# Expedited Partner Therapy Uptake and STI Clearance Rates Among Cisgender Women in Doxycycline Post-Exposure Prophylaxis Study in Kenya

**Lawrence Juma**, Sangeitha Thayalan, Benard Rono, Victor Omollo, Kevin Oware, Lauren R. Violette, Deborah Donnell, Josephine Odoyo, Felix Mogaka, Lianne K. Siegel, Sarah J. Hoffman, Elizabeth A. Bukusi, Jared M. Baeten, Jenell Stewart

UNIVERSITY OF WASHINGTON
INTERNATIONAL CLINICAL RESEARCH CENTER

CeIDeR
CENTER FOR INFECTIOUS DISEASE RESEARCH

KENYA MEDICAL RESEARCH INSTITUTE
KEMRI

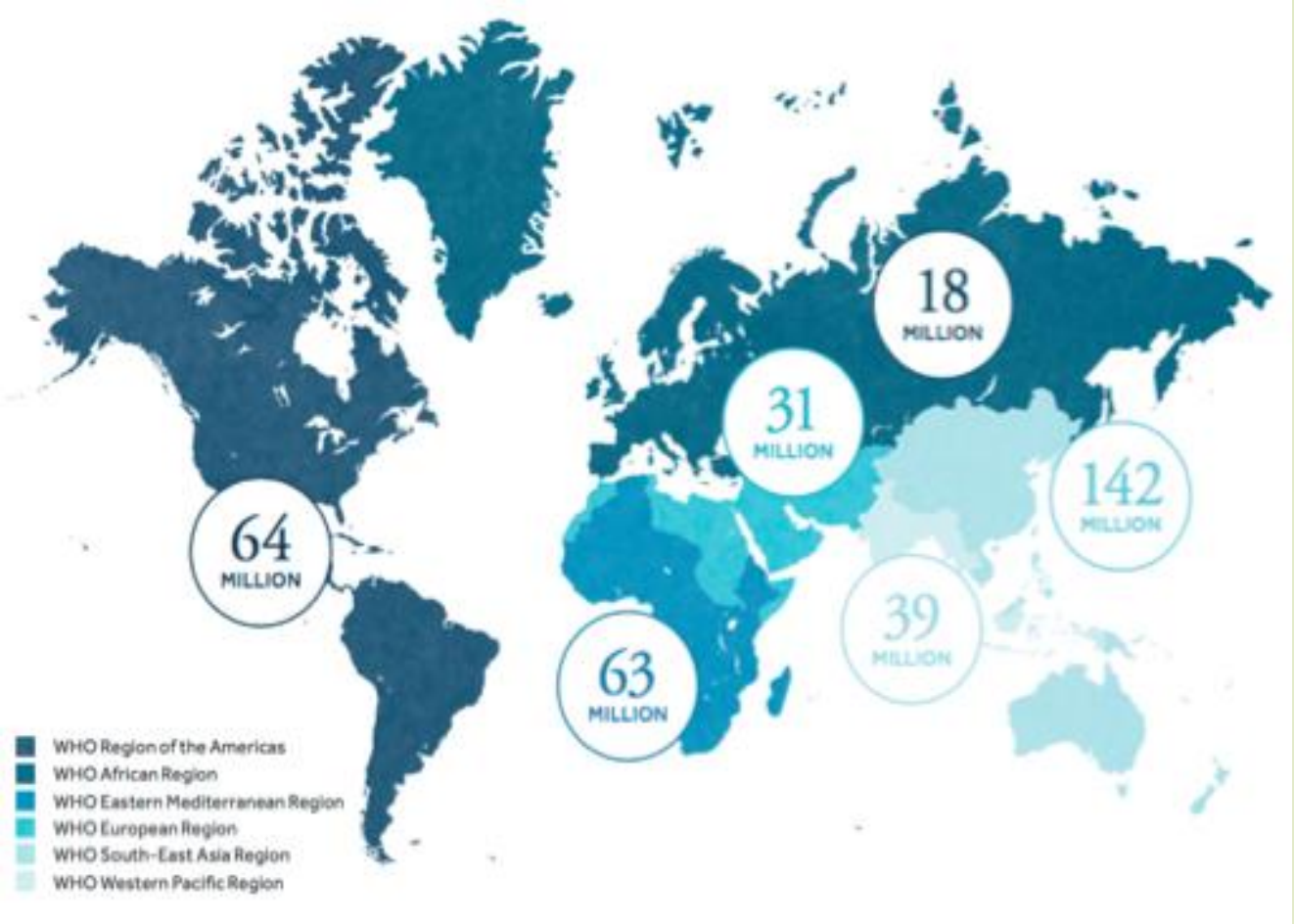
EP KENYA

# Background

- Expedited partner therapy (EPT) reduces the reinfection of STIs following treatment without requiring clinical evaluation of partners.
- Use of EPT in sub-Saharan Africa is rare with etiologic testing often unavailable
- Partner engagement for HIV self testing and linkage to care in Kenya has resulted in moderate uptake of PrEP and high uptake of ART with low rate of social harm (Kiptinness et al, JAIDS, 2025)
- Adherence to HIV prevention and treatment medications is often associated with disclosure and support from partners (Mngadi et al, AIDS Behavior, 2014)
- Understanding the factors associated with EPT uptake and clearance of STIs is critical to optimizing intervention strategies.

# Rationale

- STI rates are on the rise with more than double increase in the last decade
- The burden of sequalae disproportionately impacts cisgender women due to increased risk of HIV acquisition, Pelvic Inflammatory Disease (PID), infertility, and pregnancy complications.




Global burden of curable STIs (WHO, 2014)

# Study objective

- We investigated factors associated with the uptake of EPT and the clearance of *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) among women in a doxyPEP trial.

# Methods

- **Design:**
- Secondary analysis from dPEP Kenya Study.
- **Population:** Cisgender women, 18-30 years of age and taking HIV PrEP, with an STI diagnosis during the dPEP Kenya Study (N=140, 209 visits).
- CT/NG test, endocervical, every 3 months for 1 year
- All positive tests were followed by treatment + optional EPT offered
- Treatment and EPT Dosing (national guideline):
  - CT: Azithromycin 1 gram orally
  - NG: Ceftriaxone 500 mg IM once OR oral Cefixime 400mg and Azithromycin 1 gram
- Test of Cure: 2-4 weeks after treatment

# Analysis

- Chi-squared tests examined the relationships between EPT uptake and participant sociodemographic characteristics.
- Generalized Estimating Equation (GEE) models compared visit-level EPT uptake by participant characteristics and test of cure results.

# Results on EPT Uptake

| Characteristic | Never received EPT during study | Received EPT at least once in study | p-value |
|---|---|---|---|
| N = 140 | 35 | 105 | |
| Age Group | | | 0.696 |
| <24 years old | 20 (57.1%) | 54 (51.4%) | |
| >=24 years old | 15 (42.9%) | 51 (48.6%) | |
| *C. trachomatis* diagnosis | | | 0.693 |
| Diagnosed with chlamydia during the study | 28 (80.0%) | 89 (84.8%) | |
| Never diagnosed with chlamydia | 7 (20.0%) | 16 (15.2%) | |
| *N. gonorrhoeae* diagnosis | | | 1.000 |
| Diagnosed with gonorrhea during the study | 10 (28.6%) | 31 (29.5%) | |
| Never diagnosed with gonorrhea | 25 (71.4%) | 74 (70.5%) | |
| Intimate Partner Violence | | | 0.403 |
| Reported intimate partner violence during the study | 7 (20.0%) | 13 (12.4%) | |
| Never reported intimate partner violence | 28 (80.0%) | 92 (87.6%) | |
| Marital Status | | | 1.000 |
| Currently married | 6 (17.1%) | 20 (19.0%) | |
| Not currently married | 29 (82.9%) | 85 (81.0%) | |
| Income | | | 0.018 |
| Earns own income | 13 (37.1%) | 65 (61.9%) | |
| Does not earn own income | 22 (62.9%) | 40 (38.1%) | |
| Finished Secondary School | | | 0.922 |
| Finished secondary school | 18 (51.4%) | 51 (48.6%) | |
| Did not finish secondary school | 17 (48.6%) | 54 (51.4%) | |
| Transactional Sex | | | 0.032 |
| Reported transactional sex during the study | 11 (31.4%) | 57 (54.3%) | |
| Never reported transactional sex | 24 (68.6%) | 48 (45.7%) | |

# Result on EPT uptake cont.

- Of 140 women, 105 accepted EPT at least once during the study.
- Women who earned income (65/105, 61.9%) were more likely to accept EPT compared to women who did not earn income (40/105, 38.1%), p = 0.018.
- Women who reported transactional sex at any time during the follow-up period (56/105, 54.3%) were more likely to accept EPT compared to women who did not report (48/105, 45.7%), p = 0.032.
- Having a primary sex partner within the past three months was associated with a study visit where EPT uptake occurred (OR 2.17, 95% CI 1.01-4.65, p = 0.047).
- Participant study visits when intimate partner violence (IPV) in prior 3 months was associated with decreased EPT uptake (OR 0.25, 95% CI 0.06-1.01, p=0.051).
- In a multivariate analysis, IPV remained negatively associated with EPT uptake (OR 0.23, 95% CI 0.06-0.95, p = 0.042).

# STI Clearance Outcome

- Of the ToC completed within the 14 to 28 days after receiving treatment, 30/174 (17.2%) tested positive for the same STI.
- Among participants with a positive ToC result, trended towards more accepted EPT (n=25/30, 83.3%) compared to those who declined EPT (n=5/30, 16.7%) (OR 2.42, 95% 0.89-6.56, p = 0.082).
- Among participants with a negative ToC result, more accepted EPT (n=97/144, 67.4%) compared to those who declined (n=47/144, 32.6%) (OR 2.42, 95% 0.89-6.56, p = 0.082).

# Discussion

- Lack of impact on clearance of STI at test of cure despite high rates of uptake has important implications for partner engagement.
- This study was limited by lack of partner behavior data; the sample size is low and thus this observational comparison may not be powered.
- Consider opportunities to actively engage partners to optimize EPT, without offsetting the advantages of EPT as an equitable and cost-efficient approach to STI management.
- Our study indicates that participants were able to self-identify risk of IPV and declined uptake of EPT. Alternative options that do not require partner participation are especially important among people facing risk of IPV
- A key limitation of this study is lack of data on if EPT was offered to and accepted or declined by the participant's partner as sexual partner behavior is crucial to the effectiveness of EPT.
- Our analysis was limited to the participants' decision to accept, and not their partner's choice to accept or decline EPT, as we do not have data on successful EPT completion.

# Conclusion

Despite high rates of EPT uptake, especially among those with their own income and engaging in transactional sex work, EPT was not associated with clearance of STIs at test of cure.

## Acknowledgements

Thank You!


- Study participants
- Study PIs: Prof Elizabeth Bukusi, Dr. Jenell Stewart
- Study staff
- US National Institute of Health (R01AI145971 and K23MH124466)


UNIVERSITY OF WASHINGTON
INTERNATIONAL CLINICAL RESEARCH CENTER

CeIDeR
CENTER FOR INFECTIOUS DISEASE RESEARCH

KENYA MEDICAL RESEARCH INSTITUTE
KEMRI

EP KENYA