

COMMUNITY-BASED ORAL FLUID HIV TESTING AS A POTENTIAL STRATEGY TO IMPROVE HIV CARE CASCADE AMONG MSM IN INDONESIA

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on behalf of **HATI study** team

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Introduction

- Indonesia is one of the few countries in the world with increasing in new HIV cases, particularly among high risk groups
- One of the key success for controlling the epidemic is to improve the cascade of HIV care (90-90-90)
- UNAIDS 2018: **51% of people living with HIV knew their status**
- The coverage of HIV test per semester among estimated number of MSM in Denpasar Bali is very low; 10% (SIHA 2017)

Study objective

This study aimed to explore the potential of introducing community-based oral fluid self-testing (OFT) to improve the HIV care cascade among MSM in Bali.

This report is part of a larger study

HATI



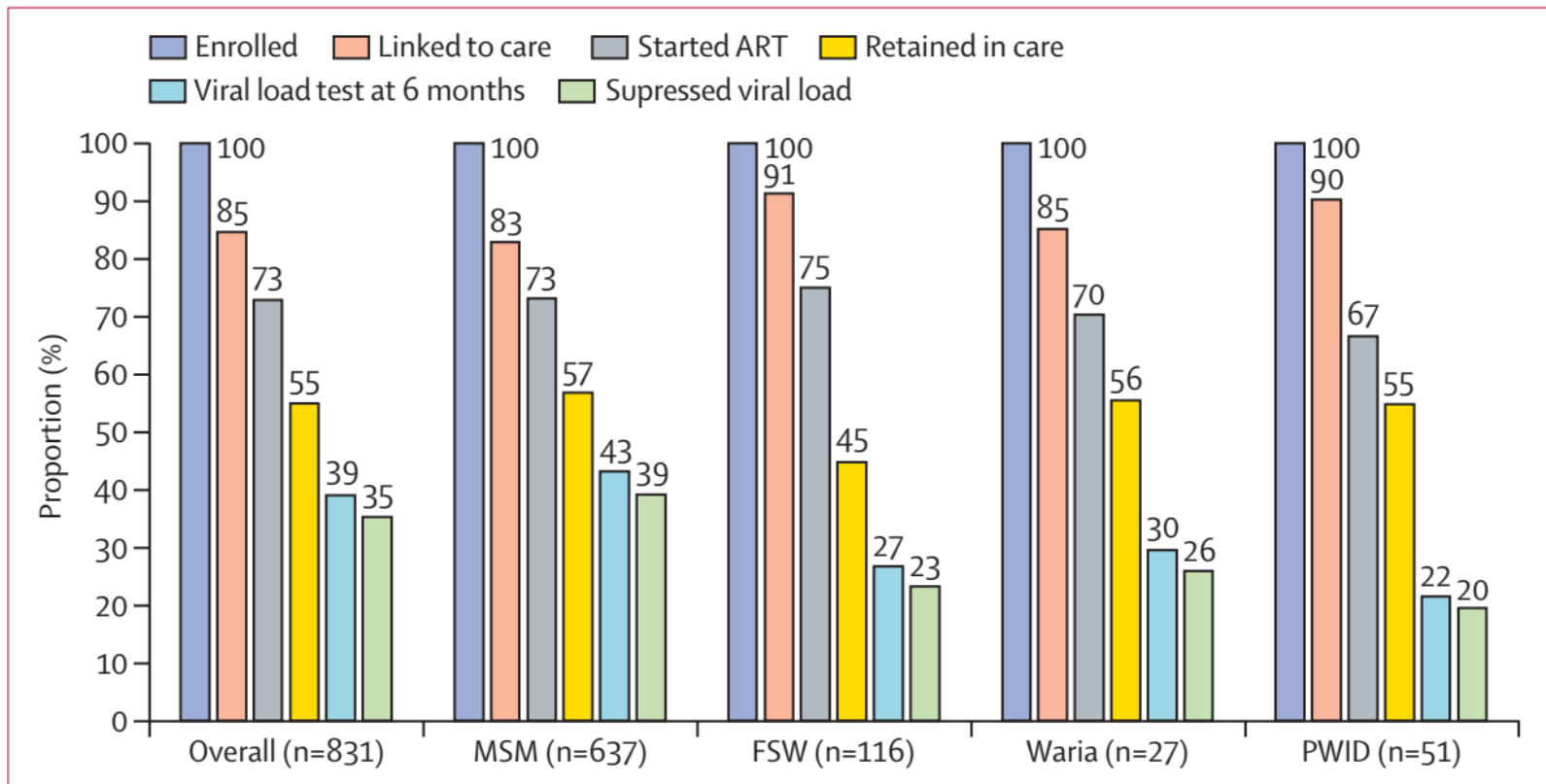
The HIV *Awal* (early) Testing and Treatment in Indonesia (HATI) study was developed to prospectively evaluate strategies to improve the cascade of HIV care in key populations

HATI study design

- Prospective implementation trial
- Study phase
 - Phase 1 – observing current practice
 - Phase 2 - after implementation of an enhanced intervention package
- Study population: MSM, FSW, PWID, Waria
- Study locations: Bali, Yogyakarta, Bandung, Jakarta

Details of the HATI study and results of phase 1 could be found in:

Januraga, P. P., Reekie, J., Mulyani, T., Lestari, B. W., Iskandar, S., Wisaksana, R., ... Kaldor, J. M. (2018). The cascade of HIV care among key populations in Indonesia: a prospective cohort study. **The Lancet HIV**.
[https://doi.org/10.1016/S2352-3018\(18\)30148-6](https://doi.org/10.1016/S2352-3018(18)30148-6)



Phase 2 Interventions



Clinics:

1. Puskesmas Gambir**
2. Puskesmas Senen**
3. Puskesmas Tanah Abang**
4. Puskesmas Grogol Petamburan**
5. Puskesmas Cengkareng**
6. Puskesmas Tambora**
7. Puskesmas Taman Sari*
8. Cengkareng Hospital**

SMS
MI

SAI
SMS
MI

Coordinating clinic:
Sardjito Hospital**

Satellite clinics:

1. Puskesmas Gedongtengen*
2. Puskesmas Umbulhardjo I*
3. NGO Vesta*

Coordinating clinic:
Amertha Clinic YKP**

Satellite clinics:

1. Puskesmas 2 Densel*
2. Puskesmas 1 Dentim*
3. Puskesmas 2 Denut*
4. Puskesmas 2 Denbar*
5. PKBI clinic*

Coordinating clinic:
Hasan Sadikin Hospital**

Satellite clinics:

1. Ujung Berung Hospital**
2. Bungsu Hospital**
3. Puskesmas Ibrahim Adjie*
4. Puskesmas Pasundan*
5. Puskesmas Garuda*
6. Mawar Clinic*

SAI
SMS
CBO

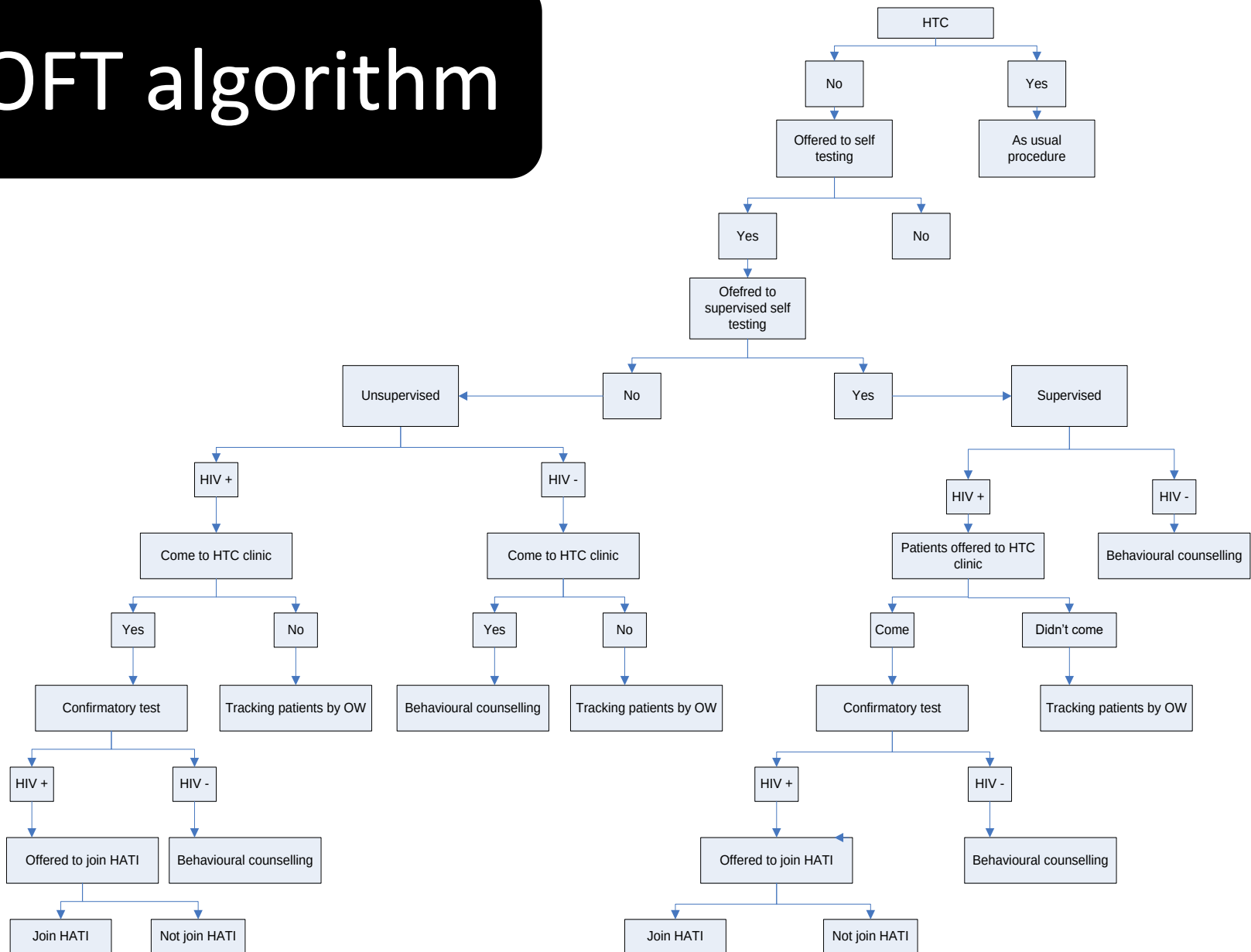
OFT
SAI
SMS

* test only (treatment is referred to the coordinating clinic)
** test and treatment

OFT intervention methods

- Participants:
 - MSM aged 16 years and over,
 - who had never tested for HIV, or had undergone HIV testing >6 months, and
 - refused clinic-based HIV testing and counseling (HTC)
- Duration for intervention: January to December 2018
- Intervention deliverer: community outreach workers from Yayasan Kerti Praja (YKP), a national leading NGO in HIV prevention programs since 1987

OFT algorithm





Results

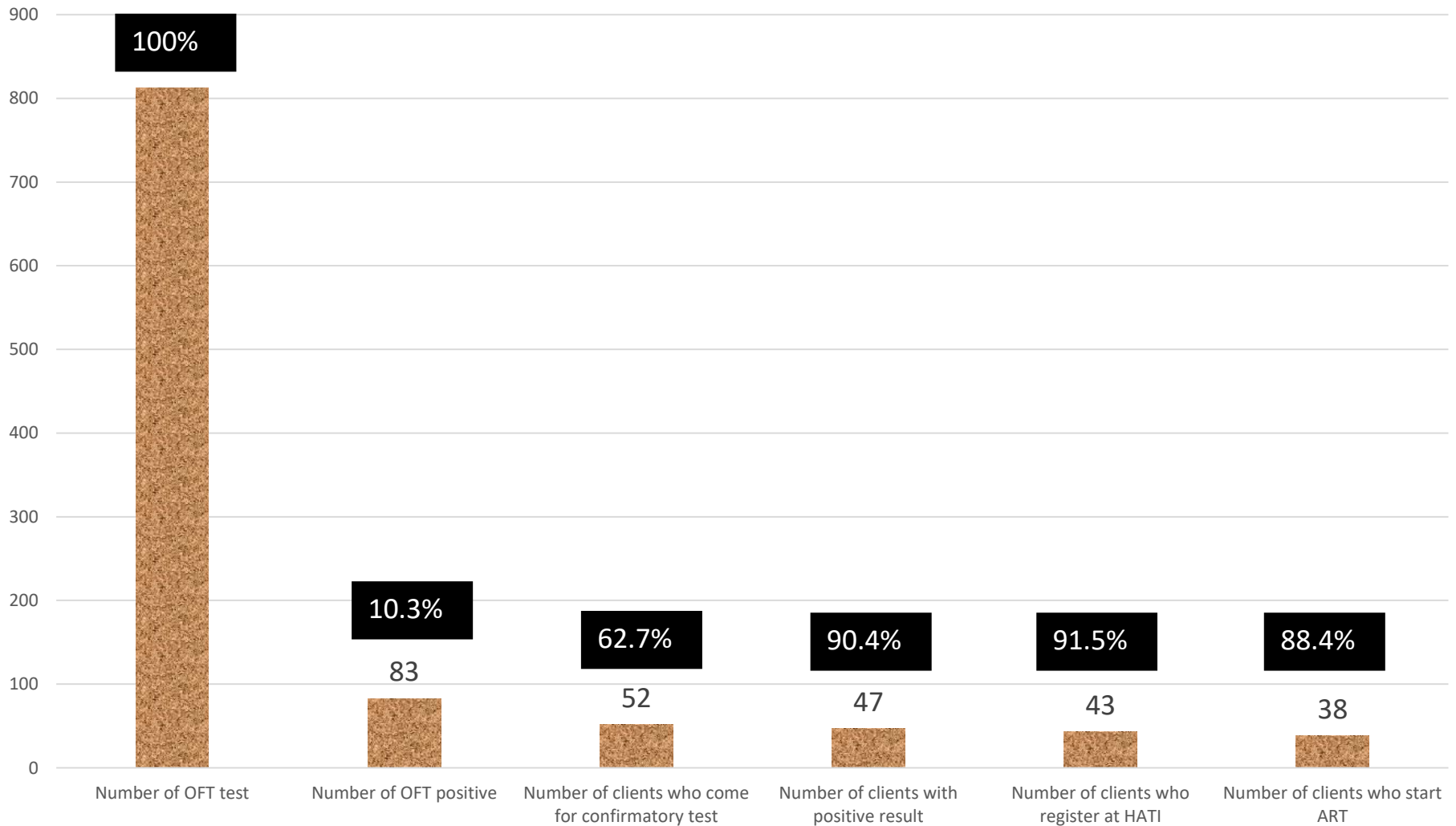
Number of participants by age and OFT result

AGE	OFT		OFT reactive		Positivity rate per age group	OFT not reactive		No return kit	
	n	%	n	%	%	n	%	n	%
18-24	130	16	21	25.3	16.2	106	14.7	3	27.3
25-29	290	35.7	25	30.1	8.6	263	36.6	2	18.2
30-34	155	19.1	15	18.1	9.7	135	18.8	5	45.5
35-39	145	17.8	12	14.5	8.3	133	18.5	0	0
>39	93	11.4	10	12	10.8	82	11.4	1	9.1
TOTAL	813	100	83	100	10.2	719	100	11	100

Number of supervised and unsupervised test

Type of test	OFT test		OFT reactive		Positivity rate per type	OFT not reactive		No return kit	
	n	%	n	%	%	n	%	n	%
supervised	756	93.0	77	92.8	10.2	679	94.4	0	0.0
unsupervised	57	7.0	6	7.2	10.5	40	5.6	11	100.0
TOTAL	813	100.0	83	100.0	10.2	719	100.0	11	100.0

The OFT cascade



The main question!

Is the HIV self testing increase the coverage of HIV testing in the population target?

Number of HIV testing in the SIHA

SITE	2015	2016	2017	2018	2018
	(3.5 months)	(12 months)	(12 months)	(12 months)	plus OFT)
YKP	160	687	849	610	
Denpasar Barat	36	228	671	437	
Denpasar Selatan	8	3	1	2	
Denpasar Utara	8	8	1	1	
Denpasar Timur	10	41	8	2	
PKBI	7	10	5	6	
TOTAL	229	977	1535	1058	1819
Mean per months	65.4	81.4	127.9	88.2	151.6
Mean 95%CI	57.3* (26.0-84.8)	68.3-93.3	113.3-140.8	75.6-101.4	130.3-171.9
Mean before (2015, 2016, 2017) and after (2018)		99.7 per month	88.2 per month	151.6 per month	
Mean 95%CI before (2015, 2016, 2017) and after (2018)		97.9* (84.5-111.5)	75.6-101.4	130.3-171.9	

Discussions

- This is the first study tried to evaluate the use of supervised (assisted) and unsupervised (unassisted) methods in delivering HIV self test (OFT) in Indonesia; **high acceptance → roles of community outreach**
- **10% OFT reactive rate** < 20% HIV positivity rate at HTC clinics → reaching the unreached?
- Low proportion of MSM received unsupervised methods → **need exploration on methods for delivery**
- Still high proportion of MSM (>35%) with reactive OFT results didn't come to clinic for confirmatory test → **need better link to care strategy**
- Confirmatory test found 90.4% positive results, while OFT in this case is treated as screening test, the figure is certainly important for **advocacy**

Conclusion

- The study show the potential utility of scaling up HIV testing among MSM through a community-based approach involving HIV self-test kit distribution
- Future studies should consider exploring methods for delivery with a focus on better campaign strategy to reach hidden MSM groups.

Acknowledgment

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- Our mentor, the father of HATI study, the late Prof David Cooper

Thank you

