Acceptability and satisfaction with HIV self-testing among female sex workers: findings from a pilot project in 15 Indonesian priority districts

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Outline

- Background
- Setting
- Method
- Results
- Discussion

Background

- FSW and their clients remain priority or key populations for HIV and AIDS control in Indonesia
- Epidemic modelling indicated that, combined, FSW and their clients accounted for 24% of new infections in 2019 and 14% of all PLHIV
- Data from the 2018-19 IBBS indicated inadequate levels of HIV testing coverage among FSW are rather low (42% ever tested) and extremely low among clients of FSW (15%)
- Recent data on 5094 FSWs visiting a CBC in Bali, Indonesia during 2018-2021 → only 19% have visit more than one
- HIVST using OFT as new modality, that has been evaluated with high sensitivity and specificity, as well as high level of acceptability among KPs in some countries such as Thailand

Objectives

Primary research questions:

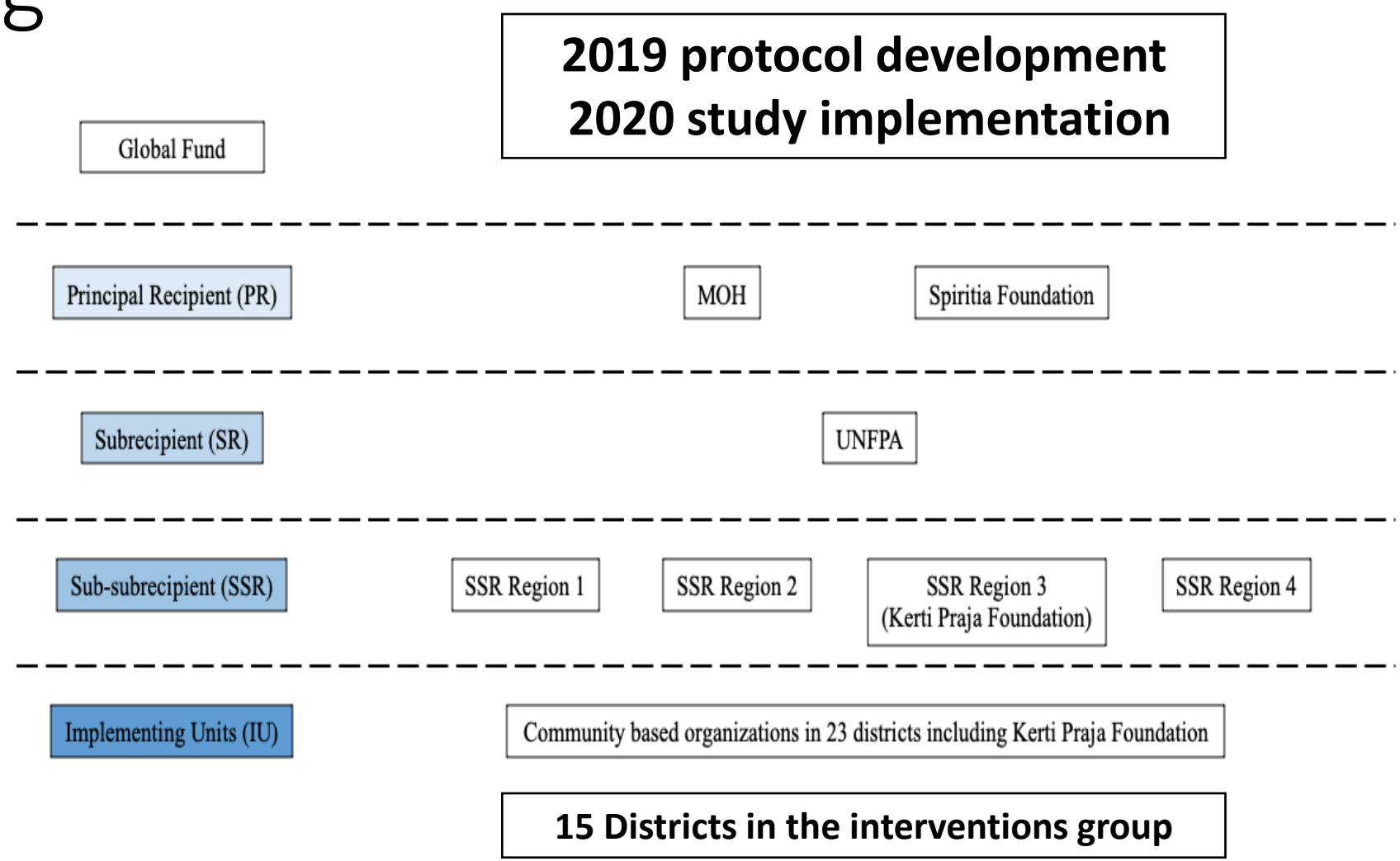
- Does the introduction of community HIV screening among FSW increase the rate of HIV testing?

Secondary research questions:

- What is the acceptability of community-based self-screening for FSWs participating in this study?
- What is the satisfaction of FSWs participating in this study towards delivery of community-based self-screening?

Study setting

Study was performed in the context and network of existing HIV program structure for FSWs involving key stakeholders UNFPA, OPSI, implementing partner organizations, outreach workers (OW) and peer leaders (PE)



Eligibility criteria

Inclusion criteria:

- Female, 18 years old and above
- Reported transactional sex (vaginal, oral, and/or anal) at least once within one month
- Have never been tested for HIV test or had not been tested in the past six months
- Self-reported HIV negative or HIV status unknown
- Not currently participating in any other HIV prevention study.

Exclusion criteria:

- Unwilling to participate for any reason.

Mode of delivery

To increase the visibility of this trial, branding strategy was employed by using the title Teman-kita (Tes Mandiri Komunitas).

1. Outreach Workers
   - Face-to-face outreach
   - Virtual outreach through social media and dating applications
2. Social Media Campaign → website for self registration
   - Content development on Facebook, Instagram, and Twitter
   - Managed by research staff from March-June 2020 then by digital marketing team from July-October 2020
3. Satelit Pengambilan Kit OFT (SPOT)
   - Established as an OFT pickup point to increase participants to register independently
   - Location was at a salon in East Jakarta which was frequented by local FSWs

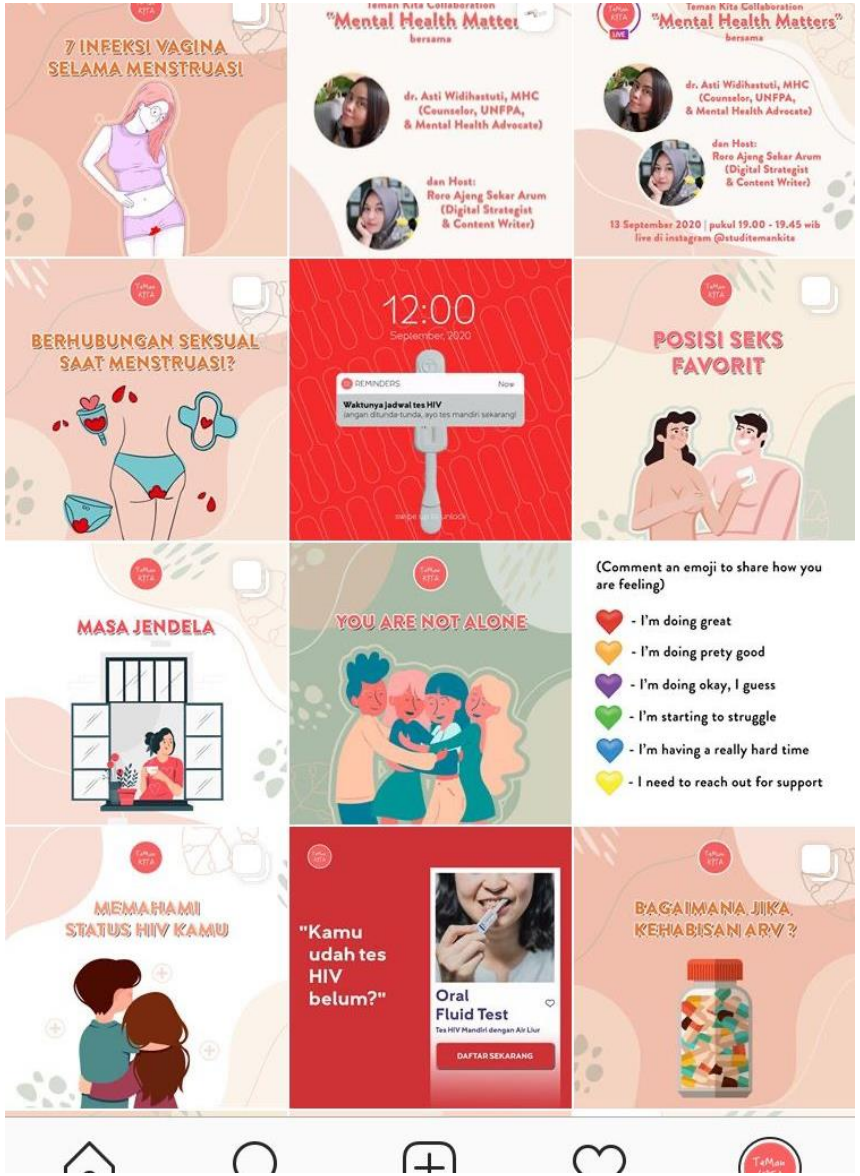
The campaign

"Kamu udah tes HIV belum?"

Oral Fluid Test

Tes HIV Mandiri dengan Air Liur

DAFTAR SEKARANG


7 INFEKSI VAGINA SELAMA MENSTRUASI
"Mental Health Matters"
bersama
dr. Asti Widihastuti, MHC (Counselor, UNFPA, & Mental Health Advocate)
dan Host: Rora Ajeng Sekar Arum (Digital Strategist & Content Writer)
13 September 2020 | pukul 19.00 - 19.45 wib
live di instagram @studitemankita
BERHUBUNGAN SEKSUAL SAAT MENSTRUASI?
12:00
September, 2020
REMINDERS
Now
Waktunya jadwal tes HIV
Jangan ditunda-tunda, ayo tes mandiri sekarang!
POSISI SEKS FAVORIT
MASA JENDELA
YOU ARE NOT ALONE
(Comment an emoji to share how you are feeling)
- I'm doing great
- I'm doing prety good
- I'm doing okay, I guess
- I'm starting to struggle
- I'm having a really hard time
- I need to reach out for support
MEMAHAMI STATUS HIV KAMU
"Kamu udah tes HIV belum?"
Oral Fluid Test
Tes HIV Mandiri dengan Air Liur
DAFTAR SEKARANG
BAGAIMANA JIKA KEHABISAN ARV ?


Comment as Teman Kita
GIF
Andriani Ikbal Gmn cara nya
Like · Reply · Message · 2w
Author
Teman Kita hi dear, silahkan langsung daftar ke link yang tersedia ya. kamu bisa isi formulir terlebih dahulu
Like · Reply · Commented on by Reno Pristiawan [?] · 2w
Mia Oktaviani Teman Kita berapa bayarnya?
Like · Reply · Message · 1w
Author
Teman Kita Mia Oktaviani tidak berbayar alias GRATIS dear. kamu hanya cukup mengisi formulir dan jika sesuai dengan kriteria maka akan bisa melakukan tes nya. Silahkan daftar dan isi dulu ya
Like · Reply · Commented on by Reno Pristiawan [?] · 2d

Data collection

Start of data collection

- The start of data collection was varied in each district based on the virtual training. (see Table)
- The virtual training was scheduled based on the preparedness of every IU with consideration to the availability of internet connection, computers, and smartphones and the level of restriction implementation in each district regarding pandemic of COVID-19

End of data collection

- The last day to register for the study was October 25, 2020, after which, OWs were no longer able to input new outreach and participant registration
- The participants who were already registered but have yet to complete remaining steps were given the opportunity to do so until October 31, 2020

Data collection starting times in intervention cites

Start of data collection	Districts
4/20/20	Denpasar
4/23/20	Palembang
5/4/20	Malang
5/6/20	Jakarta Timur
5/11/20	Sorong
5/12/20	Jakarta Pusat
5/14/20	Tangerang
5/14/20	Tangerang Selatan
5/15/20	Jakarta Barat
5/18/20	Depok
5/18/20	Surakarta
5/28/20	Medan
5/28/20	Deli Serdang
5/28/20	Bogor
5/29/20	Surabaya

Flowchart of participation part 1

Recruitment	**Registration**	**Eligibility selection**	**Informed consent process**	**Choosing type of testing**
➔	➔	➔	➔	➔
Outreach 3,377	Enrollment 2,772	Eligible 1,933	Agree to participate 1,907	Withdrew 74 (7 were self-withdrawal)
				Chose blood test 271
Independent registration 428 (80 were truly FSW)				Chose OFT test 1,562 (82%)

Flowchart of participation

Choosing type of testing		Undergoing OFT testing	OFT testing result	Undergoing Blood or Confirmatory testing	Blood or confirmatory result	ARV initiation
➔	➔	➔	➔	➔	➔	➔
Chose OFT test 1,562	Chose unassisted test 34	Underwent testing and reported result 29	OFT non-reactive result 29	Confirmatory test 1	Confirmatory non-reactive result 1	
	Chose assisted test 1,528 (98%)	Underwent testing and reported result 1,516	OFT non-reactive result 1,449	Confirmatory test 77 (71 conducted test without uploading the result through Teman-kita website)	Confirmatory non-reactive result 77	
			OFT reactive result 35 (2,3%)	Confirmatory test 24 (69%)	Confirmatory non-reactive result 2	
					Confirmatory reactive result 22 (92%)	ARV initiation 19 (86%)
			OFT indeterminate result by researcher 22	Confirmatory test 5 (2 conducted test without uploading the result through Teman-kita website)	Confirmatory non-reactive result 5	
			OFT indeterminate result by participant 10	Confirmatory test 6 (60%)	Confirmatory non-reactive result 3	
					Confirmatory reactive result 2	ARV initiation 2
					Confirmatory indeterminate result 1	

Table 12. Characteristic of participant by type of assistance

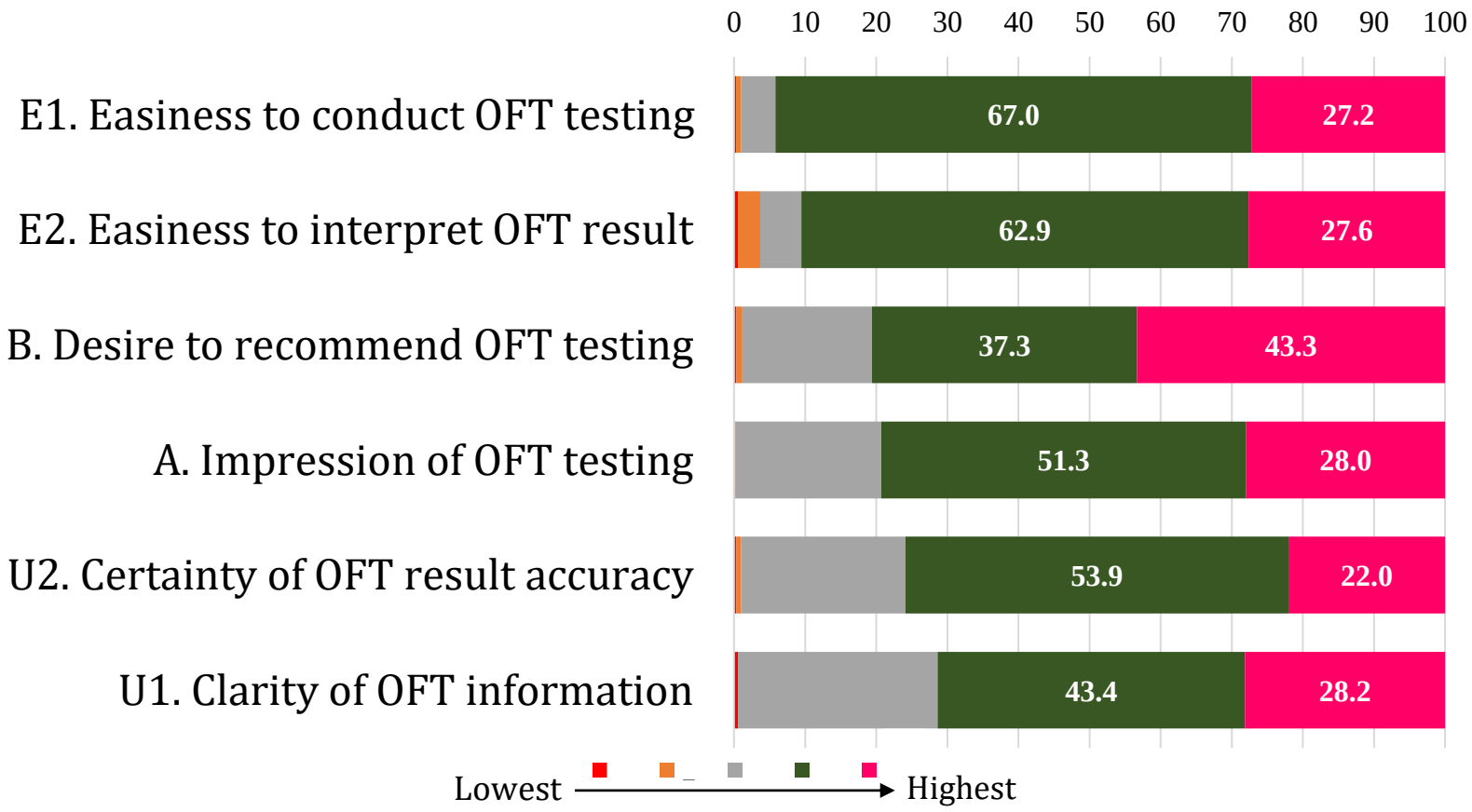
Characteristics	Total		OFT Unassisted test		OFT Assisted test		χ^2 p-value
	n	%	n	%	n	%	
	1,545	(100)	29	(1.9)	1,516	(98.1)	
Age groups	Mean=31;SD=9; median=30;IQR=14		Mean=26;SD=9; median=22;IQR=8		Mean=31;SD=9; median=30;IQR=14		0.003*
≤ 19 years old	110	(7.1)	6	(20.7)	104	(6.9)	
20-29 years old	620	(40.1)	16	(55.2)	604	(39.8)	
30-39 years old	511	(33.1)	2	(6.9)	509	(33.6)	
40-49 years old	257	(16.6)	5	(17.2)	252	(16.6)	
≥50 years old	47	(3.0)	0	(0.00)	47	(3.1)	
Districts							0.004*
Medan, Deli Serdang and Palembang	247	(16.0)	7	(24.1)	240	(15.8)	
West, East and Central Jakarta	704	(45.5)	6	(20.7)	698	(46.0)	
Bogor, Depok, Tangerang and South Tangerang	265	(17.2)	5	(17.2)	260	(17.2)	
Surakarta, Malang and Surabaya	135	(8.7)	7	(24.1)	128	(8.4)	
Denpasar	100	(6.5)	4	(13.8)	96	(6.3)	
Sorong	94	(6.1)	0	(0.00)	94	(6.2)	

Table 12. Characteristic of participant by type of assistance (cont..)

Characteristics	Total		OFT Unassisted test		OFT Assisted test		χ^2 p-value
	n	%	n	%	n	%	
	1,545	(100)	29	(1.9)	1,516	(98.1)	
Education level							<0.001*
Never school and graduated from elementary	387	(25.1)	1	(3.5)	386	(25.5)	
Graduated from junior high	544	(35.2)	3	(10.3)	541	(35.7)	
Graduated from senior high	574	(37.2)	21	(72.4)	553	(36.5)	
Ever/graduated from university	40	(2.6)	4	(13.8)	36	(2.4)	
Marital status							<0.001*
Never married	406	(26.3)	23	(79.3)	383	(25.3)	
Married	429	(27.8)	2	(6.9)	427	(28.2)	
Ever married	710	(46.0)	4	(13.8)	706	(46.6)	
Ever done HIV testing							0.064
Ever done	388	(25.1)	3	(10.3)	385	(25.4)	
Never done	1,157	(74.9)	26	(89.7)	1,131	(74.6)	
Received HIV testing invitation							<0.001*
Yes	831	(53.8)	3	(10.3)	828	(54.6)	
No	714	(46.2)	26	(89.7)	688	(45.4)	

Note: *significant at α=0.05

Divergent stacked bar of OFT users' satisfaction by 6 statements



TAM component analysis on OFT satisfaction

TAM components	Total		OFT unassisted testing		OFT assisted testing		t test p-value
	Mean	SD	Mean	SD	Mean	SD	
(U) Perceived usefulness	4.0	0.6	4.1	0.7	4.0	0.6	0.141
(E) Perceived easy to use	4.2	0.6	4.5	0.5	4.1	0.1	0.001
(A) Impression of OFT testing	4.1	0.7	4.1	0.8	4.1	0.7	0.998
(B) Behavioral intention to use	4.2	0.8	4.4	0.6	4.2	0.8	0.193
Total	4.1	0.4	4.3	0.4	4.1	0.4	0.006

TAM components	Behavioral intention to use				OR	p-value	95% CI
	Weak intention		Strong intention				
	Mean	SD	Mean	SD			
Perceived usefulness	3.8	0.6	4.0	0.6	1.7	<0.001	1.4-2.1
Perceived easy to use	4.1	0.5	4.2	0.6	1.3	0.012	1.1-1.7
Impression of OFT testing	3.7	0.7	4.2	0.7	2.4	<0.001	2.0-2.9

OFT as an alternative strategy for testing is well received by the community

- The high number of independent registrations indicated that wider communities had high interest for HIV self-testing
- Acceptability of OFT was high number of first tester →12 of 15 districts in which the proportion of the first-time tester was ≥50%.
- The majority of participants had high trust to the OFT accuracy in line with high sensitivity and specificity
- Further exploration needed for HIVST confirmatory testing among FSW is Indonesia.

Outreach works have important position in delivering HIV services

- Majority of participants enrolled through OW
- Majority of participants enrolled through OWs chose assisted testing (97.8%)
- High ARV initiation (87.5%) compared to previous study among key populations in Indonesia where ARV initiation was 75% (Januraga et al, 2018)
- 1.4% assisted OFT results were interpreted as nonreactive but categorized as indeterminate by researchers based on uploaded images
- Robust training and competency tests needed for OWs

Conclusions

- CBS HIVST using OFT appears to be highly acceptable to FSW in Indonesia and and tends to be trusted - Service satisfaction was high among FSW who received OFT;
- Strong preference among Indonesian FSW to receive test kits through outreach workers and to be assisted in carrying community screening.
- In the short run, scaling up HIVST will depend upon the deployment of outreach workers to reach FSW and other key populations.
- The global experience suggests that as people become more comfortable with HIVST technology, there tends to shift toward increasing acquisition of test kits via other distribution channels and self-testing in private.

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- Study team

Thank you!!!!