

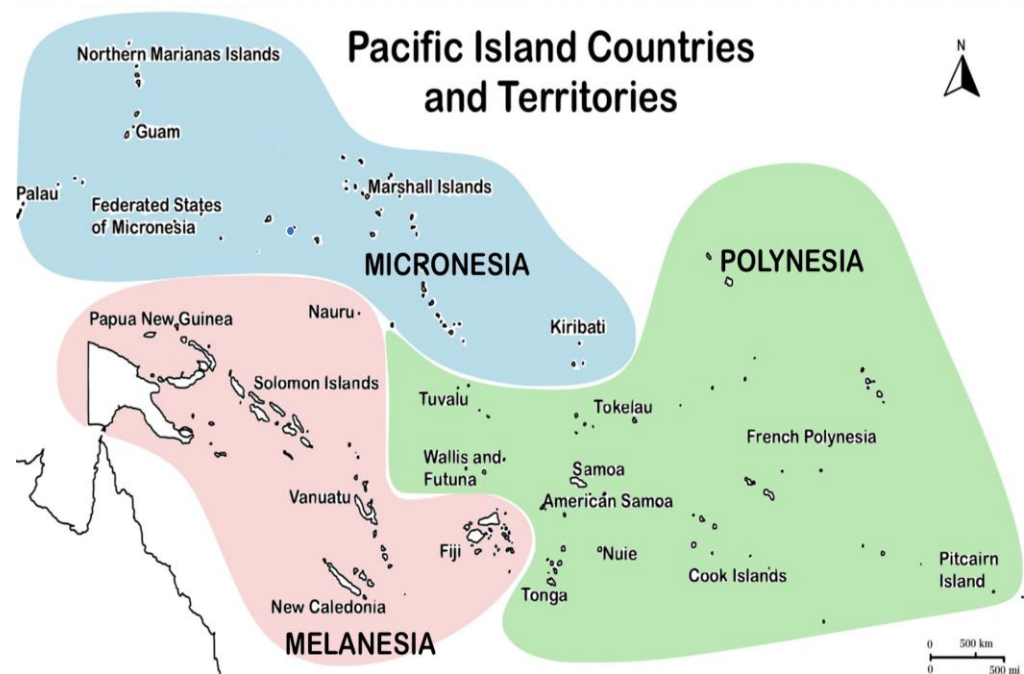
The increasing prevalence of *Neisseria gonorrhea* STIs among female Pacific Islanders of the Western Pacific Region

Isabella Auchus¹, Joelle Brown¹, Mike Kama², Redwan Al-Karim Bhuiyan², Rachel Devi² and Deborah Dean¹

¹University of California San Francisco, San Francisco, CA, USA
²Ministry of Health and Medical Services, Suva, Fiji

BACKGROUND

- Neisseria gonorrhoeae* is the second most common bacterial STI worldwide and is of particular concern due to the significant health burdens associated with infections if left untreated.
- Over **60 million STIs occur in the Pacific Island Countries and Territories (PICT)**, which includes Fiji.
- Most women with gonorrhea are asymptomatic.
- Testing is unavailable in most of the PICT, and syndromic management is practiced, leaving prevalence and risk factors for gonorrhea among Pacific Islanders unknown.



METHODS

- A **cross-sectional bio-behavioral study** enrolled women aged 18-40 from Feb 2018 to Dec 2022 in clinics around Suva, Fiji.
- Participants underwent pelvic exams and vaginal samples were tested for gonorrhea, chlamydia, and other STIs.
- Socio-demographic and behavioral data were collected, as well as data on patient symptoms and signs of infection.

RESULTS

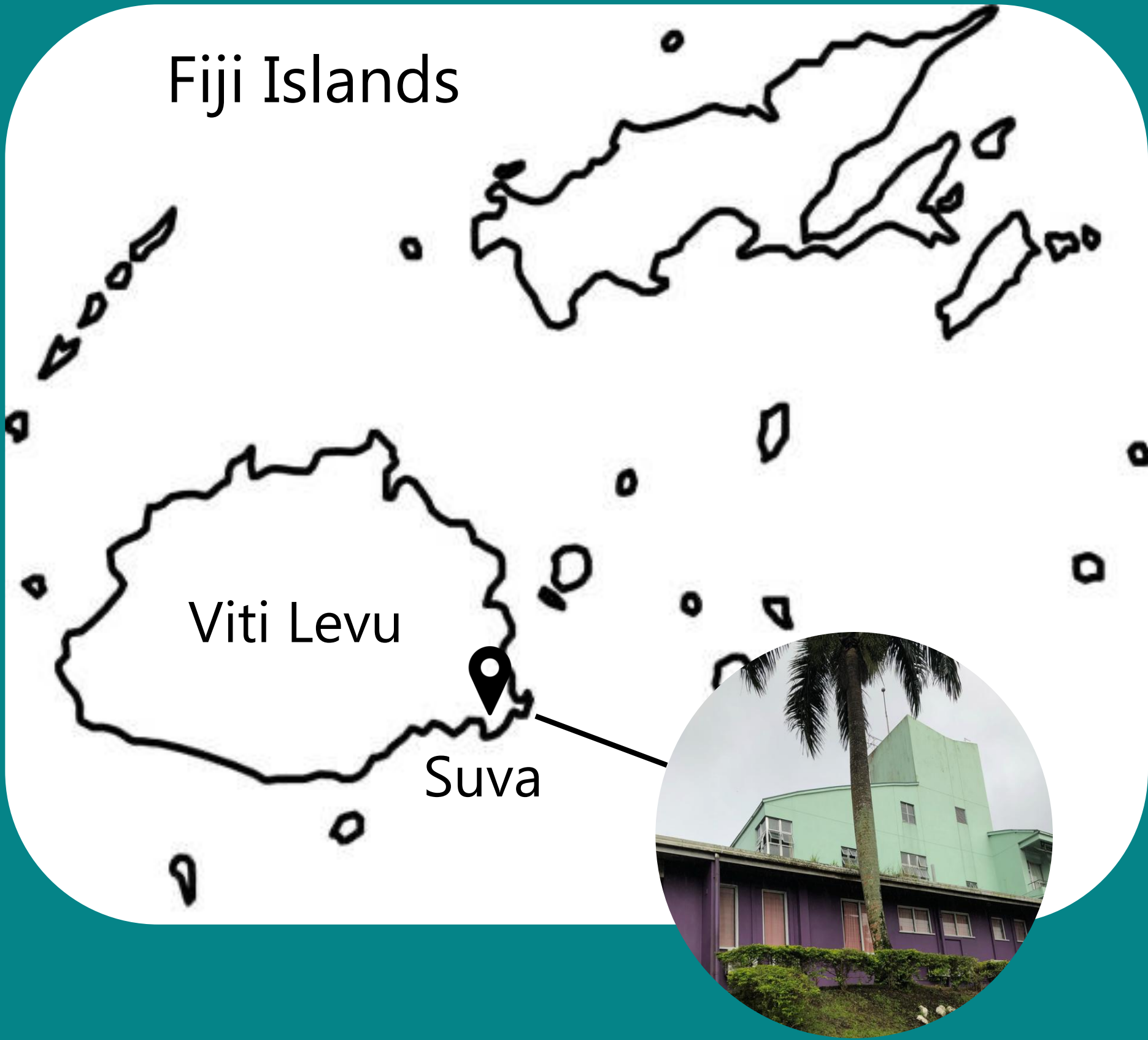
- Of 1,494 participants, **78 (5.2%) tested positive** for gonorrhea, and **37.2% were asymptomatic**.
- The prevalence was highest among women 18-24 years (11.5%) but more than doubled post-COVID pandemic (after March 2020) for women over 24 years (6.3% vs 2.4%, p=0.004).
- Only 24% (19/78) of women with gonorrhea met syndromic management criteria.**
- Infection was associated with women < 25 years (AOR=2.4), iTaukei ethnicity (AOR=2.8), being unmarried (AOR=3.5), having a regular partner who has or may have sex with others (AOR=3.4) and 3+ alcoholic drinks per day (AOR=1.8).
- Younger women with *N. gonorrhoeae* were significantly more likely to be co-infected with *C. trachomatis* and/or *T. vaginalis*.

DISCUSSION

- Young iTaukei women are disproportionately affected by STIs, and syndromic management likely contributes to the high prevalence of gonorrhea.
- Understanding the epidemiology of STIs can help to guide resource allocation for surveillance and education for at-risk groups to improve reproductive health.

ACKNOWLEDGEMENTS

- Thank you to UCSF Yearlong Inquiry Funding, the Fijian Ministry of Health, and our Fijian colleagues for supporting this work.

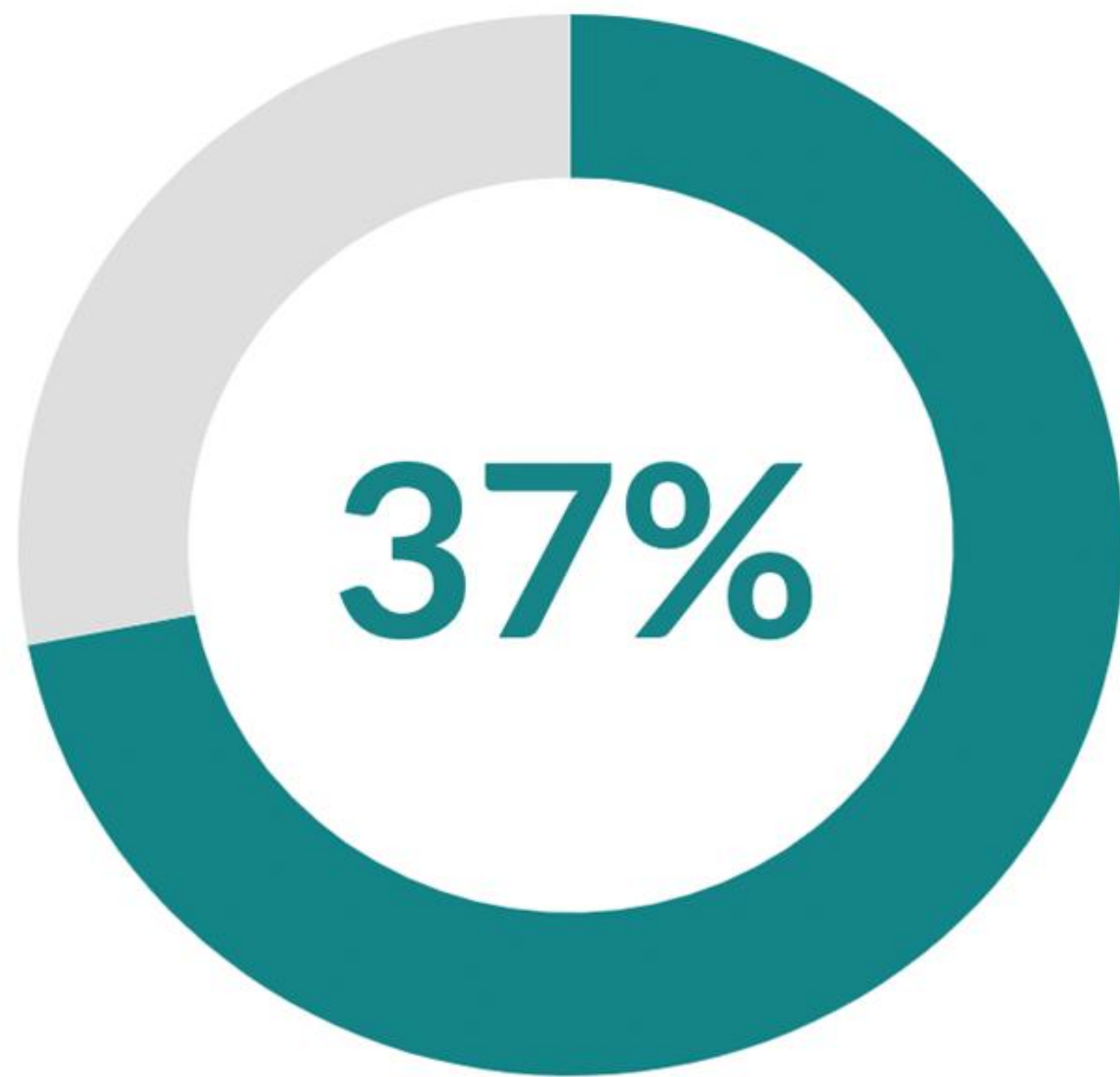


5.2% of women aged 18-40 in Fiji have a **gonorrheal STI** — **over 5x** the WHO global estimate of 0.9%

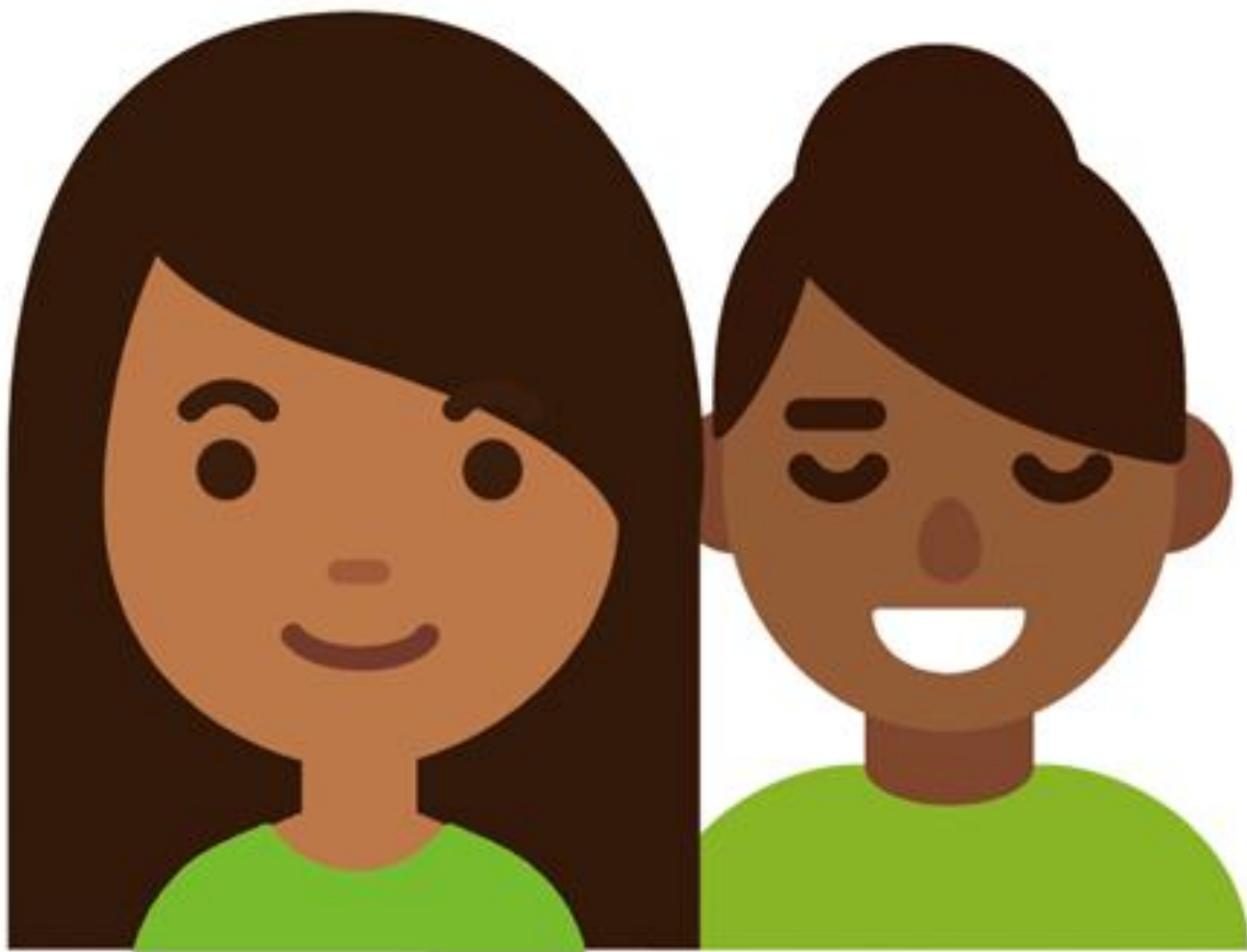


of women with gonorrhea **did not** meet syndromic management criteria for treatment

37.2% of infected women were **asymptomatic**



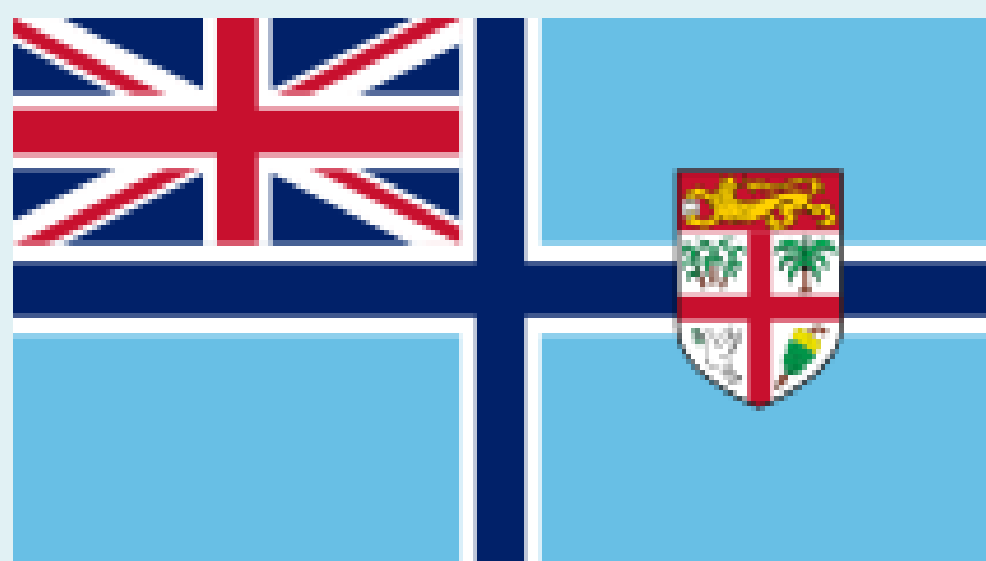
(Leading to undertreatment and increased risk for spread)



iTaukei women have about

4x

greater odds of being **infected** compared to other ethnic groups in Fiji



UCSF

University of California San Francisco