

Note: This is Online Appendix 1 of Kufa T, Tobaiwa, O, Cutler, E, et al. Acceptability and performance of dual HIV/syphilis testing in male circumcision clients, 2021. S Afr J HIV Med. 2024;25(1), a1571. <https://doi.org/10.4102/sajhivmed.v25i1.1571>.

**Table 1: List of variables included in the questionnaire**

Demographic	Age, risk group, location, education, employment, smoking, alcohol
Clinical	History of STI treatment in the past 3 months, partner STI history and treatment, other illnesses, HIV testing (lab confirmed and self-reported), ART use, most recent viral load, ever circumcised, circumcision method
Behavioural	Age at first sex, condom use at last sex, number of sexual partners in the preceding 3 or 12 months, type of sexual partner in the last 3 months (regular or non-regular), sexual act type, new sexual partner, history of recent travel, recent sex under the influence of alcohol or drugs
NDOH screening tool questions	Do you have a genital discharge? Do you have a genital ulcer? Has your partner been treated for an STI in the past 8 weeks?
Risk perception	Referring to your past and present sexual practices, at which level do you rank your risk of contracting HIV? 5-point Likert scale ranging from 5 (very high) to 1 (not high at all),
Acceptability of dual testing by participants	Before test <ul style="list-style-type: none"> <li>- Would you like to be tested for HIV (yes, no, do not know)?</li> <li>- Would you like to be tested for syphilis (yes, no, do not know)?</li> <li>- Would you prefer two single tests or one dual test? (single, dual, it's the same, do not know/don't care)</li> <li>- If you prefer a single test, why? (I do not want to be tested for HIV, I do not want to be tested for syphilis, other).</li> </ul> [if participant did not want to test with the dual HIV/syphilis test, the test was not administered] <ul style="list-style-type: none"> <li>- Would you be willing to wait for the results at the clinic, directly after the tests are performed? (Yes, no, do not know).</li> <li>- If yes, how long would you be willing to wait? (Up to 20 min, up to 30 min, up to 1 hour, up to 2 hours, do not know other). If other, please describe.</li> </ul>
Test results	HIV – Negative, Positive, Discrepant Syphilis – Negative, Positive, equivocal
Acceptability of dual HIV/syphilis testing by participants	After test <i>I liked being tested for HIV and syphilis at the same time</i> a five-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree) <i>I was happy the results of the syphilis test</i> a five-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree) <i>I was happy with the results of the HIV test</i> a five-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree) <i>I would recommend this test to a friend</i> a five-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree) <i>I am willing to pay for the test in the future</i> a five-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree) How much would you be willing to pay

**Table 2: Performance of the dual HIV/syphilis testing with First Response HIV1+2/Syphilis Combo Card Test®**

	Facility	Sensitivity			Specificity			NPV			PPV		
HIV testing	Tshwane 1	83.33%	77.81%	88.85%	98.09%	96.06%	100%	83.33%	77.81%	88.85%	98.09%	96.06%	100.12
	Ekurhuleni 1	30.00%	19.76%	40.24%	100%	100%	100%	100%	100%	100%	90.54%	84.00%	97.08%
	Tshwane 2	76.92%	70.11%	83.73%	100%	100%	100%	100%	100%	100%	95.28%	91.85%	98.71%
	Ekurhuleni 2	100%	100%	100%	92.31%	79.25%	100%	75.00%	53.78%	96.22%	100%	100%	100%
	Tshwane 3	66.67%	59.20%	74.14%	100%	100%	100%	100%	100%	100%	98.66%	96.83%	100%
	Ekurhuleni 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Syphilis (Past and recent testing)	Tshwane 1	58.33%	51.11%	65.56%	98.80%	97.21%	100%	77.78%	71.69%	83.87%	97.06%	94.58%	99.53%
	Ekurhuleni 1	25.00%	15.45%	34.55%	98.67%	96.14%	100%	50.00%	38.97%	61.03%	96.10%	91.84%	100%
	Tshwane 2	33.33%	25.81%	40.85%	100%	100%	100%	100.00%	100.00%	100.00%	94.56%	90.94%	98.18%
	Ekurhuleni 2*	-	-	-	-	-	-	-	-	-	-	-	-
	Tshwane 3	81.82%	75.93%	87.70%	99.35%	98.13%	100%	90.00%	85.42%	94.58%	98.71%	96.99%	100%
	Ekurhuleni 3	75.00%	55.53%	94.47%	100.00%	100.00%	100.00	100.00%	100.00%	100.00%	93.75%	82.87%	104.63%
Syphilis (recent testing)	Tshwane 1	100.00%	100.00%	100.00%	95.51%	92.47%	98.54%	11.11%	6.51%	15.71%	100.00%	100.00%	100.00%
	Ekurhuleni 1	100.00%	100.00%	100.00%	98.72%	96.24%	101%	50.00%	38.97%	61.03%	100%	100%	100%
	Tshwane 2	50.00%	42.03%	57.97%	97.99%	95.75%	100%	25.00%	18.09%	31.91%	99.32%	98.01%	100%
	Ekurhuleni 2*	-	-	-	-	-	-	-	-	-	-	-	-
	Tshwane 3	100.00%	100.00%	100.00%	96.27%	93.38%	99.16%	40.00%	32.52%	47.48%	100%	100%	100%
	Ekurhuleni 3	100.00%	100.00%	100.00%	88.89%	74.76%	100%	33.33%	12.14%	54.53%	100.00%	100.00%	100.00

\*This facility had no syphilis positive clients and therefore performance could not be determined