Clinical Infectious Diseases

CORRESPONDENCE

Same-day treatment following point-of-care sexually transmitted infection testing in different healthcare settings in South Africa

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Dear Editor –

We would like to congratulate Asare et al [1] on their analysis of the outcomes of point-of-care (POC) testing for sexually transmitted infections (STIs) among women in South Africa during an HIV vaccine trial. They found that, in one clinic, 92% of women with a positive test result for

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Chlamydia trachomatis or *Neisseria gonorrhoeae* (Xpert® CT/NG, Cepheid, Sunnydale, California) received same-day treatment. We would like to highlight the variability in receipt of same-day STI treatment at primary healthcare (PHC) settings in South Africa.

We evaluated same-day STI treatment at the baseline visit in our ongoing implementation-effectiveness trial of STI diagnostic strategies in pregnancy in the Buffalo City Metropolitan Municipality in South Africa [2]. At four PHC clinics, we enrolled pregnant women attending their first antenatal care visit at <27 weeks of gestation. On-site testing with the Xpert® CT/NG and TV (*Trichomonas vaginalis*) assays is conducted in two of three study arms; results are usually available within 90 minutes of sampling. Women are encouraged to wait for their results and those who cannot wait are contacted by telephone. The study is approved by the Human Research Ethics Committee at the University of Cape Town (REF: 676/2019).

We have enrolled 511 women in this analysis with a median age of 28 years (interquartile range 24-32). HIV and syphilis prevalence are 29% and 2%, respectively. Overall baseline STI prevalence is 24% (125/511) with 83 women (16%) testing positive for *C. trachomatis*, 27 for *N. gonorrhoeae* (5%), and 31 for *T. vaginalis* (9%). In our cohort, 39% (49/125) of women diagnosed with an STI received same-day treatment. However, there was a large difference between the four clinics: 96% of women (26/27) received same-day treatment at one facility compared with 7/25 (28%), 7/39 (18%), and 9/34 (26%) at the others. At these clinics, 66% (66/98) received treatment within 7 days of testing (**Table 1**).

We agree that rapid STI diagnostics could improve STI management in settings where syndromic management is standard of care. The benefits of on-site STI testing, however, may depend on the setting and on test characteristics. We achieved >90% same-day STI treatment at one clinic (Facility A), which has a designated waiting area. However, most women did not wait for their results at three other PHC clinics, which are crowded and do not have a designated waiting area. Nevertheless, most women received STI treatment within 7 days following telephone follow-up. This is faster than reported by Asare et al. for laboratory-based testing (8% treated within 7 days) but similar for clinic-based testing (98% treated within 7 days). Additionally, Asare et al. used an antigen test for *T. vaginalis* that gives results in 10-15 minutes, which might contribute to the high levels of same-day treatment in clinic-based testing.

In conclusion, our findings confirm that on-site STI testing can achieve high levels of same-day treatment, but further implementation research is needed to determine the settings, populations, contexts, and test characteristics that are needed to optimize same-day STI treatment at the PHC level.

NOTES

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No other authors report conflicts of interest.

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Table 1. Time to treatment initiation following point-of-care STI testing at four primary healthcare facilities in South Africa

	Facility A (N = 27) n (%)	Facility B (N = 39) n (%)	Facility C (N = 34) n (%)	Facility D (N = 25) n (%)	Total (N = 125)
Same-day treatment	26 (96)	7 (18)	9 (26)	7 (28)	49 (39)
Treatment 1-7 days	0	19 (49)	13 (38)	11 (44)	43 (34)
Treatment >7 days	0	10 (26)	7 (21)	4 (16)	21 (16)
Did not return	1 (4)	3 (8)	5 (15)	3(12)	12 (10)

Abbreviations: STI, sexually transmitted infection.