

Awareness, preferences, and attitudes towards three types of pre-exposure prophylaxis among Chinese MSM: A national cross-sectional study

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Background

This study aimed to assess the knowledge and preferences of Chinese men who have sex with men (MSM) regarding long-acting injectable (LAI) pre-exposure prophylaxis (PrEP), as well as their attitudes and intentions towards three types of PrEP (daily oral, on-demand oral, and LAI-PrEP), and to provide a valuable reference for the implementation and promotion of PrEP among the MSM population in China.

Methods

Research type: A cross-sectional study;
Duration: From December 13 to 31, 2023;
Participants: Adult MSM self-reporting HIV status as negative or unknown;
Sample source: Local community-based organizations serving MSM from 20 cities across different regions in China;
Recruitment methods: Local VCT & Outreach activities & MSM peer referrals;
Sample size: 1,545, which was proportionate to the population density of each city;
Questionnaire: An internet-based electronic questionnaire, took an average of 16.19±8.2 minutes to complete;
Measurements: Socio-demographics, PrEP eligibility assessment, and PrEP-related cognitions, including preferences for the three types of PrEP and the reasons;
Quality control: Single participation restriction, IP address restriction, cipher code and screening questions.



Figure 1 Distribution map of 20 survey cities in China

Results

- The study included 1,545 participants with a mean age of 30.0 ± 7.5 years, and 89.3% of the participants had a history of HIV testing. Three-quarters (74.4%) perceived their risk of HIV infection as low or very low.
- According to the Chinese PrEP Expert Consensus 2023, 66.5% of participants were eligible for PrEP.
- The awareness rate of PrEP was 90.6%, and a quarter (22.1%) reported a PrEP use history.
- When PrEP can be provided for free, there were 36.4%, 75.5%, and 53.6% of the participants reported a willingness to use daily oral, on-demand oral, and LAI-PrEP, respectively; these numbers were reduced substantially with the market price.
- Participants perceived the on-demand oral PrEP to require less time (73.2%), lower cost (70.4%), higher convenience (69.5%), and better privacy (58.9%).

Table 1 Characteristics related to sexual behavior and PrEP (N=1545)

Items	n (%)
HIV test history	1380 (89.3)
Perceived risk of HIV infection	
High-risk	109 (7.1)
Medium-risk	286 (18.5)
Low-risk	1150 (74.4)
PrEP awareness	1400 (90.6)
Sources of PrEP information	
HCP ¹	241 (17.2)
Non-HCP	1159 (82.8)
PrEP experience	
Naive user	1204 (77.9)
Current user	105 (6.8)
Former user	236 (15.3)
Type of oral PrEP used²	
Daily PrEP	69 (20.2)
On-demand PrEP	263 (77.1)
Both	9 (2.6)
Satisfaction towards PrEP²	
Satisfied	294 (86.2)
Average	43 (12.6)
Unsatisfied	4 (1.2)
PrEP adherence²	
Used PrEP guideline by health care provider	202 (59.2)
HIV tested every three months as required	254 (74.5)

1. HCP=Health care practitioner.
2. Among the current/former users.

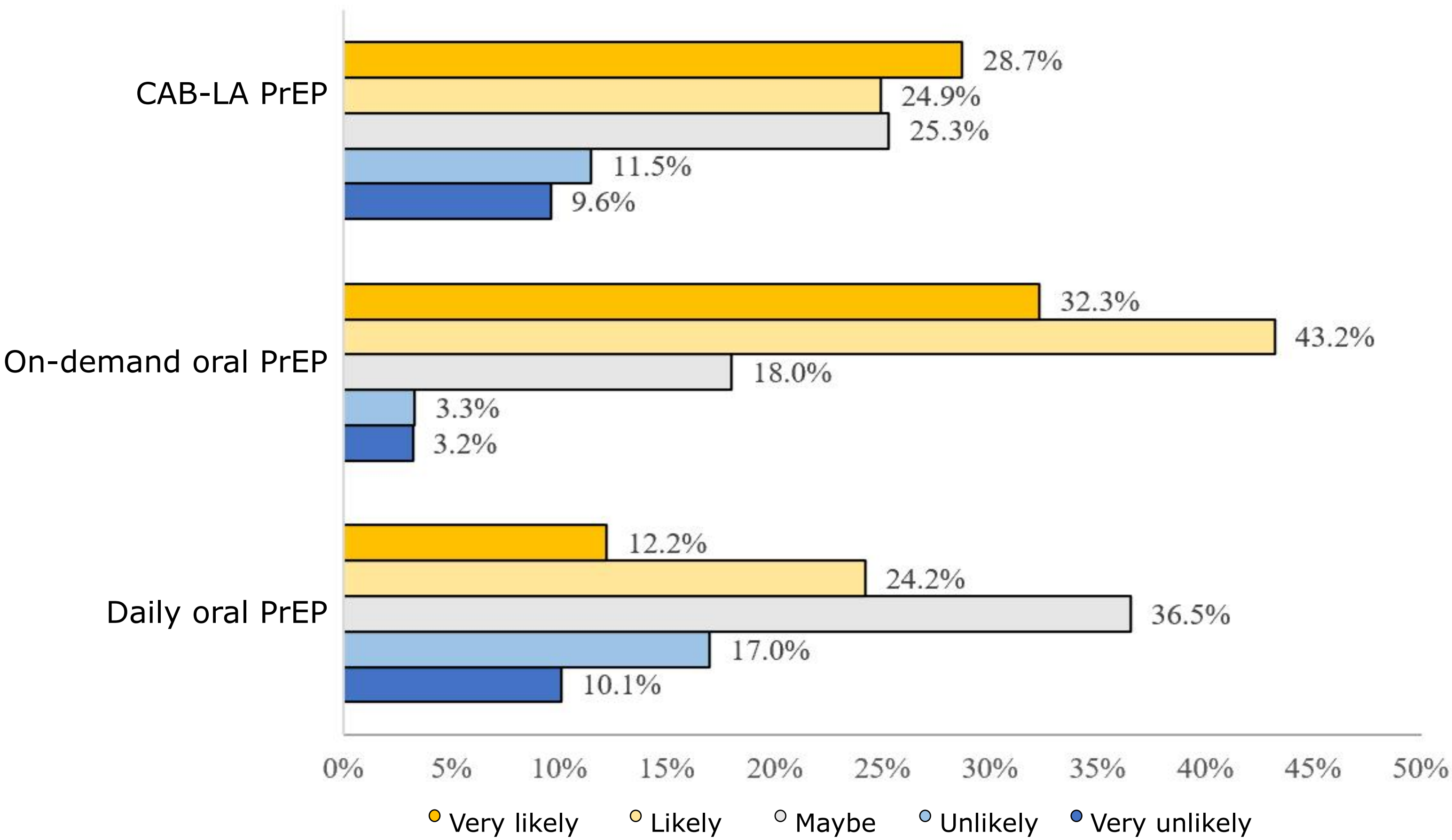


Figure 2. Willingness to use PrEP in the next six months (if provided for free)

Conclusions

Chinese MSM demonstrated a high level of awareness and interest in PrEP, with substantial preferences for on-demand oral and long-acting injectable PrEP. Factors such as convenience, cost, privacy, safety, and effectiveness influenced their preferences. Individual preferences and characteristics should be considered when implementing and promoting PrEP among MSM in China.

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