

ACCEPTABILITY AND OPERATIONAL SUITABILITY OF A RAPID POINT-OF-CARE DIAGNOSTIC TEST FOR SYPHILIS IN HIGH-RISK POPULATIONS OF MANAUS, BRAZIL *

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Background

The implementation of syphilis screening programmes may be hampered by operational and technical difficulties.

We evaluated the acceptability and operational characteristics of a rapid point-of-care (POC) diagnostic test for syphilis using fingerprick blood at an STI clinic located in a 'red-light' area near the harbour of Manaus, Brazil.

Methods

This qualitative and quantitative study was undertaken within a larger field performance evaluation of a novel POC test for syphilis (**VisiTest Syphilis**, Omega Diagnostics, Alloa, Scotland) (Benzaken A, et al. *Sex Transm Infect* 2008; 84(4):297-302). We interviewed all **12 staff** involved in using the test and **60 patients** (60% women) attending the clinic. We performed time flow analysis on a separate subsample patients (**n=84**) who were not interviewed.

Table 1. Selected responses to a questionnaire administered to 60 patients undergoing POC syphilis testing in a STI clinic in a red-light area of Manaus, Brazil, 2006*

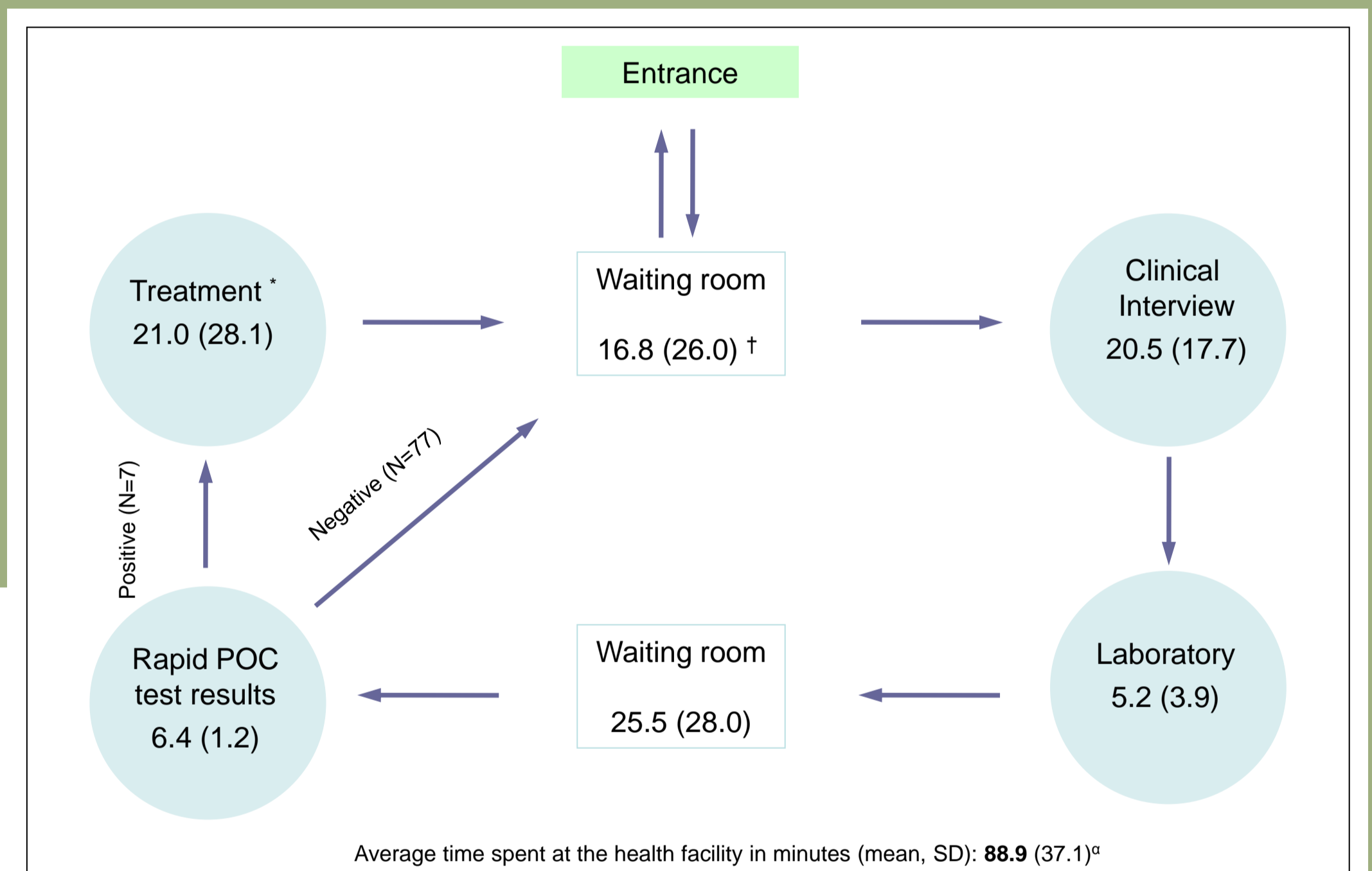
Questions	No. (%) responses
Were you satisfied with services received?†	
5 out of 5 factors	56 (93)
4 out of 5 factors	4 (7)
Would you recommend the syphilis rapid test to friends?	
Yes	57 (95)
No	2 (5)
How would you rate the information received from clinical staff?	
Satisfactory	36 (60)
Difficult to understand	8 (13)
Did not receive information	16 (27)
How much do you know about syphilis?‡	
Could identify STI	12 (20)
Could explain some or all of its symptoms	12 (20)
Could explain some of its complications	5 (8)
Do you know how syphilis is transmitted?‡	
Unprotected sex	12 (20)
Sex regardless of condom use	19 (32)
Mother to child	6 (10)
Contaminated blood	13 (22)
Kissing	6 (10)
Sitting in the same place	3 (5)
Skin lesions	2 (3)
Do you know whether syphilis can be cured?‡	
Yes	53 (89)
No/don't know	6 (11)

*POC: point of care; STI, sexually transmitted infection
† Measured on a scale from 0 (totally unsatisfactory) to 5 (totally satisfactory)
‡ Open questions.

Results

Staff found the POC test easy to use and to interpret. Half had limited confidence in the test results since it does not differentiate between old and recent syphilis.

Clinic accessibility, waiting time, and confidence in test results were not identified as obstacles for testing by patients. However, pain caused by fingerprick and patient's preferences for venous blood collection was listed as minor barriers. **Table 1** shows patients' **satisfaction** with the services and testing provided and their syphilis knowledge. Excluding time spent on receiving treatment for 7 (8.3%) patients, the **average duration** spent at the clinic was **51 minutes** (SD, 32) (**Figure 1**).



Conclusions

- The POC test was found acceptable and operationally suitable as a screening tool in high-risk groups, and it was performed within reasonable waiting time.
- It could considerably alleviate the burden of syphilis in hard-to-reach populations in the Amazon region of Brazil. Immediate, on-site testing, is an operational characteristic especially important for a region characterized by long distances to most of its settlements, the need for river transportation, and the lack of well-equipped laboratories and trained technicians.
- The drawback is that current POC remains positive for life – repeat testing in high-risk populations will require a strategy that detects active syphilis.



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