



Acceptability and real-life experience of doxyPEP in Men Who Have Sex With Men (MSM) at a combined HIV/PrEP clinic in a Southeast Asian university hospital

Background

Bacterial sexually transmitted Infections (STIs) have been consistently rising among MSM [1]. A study of MSM using HIV Pre-Exposure Prophylaxis (PrEP) showed that 25% participants accounted for 76% of all STIs [Figure1], often with multiple STIs in a single individual [2]. In Singapore, comprehensive STI screening can cost in excess of GBP200 (EUR240) and its uptake remains low. Recent studies showed that a single 200mg dose of doxycycline is effective in preventing syphilis, chlamydia and to a lesser extent gonorrhoea in MSM and transgender women [3]. In June 2024, US CDC published a guideline on the use of doxyPEP [4]. We hypothesized that discussing doxycycline Post Exposure Prophylaxis (doxyPEP) with HIV negative MSM using PrEP and MSM living with HIV at high risk of bacterial STIs could encourage STI screening.



Distribution of Participants and STI Diagnoses by Number of Infections

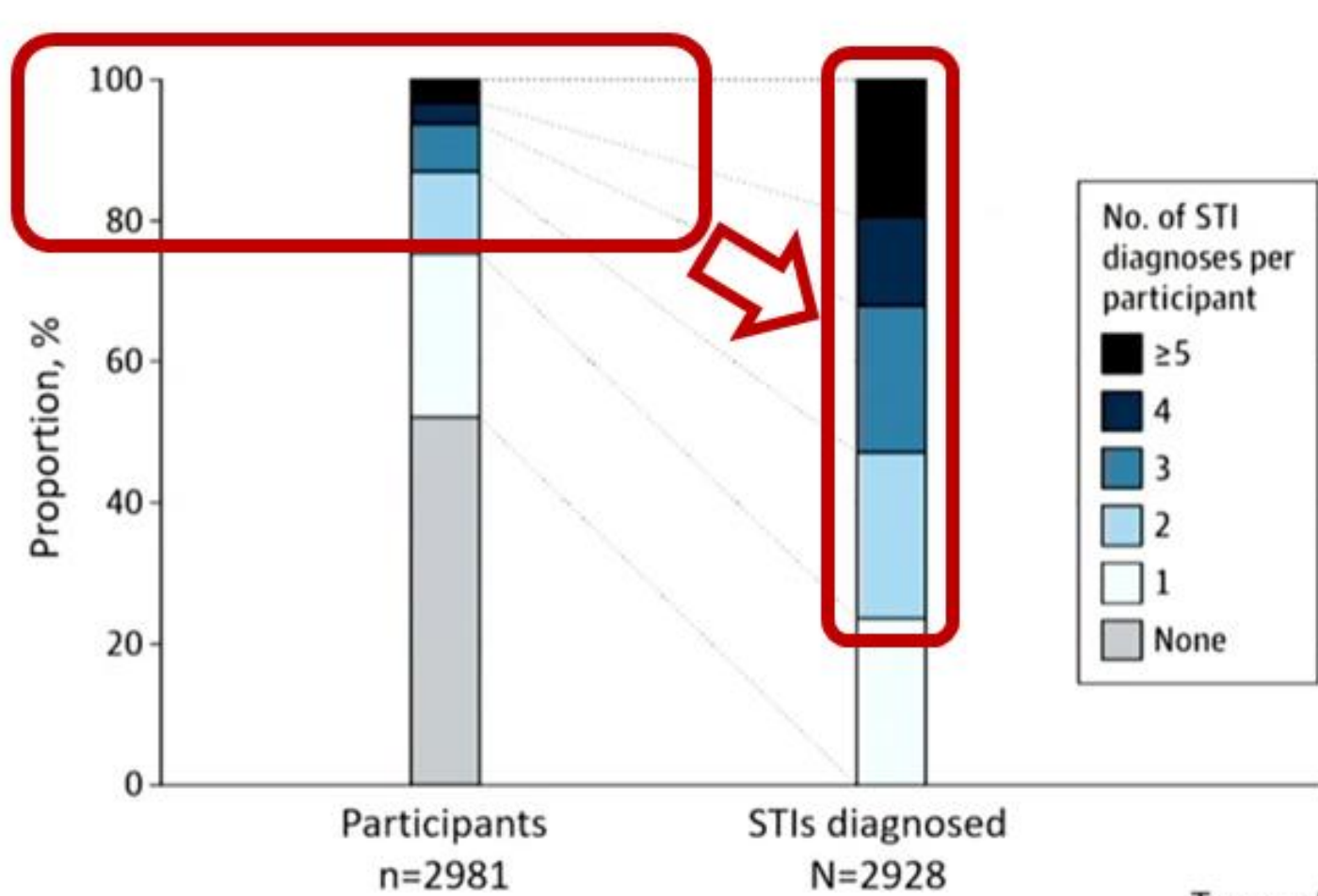


Figure 1: Among HIV negative MSM taking PrEP, 25% individuals account for 76% STIs diagnosed, often having multiple STIs (adopted from J.M. Molina, IAS 2023).

Materials and Methods

Between 1 January and 14 June, 2024, 121 HIV positive or HIV negative MSM taking PrEP attending our clinic were screened for doxyPEP eligibility. Those who met one or more of the following criteria were offered doxyPEP:

- bacterial STI within last 12 months
- condomless anal sex outside a monogamous relationship
- participation in threesomes or groupsex
- attendance of circuit parties

The above criteria were adopted from J.M. Molina [5] and were used to identify MSM at high risk of bacterial STIs. Clinicians provided patients with information about doxyPEP, including efficacy, safety, potential concerns, and information on how to use it. Before initiating doxyPEP, patients were required to undergo full STI screening (blood test for syphilis and chlamydia/gonorrhoea PCR in appropriate exposure sites).

Results

32 patients met eligibility criteria and were offered doxyPEP. 28 (88%) of them accepted and 4 (12%) patients declined doxycycline [Figure 2]. 20 (71%) of those who accepted doxyPEP, completed STI screening and were given a doxycycline prescription [Figure 3]. Among 20 patients screened, 8 were positive for an STI, 5 of whom had multiple STIs. Although our clinic offers full STI screening every 6-12 months, none of the patients diagnosed with STIs before starting doxyPEP, had undergone such testing in the past six or twelve months.

Conclusions

Real-life experience in our clinic shows high acceptability of doxyPEP among carefully pre-selected MSM. The criteria to offer doxyPEP used in our clinic seem to identify MSM at high risk of STIs who already have a significant presence of such infections. Discussion of doxyPEP can lead to high levels of detection of STIs in MSM who previously may have declined STI screening. DoxyPEP may not only be a tool to prevent future STIs in MSM, but also an opportunity to detect existing ones in MSM who otherwise would not be screened. Our experience also highlights importance of STI screening before starting doxyPEP.

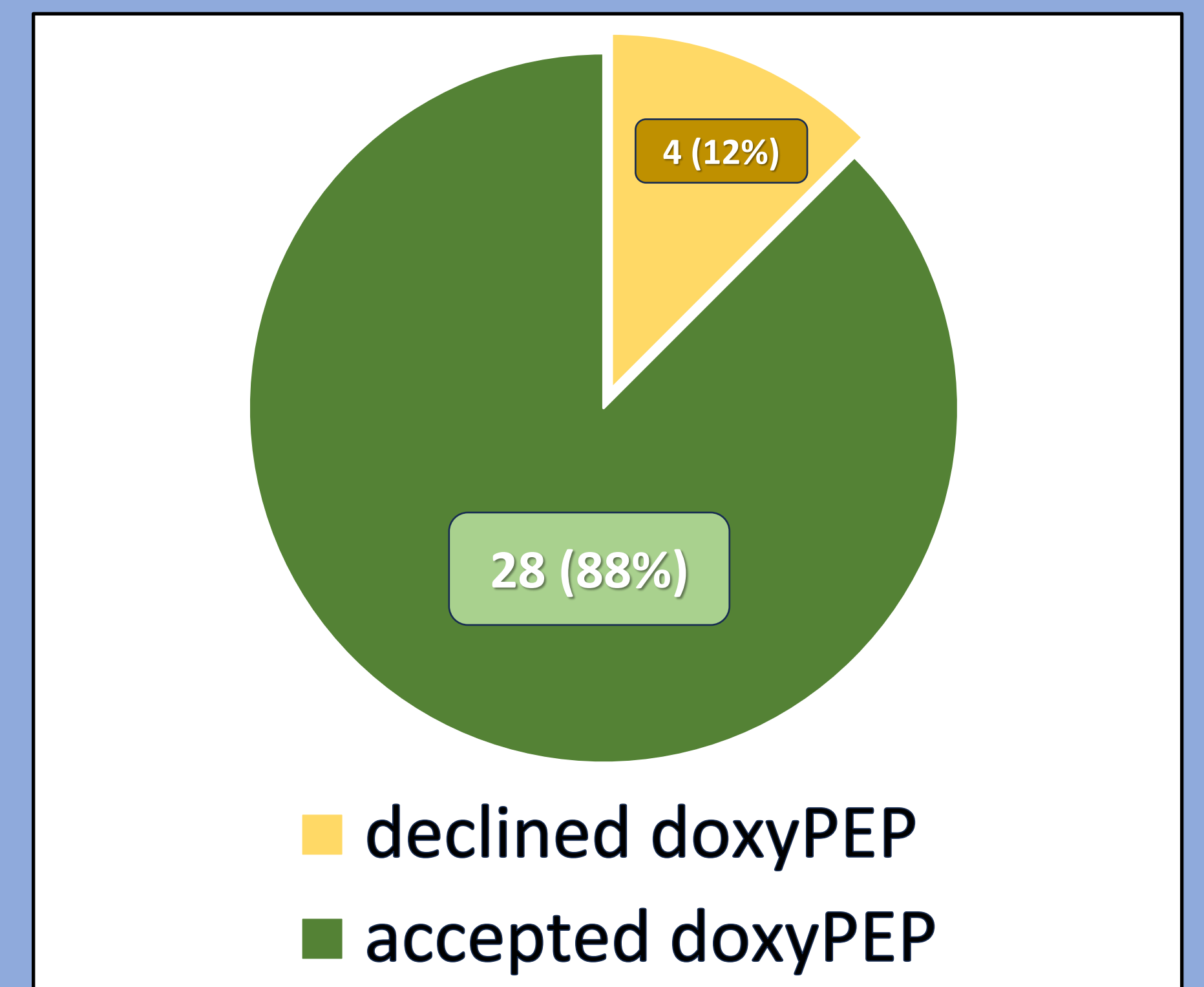


Figure 2: Majority of eligible patients accepted doxyPEP

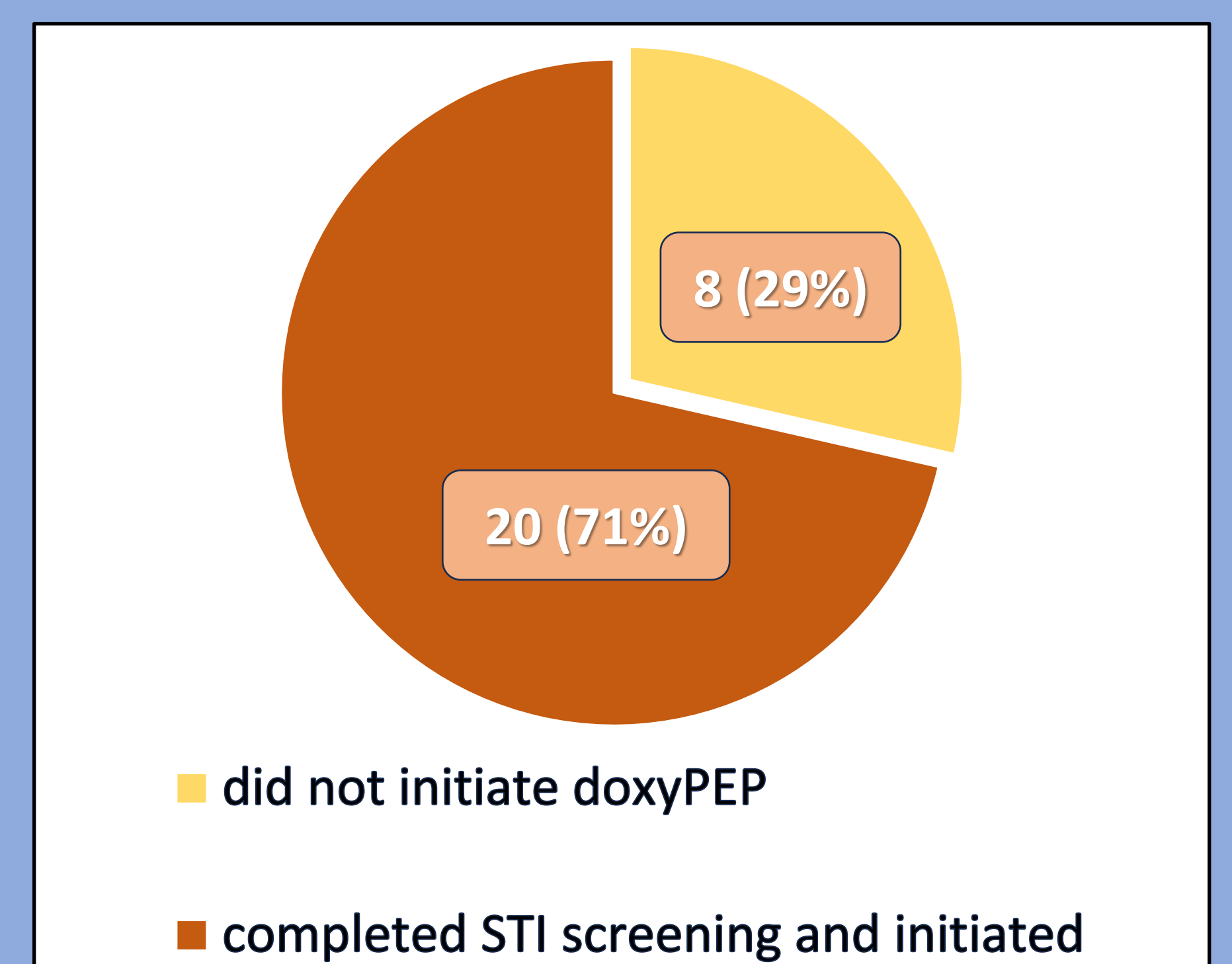
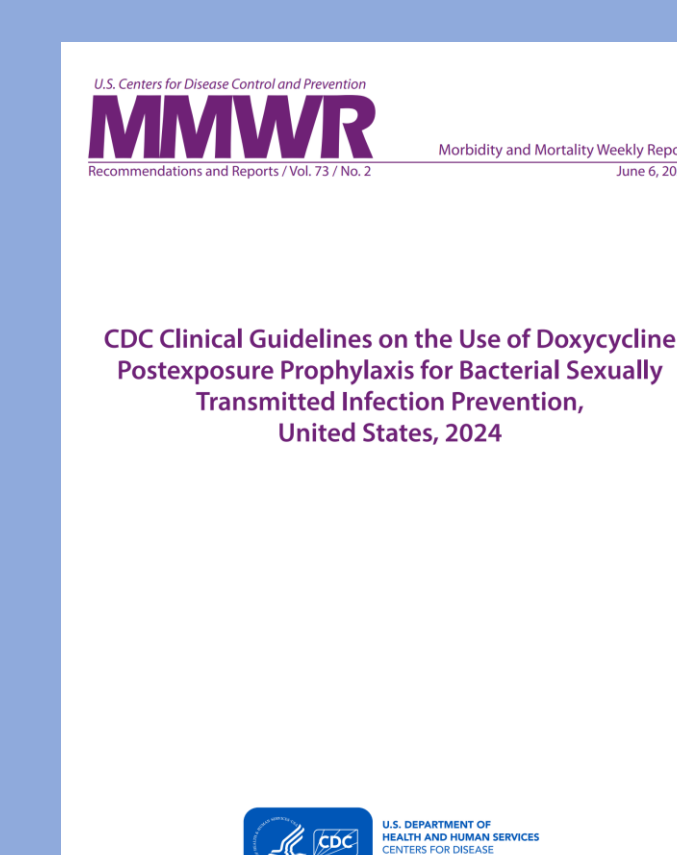


Figure 3: Majority of patients who accepted doxyPEP, completed full STI screening and initiated doxyPEP



Reference

- [1] Changes in Sexual Behavior and STI Diagnoses among MSM Initiating PrEP in a Clinic Setting. Montano MA e.a., AIDS Behav. 2019 Feb 23(2): 548-555
- [2] Association of Preexposure Prophylaxis with Incidence of Sexually Transmitted Infections Among Individuals at high risk of HIV Infection. Traeger MW e.a., JAMA 2019 Apr 9;321(14):1380-90.
- [3] Postexposure Doxycycline to Prevent Bacterial Sexually Transmitted Infections. Luetkemeyer AF and DoxyPEP Study Team. N Engl J Med. 2023 Apr 6;388(14):1296-1306.
- [4] CDC Clinical Guidelines on the Use of Doxycycline Postexposure Prophylaxis for Bacterial Sexually Transmitted Infection Prevention, Centers for Disease Control, United States 2024
- [5] Doxycycline Post-Exposure Prophylaxis for STIs: Time for Implementation? J.M. Molina IAS2023, Brisbane, Australia (<https://programme.ias2023.org/Programme/Session/4368>)