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Effectiveness and medication adherence of daily and event-driven pre-exposure prophylaxis regimens among Chinese men who have sex with men: A real-world *CROPrEP* study

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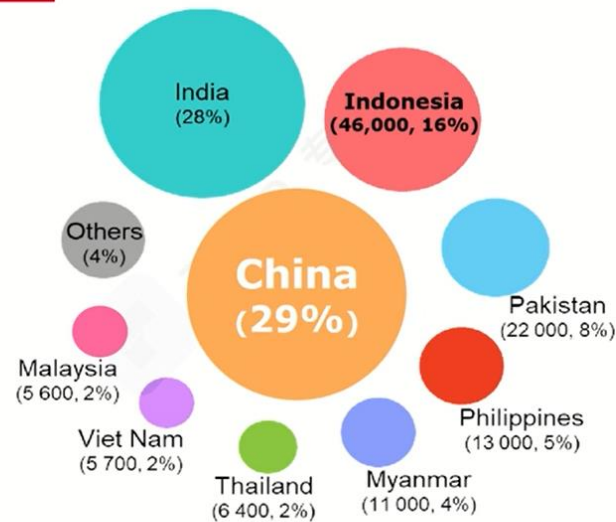
BACKGROUND

By the end of 2019, the estimated people living with HIV worldwide was 38 million.



BACKGROUND

China contributed the largest proportion of the burden of new HIV infections in Asia-Pacific region.

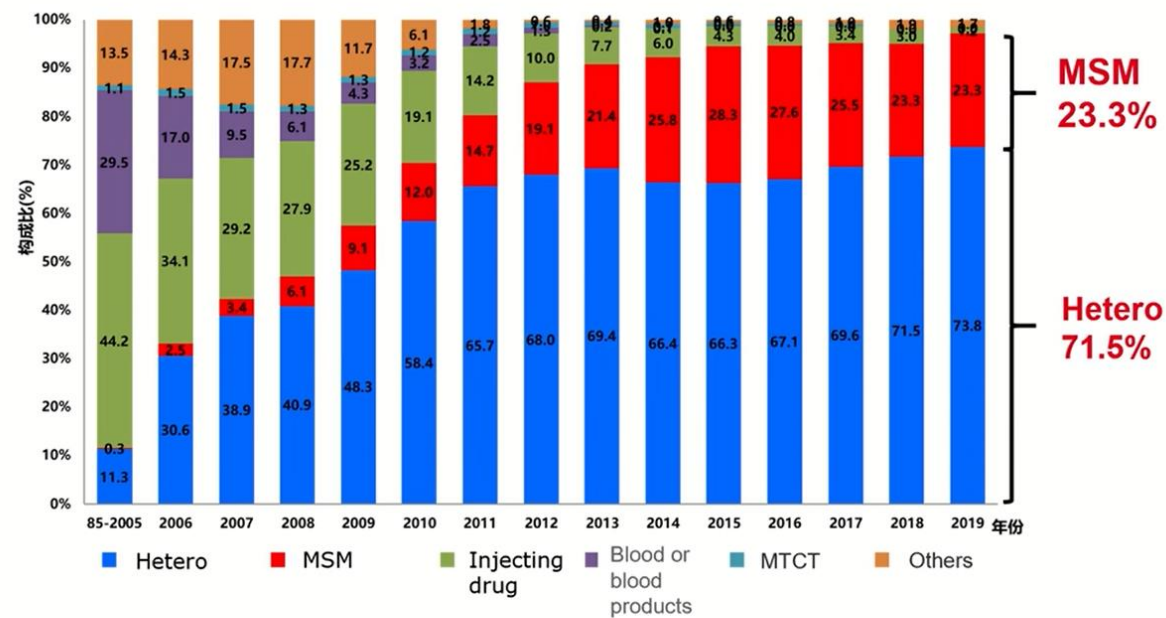


Distribution of new HIV Infections by country, 2018

Source: Prepared by www.aidsdatahub.org based on 2019 HIV Estimates

BACKGROUND

- Homosexual route showed a rapid increasing;
- HIV prevalence of MSM is higher than other high-risk populations.



BACKGROUND

- As of 1 May 2018, 35 countries or regions have policies related to oral PrEP.
- Until the beginning of this study, PrEP had not been approved for HIV prevention in mainland China due to the lack of local high-quality data to support the widespread implementation of PrEP.

Adoption of WHO oral PrEP recommendation and guideline development, June 2018



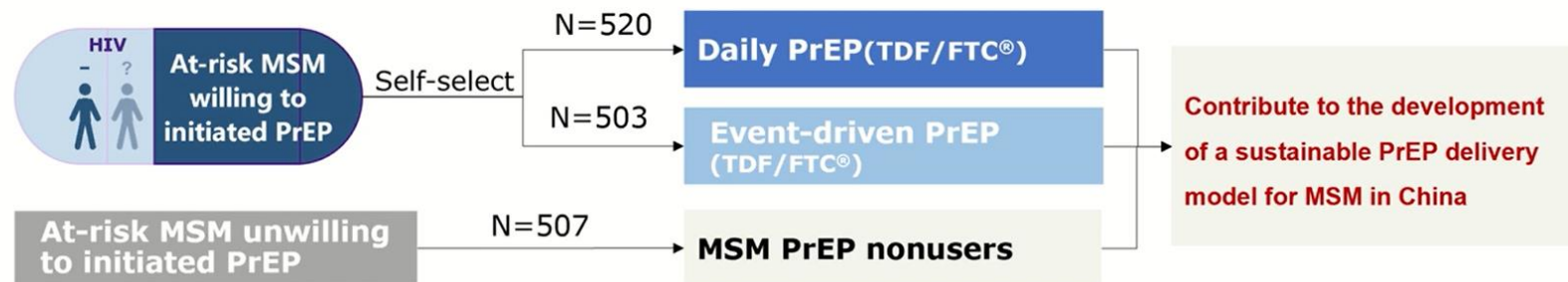
- **Update:** As a result of the evidence from our study, an expert consensus was issued to guide PrEP implementation in China in the end of 2020.

OBJECTIVES

We sought to evaluate the effectiveness and adherence of two PrEP regimens in the real-world study setting.

METHOD

Project name: China Real-world Orally intake PrEP (CROPrEP) **Registry number:** ChiCTR-IIN-17013762
Study period: December 2018 to October 2020 (Recruitment period Dec 2018 to Oct 2019).



Study Design:

Study sites: Shenyang, Beijing, Chongqing, Shenzhen.

Follow-up times: 12-months.

Follow-up time-point: 1, 3, 6, 9, 12 month.

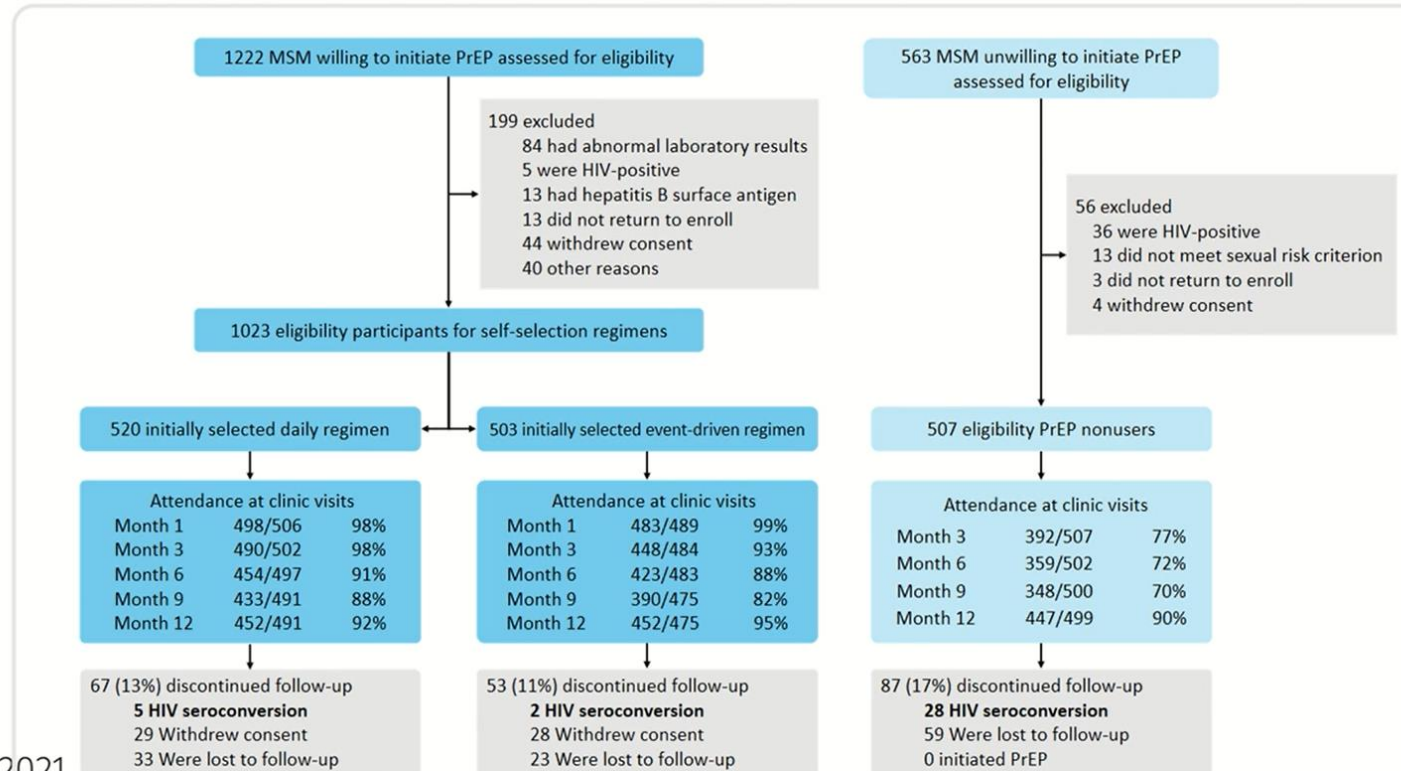


Details please see in protocol of the study. (Wang H et.al., *BMC Infect Dis.* 2019 Aug 15;19[1]:721.)



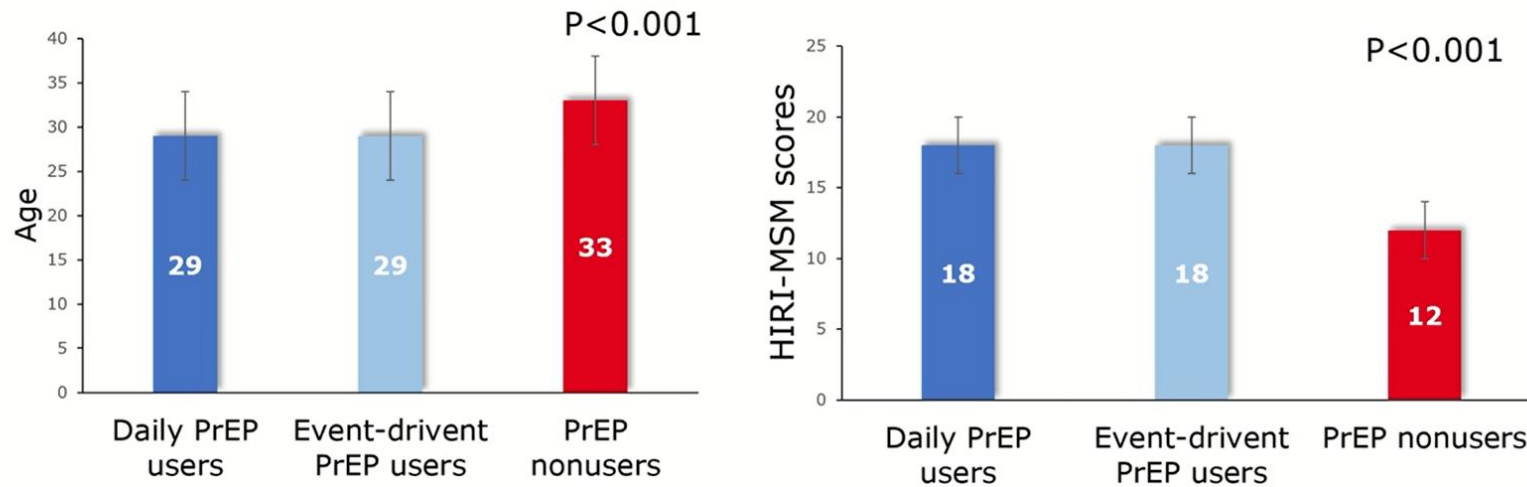
RESULTS

Flow chart of study



RESULTS

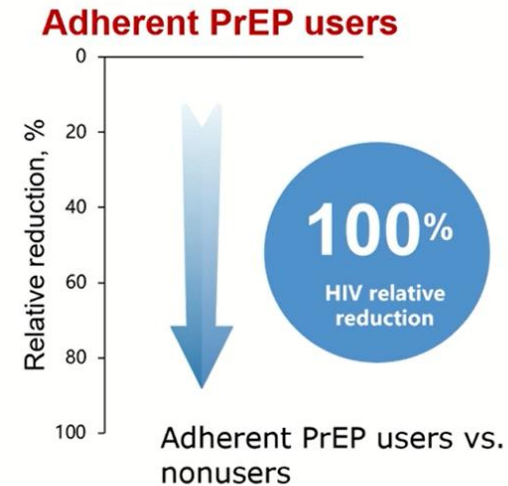
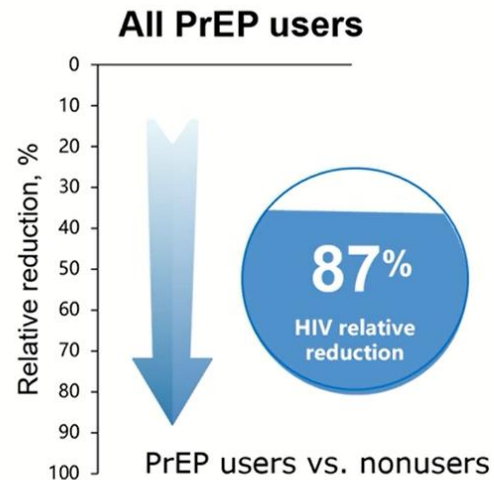
Baseline characteristics of PrEP users and nonusers



Compared with nonusers, PrEP users were younger and had higher scores for risk behaviors.

RESULTS

PrEP effectiveness

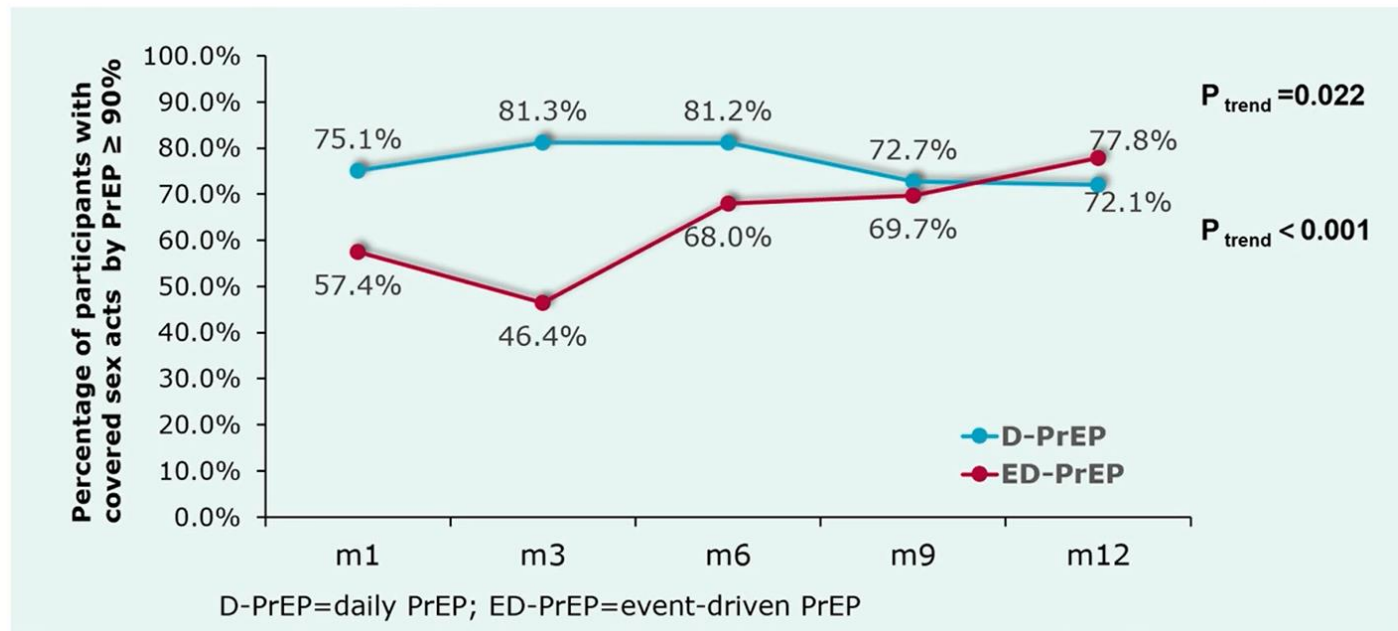


	HIV infection, n	Person-years of follow-up	Incidence rate per 100 PY (95%CI)
PrEP nonusers	28	548.6	5.10 (3.39-7.38)
Overall PrEP users	7*	1097.3	0.64 (0.26-1.31)
D-PrEP users	5	556.0	0.90 (0.29-2.10)
ED-PrEP users	2	541.2	0.37 (0.04-1.33)

RESULTS

PrEP adherence

The proportion of covered sex acts by PrEP $\geq 90\%$ increased over time in event-driven PrEP users, while the opposite trend was observed in the daily group.



CONCLUSIONS

- ✓ This real-world study showed that PrEP can effectively reduce HIV risk among MSM in China.
- ✓ Compared with the traditional daily medication regimen, the event-driven regimen has increased trend of medication adherence and a better HIV protective effect.
- ✓ Both daily and event-driven PrEP are effective, and well-adopted HIV prevention tools for high-risk Chinese MSM.

Thank you.