

Sexually Transmitted Infections: Perspectives from Latin America

Mayara Secco Torres da Silva, MD, PhD

Instituto Nacional de Infectologia Evandro Chagas, Fiocruz

Rio de Janeiro, Brazil



- The global and regional burden of STI;
- Data on STI incidence among sexual and gender minorities (SGM);
- Antimicrobial resistance and STI in Latin America;
- STI prevention;
- Reflections on the way forward.

1

STI burden globally and in Latin America

STIs are a major health burden...

New infections of chlamydia,
gonorrhoea, syphilis or
trichomoniasis

374 million

in adults 15 to 49 in 2020

New infections of chlamydia,
gonorrhoea, syphilis or
trichomoniasis

**over 1
million**

new cases per day in adults 15 to 49
in 2020

New infections of syphilis

8 million

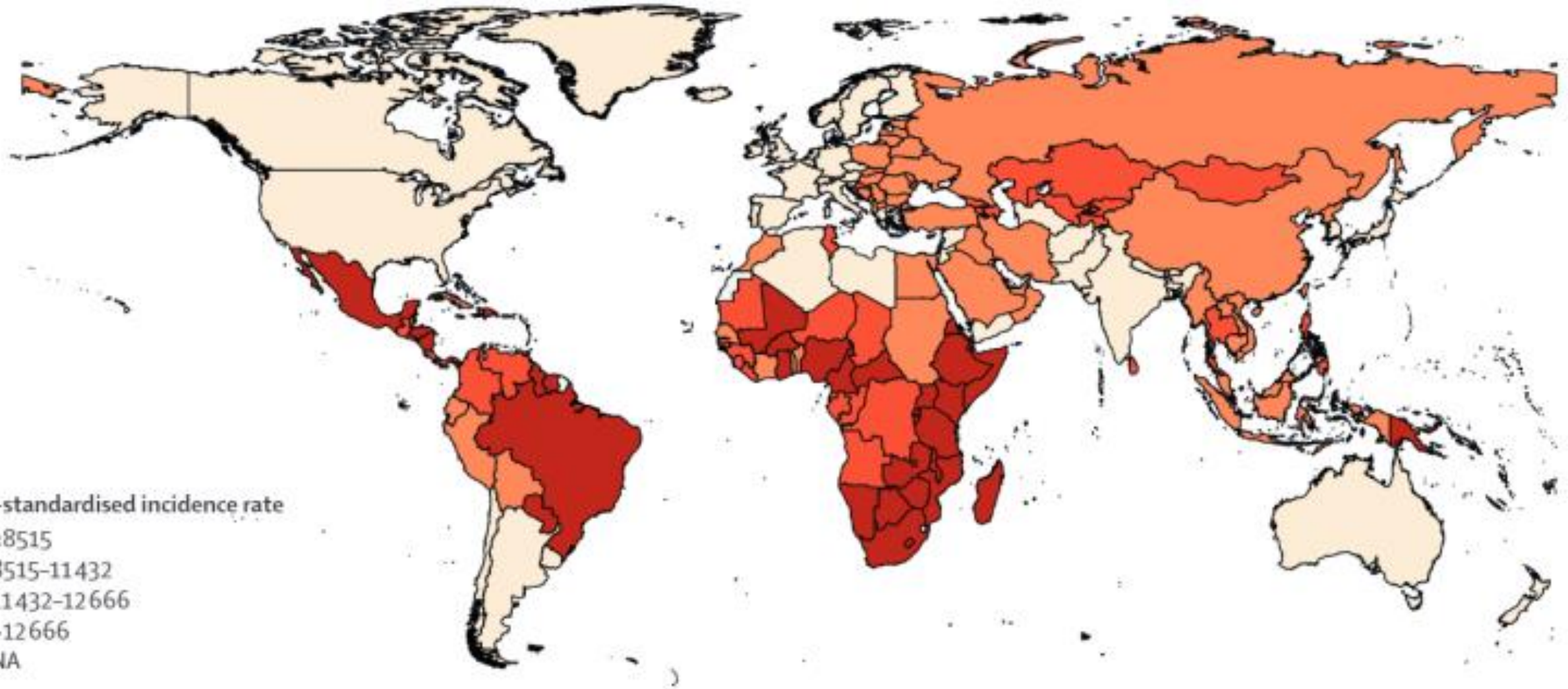
in adults 15 to 49 in 2022

Cases of congenital syphilis

700 000

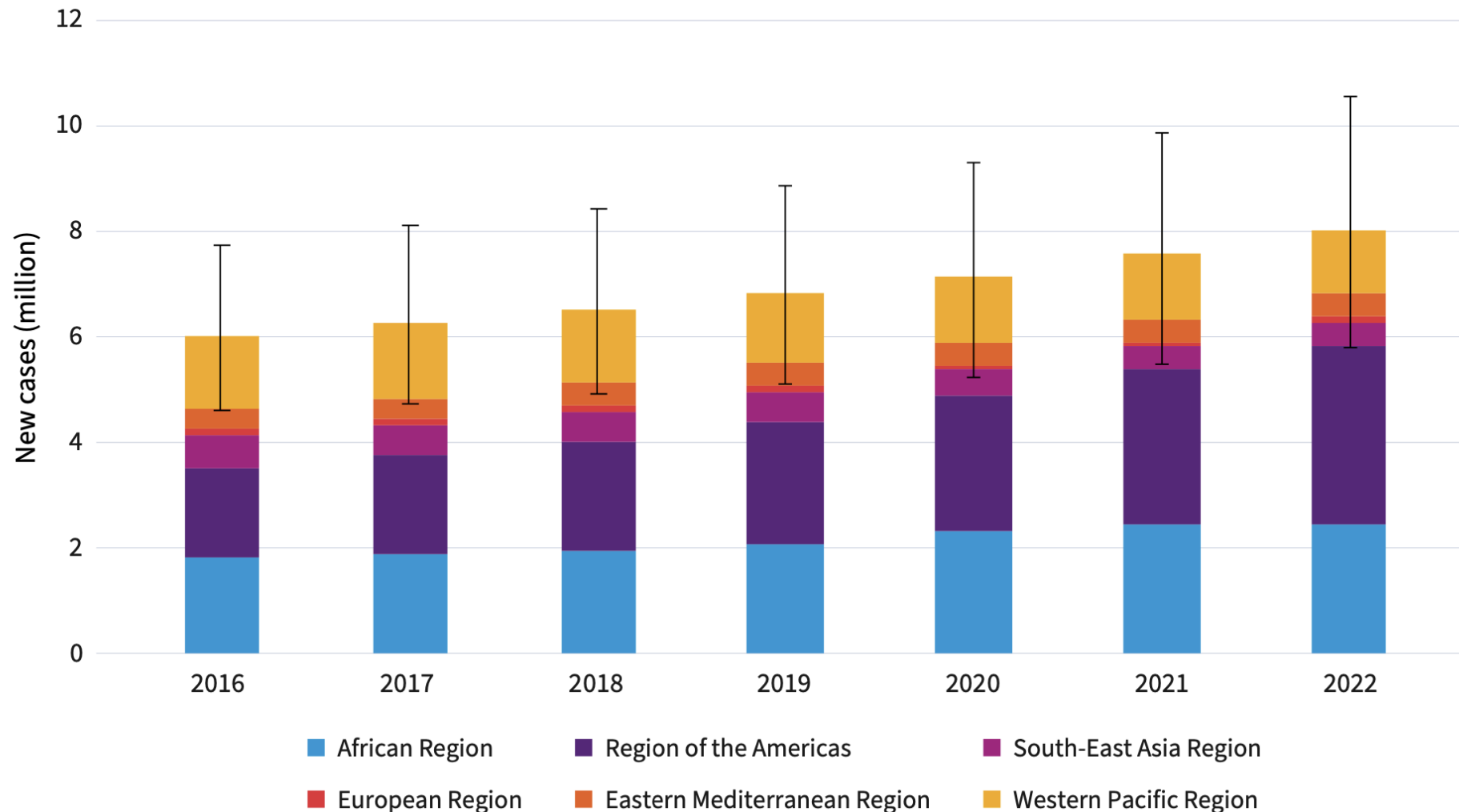
in 2022

Disproportionally affecting the Global South

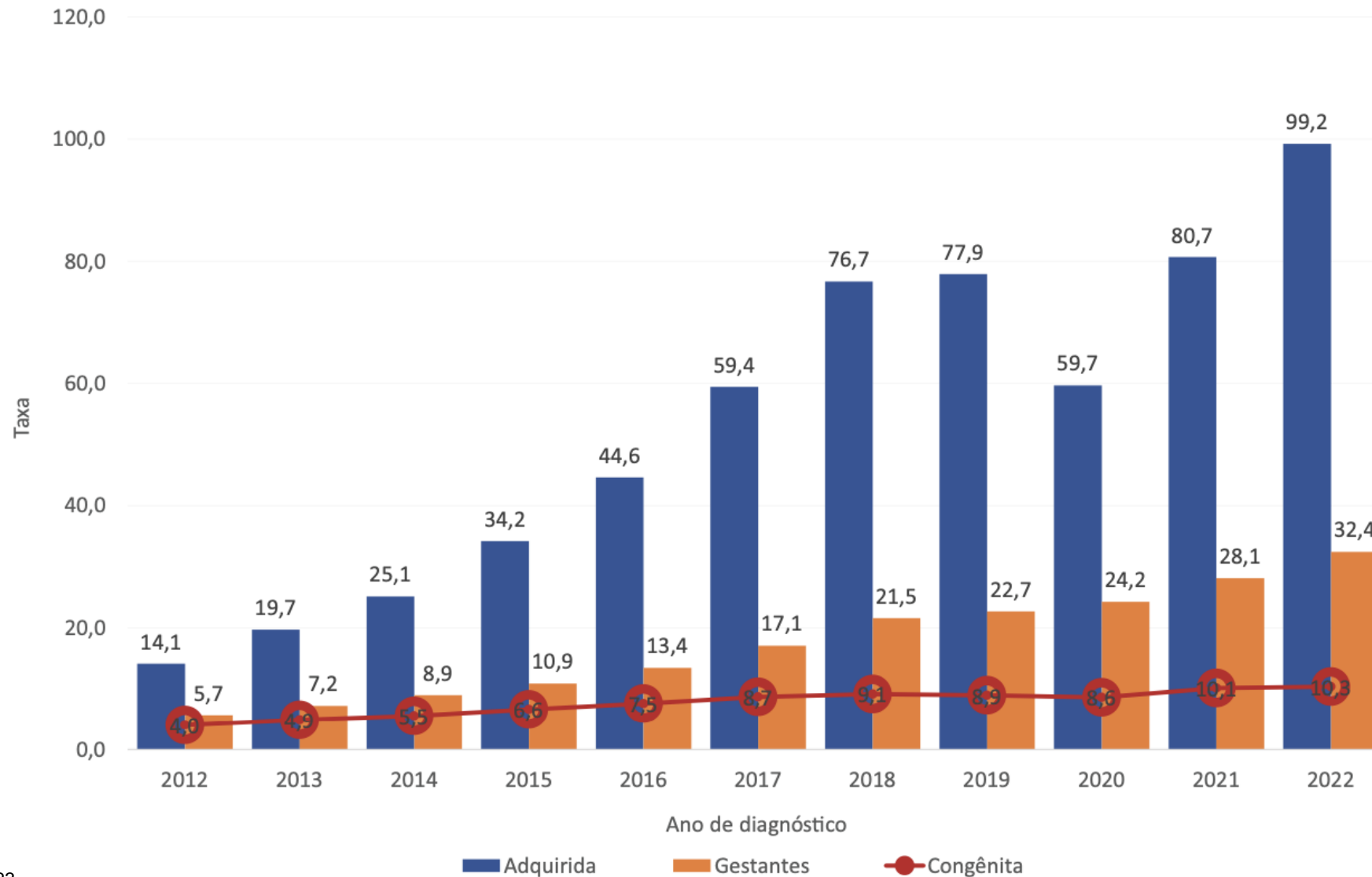


Syphilis is a major concern in Americas

Fig. 6.2 Estimates of the total number of new cases of syphilis among people aged 15–49 years by WHO region, 2016–2022

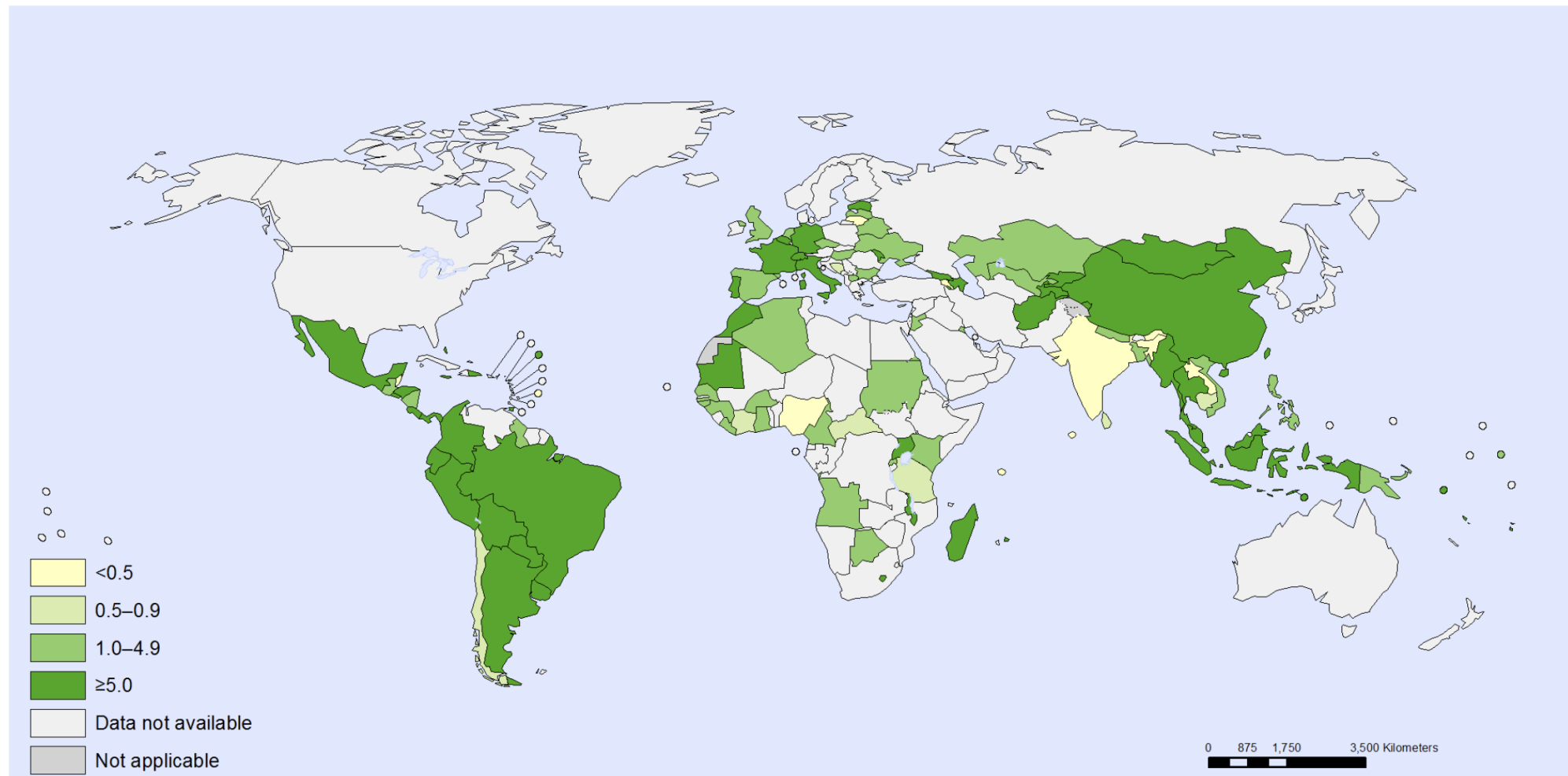


Syphilis: rising incidence rates in Brazil



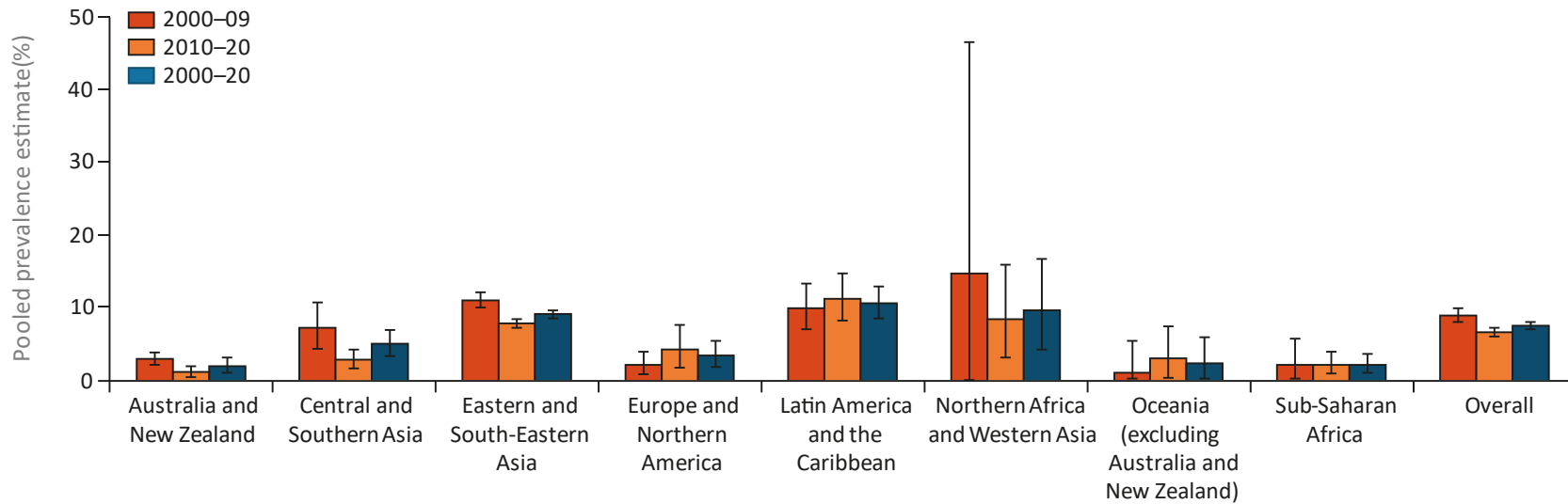
Particularly among SGM...

Percentage of men who have sex with men with active syphilis (latest reported data since 2008)



Particularly among SGM...

Syphilis prevalence among MSM in Latin America, 2000-20



Prevalence estimates (%)

- 0 to <2.5
- 2.5 to <5
- 5 to <10
- 10 to <15
- 15 to <20
- ≥20
- No report

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STI incidence among SGM in Latin America

ImPrEP study

- The largest PrEP implementation study in Latin America:

Prospective, open-label, multicenter implementation study to assess feasibility of same day oral PrEP delivery for MSM and TGW within the public health systems of Brazil, Mexico and Peru between 2018 and 2021.

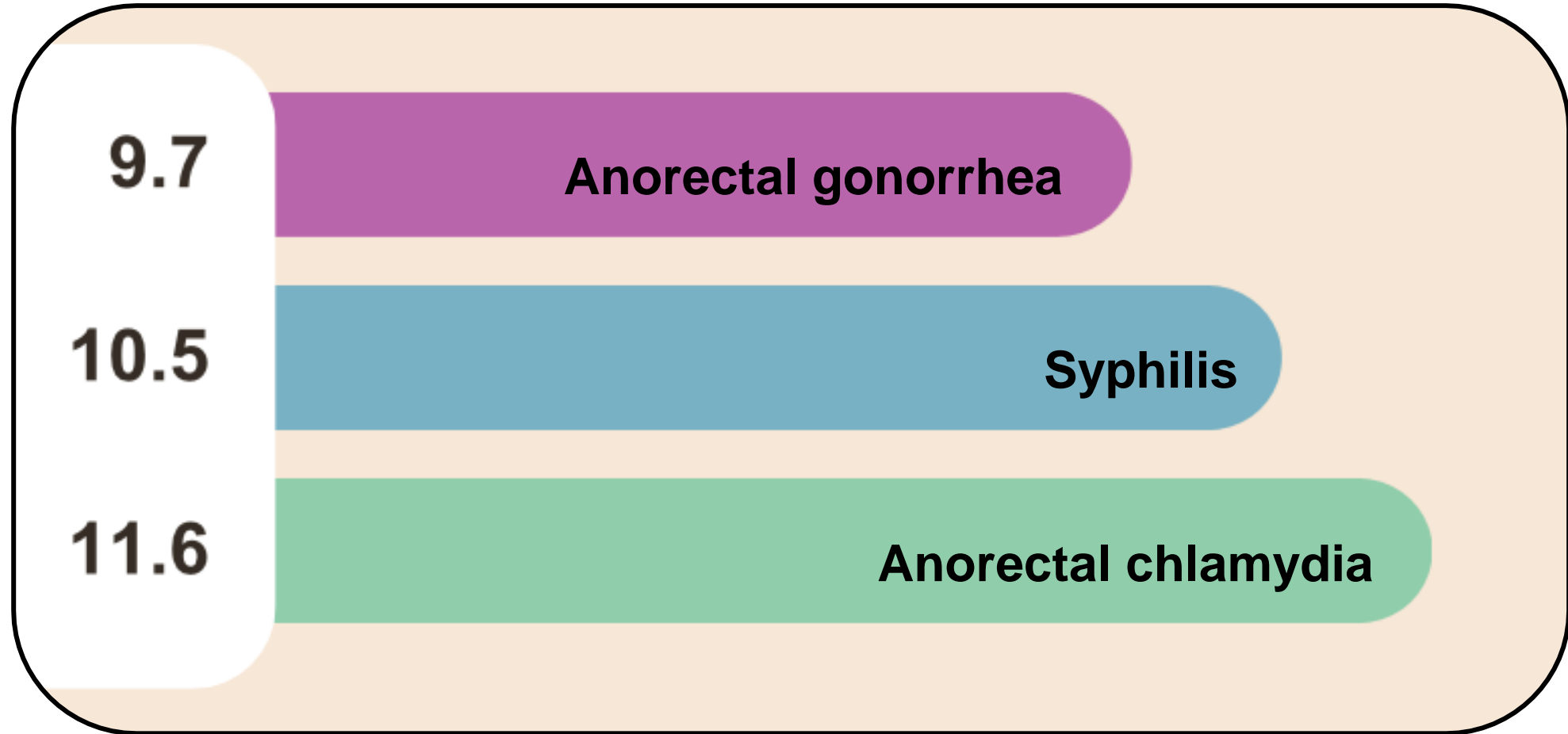


Brazil
n=3,928

Mexico
n=3,288

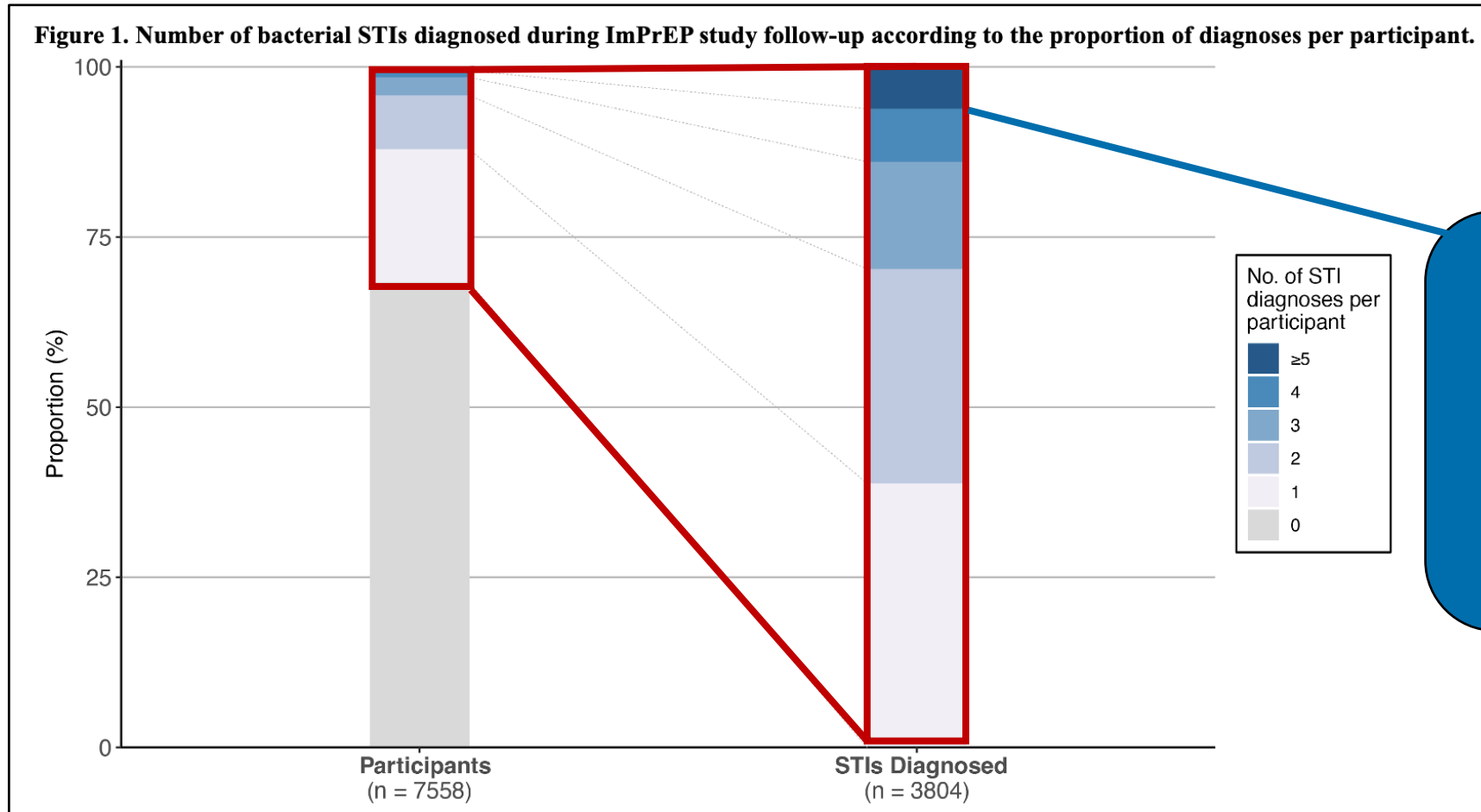
Peru
n=2,293

ImPrEP study: STI incidence



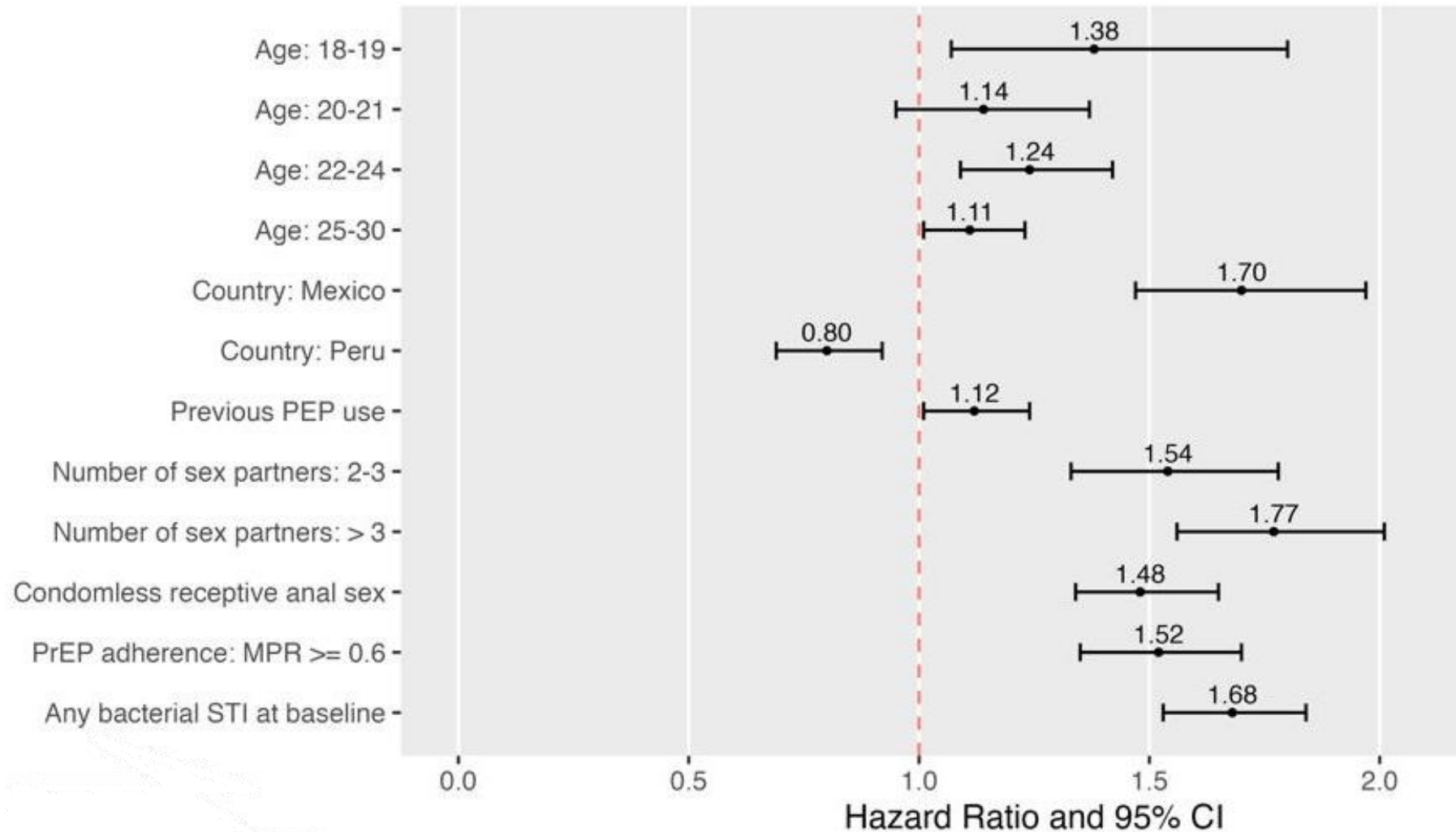
Cases per 100 person-years

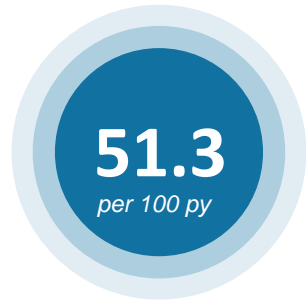
ImPrEP study: STI diagnoses



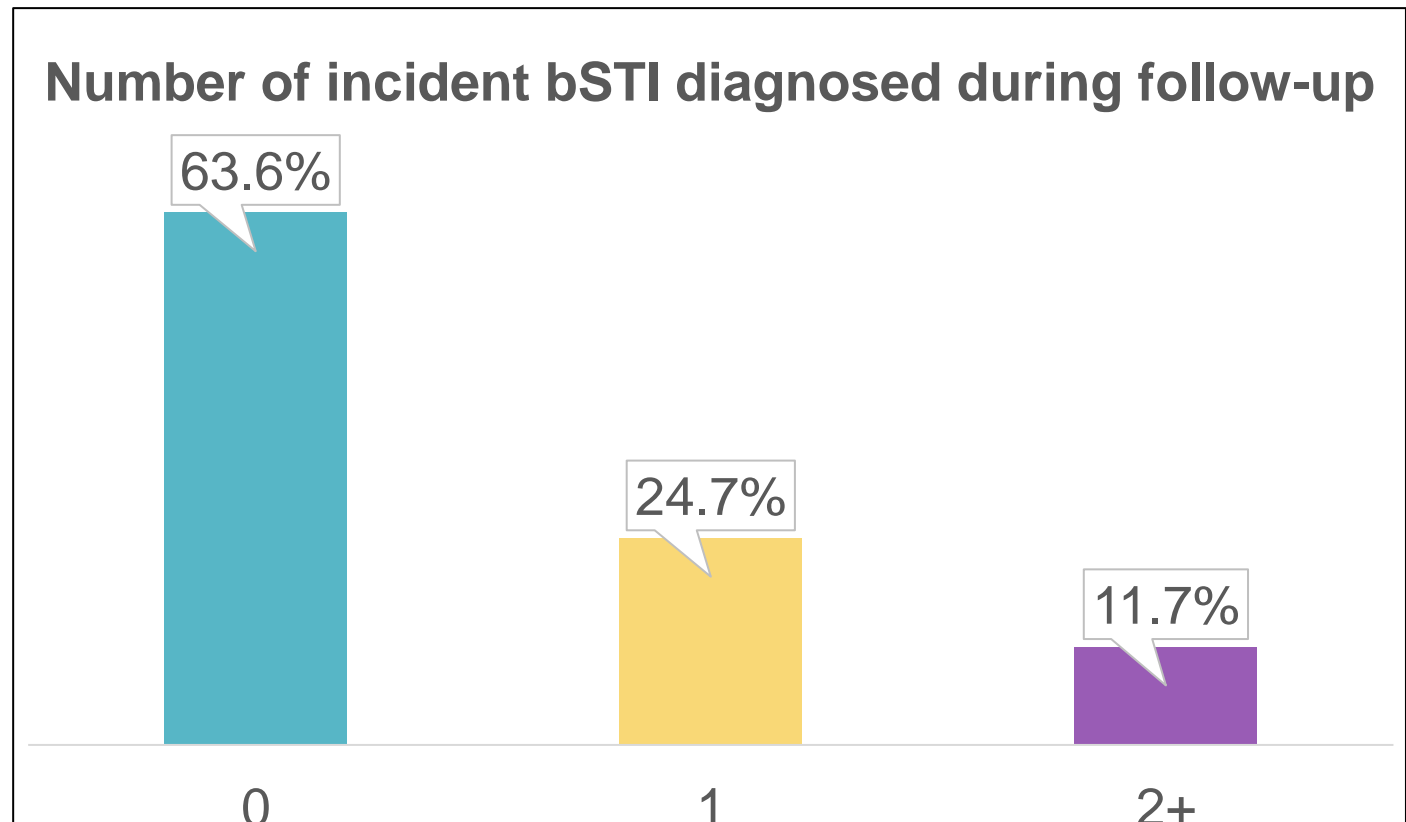
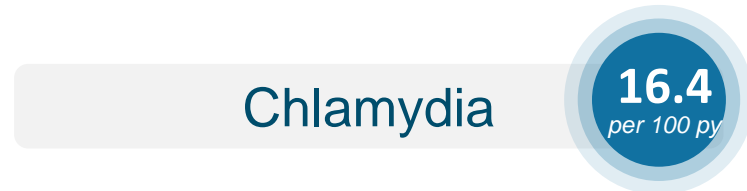
All STI diagnoses occurred in 31.6% of participants

Factors associated with first STI diagnosis

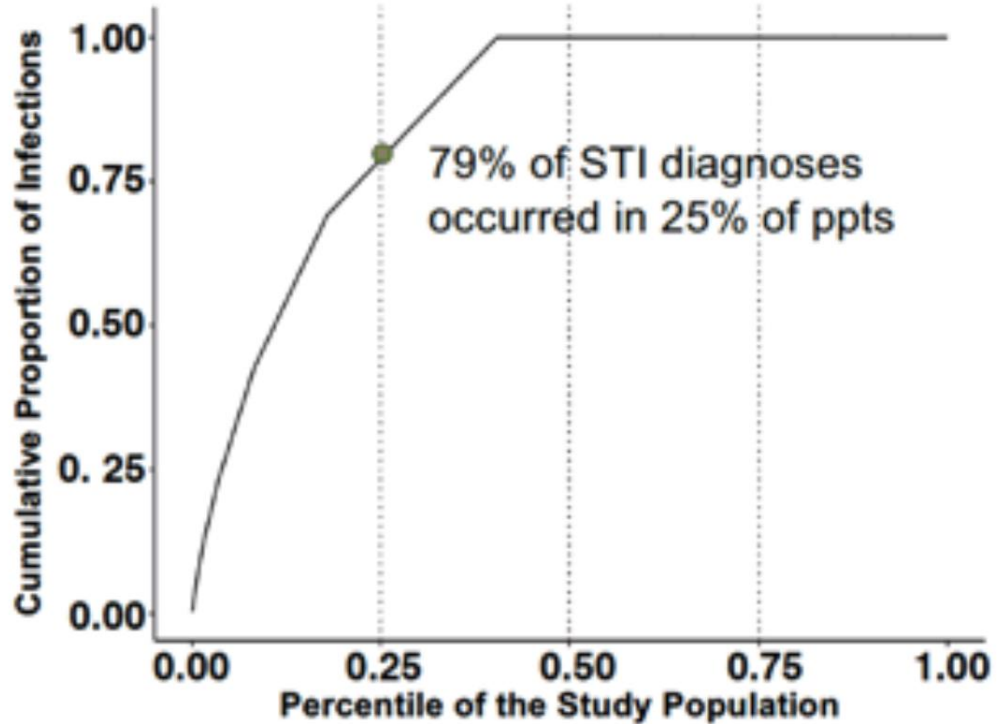




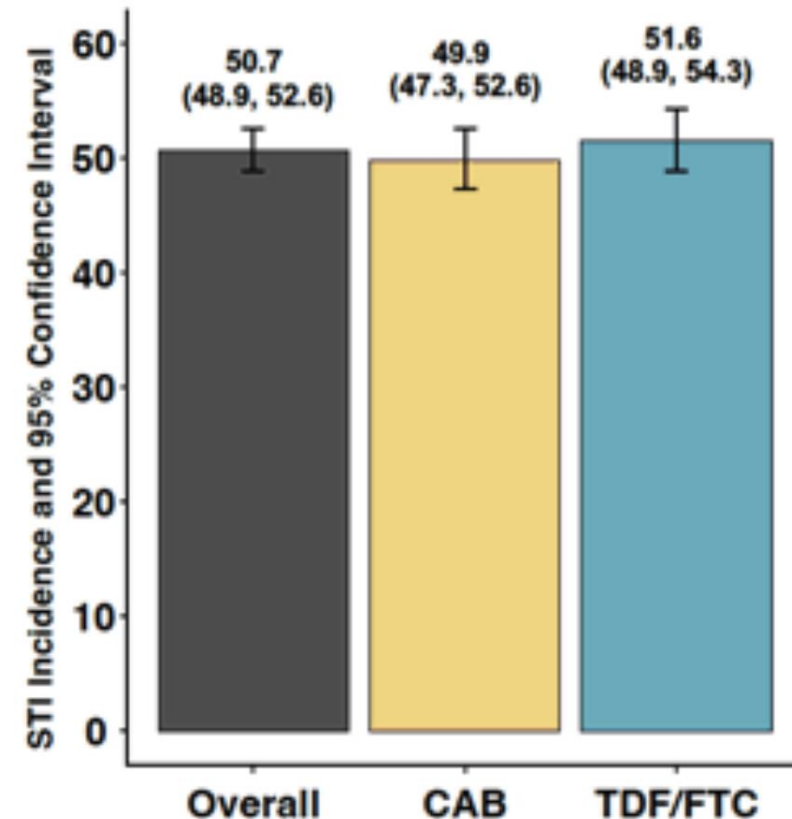
Incidence of any bacterial STI

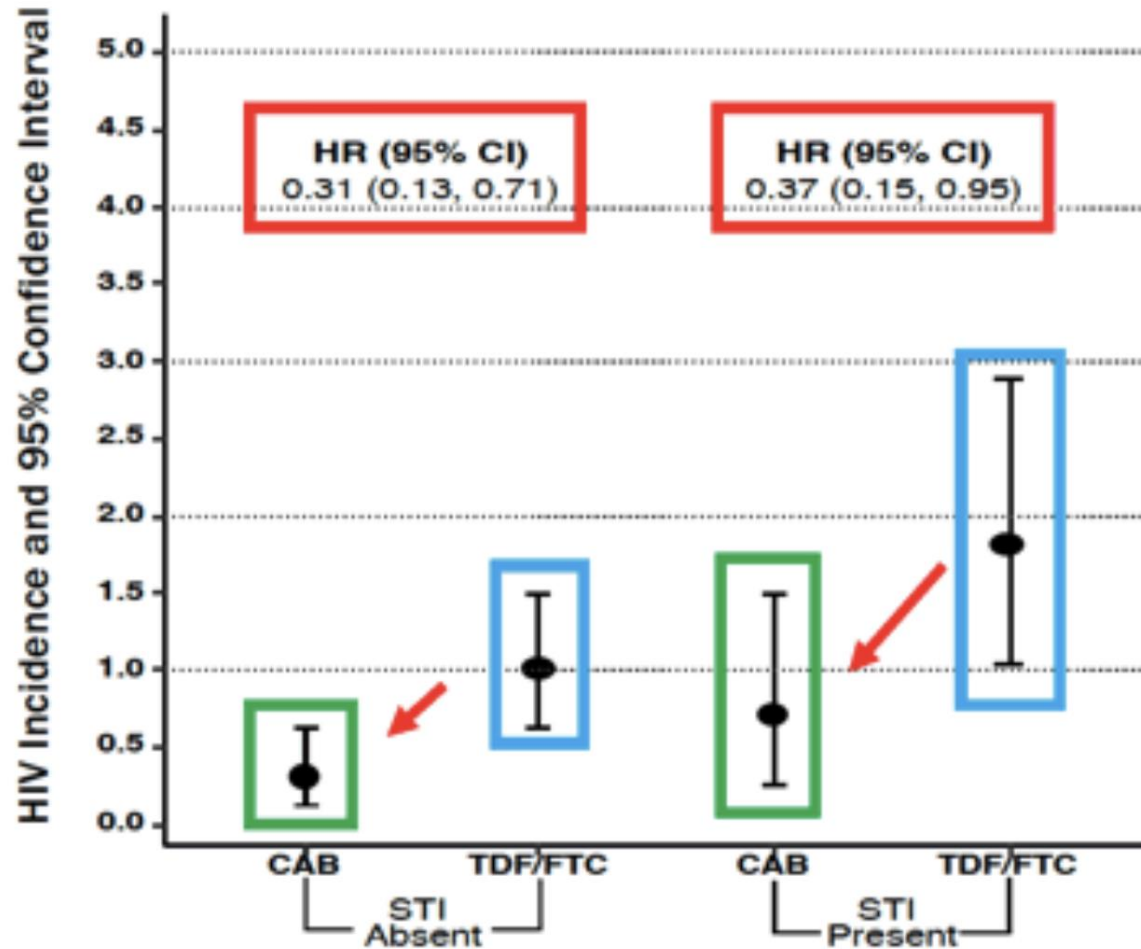


Among 3859 participants, STIs were diagnosed in 1562 (40.5%), with multiple STIs reported for 691 (17.9%)



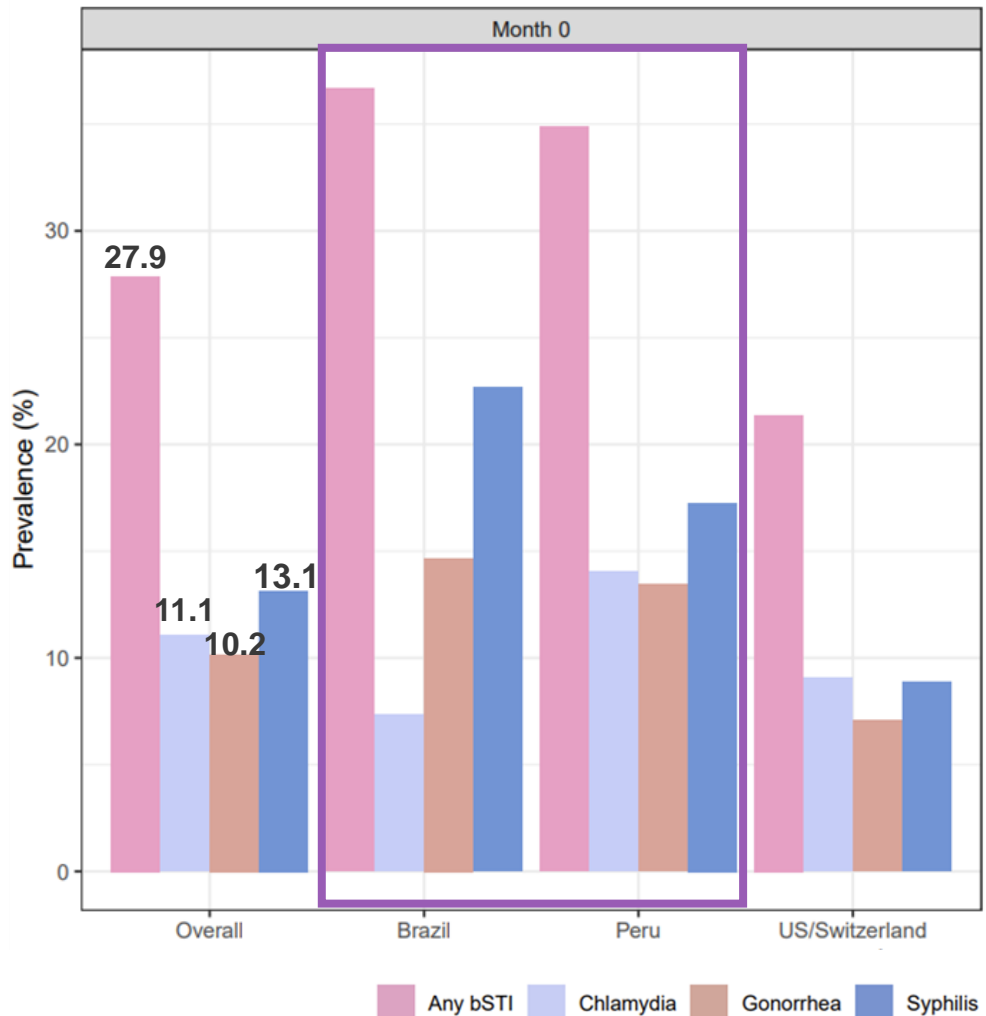
43% of participants from Latin America





Cabotegravir maintain its efficacy even in the setting of a concomitant bacterial STI diagnosis

STI at baseline



bSTI incidence rates

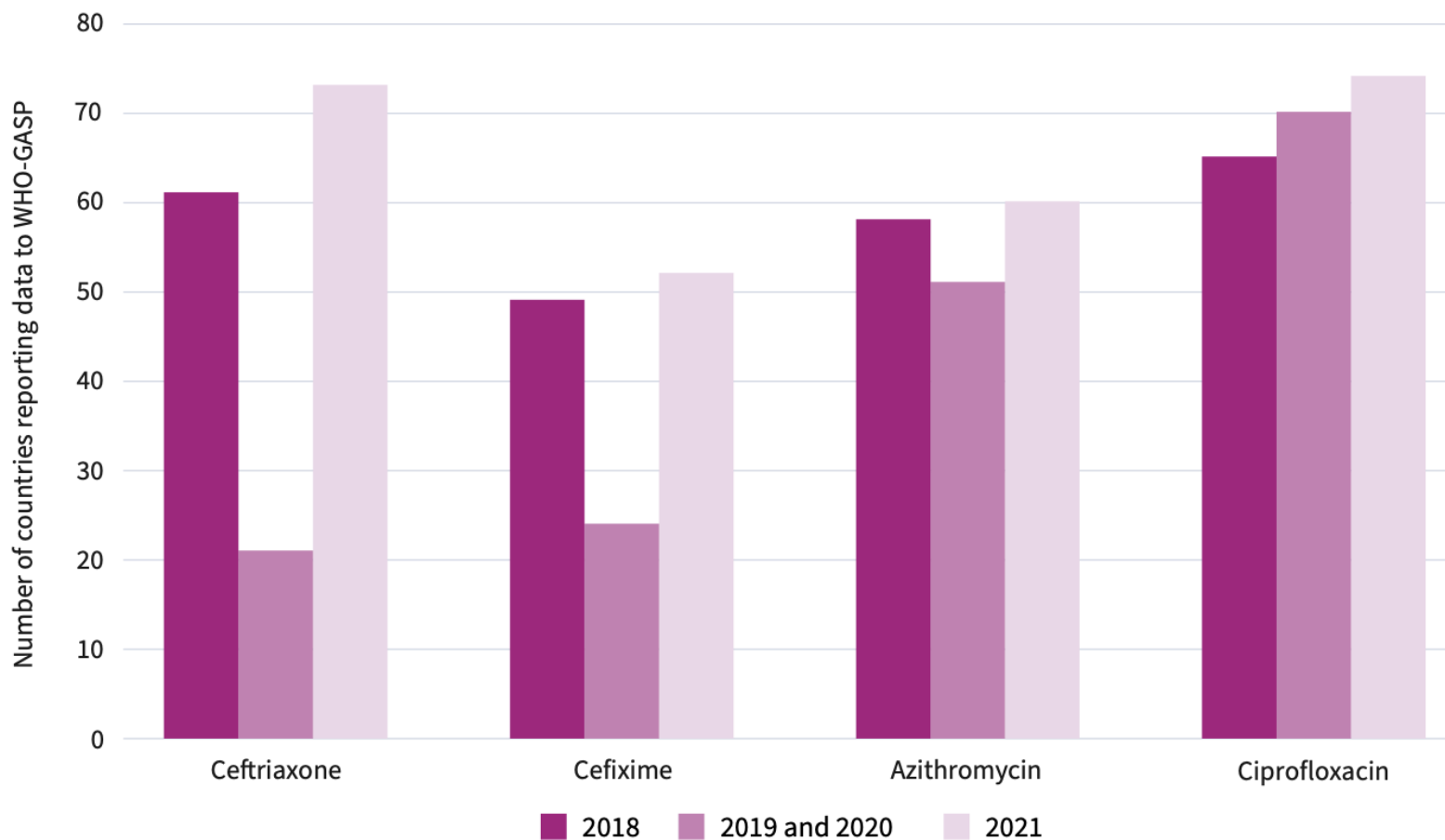
bSTI	No. Events	Person-Years at Risk	Incidence Rate (95% CI)
Any STI	617	2154.7	28.6 (26.4-31.0)
Chlamydia	375	2335.4	16.1 (14.5-17.8)
Gonorrhea	290	2373.0	12.2 (10.9-13.7)
Syphilis	165	2459.7	6.7 (5.7-7.8)

Incidence is summarized for 100 person-years.

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STI and Antimicrobial Resistance

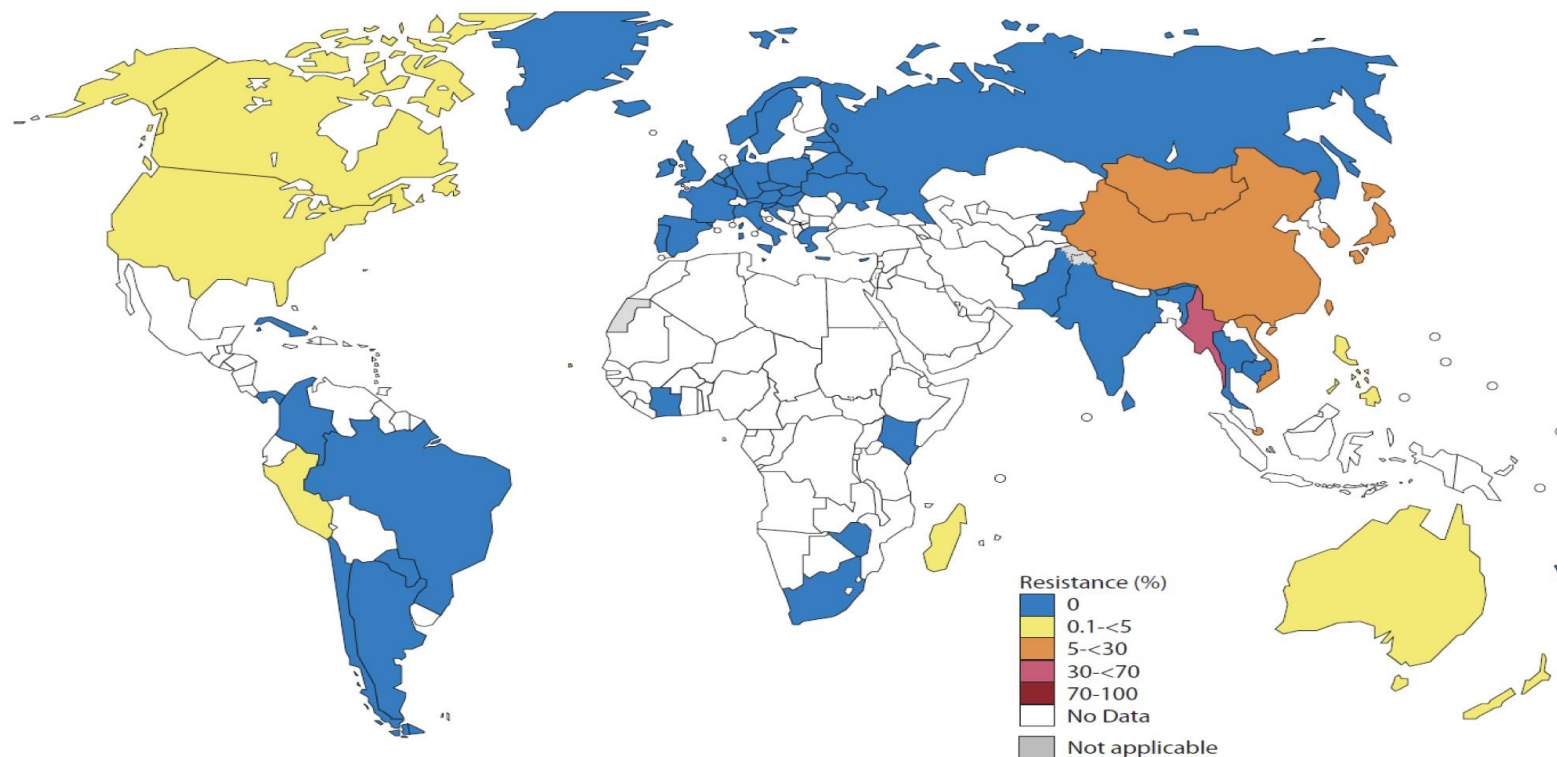
Fig. 6.5 Number of WHO Member States reporting data on gonococcal antimicrobial susceptibility or resistance to the WHO Gonococcal Antimicrobial Surveillance Programme (WHO-GASP) for four drugs used to treat gonorrhoea, 2018–2021



Note: Data for 2019 and 2020 were combined owing to the impact of COVID-19 on laboratory testing services.



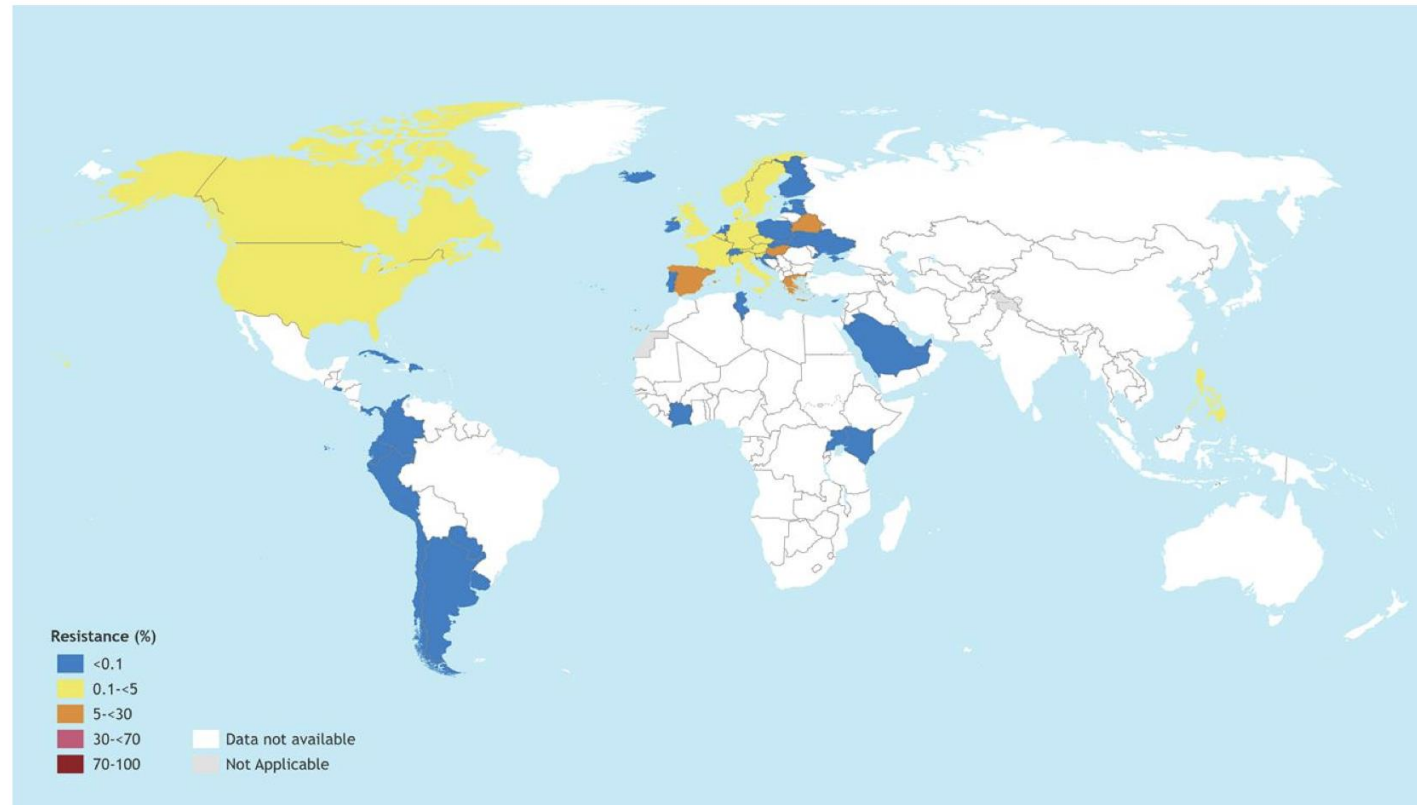
Countries with reported decreased susceptibility/resistance (DS/R) to ceftriaxone in *N. gonorrhoeae*, WHO GASP 2015-2016



15/63 (30%) countries - DS/R to ceftriaxone ; 8 (15 %) countries \geq 5%; 8(15%) countries \leq 5%

WHO-GASP 2015-2016

Countries with reported decreased susceptibility/resistance (DS/R) to ceftriaxone in *N. gonorrhoeae*, WHO GASP 2017-2018



21/68(31%) countries - DS/R to ceftriaxone ; 6 (9%) countries $\geq 5\%$; 15(22%) countries $\leq 5\%$

Ng resistance in Brazil

Recent dynamics in *Neisseria gonorrhoeae* genomic epidemiology in Brazil: antimicrobial resistance and genomic lineages in 2017–20 compared to 2015–16

[Get access >](#)

Daniel Golparian, Maria Luiza Bazzo, Josefine Ahlstrand, Marcos André Schörner, Pamela Cristina Gaspar, Hanalydia de Melo Machado, Jéssica Motta Martins, Alisson Bigolin, Mauro Cunha Ramos, William Antunes Ferreira ... [Show more](#)

Journal of Antimicrobial Chemotherapy, Volume 79, Issue 5, May 2024, Pages 1081–1092,
<https://doi.org/10.1093/jac/dkae075>

Published: 22 March 2024 **Article history** ▼

Azithromycin resistance (15.6%, 97/623) had substantially increased and was mainly explained by clonal expansions of strains with 23S rRNA C2611T (mostly NG-STAR CC124) and *mtr* mosaics (mostly NG-STAR CC63, MLST ST9363). Resistance to ceftriaxone and cefixime remained at the same levels as in 2015–16, i.e. at 0% and 0.2% (1/623), respectively. Regarding novel gonorrhoea treatments, no known zoliflodacin-resistance *gyrB* mutations or gepotidacin-resistance *gyrA* mutations were found. Genomic lineages and sublineages showed a phylogenomic shift from sublineage A5 to sublineages A1–A4, while isolates within lineage B remained diverse in Brazil.

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STI prevention

Combined prevention



- Tests for HIV and STI;
- HIV PEP and PrEP;
- Vaccines;
- Treating STI and HIV;
- Partners' treatment;
- Harm reduction;
- Condoms, lubricants;
- Structural factors!

Challenges for Partner Treatment

Open access

Protocol

BMJ Open Safetxt: a safer sex intervention delivered by mobile phone messaging on sexually transmitted infections (STI) among young people in the UK - protocol for a randomised controlled trial

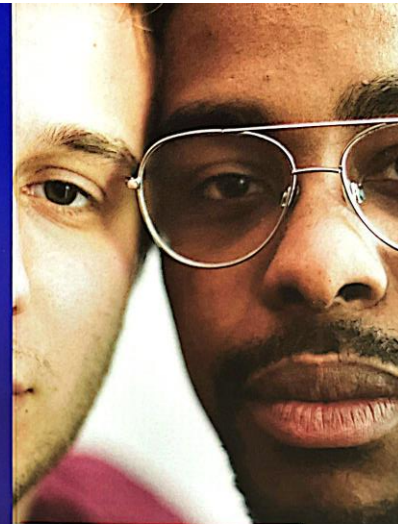


Communication



Find out more, get it now:
dean.st/doxy-pep

REDUCE YOUR CHANCES OF SEXUALLY TRANSMITTED INFECTION BY UP TO 80%



BE PROTECTED WITH DOXYPEP

WHAT IS DOXYPEP?

DoxyPEP involves taking an antibiotic called doxycycline. Taking this medicine after sex reduces the chance you'll get a bacterial sexually transmitted infection.

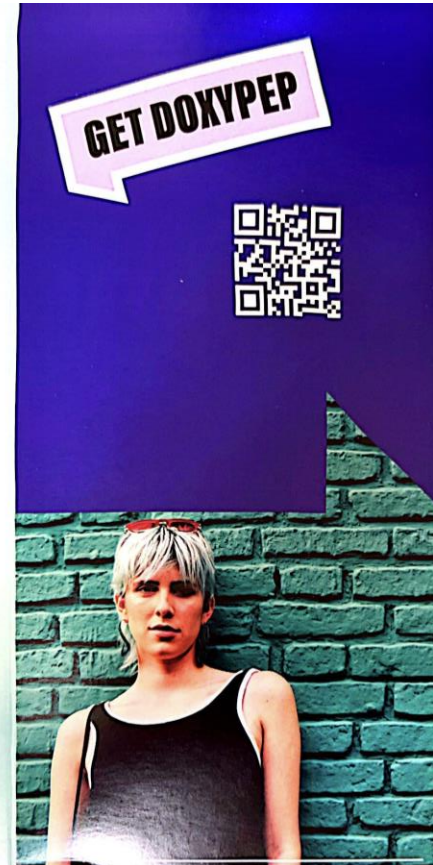
HOW WELL DOES IT WORK?

Studies show that DoxyPEP reduces the chance of getting chlamydia & syphilis by around three quarters and the risk of gonorrhoea by around a half. It gives no protection against any infections caused by viruses such as herpes, warts, HIV and hepatitis.

HOW DO YOU TAKE IT?

Take a 200mg dose of doxycycline taken within 72 hours after sex (2x100mg pills).

Don't take it more than **once each day**.



ARE THERE ANY POSSIBLE DOWNSIDES?

Some people worry that using doxycycline regularly might increase antibiotic resistance or affect the balance of healthy bacteria in your gut. Others argue that this is unlikely to be a problem because the drug is already given long term for other health issues without it causing any problems (e.g. Acne treatment).

Doxycycline can make skin more sensitive to ultraviolet light, so be careful in the sun when taking it regularly. Take the pills standing up with plenty of water to reduce the chance of stomach irritation.

Doxycycline should not be used in pregnancy. Don't take it at the same time as indigestion remedies. It has very few other significant drug interactions. Check the link on the website if you are taking other medicines.

HOW CAN I GET IT?

DoxyPEP is not yet available through the NHS. Visit our webpage for the latest information on how to access it.

Doxy-PEP in Latin America

- Clinical trials have not enrolled participants in Latin America;
- No official guidelines issued so far;
- No data on off-label use or doxy-PEP awareness among sexual and gender minorities.

Web-based survey enrolling 5,007 respondents who answered the following question:

Have you ever heard about doxy-PEP?

Doxy-PEP awareness in Brazil

	Doxy-PEP awareness, N=1707 (n, %)	No doxy-PEP awareness, N=3300 (n, %)	aOR (95% CI)
Educational level: secondary or lower	327 (19.2)	884 (26.8)	Ref.
Educational level: post-secondary	1380 (80.8)	2416 (73.2)	1.43 (1.19-1.72)
HIV Knowledge Score (Median, IQR), (score range 0-12)	12 (11, 12)	11 (11, 12)	1.13 (1.06-1.22)
Internalized LGBTQIAPN+ Score (Median, IQR), (score range 0-42)	7 (3, 13)	9 (4, 17)	0.98 (0.97-0.98)
Number of sex partners¹: 5 or less	787 (37.7)	2039 (61.8)	Ref.
Number of sex partners¹: More than 5	920 (53.9)	1261 (38.2)	1.41 (1.21-1.65)
Condomless anal sex¹	1379 (80.8)	2272 (68.8)	1.39 (1.16-1.67)
Chemsex¹	520 (41.0)	694 (27.4)	1.28 (1.09-1.50)
At least one STI¹	333 (19.7)	448 (13.8)	1.28 (1.06-1.55)
HIV status: negative	1156 (68.0)	2290 (69.7)	Ref.
HIV status: positive	509 (29.9)	811 (24.7)	1.15 (0.98-1.35)
HIV status: unknown	36 (2.1)	183 (5.6)	0.64 (0.41-0.97)

¹ In the last 6 months; models adjusted for age, gender, race, income and living in capital cities.

Only 5.6% reported previous doxy-PEP use, mostly receiving a medical prescription (64.2%)

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Reflections on the way forward...

Strengthening clinical research...

- Clinical trials conducted in 10 countries from Latin America by 2024:

Country	Number of active trials	Topics
Argentina	1	Syphilis (diagnosis)
Brazil	5	HPV (vaccines), Hepatitis B (vaccines)
Chile	2	HPV (vaccines)
Colombia	3	HPV (vaccines)
Guatemala	1	HPV (diagnosis)
Haiti	2	HPV (vaccines), Hepatitis B (vaccines)
Mexico	3	HPV (vaccines)
Nicaragua	6	HPV (vaccines)
Peru	3	HPV (vaccines)
Puerto Rico	2	HPV (vaccines)

Community action



Fight stigma and LGBTQIAPN+phobia

Protests in Peru after new insurance law deems transgender people mentally ill

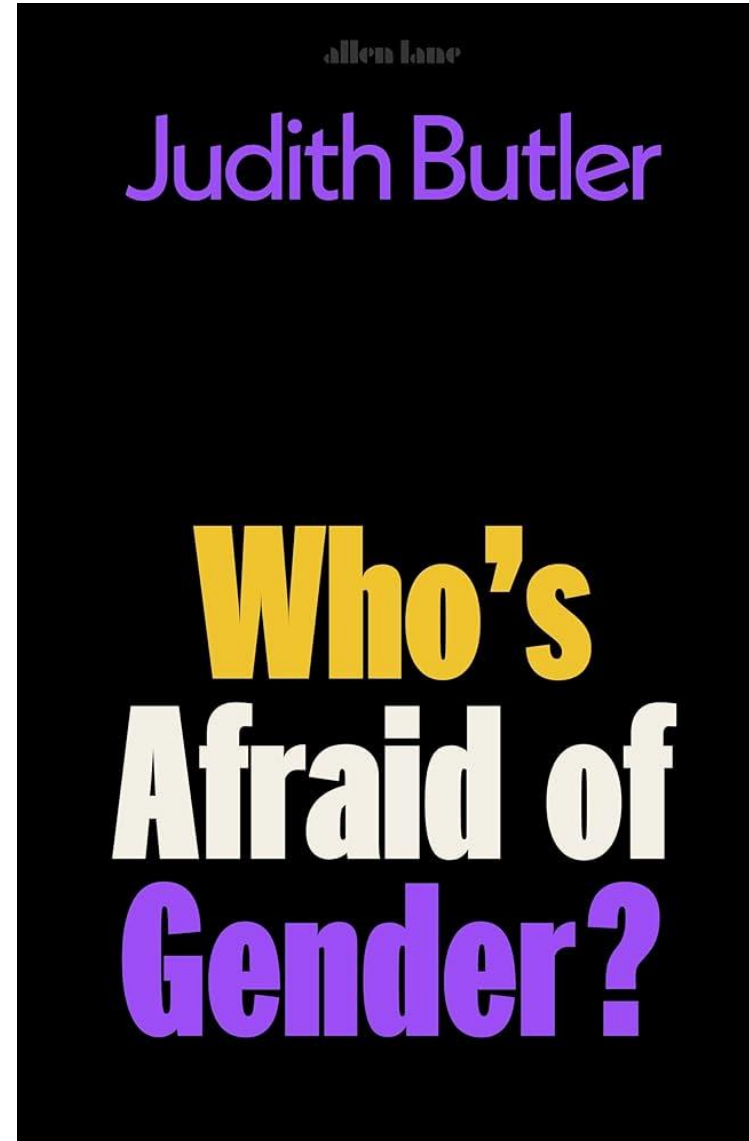
Sexual diversity activists protest in Peru's capital in front of Health Ministry to demand that government repeal decree



Peru
June, 2024



Fight stigma and LGBTQIAPN+phobia





Gratidão!

mayara.secco@fiocruz.br



| @HIVptn



HPTN
Regional
Meeting

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