed PrEP were right censored. Probabilities of non-discontinuation were estimated using Kaplan Meier. The survival distributions defined by covariates were compared using log-rank and Wilcoxon tests. Cox regression models were carried out, and adjusted hazard ratios (aHR) with 95% confidence interval (CI) were estimated.

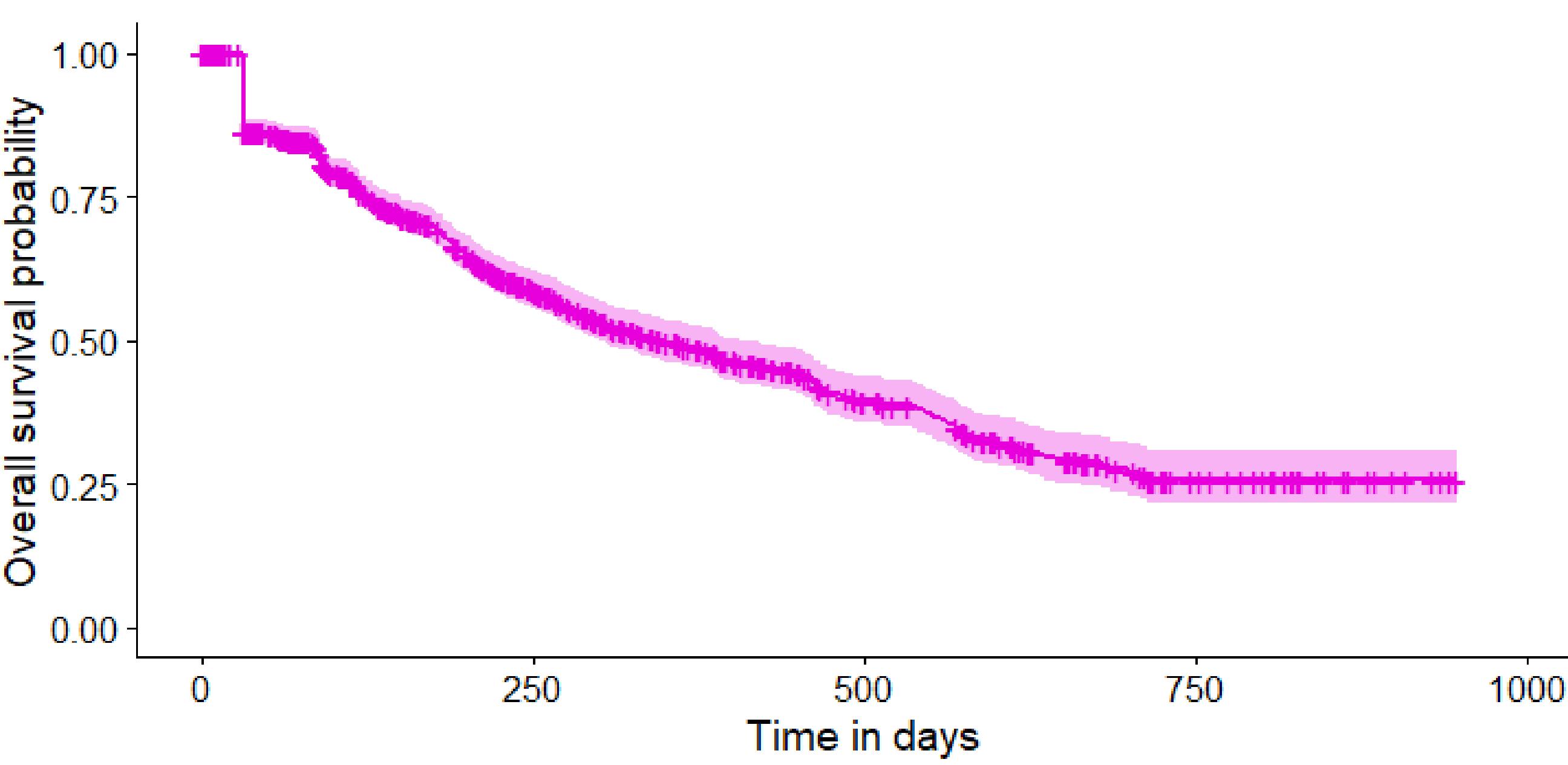


Figure 1. Kaplan Meier curve. PrEP1519 cohort

PrEP discontinuation is higher among adolescents with medium and low-risk perception for HIV infection, and among adolescent transgender women.

RESULTS

A total of 1146 participants started PrEP, 22% were 15-17 years old. Most were aMSM (91.5%) and self identified as black/brown (70.4%). Over the study period, 53.4% were persistent users and almost half discontinued PrEP (46.6%). The probability of discontinuation within the first 12 weeks was 20.1% and the probability of discontinuation at first year was 51.8% (Figure 1).

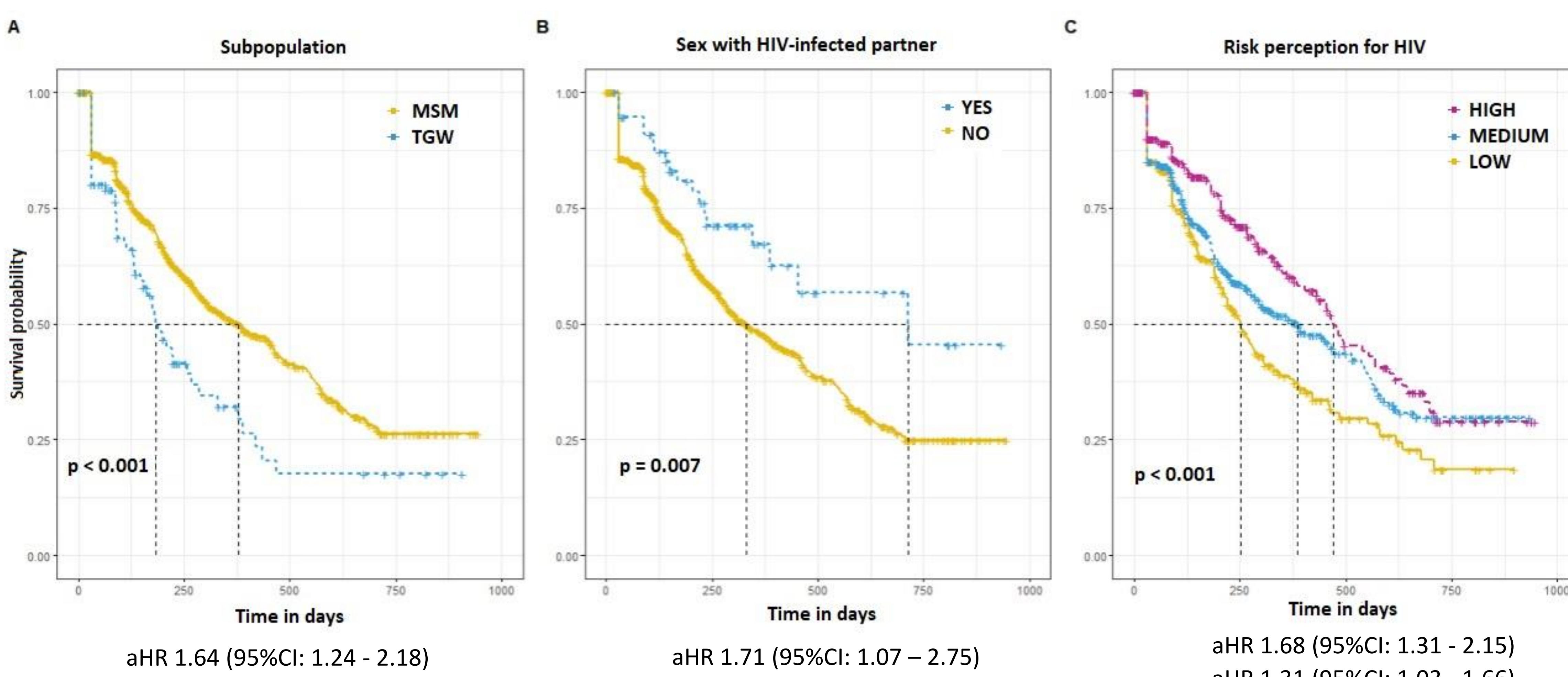


Figure 2. Kaplan Meier curves and p values for the equality test of survivor functions for A) Subpopulation: MSM and TGW B) Sex with HIV-infected partner C) HIV risk perception; aHR from Cox regression models

Multivariate analysis showed that risk of discontinuation increased 64% in aTGW (aHR: 1.64; CI: 1.24 - 2.18) when compared to aMSM; and increased 68% (aHR: 1.68; CI: 1.31 - 2.15) and 31% (aHR: 1.31; CI: 1.03 - 1.66) if the risk perception for HIV was low and medium, respectively, when compared with those with high-risk perception. Having an HIV-positive partner in the past 3 months was associated with a lower risk of discontinuation (aHR: 0.58; CI: 0.36 - 0.93) (Figure 2). Socioeconomic characteristics, housing situation and other sexual behaviors were not associated with discontinuation.

CONCLUSIONS

Adolescents' behaviors are dynamic and fluid; therefore, we must continually adapt to their context and respect their choices. The greater social vulnerability may have increased the risk of discontinuation in aTGW. PrEP discontinuation at an early stage was associated with a disconnection between risk perception and sexual behavior. It is important to emphasize the value of PrEP as an HIV prevention tool, especially for adolescents with medium and low-risk perceptions for HIV infection, and for aTGW.

ADDITIONAL KEY INFORMATION

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