

What Faith Groups Can Learn from the Science, Research, and Information Presented at AIDS 2020?:

Key findings from AIDS 2020, Status, Scientific Update and Social Dynamics of the HIV epidemic

2025 AIDS Targets: Setting The Next Generation of Goals for the Global AIDS Response

- 1. Setting targets for 2025
- 2. Estimating the epidemiological impact of reaching the targets for 2021 through 2030
- 3. Calculating the estimated price tag to reach these targets for low- and middle-income countries for 2021 through 2030



Professor Stanly Okolo is the Director General of the West African Health Organization (WAHO).

Vision, Goal, & Strategic Objectives

An ECOWAS Community in which all key populations have universal access to comprehensive HIV, TB, Hepatitis B & C and SRH services, free from stigma and discrimination

An enabling legal, social and economic environment to facilitate access to comprehensive services designed to address the needs of each sub-group

- 1. Strengthen National
 & Regional
 Coordination and
 Leadership for a
 Harmonized and
 Sustainable response to
 the target diseases in
 KPs
- 2. Generate and
 Disseminate
 Strategic
 Information &
 Normative
 Guidance grouped
 by KP, age and
 gender to guide
 policies & programs
- 3. Scale up targeted and comprehensive interventions
 (prevention, treatment, care and support) in HIV, TB, Viral Hepatitis and SRHR services to reduce incidence, morbidity and mortality among KPs
- 4. Empower all KPs and promote their meaningful participation in the design, implementation and monitoring of policies and programs
- 5. Ensure that the human rights of KPs are respected by addressing the social, economic and legal barriers to access to health services





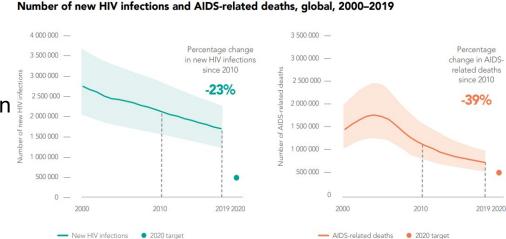
Key numbers: 690 000 AIDS deaths in 2019!

FIGURE 0.6

Source: UNAIDS epidemiological estimates, 2020 (see https://aidsinfo.unaids.org/

In 2019, globally:

- 38 million people living with HIV
 - 1.8 million children living with HIV
- 1.7 million new HIV infections
 - 150 000 new HIV infections among children
- 690 000 AIDS related deaths
 - 100 000 AIDS related deaths among children
- 25.4 million people receiving antiretroviral therapy (67%)
 - 950,000 children receiving antiretroviral therapy (53%)
- Progress toward 90-90-90: 81-82-88
- Progress toward 90-81-73: 81-67-59
- Coverage of treatment among pregnant women: 85%



WUNAIDS

Source: UNAIDS epidemiological estimates 2020.

Global AIDS Update report 2020 and Three Frees Progress Report

SEIZING THE MOMENT

Tackling entrenched inequalities to end epidemics



Main messages:

- We will miss 2020 targets
- The AIDS pandemic is fuelled by inequalities
- Although some great successes in the HIV response, progress is extremely uneven because of **persistent inequalities**,
- COVID-19 has further impacted the AIDS response. Community resilience and innovation will define the COVID-19 response

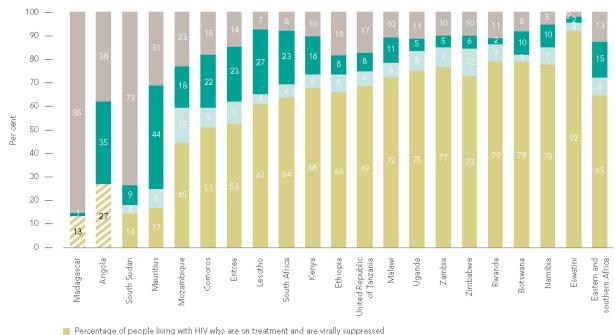


Main messages:

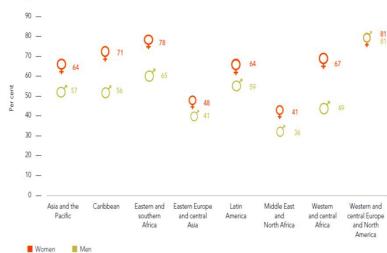
- Despite high ART coverage among pregnant women in some regions, child new infections continue due to lack of retention in care and women acquiring HIV during pregnancy and breastfeeding
- 280 000 new HIV infections among AGYW 15-24
- Only 950 000 (53%) of children reached with ART

Many countries in Eastern Southern Africa are making progress toward 90s targets, unequal progress for men and women

Knowledge of status, treatment and viral suppression gaps by country, eastern and southern Africa, 2019







Source: UNAIDS epidemiological estimates, 2020 (see https://aidsinfo.unaids.org/); UNAIDS Global AIDS Monitoring, 2020 (see https://aidsinfo.unaids.org/);

Percentage of people living with HIV who are on treatment but are not virally suppressed

Percentage of people living with HIV who know their status but are not on treatment

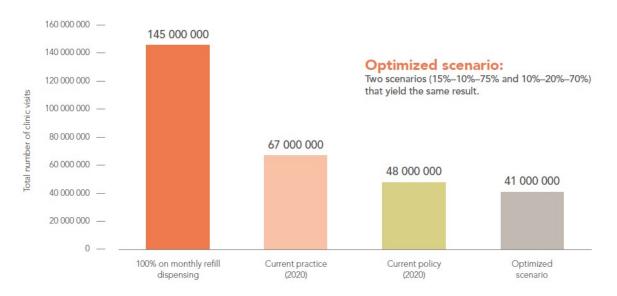
Percentage of people living with HIV who do not know their status and are not on treatment

🔀 Percentage of people living with HIV who know their status and are on treatment, but whose viral suppression is unknown



Turning a crisis into an opportunity for multimonth dispensing

Comparison of different antiretroviral dispensing policies on the total number of visits to a health facility for people on HIV treatment, selected countries, 2020



Current practice: The number of visits, as per current dispensing practice.

Current policy: The number of visits that would be possible if dispensing practice was fully coherent with policy.

Optimized scenario: The number of visits in a hypothetical scenario of 15% of people on treatment with one-month refills, 10% with three-month refills and 75% with six-month refills. This number of visits was the same as a scenario where 10% of people on treatment have one-month refills, 20% have three-month refills and 70% have six-

100% on monthly refill dispensing: The number of visits if all people living with HIV and on treatment attended a health-care facility monthly for refills. This was the intitial

Note: The analysis is from 46 low- and middle-income countries, based on the estimated number of people receiving HIV treatment in 2019. This represents more than 40% of the global total of people on HIV treatment.

Source: UNAIDS epidemiological estimates, 2020 (see https://aidsinfo.unaids.org/); UNAIDS special analysis, 2020 (see methods annex).

- COVID-19 crisis has accelerated a multitude of innovations.
- Early adopters of multi-month dispensing (MMD) have been better placed to avoid serious disruptions to their HIV treatment services during the COVID-19 pandemic (Zimbabwe, Malawi and Thailand).
- Many countries have accelerated MMD or introduced new policies as the adapt to HIV service delivery under lockdown.
- UNAIDS analysis shows MMD has already halved clinic visits. More gains are possible.

KEY POPULATIONS

Annette Verster



Key populations

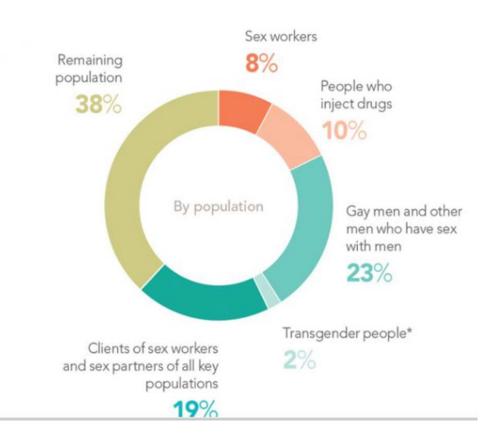
Flagship WHO session

Time to move beyond HIV: securing person-centered approaches to health with and for key populations

Opportunities and challenges of ensuring a broader health focus for key populations



Distribution of new HIV infections by gender and population, global, 2019





Dr. Asa RadixSenior Director of Research and Education, Callen-Lorde Community Health Center, NY and clinical associate professor of medicine, NYU

- Integration of gender-affirming care incl hormones essential to engagement of trans and gender diverse people into HIV programmes as well as other entry points to care (STI, HCV, TB)
- Some health concerns associated with gender-affirming hormones may be of additional concern for people living with HIV (dyslipidemias and CVD, bone health and metabolic issues) and integration provides an effective, one-stop shop mechanism to ensure appropriate care delivery
- All programmes for KPs need to consider the needs of trans people, since groups overlap

Gender-affirming Hormones and Transgender People

In some countries >60% of trans women use estrogens without medical supervision

Metabolic

- Increase visceral fat
- Decrease insulin sensitivity
- 30% more likely to be overweight/obese

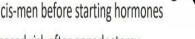


Cardiovascular

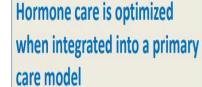
- Dyslipidemia with estrogens
- Higher rates of venous thromboembolism & ischaemic stroke



 TW have elevated rates of osteopenia c/w cis-men before starting hormones



Increased risk after gonadectomy





Gooren LJ, 2014; Roberts TK. Goldstein Z. 2017; Van Caenegem, 2013; Maraka S, 2017; Wierckz 2014, Asscheman 2011, Dhejne 2011, Wilson 2009; Caceres 2019; Getahun 2018; Goodman 2019; Radix 2016

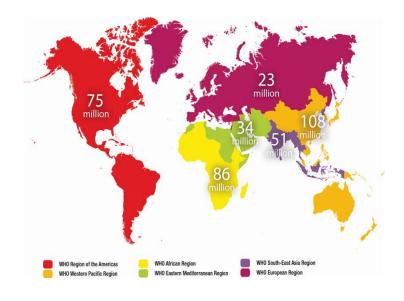


More than 1 million STIs acquired everyday

Estimated 376 million new cases of curable STIs in 2016 (chlamydia, gonorrhea, syphilis, trichomoniasis)



Teodora Wi Dept Global HIV, Hepatitis and STIs Programmes, WHO

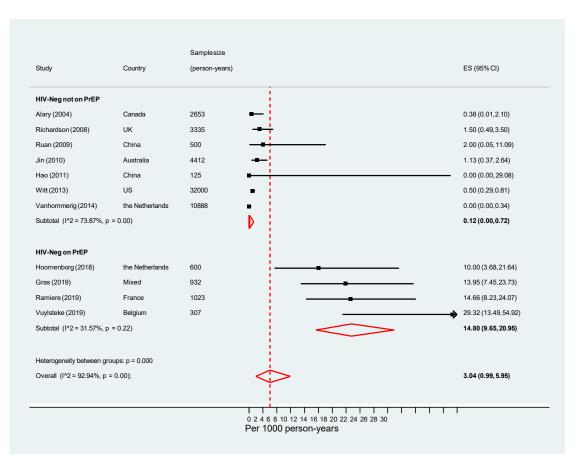


- STIs incidence and prevalence are high among KP
- Opportunities to integrate STI/SH in KP PrEP services and peer-outreach services
- Community-led STI/HIV services can interrupt STI transmission
- Integrating STI/SH is a small investment with high returns that can increase access to people-centered comprehensive HIV/STI services
- Condoms remain key in STI and HIV prevention
- Innovations to screen STIs—self collection and pooling of samples and POC test





Incidence of HCV infection in HIV-negative MSM



Dr Jeff Jin, Kirby Institute, UNSW, Sydney, Australia



 HCV incidence in HIV-negative MSM not on PrEP remained low

0.12 per 1,000 person-years

 HCV incidence in HIV-negative MSM on PrEP strikingly high

14.80 per 1,000 person-years





MSM living in African countries that criminalize gay sex at a much higher risk of getting HIV

Overall, in countries where same-sex sexual activity was not criminalized,
 8% of MSM sampled had HIV, rising to 20% in countries with criminalization, and increasing to 52% in countries with severe criminalization

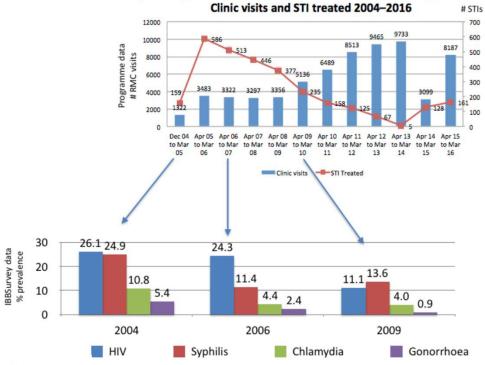
More news from Sub-Saharan Africa:

- After adjusting for factors such as age and education level, men in countries with **criminalization** were **2.21 times more likely to have HIV** (95% CI 1.32-3.73), while those in countries with **severe criminalization** were **4.65 times more likely to have HIV** (95% CI 3.38-6.4)
- In countries with **no legal barriers for civil service organizations**, **12% of MSM sampled had HIV**, whereas in those **with legal barriers**, **33%** tested positive. The adjusted odds of having HIV was
 - **2.27** times higher in countries with legal barriers (95% Cl 1.30-3.96).

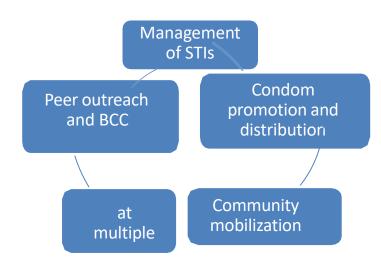


Sex worker community-led intervention interrupts STI and HIV transmission

Essential package of intervention in the Ashyodaya







- High uptake and utilization of basic condoms and STI services – promoted actively by peer networks
- Strong community-based clinic services
- Program monitoring
 - Reza-Paul . Sexually Transmitted Diseases. Aug 2019

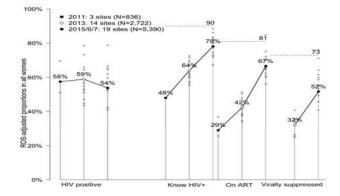


Tracking HIV among female sex workers in Southern Africa to gain actionable insights: what do we know, what else is needed?

Frances Cowan (LSTM & CeSHHAR)
Dr Owen Mugurungi (MOHCC)

Goal of programs for sex workers should be to empower sex workers to achieve 'virtual elimination' of sexual transmission of HIV through commercial sex

- SWs in Africa greatest burden of HIV infection globally
 - 21 times general population prevalence
- Data to understand the pattern of HIV in SWs and its likely impact on population incidence are lacking
- Modelling suggests that PAF of sex work for HIV is high and likely to be an increasingly important driver of new infections as infections in general population decline



- Attaining virtual elimination of HIV transmission through sex work requires working with sex workers to scale, intensify and innovate to optimise engagement with prevention and care
- Supporting programme implementation with real time triangulation of data collected from programmes, surveys and modelling should inform and guide epidemic response



Faster, cheaper and better results, integrating HCV, HIV, TB, Sexual Health and Harm Reduction



GLOBAL BURDEN OF HCV, HIV AND TB AMONG SELECT KEY POPULATIONS*

	People living with HCV (million)	People living with HIV (million)	People who inject drugs (million)	Prisoners (million)
Total population	71.01	37.95	15.6 ²	11.07
HCV-infected	-	2.33	8.22	1.74
HIV-infected	2.33	-	2.82	0.44
TB-infected	n/a	1.26	n/a	0.34

BENEFITS OF INTEGRATED PROGRAMMING

- Optimising client engagement with services
- Coordinated program management
- Enable financial efficiencies
- Achieve public health goals





Critical need to integrate HCV, HIV, and comprehensive harm reduction programming and investment to meet the needs of KPs, with a particular emphasis on PWID

^{*}Equivalent global disease burden estimates for men who have sex with men (MSM), sex workers and transgender populations are unavailable. This table shows some of the coinfection rates among key populations, but does not focus on coinfection rates.

AIDS 2020: Virtual Conference – Thursday July 9th Satellite session on "Addressing HIV among people who use stimulant drugs"

- > 150 participants
- Focus on HIV prevention among PWUD concentrated on the injection of opioids
- While difficult to quantify the contribution of stimulants to increasing HIV infection rates, evidence of a positive association between stimulant use, higher-risk sexual and injecting behaviours and HIV
- ➤ Both non-injecting and injecting stimulant drug use associated with sexual transmission of HIV, particularly among MSM and sex workers



- Monica Ciupagea, UNODC an overview of the technical guidance developed in the field of HIV prevention treatment and care and stimulant drugs
- · Rhiannon Thomas, COUNTERfit Harm Reduction Program outlined perspectives on user-driven comprehensive support for people who use stimulants
- Mat Southwell, UNODC Civil Society Group on Drug Use and HIV and International Drug Policy Consortium discussed harm reduction responses to smoked cocaine, COVID-19 and hepatitis C
- · Doan Thanh Tung, Lighthouse Social Enterprise presented the community-leading response to Chemsex in Vietnam
- · Achmad Nuhung outlined experiences in reaching out to people who use crystal-meth in Jakarta



PREP: 083 AND INTEGRATION WITH SRH

Michelle Rodolph

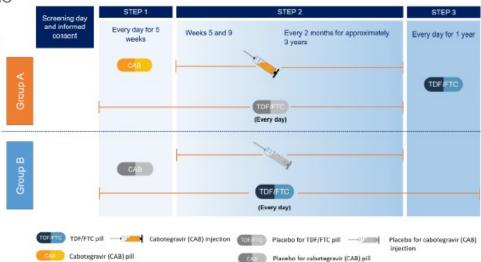




HPTN 083 Study Design

- Study design: Phase 2b/3 randomized, doubleblind, double-dummy
- Study population: Cisgender men and TGW who have sex with men
- Enrollment: Planned 4500 increased to 5000 for low pooled incidence at interim monitoring
- Sites: (N=43)
 - Africa (South Africa)
 - Asia (Thailand, Vietnam)
 - Latin America (Argentina, Brazil, Peru)
 - United States
- Protocol specified metrics to ensure representation of disproportionately affected populations
 - ≥50% under age 30
 - ≥10% TGW
 - ≥50% of US enrollment Black/African-American

Please see Landovitz R. et al, Abstract #OAXLB01

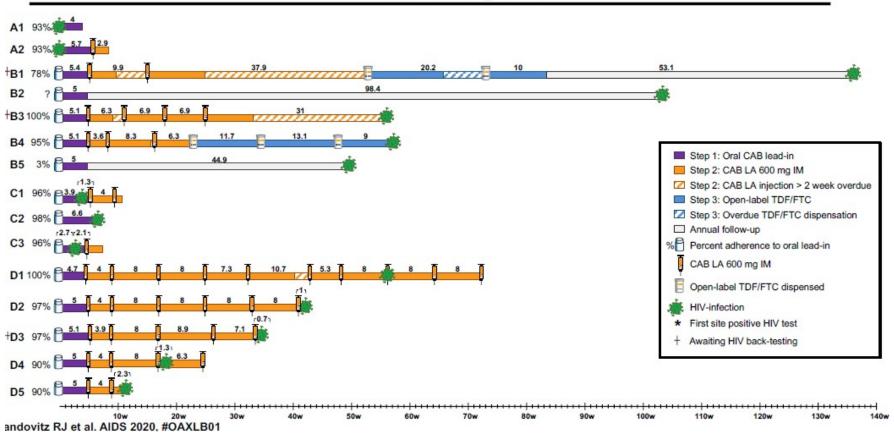






13 Incident HIV Infections

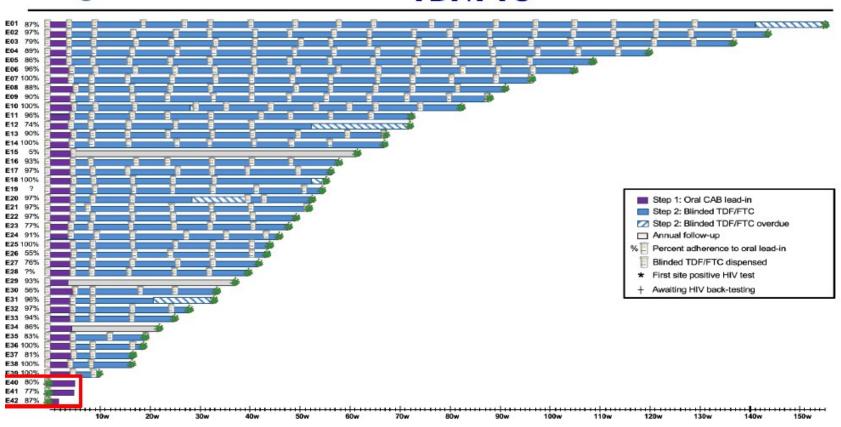
Cabotegravir





39 Incident HIV Infections







Conclusions

- Both agents were highly effective for HIV prevention
- The PrEP regimen containing CAB-LA was superior to a daily oral regimen of TDF/FTC in HPTN 083, with a 66% reduction in risk of HIV infection observed in participants receiving CAB compared to TDF/FTC
- CAB-LA was well tolerated despite injection site reactions
- Peri-infection drug concentrations and detailed resistance profiles are needed to fully understand and contextualize results
- CAB is the first long-acting injectable agent to demonstrate robust HIV prevention efficacy in MSM/TGW
- Awaiting results for cisgender women (HPTN 084)

ONE YEAR AFTER ECHO: INTEGRATION IN THE TIME OF COVID-19

Results for Evidence for Contraceptive Options and HIV Outcomes clinical trial:

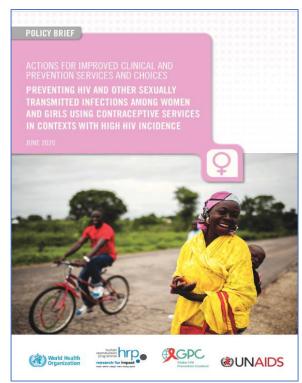
- **No substantial difference** in HIV risk among women using the three methods studied (DMPA-IM, Jadelle implant, copper IUD).
- All contraceptive methods tested were **safe**, **effective**, and **acceptable** in preventing pregnancy.
- HIV infection rates among the study population were alarmingly high: approximately 4%

Suggests urgent need for investment in woman-centered programs that offer a full range of contraceptive choices and HIV prevention strategies at the same site, time and with the same provider, and through an approach that is centered on women's informed choice.

• Expanding contraceptive access with integrated HIV prevention will help reach women— especially young women and adolescent girls—who are at high risk.

Preventing HIV and other sexually transmitted infections among women using contraceptive services in contexts with high HIV incidence: Actions for better clinical and prevention services and choices

- Changes are needed to better serve adolescent girls and women at high risk of acquiring HIV and STIs who are accessing contraceptive services
- Approaches should be evidence based and women centered
- Prioritize actions in settings with high HIV burden
- Improve access for women from key populations, other vulnerable women and adolescents where HIV prevalence is low or medium



A focus approach recommended

Suggested approaches to integrating HIV into contraceptive services, by HIV prevalence

		HIV prevalence among adult women*			
		Low (<1%)	Medium (1–5%)	High (5-20%)	Extremely high (>20%)
General approach to integrating HIV services into contraceptive services		Likely only a few changes needed; key population focus Mix of referral & on-site integration	Part of SRH—HIV programme development Mix of referral & on-site integration	Rapid action (change operating procedures) On-site integration where possible	Immediate action (executive orders, change operating procedures) Immediate on-site integration
	Male and female condoms and lubricant	YES	YES	YES	YES
	HIV risk assessment	YES Focused offer	YES Routine offer	YES Routine offer	YES Routine offer
STI risk assessment		STI risk assessment YES Focused offer (routine offer if high STI prevalence)		YES Routine offer	YES Routine offer
vice d	Condom promotion & skills building	YES Focused offer	YES Routine offer	YES Routine offer	YES Routine offer
HIV prevention & risk reduction counselling		YES Focused offer	YES Routine offer	YES Routine offer	YES Routine offer
HIV testing services (including self-test) + ART		YES Focused offer	YES Focused offer	YES Routine offer	YES Routine offer
Condom promotion & skills building HIV prevention & risk reduction counselling HIV testing services (including self-test) + ART STI diagnosis & treatment of asymptomatic women (including partner STI services)		Focus on key populations	Focus on key populations	YES Focused offer (routine offer if high STI prevalence)	YES Routine offer
Offer as part	STI diagnosis & treatment of symptomatic women (including partner STI services)	YES	YES	YES	YES
Partner HIV testing (for example, invitation letter + self-test) + ART		Referrals for partners of HIV-positive women	Referrals for partners of HIV-positive women	YES Routine offer	YES Routine offer
	Community outreach for HIV prevention for women using contraception and their partners	Focus on key populations	Focus on key populations	YES Focused outreach	YES Expanded outreach
	Pre-exposure prophylaxis	NO (but referrals for women at higher risk)	NO (but referrals for women at higher risk)	YES Focused offer	YES Routine offer

Time for post ECHO action

- Women, want, need and deserve more HIV prevention access and choice
- Women who seek contraception in high HIV burden countries should be able to
 - learn their HIV status
 - access treatment easily
 - have a range of choices to protect themselves from HIV
- STIs in women are often asymptomatic and current syndromic approaches may not be adequate. A push for better diagnosis and treatment of STIs is needed, inc Cervical Cancer
- We need to act now.
 - Listen to women, involve women
 - Fast track national policies and overcome regulatory barriers (HIVST, aPN, PrEP)
 - Make national commitments, set testing and prevention targets, commit to training providers
- Watch the space for innovations





Simplifying PrEP Implementation

Shona Dalal, PhD

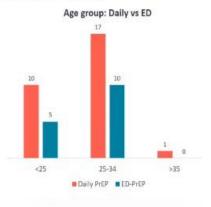
Event-driven PrEP or daily PrEP?

ED-PrEP enrollment: early results (June 2020) Viet Nam Scaling access to 2+1+1



STIs among PrEP users: Daily vs ED

	Daily PrEP	ED-PrEP
Syphilis	2 (7.1%)	0
Gonorrhea	2 (7.1%)	1 (6.7%)
Chlamydia	2 (7.1%)	2 (13.3%)
		4 (m. mar)



Thailand OAE07

• Significantly higher retention in daily PrEP group compared to ED PrEP group in Month 1, Month 3 and Month 6



Brazil, Mexico, Peru

Scaling access to 2+1+1

	Brazil	Peru	Mexico
	N=566	N=332	N=511
Are you ta	king daily PrEP as	recommended	1?
No	8/1.4%	11/3.3%	7/1.4%
Yes	558/98.6%	321/96.7%	504/98.6%
Did you ev	ver heard about EC	-PrEP?	
No	463/81.8%	270/81.3%	321/62.8%
Yes	103/18.2%	62/18.7%	190/37.2%
Would you	u be willing to use	ED-PrEP inste	ad of daily?
No	457/80.7%	248/74.7%	376/73.6%
Yes	109/19.3%	84/25.3%	135/26.4%

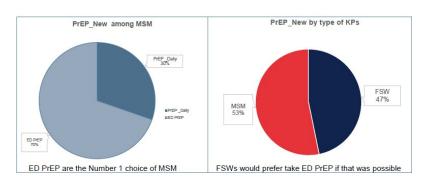
	Brazil	Peru	Mexico
	N=566	N=332	N=511
"Would you be v	willing to use EC	-PrEP instead	of daily?"
No	457/80.7%	248/74.7%	376/73.6%
Yes	109/19.3%	84/25.3%	135/26.4%
"In general, how	often do you h	ave sex a week'	?"
1 day	123/21%	68/20.5%	87/17%
2 days	142/25%	99/29.8%	103/20%
3 - 4 days	230/41%	100/30.1%	222/43%
5 - 6 days	40/7%	50/15.1%	76/15%
7 days (every day)	20/4%	12/3.6%	19/4%
No day	11/2%	3/0.9%	4/1%

ED-PrEP preferred in some settings

Cote d'Ivoire

Scaling access to 2+1+1

PrEP uptake among KP members (April – May 2020)

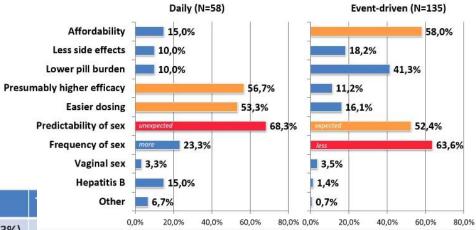


Taiwan

OAC05

User Preference over Daily or ED PrEP

"What are some of the reasons why you prefer "X" over "Y" use of PrEP?"



	Daily PrEP	PrEP 2-1-1
	Daily FILE	FIEF 2-1-1
Overall	2,531 (75.7%)	814 (24.3%)
PrEP choice on enrollment in study period	929 (78.6%)	253 (21.4%)
New PrEP enrollments	828 (70.1%)	354 (29.9%)
Existing daily PrEP use	1,703 (78.7%)	460 (21.3%)
Accessed PrEP only because 2-1-1 was available		90 (2.7%)

San Francisco

OAC05



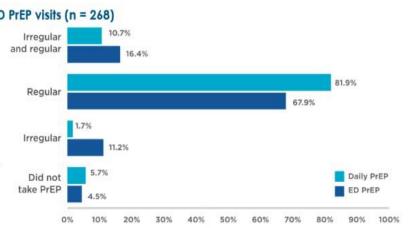
People are using PrEP correctly

Thailand

OAE07

Daily PrEP visits (n = 3,596), ED PrEP visits (n = 268)

- Regular use defined as:
 - Daily PrEP: taking ≥ 4 pills/week
 - ED PrEP: taking 2+1+1 correctly
- Self-reported regular use is high in both daily and ED PrEP



Malaysia

PDC01



Philippines PDC01

Study Design

- Cohort of PrEP-naïve,
 MSM/TW in "Project PrEPPY" (n=250)
- Daily oral PrEP for 12 months
- Self-reported PrEP adherence was monitored using daily diaries



- Using a computer algorithm, randomly tested 50 banked plasma samples
 - 6- and 12-month visits for tenofovir concentrations
 - liquid chromatography-electrospray tandem mass spectrometry
- HIV protective concentrations using previously established cut-offs: >40ng/mL.



Telemedicine worked well

Thailand

Bringing PrEP closer to home

Post-COVID	PrEP Screening, initiation and early follow-up (0-3 months)			PrEP continuation (+3 months)	
Post-COVID	Screening	PrEP initiation visit	Initial follow-up	Routine clinical follow-up	
WHEN Service frequency	Same-day		Months 1, 3	Every 3 months/6 months	
WHERE Service location	KP-led clinics		KP-led clinics	KP-led clinics/Telehealth	
WHO Service provider	KP lay providers dispense PrEP (which is prescribed remotely by doctors)		KP lay providers	KP lay providers	
WHAT Service package	Same-day HIV/syphilis testing Cr, HBsAg (results come later) PrEP counseling		HIV testing PrEP counseling	Xpress, self-sampling/testing for HIV/STIs Syphilis testing and Cr (every 6 months) PrEP/effective use counseling	

- Telehealth
- · Xpress services
- STI self-sampling have become feasible over these times

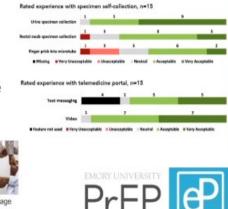


USA

BS06

Telemedicine to increase PrEP delivery to young Black MSM in rural areas

- 50 Black YMSM screened, 21 started PrEP via ePrEP system
- 93% willing to use ePrEP in place of standard provider visit
- 67% more likely to remain on PrEP if ePrEP were available



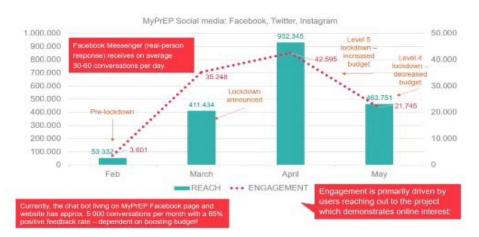
AT HOME 🚮



Siegler CROL 2019

South Africa

Bringing PrEP closer to home







ADOLESCENT GIRLS, AND YOUNG WOMEN

Shona Dalal, PhD

Impact of DREAMS - 1

- KZN, South Africa
 - Random sample of DREAMS beneficiaries compared to non-beneficiaries
 - Followed up for 2 years
 - 85% retention at 1 year
 - 78% retention at 2 years
 - 25% positive for HSV-2 at baseline
 - No significant difference in HSV-2 incidence
 - DREAMS: 14.4 per 100 PY (95%CI: 12.2, 17.1)
 - Non-DREAMS: 16.8 per 100 PY (95%CI: 13.9, 20.3)



Impact of DREAMS - 2

- Sisters programme among young women who sell sex,
 Zimbabwe
 - 2 intervention, 4 comparison clusters (out of 30)
 - 12 & 24 month follow up
 - 24-month follow-up rate
 - 56% in DREAMS sites
 - 53% in non-DREAMS sites
 - HIV incidence not statistically different
 - DREAMS sites: 3.14 per 100 PY
 - non-DREAMS 5.29 per 100 PY sites
 - Improved secondary outcomes:
 - Knowledge of partners status, ability to negotiate condom use with any partner, number of sex work clients in the past month, partner violence



A ray of hope: 1) ECHO trial analysis

	Study Visit Method		Calendar Time Method	
	Before PrEP Access (# Women = 4582) After PrEP Access (# Women = 2119)		Before PrEP Access (# Women = 3675)	After PrEP Access (# Women = 2032)
	# Visits = 10,278 # Visits = 556		# Visits = 3774	# Visits = 481
PrEP initiated	3%	25%	<1%	25%

		Infection/ Person Years	Incidence rate	Adjusted* IRR (95% CI)	p-value
Study visit	Before PrEP access	133/2860	4.65%	0.45 (0.35, 0.93)	0.0085
method	On-site PrEP access	12/556	2.16%	0.45 (0.25, 0.82)	0.0085
Calendar time method	Before PrEP access	46/919	5.00%		
	On-site PrEP access	11/481	2.29%	0.43 (0.22, 0.84)	0.014

OAC01

^{*}Adjusted for age, new partner since last visit, unprotected sex and partner has other partners (baseline and since last visit)

Key Adolescent and Men Updates





Wole Ameyan World Health Organization Global HIV, Hepatitis and Sexually Transmitted Infections Programmes



AIDS 2020: Virtual satellite: Men and HIV: Insights from sub-Saharan Africa



Men & HIV: insights from sub-Saharan Africa

Guest Editors: Wole Ameyan, James Ayieko, Anna Grimsrud, Tanya Shewchuk Supplement Editor: Marlène Bras



Volume 23, Supplement 2, June 2020

WILEY

Men & HIV: insights from sub-Saharan

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Contents

Shifting the narrative from "the missing men" to "we are missing the men"

Anno Grimond. Wole Ameyon. Jonne: Nyelici and Tanya Shenchule

Population-wide differentials in HIV service access and outcomes in the Western Cape for men as compared to women. South Africa: 2000 to 2018: a cohort analysis.

May Gold. Florar Germil, Rivinnia Frod, Informer Ridingtonian, Eric Geometre and Andrew Boulle

Stocked Cender and Aelexia Rizozon.

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Gendered health institutions: examining the organization of health services and men's use of HIV testing in Malawi Kathryn Dovel. Sharel. Doverias, Menor Germil, Tomora J. Codes and Son's Vestman

Cendered health institutions: examining the organization of health services and men's use of HIV testing in Malawi Kathryn Dovel. Sharel. Doverias, Menor Germil, Tomora J. Codes and Son's Vestman

Cereating HIV risk profiles for men in South Africa: a latent class approach using cross-sectional survey data

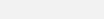
An implementation study of oral and blood-based HIV self-testing and linkage to care among men in rural and peri-turbas NovalUse Malas. South Africa:

Adrienne E Organica, Allation's Hearden's Mergines (Noval, Komb. South, Mislas Strikol, Torin's T-Chadatrina, Olivier Koole, Heldi van Royon, Cromit L Celiman and Ramen's Warmolos.

Lottery incentives have short-term impact on ART initiation among men: results from a randomized pilot study Rumen's Warmolos.

Assume V Barmolos, Allation's Hearden's Magageria McConsol, Advance New York, New York,

Volume 23, Supplement 2 June 2020



Key themes

RECOGNITION AND ENGAGEMENT OF MEN BY HEALTH SYSTEMS

HIV SERVICES ARE NEEDED FOR OLDER MEN

ENHANCING HIV TESTING TO REACH THOSE WHO HAVE NOT BEEN REACHED

REFRAMING THE NARRATIVE

11 articles

- 8 research articles
- 2 viewpoints
- 1 editorial

"It is essential that health services acknowledge that we have been missing men, and that it is our collective responsibility for health systems to be people-centred to address the needs of all people."

IAS



HIV TESTING UPDATES

Cheryl Johnson



HIVST highlights

- Preliminary policy uptake data shows more countries adding HIVST – but gaps remain in full implementation
- More implementation lessons learned on models
 - Community pharmacies and Tuk shops in South Africa highlighted as promising models and linking to people accessing "male libido enhancers" and emergency contraceptive to reach those at risk
 - In Zambia HIVST increased efficiency of index testing approaches and sustained high yield (39%).
- Key takeaways
 - Evidence on increased ART initiation, enhancing disclosure, reaching more men - particularly in southern Africa
 - No perfect test but different optimization of delivery and support tools
 - Demonstrations important in Africa particularly for bloodbased HIVST kits
 - Linking with messaging, digital demand creation and "U=U" messages
- Strong focus on utilization of HIVST during COVID-19 to sustain services
 - Integration of HTS noted as key
 - Challenges with # kits in country support needed



Insights from research on blood-based self-tests

We iteratively refined user instructions using the same methods as for oral fluid tests

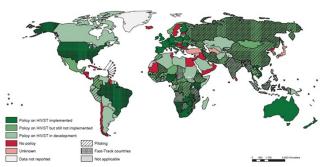
- Collection of sample is challenging
- · Hardened skin making sample collection
- Instructions on where to position lancet or
- Participant difficulties recognising lance leading to inadvertent trigger







National HIVST policy and implementation. 2019



By July 2019:

40% (77/194) of reporting countries had HIVST policies, and of these only 49% (38) were implementing

As of a preliminary update at end-June 2020:

- 10 additional countries have reported HIVST policies
- 4 additional countries have reported HIVST implementation

Key implementation gaps remain in

















Key insights from HIVST country mapping

Select country mapping shows that countries are considering HIVST scale up in the wake of COVID-19

	HIVST Scale Up?	Resources Sufficient?	HIVST Kits Sufficient?	Critical gaps
Burkina Faso				Shipment delays;
Cameroon				No resources
Eswatini				Shipment delays
Kenya				Shipment delays
Lesotho				Shipment delays
Nigeria				Don't seem keen
Rwanda				Longer-term scale up plans
S. Africa				Delays
Vietnam				Shipment delays
Zambia				Shipment delays
Zimbabwe				Shipment delay
: WHO HIVST COVID-19 Que	Yes	Yes, mobilizing	resources	laybe No

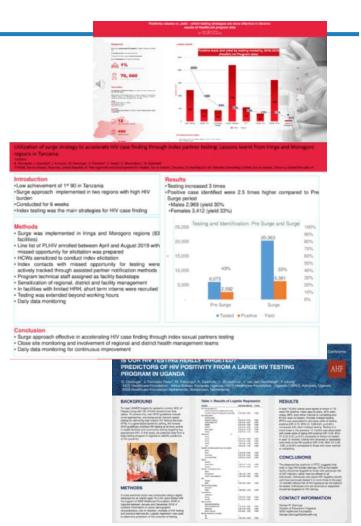
World Health Organization

Targeted testing highlights

- Index testing is being scaled-up across more settings and epidemics with high positivity
 - Health-E Link Project in Ukraine showed how index testing (along with other differentiated HTS) was able to achieve highest yield overall (10%).
 - Tanzania used a "surge" based index testing approach and tripled index testing and identified 2.5 times more HIV positive people compared to efforts prior to "surge"
 - In <u>Nigeria</u> integrated messaging increased offer and acceptance of index testing
 - In <u>Cameroon</u> focusing on offering index testing for known PLHIV and with unsuppressed VL was highly effective for diagnosing new cases
 - Partner referral worked well for MSM and FSW in Malawi but noted innovation and active approaches needed for FSW moving forward
 - Efforts to dispel stigma with index approach observed in <u>KZN</u> and is a priority

Screening tools?

Example from <u>Uganda</u> – highlighted their predicators on HIV positivity among those at clinics would focus HTS on those not tested more than 3 times in the past 12 months and those who report they are separated or divorced Strong focus on utilization of HIVST during COVID-19 to sustain services





AIDS2020 and Children

Martina Penazzato

Paediatric HIV lead HHS Department - WHO





Children continue to be left behind





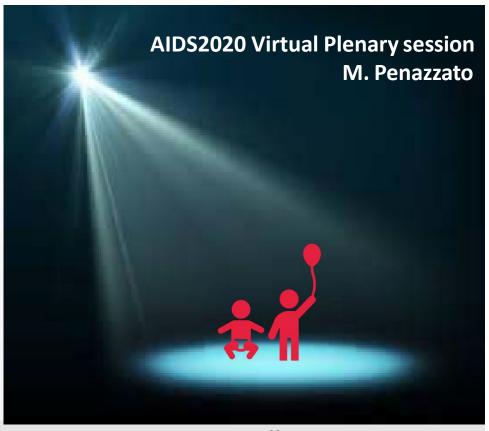


Paediatric HIV we are not done yet!

Don't let COVID-19 stop our progress:

No bouncing back, let's bounce forward!

We can get to an **AIDS-Free** generation, but we must do this **Together!**



We need to...
ACT NOW



Do more operational...

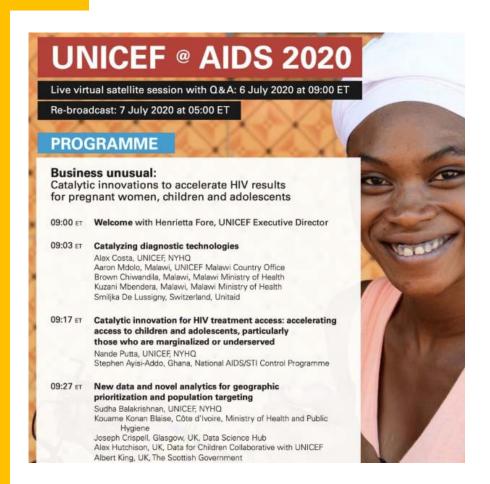
RESEARCH



Keep...
INNOVATING







Catalytic innovations to accelerate HIV results for pregnant women, children and adolescents

Proposed using catalytic innovations to accelerate HIV results for pregnant women, children and adolescents (Opportunities to accelerate access to ART for children and adolescents): integration of HIV diagnostic technology; data use to prioritize and target responses; family based index testing for paediatric HIV; differentiated approach for adolescents with prioritization using subnational data

PMTCT

- Sessions reiterated falling short of 2020 targets
- Sharing of successes in mothers and children in spite of limitations with data availability:
 - earlier knowledge of status in women (Columbia);
 - declining trends in MTCT, improved birth outcomes (Brazil),
 - maturing of PMTCT services (RSA) and
 - capacity strengthening for moving forward to Triple Elimination with (China)





HIV treatment and care

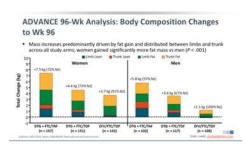


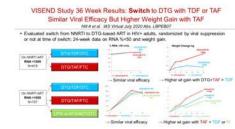
Marco Vitoria World Health Organization Global HIV, Hepatitis and Sexually Transmitted Infections Programmes



Body weight gain and cardio-metabolic effects of new ARVs

- Several RCTs & cohorts showed increased risk of body weight gain and change in other metabolic parameters (hyperglycaemia, dyslipidaemia, insulin resistance) in patients using new ARVs, particularly with regimens containing DTG and/or TAF
 - ADVANCE (96 weeks): significant body weight gain, particularly in women (Sokhela. AIDS 2020. Abstr OAXLB0104).
 - TANGO (48 weeks): improvement of metabolic parameters (cholesterol, triglycerides, fasting insulin, insulin resistance) when switched from TAF/3TC /DTG to 3TC/DTG (van Wyk. AIDS 2020. Abstr OAB0606).
 - NAMSAL (96 weeks): DTG vs EFV400 showed similar viral efficacy but more weight gain with DTG (□ women) (Kouanfack C et al. IAS 2020 Abs. OAB0402)
 - VISEND (36 weeks) Switch to DTG with TDF or TAF similar viral efficacy but more weight gain with TAF (Hill. AIDS2020. AbstrLBPEB07)
 - OPERA (+7,000 patients): weight gain associated with swap from TDF to TAF (Mallon. AIDS 2020. Abstr OAB0604)
 - AFRICOS (+3500 patients): increased BMI and incidence of hyperglycaemia associated with TLD (Ake. AIDS2020,Abstr OAB0602).
- BPIs associated slightly less weight gain then INSTI and NNRTIs (OPERA)
- BMI among people with HIV increased at a significantly higher rate thn in HIV-negative people, regardless of baseline weight classification (Kaiser Permanente study – Silverberg AIDS2020. Abstr OAB0603).
- These findings support current WHO guidelines reserving TAF for people with osteoporosis or impaired kidney function
- New research area: long-term cardiovascular risk among PLWH, and the extent to which new ARVs mitigates or accentuates that risk.

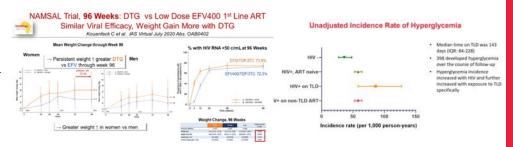




TANGO: Lipid Changes at Wk 48 • In analysis excluding those with BL lipid-modifying agent use, lipid changes favored switch to DTG/JTC (n = 275) vs. continued TAI—based ART (n = 263) in overall population - When stratfled by previous we of boorting early, statistically liverable changes with DTG/JTC vs. TAI based ART persisted in boosted subgroup Change From Total Control of Cont



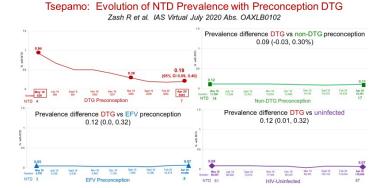
AFRICOS

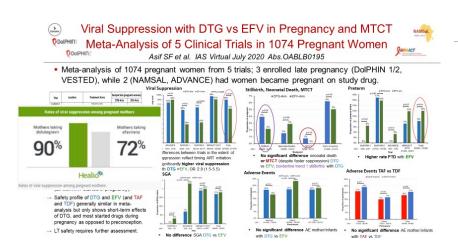




Safety and efficacy of new ARVs in pregnancy

- 2019 data from TSEPAMO: risk of NTDs significantly lower than initially reported (0.19%) but still higher than observed in those taking EFV or are HIV negative (0.1%) (Zach . AIDS2020, AbstrOAXLB0102)
- DOLPHIN 1&2, VESTED, NAMSAL and ADVANCE (metanalysis): pregnant women on DTG have greater and faster virologic suppression when compared with EFV, but did not translate to a lower risk for vertical transmission (Asif. AIDS2020, Abstr OABLB0195)
- Impact of obesity in pregnancy outcomes (ADVANCE): Regimens containing DTG and TAF could boost long-term risk of adverse pregnancy outcomes for mothers and infants (gestational diabetes, pre-eclampsia, LGA infant, and neonatal death) (Sokhela. AIDS2020 . Abstr OAXLB0104)





ADVANCE: Estimates of Adverse Pregnancy Outcomes (APO) with Pre-Pregnancy Weight Gain

Sokhela S et al. IAS Virtual July 2020 Abs OAXLB0104

E ART-related emergent obesity rates and data on

Used ADVANCE ART-related emergent obesity rates and data on relationship of obesity with APO to estimate RR for APO by ART regimen.

ART-related obesity Related Obesity Relat



- Based on RR of APO in obese vs normal BMI per meta-analysis (table), predicted potential APO ↑ (including gestational diabetes, preeclampsia, LGA infant, and neonatal death) due to ART-induced obesity:
 - TAF/FTC/DTG: 9.9% increase
 - TDF/FTC/DTG: 5.2% increase
 - TDF/FTC/EFV: 0.9% increase

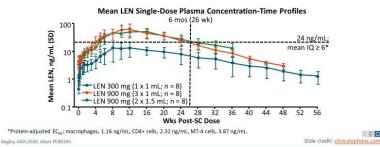


New drugs in HIV pipeline

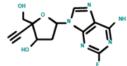
- Lenacapavir (GS-6207) Begley, AIDS2020, Abstr PEB0265
 - novel, first-in-class selective HIV-1 capsid inhibitor (Phase I)
 - PK data support ongoing phase II and III trials of lenacapavir oral loading dose, followed by 6monthly SC maintenance dosing
- Islatravir (MK-8591) de Jesus, AIDS2020, AbstrOAB0305
 - · Dual mechanism of action: translocation inhibitor (stops the reverse transcriptase nucleotide binding site from opening) and delayed chain terminator (which prevents nucleotide incorporation into viral DNA).
 - · High genetic barrier
 - Long half life
 - Initial studies in combination with Doravirine (P011 study - Phase II)
 - Also studied as PrEP

Lenacapavir PK Study: PK Profile

Per antiviral activity, mean lenacapavir target plasma concentration is 24 ng/mL, corresponding to mean inhibitory quotient ≥ 6 (range: 6.2-20.3)



Islatravir, a First-in-Class NRTTI with Multiple Mechanisms of Action



I CO

Translocation Inhibition



- Translocation inhibition prevents opening of the RT nucleotide binding site
- Nucleotides cannot be incorporated into
- Viral replication is inhibited

Delayed Chain Termination



- ISL changes vDNA structure such that nucleotide incorporation is prevented
- As ISL is not in the RT active site, it is not susceptible to RT-associated resistance-conferring mutations Viral replication is inhibited

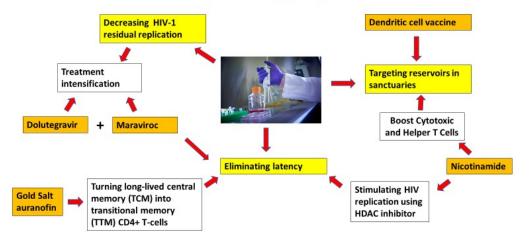
Multiple mechanisms contribute to the high potency of ISL against HIV-1 (including drug-resistant variants) and its high barrier to resistance



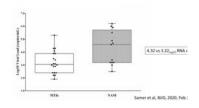
HIV remission without BMT (SPARC study)

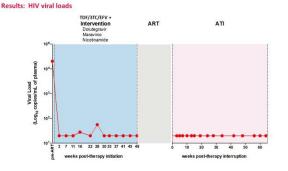
- The case from a small study in Sao Paulo, Brazil (30 patients) with long-term viral suppression
- Patients divided participants into six study arms (five people each) and tested a different type of treatment intensification, in an effort eradicate latent HIV within viral reservoirs
- Intensification scheme used in this patie n
 - DTG (may viral replication in HIV reservoirs),
 - Maraviroc (may have latency reversal properties),
 - Nicotinamide (potential in preventing cells from entering latency).
- The patient took this additional regimen fo year, then continued on regular ART until Mar 2019, when began a monitored treatment interruption.
- Viral load remained suppressed off therap ^y (57 weeks after structured treatment interruption)
- HIV DNA in cells and his HIV antibody test remains negative
- Full examinations have not yet been performed that would certify whether HIV DNA is present in lymph nodes and gut.
- No other participant in the study was able to retain viral suppression without ART.

Multi interventional study exploring HIV-1 residual replication: the SPARC-7 Trial (2014) [NCT02961829] (Diaz PI)









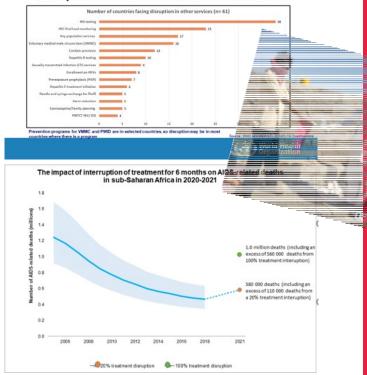




Impact of COVID-19 in PLHIV

- In 2 US retrospective studies in hospitalized patients, no clear evidence that HIV clinical (Patel, Abstr OABLB0102).or immunological status (Ho. Abstr OABLB0104) affect COVID-19 susceptibility or severity
- A trend of higher rate of intubations and a longer period of time spent intubated was observed in PLHIV with severe COVID (Patel, Abstr OABLB0102)
- Increased (2 -2.5x) risk of COVID-19 death associated with HIV and TB in South Africa (Davies, AIDS2020, Abstr OAXLB0106)
- Impact on HIV services disruption (WHO country report):
 - 73 countries are facing risk of ARV disruption. In these countries 17.7 million people were receiving ART (70% of total PLHIV on ART)
 - 36 countries reported disruption in provision of ARV services. In these countries 11.5 million people were receiving ART (45% of total PLHIV on ART))
 - 24 countries had a critically low stock of ARVs. In these countries 8.3 million people were receiving ART (33% oftotal PLHIV on ART)
- Interruption of HIV treatment for 6 months could result in 500,000-1,00 million AIDS-related deaths in sub-Saharan Africa in 2020/2021
- Ensure continued treatment to mitigate this risk DSD and MMD is critical.

Preliminary results compiled from a survey conducted by WHO between Agrill and June 2020 (n=127) Preliminary results compiled from a survey conducted by WHO between Agrill and June 2020 (n=127) The survey of th



STI vaccine development



Potential cross protection against gonorrhoea with Meningococcal B vaccine

- Outer Membrane Vesicle (OMV) meningococcal group B vaccines may affect the incidence of gonorrhea
 - 31% reduction of gonorrhea in a case-control study in NZ
 - Similar ecological data in Cuba, Norway and Canada
- Meningococcal B vaccine (4CMen B: Bexsero°) contains OMV poteins (Por A) and 3 recombinant proteins (NHBA, NadA, fHbp)
- MSM are at increased risk for meningococcal disease (RR: 4)
- A clinical trial (ANRS Doxyvac) will assess among MSM on PrEP the impact of Bexsero° on GC incidence

First human recombinant protein sub-unit chlamydia vaccine

- 35 healthy women 19-45 years, with no history of Chlamydia and negative PCR at entry
- 3 IM injections of CTH522 with 2 different adjuvants (CAF01 or aluminium hydroxide)
 + 2 nasal administrations or placebo
- High anti-CTH-522 IgG titers in 100% of pts
- Cell mediated immune responses (IFN-γ release) were generated
- NAb detected and IgA in the genital tract
- Safe and well tolerated
- Phase 2 optimisation study in preparation

Petoussis-Harris et al. Lancet 2017; Folaranmi CID 2017; Semchenko EA et al. CID 2019; Semchenko EA et al. JID 2020

Abraham S et al. Lancet ID 2019



AIDS2020: SELECTED TBHIV HIGHLIGHTS

Dr Vindi Singh, Medical Officer



TB Preventive Treatment

- PEE1617. Adult and pediatric tuberculosis preventive therapy in select
 PEPFAR-supported countries Pooja Vinayak, Office of the Global AIDS Coordinator
 - TPT completion data collected in PEPFAR-supported countries Oct 2018 Sept 2019
 - 7/ 18 countries had TPT completion rates of >80% for both adults and children.
 - TPT completion rates ranged from 29% to 91% (adults) and 8% to 92% (children)
 - Pediatric TPT completion lags behind adult TPT completion in 1/3 countries.
- PEE1495: Scaling up isoniazid preventive therapy uptake among HIV clients in Kogi State, Nigeria: A quality improvement approach Stephen Balogun, AIDS Healthcare Foundation
 - Baseline data from care cards at six HIV sites (795 clients) median IPT uptake 39%
 - Root causes: knowledge gap on guidelines, lack of staff commitment, commodity stockout
 - Intervention: 3 Plan -> Do -> Study -> Act (PDSA) cycles with capacity building for focal persons, identification of facility champions, and isoniazid commodity management
 - RESULTS: increase in median IPT uptake from 39% to 74%.



TB Contact investigation studies

- OAB0507. TB contact investigations as an active HIV case finding strategy in Mozambique: Lessons for high TB and HIV syndemic countries
 Peter R Kerndt, Centers for Disease Control and Prevention
 - TB index patient contact investigations in 5 health facilities in Maputo Province, Mozambique, 2017 to Oct 2019.
 - 2,990 TB index patient HHCs visited; 3.6% dx with TB; of those who did not and were tested, 8.1% (278/3,442) of those who did not know HIV status positive.
- PEE1394. Uptake, yield and linkage to care after home-based HIV counselling and testing among household contacts of tuberculosis patients in Uganda Pauline Mary Amuge, Baylor College of Medicine Children's Foundation-Uganda
 - 459 index TB patients Oct-2017 to Sept-2018 HH members screened for TB and HIV
 - 1692 household members; Of 499 with unknown HIV status who accepted testing.
 2% (10/499) tested HIV positive;



Advanced HIV Disease and TPT within DSD models

- PEB0137 Tuberculosis and cryptococcal co-morbidity among patients with advanced HIV disease in Lesotho Vincent J Tukei, EGPAF
 - 110 HIV-pos patients with AHD (Nov 2018-May 2019) in Berea and Motebang hospitals (record reviews) received TB screening, IPT, CrAg screening
 - 36 (32.7%) patients screened positive for TB symptoms; 17/110 confirmed TB
 - 1 in 8 patients with CD4 <100 had cryptococcal meningitis.
 - Conclusion: AHD interventions for TB and cryptococcal disease should be prioritized
- Leveraging Differentiated Service Delivery to Enhance Coverage and Completion of TB Preventive Treatment (TPT) (nonabstract driven session)
 - Feasibility and Acceptability of Providing TPT in Community Antiretroviral Refill Groups (CARGs) in Zimbabwe Clorata Gwanzura, Zimbabwe Ministry of Health and Child Care
 - Leveraging DSD models to expand TPT coverage in Uganda Proscovia Namuwenge, Ministry of Health



OAXLB0106. Western Cape: COVID-19 and HIV / Tuberculosis Mary-Ann Davies, University of Cape Town

- Linked data on all public sector patients (3.5M active patients >=20) using unique identifier with COVID-19 diagnoses, hospitalizations and deaths
- Comorbidities inferred from labs, drugs, encounters (Diabetes, HTN, Chronic Kidney Disease, COPD/Asthma, Tuberculosis, HIV) so NOT AVAILABLE: obesity, smoking, CVD

– RESULTS:

- Adjusted HR for increase in COVID-19 deaths PLHIV 2.39 (95% CI: 1.96-2.86); also median age of death lower among PLHIV

 • Adjusted HR for current Tuberculosis: 2.70 (95% CI: 1.81-4.04)
- Adjusted HR for previous Tuberculosis: 1.51 (95% CI: 1.18-1.93)
- For Diabetes: 5.37-12.07 (depending on level of control; HgbAlC)

CONCLUSIONS:

- ~2 times risk of COVID-19 death associated with HIV and TB
- May be over-estimated if residual confounding



Post-AIDS2020 briefing

Financing and Economics

Jose Antonio Izazola UNAIDS, SID

Keynote speakers, plenary sessions and satellites

• Opening:

The future of HIV: W Byanyima

• Closing:

Rejuvenating the AIDS Response in a World Living with COVID-19: P Piot

Prime Session 4: Financing

Fighting HIV in the shadow of COVID-19. COVID-19 threatens to reverse the gains made in the response to HIV and AIDS: P Sands

Plenary sessions:

- The road ahead: Addressing injuries of inequality in the HIV/AIDS pandemic.
 Celeste Watkins-Hayes, Northwestern University
- HIV targets and beyond: An assessment of progress towards global commitments. D Birx, PEPFAR

Satellites:

- 2025 AIDS targets
- The next UNAIDS Strategy

Leadership workshop

HIV and universal health coverage

Financing of HIV was not the main topic in these sessions, however, in all of them there was explicit mention to stagnating and decreasing funding for HIV and the complexities to finance an optimal response in view of COVID19, competing needs, inequality.

"Now when funds are needed the most, they are faltering"

Sustainability and Transition

PEE1370. Social contracting with civil society organizations (CSO): An effective approach for sustainable HIV/AIDS response

Activity-based costing for community-based HIV/AIDS service delivery by local CSO/CBO (USAID funded) in 4 provinces of Vietnam during 2015-2018.

The potential health impacts of the CBO-based services were significantly higher than those of health facilities:

- HIV transmission prevention (237.6 cases vs. 124.4 cases)
- DALYs averted (1,077.9 DALYs vs. 577.4 DALYs).
- The average cost for the community-based service for finding one new HIV positive case is about US\$ 498 and US\$ 547 for both finding and linking a new HIV positive case to treatment.
 - This cost ranged from US\$ 221 in urban areas to US\$ 1,100 in mountainous areas.



"2025 AIDS Targets: Setting The Next Generation of Goals for the Global AIDS Response." "Progress is not equal everywhere. We see this laid bare with COVID-19." "Community voices must really be forefront in any messaging we have. This is what UNAIDS strategy will bring to us. It's that combination of data with communities and understanding the needs of the community, hearing the voices of the community, and most importantly investing in the communities and those voices."

-Amb. Birx

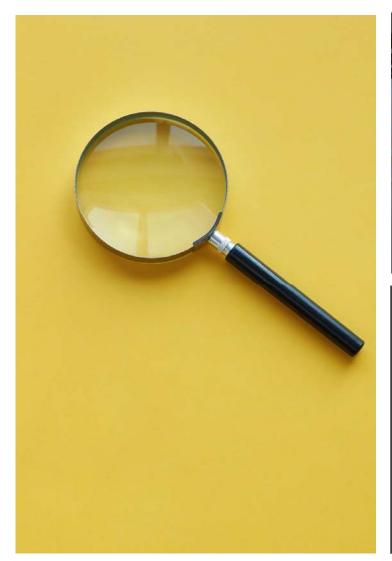
Social Enablers

- 1. Reducing stigma and discrimination
- 2. Providing access to an improved legal environment and social justice
- 3. Allowing for gender equality

HIV/AIDS and Faith

- Pew Research estimates 84% of the world's population identifies with a faith community
- WHO estimates 40% of Sub Sahara Africa's HIV/AIDS treatment and care provided by Christian hospitals and health centers
- 60% of HIV/AIDS services delivered by FBOs in some areas of the world

ELIMINATE STIGMATIZATION!





Thank you!!