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Does a waiting room increase same-day treatment for sexually transmitted infections among pregnant women? A quality improvement study at South African primary healthcare facilities

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Additional file 1 – Socio-economic and health characteristics of included and excluded participants

	Included (N=624)	Excluded (N=876)	P-value
Age (in years)			
Mean (SD)	27.6 (6.20)	29.0 (5.96)	<0.001
Median [Min, Max]	27.0 [18.0, 44.0]	29.0 [17.0, 44.0]	
Gestational age (in weeks)			
Mean (SD)	14.4 (5.86)	14.2 (5.82)	0.366
Median [Min, Max]	14.1 [3.43, 26.9]	13.7 [2.86, 26.9]	
Missing	0 (0%)	4 (0.5%)	
Number of previous pregnancies			
Mean (SD)	1.34 (1.27)	1.42 (1.29)	0.266
Median [Min, Max]	1.00 [0, 10.0]	1.00 [0, 7.00]	
Education level			
Less than Grade. 10	48 (7.7%)	55 (6.3%)	0.02
Grade 10 or 11	209 (33.5%)	271 (30.9%)	
Grade 12	310 (49.7%)	419 (47.8%)	
Diploma	38 (6.1%)	89 (10.2%)	
Degree	19 (3.0%)	41 (4.7%)	
Missing	0 (0%)	1 (0.1%)	
Employment status			
Not employed	383 (61.4%)	501 (57.2%)	0.116
Employed	241 (38.6%)	375 (42.8%)	
Personal income (ZAR per month)			
None	383 (61.4%)	505 (57.6%)	0.001
< 1000	31 (5.0%)	21 (2.4%)	
1001 - 5000	157 (25.2%)	249 (28.4%)	
5001 - 10'000	48 (7.7%)	75 (8.6%)	
> 10'000	5 (0.8%)	26 (3.0%)	
Vaginal discharge (observed or reported)			
Yes	82 (13.1%)	106 (12.1%)	0.602
No	542 (86.9%)	770 (87.9%)	
HIV status			
HIV negative	433 (69.4%)	615 (70.2%)	0.833
HIV positive on ART	158 (25.3%)	210 (24.0%)	
HIV positive, not on ART	33 (5.3%)	49 (5.6%)	
Missing	0 (0%)	2 (0.2%)	
Time normally spent waiting to see a nurse/doctor (in minutes)			
Mean (SD)	62.2 (55.6)	56.0 (50.3)	0.123
Median [Min, Max]	45.0 [0, 360]	45.0 [0, 420]	
Travelling time to the clinic (in minutes)			
Mean (SD)	25.4 (17.6)	23.9 (14.0)	0.797
Median [Min, Max]	20.0 [0, 120]	20.0 [1.00, 120]	
Money spent to attend clinic (in ZAR)			
Mean (SD)	37.4 (34.8)	39.2 (35.8)	0.651
Median [Min, Max]	34.0 [0, 300]	32.0 [0, 300]	

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Additional file 2 – Percentage of women who waited for results by clinic and intervention date (14 December 2023)

Waited for results, % (95% CI) n/N	Clinic A	Clinic B	Clinic C	Clinic D	Clinic E	Overall
	Intervention: waiting room introduced		No intervention: always had a waiting room		No intervention: never had a waiting room	
Pre-intervention	26 (16-39) 17/65	10 (4-18) 8/84	94 (86-98) 77/82	68 (43-86) 13/19	18 (12-26) 21/118	37 (32-42) 136/368
Post-intervention	18 (9-32) 9/50	2 (0-12) 1/49	80 (66-90) 41/51	69 (49-84) 20/29	23 (15-35) 18/77	35 (29-41) 89/256
Total	23 (16-32) 26/115	7 (3-13) 9/133	89 (82-93) 118/133	69 (54-81) 33/48	20 (15-26) 39/195	36 (32-40) 225/624

Additional file 3 – Secondary analysis 1: All clinics, grouped by waiting room availability

	Waiting room vs. no waiting room
Absolute percentage difference, % (95% confidence interval)	+39 (+31 to +47)
Adjusted absolute percentage difference, % (95% confidence interval)	
Adjusted for employment status of participants	+39 (+31 to +47)
+ STI positivity	+41 (+33 to +49)
+ proportions of symptomatic participants	+39 (+31 to +47)
+ load shedding (in 3 categories: no load shedding, stage 1-3, stage 4-6)	+42 (+35 to +50)
+ the distance in metres to the nearest food shop	+7 (–4 to +18)
+ work experience of the nurse (in 3 categories: 9 years=low, 15 years=middle, 33 years=long)	–8 (–15 to –0.3)

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Additional file 4 – Sub-group analysis: Clinics A and B combined, grouped by presence of an STI

	Percentage waited, % (95% CI, n/N)	Absolute percentage difference, % (95% CI)	Adjusted ¹ absolute percentage difference, % (95% CI)
No STI	13 (7-21, 13/101)		
Pre-intervention	18 (7-35, 6/34)		
Post-intervention	10, (4-20, 7/70)	–9 (–26 to –7)	–11 (–29 to +7)
STI present	15 (10-22, 22/147)		
Pre-intervention	16 (10-24, 19/118)		
Post-intervention	10 (3-29, 3/29)	–6 (–20 to –8)	–5 (–23 to +12)
p-value for interaction between STI presence and absence		0.79	0.76
Legend: CI, 95% confidence interval; 1, adjusted for employment status of participants, STI positivity, proportions of symptomatic participants, load shedding (in three categories: no load shedding, stage 1-3, stage 4-6), and the distance in metres to the nearest food shop			

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Additional file 5 – Reasons for not waiting for STI test results, or for changing intention, grouped by clinic and pre/post-intervention

	Clinic A	Clinic B	Clinic C	Clinic D	Clinic E	Overall
Total number of participants	115	133	133	48	195	624
Responded to questions about waiting for results, n (%)	74 (64)	77 (58)	76 (58)	40 (83)	125 (64)	392 (63)
“Are you planning to wait for your results today?”						
Yes	48 (65)	7 (9)	65 (86)	35 (88)	20 (16)	175 (45)
No	26 (35)	70 (91)	11 (15)	5 (13)	105 (84)	217 (55)
“What is your main reason why you are not intending to wait today?”	Clinic A (n=26) n (%)	Clinic B (n=70) n (%)	Clinic C (n=11) n (%)	Clinic D (n=5) n (%)	Clinic E (n=105) n (%)	Overall (n=217) n (%)
Have to get back to my kids/family	5 (19)	13 (19)	3 (27)	2 (40)	43 (41)	66 (30)
Have to get to work/school	8 (31)	18 (26)	5 (46)	1 (20)	28 (27)	60 (28)
Hungry	5 (19)	12 (17)	0	1 (20)	11 (11)	29 (13)
Want to go to the shop	0	9 (13)	1 (9)	0	16 (15)	26 (12)
Not feeling well	2 (8)	8 (11)	0	0	1 (1)	11 (5)
No time/going somewhere	0	5 (7)	1 (9)	0	2 (2)	8 (4)
Load shedding	3 (12)	2 (3)	0	0	0	5 (2)
Referred to hospital	1 (4)	1 (1)	0	0	2 (2)	4 (2)
Too hot	0	2 (3)	0	0	0	2 (1)
Boring	0	0	0	0	2 (2)	2 (1)
Transport availability	0	0	1 (9)	0	0	1 (1)
No space to wait	1 (4)	0	0	0	0	1 (1)
Didn't come alone to the clinic	0	0	0	1 (20)	0	1 (1)
Tired	1 (4)	0	0	0	0	1 (1)
“What would make you change your mind?”	Clinic A (n=26) n (%)	Clinic B (n=70) n (%)	Clinic C (n=11) n (%)	Clinic D (n=5) n (%)	Clinic E (n=105) n (%)	Overall (n=217) n (%)
Nothing	20 (77)	28 (40)	11 (100%)	3 (60)	95 (91)	157 (72)
If I did not have other commitments/not be in a hurry	2 (8)	23 (33)	0	0	1 (1)	26 (12)
Food	3 (12)	10 (14)	0	1 (20)	9 (9)	23 (11)
If I had someone looking after the kids	0	5 (7)	0	1 (20)	0	6 (3)
If I can feel better	0	3 (4)	0	0	0	3 (1)

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Comfortable waiting space	1 (4)	1 (1)	0	0	0	2 (1)
“What made you change your mind about waiting for the results?”	Clinic A (n=1), n (%)	Clinic B (n=0), n (%)	Clinic C (n=1), n (%)	Clinic D (n=2), n (%)	Clinic E (n=7), n (%)	Overall (n=11) n (%)
Waiting for other clinic procedures (for example medication)	1 (100)	0	0	0	6 (86)	7 (64)
Education about importance of waiting by the nurse	0	0	1 (100)	2 (100)	0	3 (27)
Returned to clinic after being called	0	0	0	0	1 (14)	1 (9)