15th International Conference on HIV TREATMENT AND PREVENTION ADHERENCE

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"Go As Fast As You Can – But Always Follow the Implementation Science|"*: Closing the Adolescent HIV Prevention and Treatment Gaps

Wits Reproductive Health and HIV Institute

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*derived from AVAC spotlight report, 14 October 2020 re the development of COVID-19 vaccines

Presentation Outline

- Key Tenets of Implementation Research
- State of Adolescent Health and Wellbeing
- Prevention and Treatment Gaps
- Implementation Research Opportunities
 - Reaching young people Digital innovations
 - Its not only about the facility decentralised service delivery models
 - Scaling up comprehensive SRH and PrEP Long Acting Methods
 - Youth Engagement
- Concluding Remarks



Implementation Research



"The study of **methods and strategies** to promote the uptake of interventions that have proven effective into **routine practice**,examines **what works, for whom and under what circumstances, and how interventions can be adapted and scaled** up in ways that are accessible and equitable."

Global Alliance for Chronic Diseases

- Aims to close the gap between evidence, policy and practice
 - Lack of coordination of emerging interventions
 - Small pilots
 - Inefficient and ineffective interventions are taken to scale comes at high cost in resource limited settings
- Numerous IS frameworks and definitions most commonly used CFIR, RE-AIM
- Examines implementation outcomes
 - Acceptability, Adoption, Appropriateness, Costs, Feasibility, Fidelity, Penetration, Sustainability



The adolescent burden of disease reaches further than just HIV infection and SRH related illness.

Adolescents face a multitude of health and social drivers of disease.

Young lives are riddled with risk

Diseases of poverty

Infectious and vaccine preventable diseases

Under nutrition

HIV

Sexual and reproductive health

Injuries

Unintentional injuries

Violence

Non-communicable diseases

Physical disorders

Mental health disorders

Substance use disorders

EPIDEMIOLOGICAL TRANSITION

Multi-burden ≥2500 diseases of poverty DALYs per 100 000 per year Injury excess ≥2500 injuries <2500 diseases of poverty DALYs per 100 000 per year NCD predominant <2500 injuries <2500 diseases of poverty DALYs per 100 000 per year



State of Adolescent Health

- Africa adolescent youth bulge 60% of the continent population <25 years
 - 293 million by 2050 (UN youth population trends and SDGs, 2015)
 - Significant population level effect if HIV incidence is not curbed
 - Increased demand on health systems
- AGYW 15-24 years:
 - Eight times more likely to become infected with HIV vs. males of the same age
 - 1300-1500 new HIV infections a week in South Africa (NDOH, NSP for HIV, STIs, and TB 2017-2022)
- AGYW 18-20 years highest incidence of HIV compared to AGYW 21-30 and 31-35 (ECHO Trial, 5.03 per 100 vs 4.72 and 1.67)
- STI prevalence Chlamydia and Gonorrhae incidence high (53% and 20% respectively in POWER trial Johannesburg, Cape Town and Kisumu; n= 1504)

Myriad of factors making HIV prevention difficult



- Risky sexual behaviours early sexual debut, multiple concurrent partners, inconsistent of condom use (up to 40% never use condom last sex), age disparate relationships (20-40% of Access report partner 5-10 years older; GAP Year and Project PrEP); substance use
- HIV prevention knowledge not universal
- GBV and harmful gender norms
 - More than a third of girls experience sexual violence before the age of 18
 - creates power differential and lack of autonomy
- Identifying those most at risk early diagnosis and treatment, whilst ensuring appropriate primary
 prevention so that adolescents stay negative
- Access to Services:
 - Lack of resource to access traditional health services
 - Integrated service delivery missed opportunity and multiple needs i.e. unmet needs for contraception, mental health, psychosocial support, post violence care
- Uptake (underutilised) and continuation of prevention methods contraception, condoms and PrEP
 - High uptake of oral PrEP among AGYW but gaps with continuation

What about treatment?

- Significant testing and treatment gap:
 - Progress towards 90-90-90 for adolescents 15-24 years: 74-52-85
 - Sex and provincial variation
- Implementation of policy shifts low uptake of UTT
 - 20% of newly diagnosed women with TB/low CD4 count in Soweto refused ART initiation - "feeling healthy", "unable to disclose to family members", and "(concern about) side effects
- Access to testing and treatment
 - Disclosure support close relationships and social support experience better linkage and treatment experience
 - low facility testing coverage barriers to accessing facilities
 - Holistic integrated QUALITY care
- Treatment tolerance/side effect profiles TLD
- Adherence and retention in care
 - 63.3% after 6 years Fox et al. 2018



Marinda et al. BMC Public Health (2020) 20:1375





Opportunities for Implementation Research

1. Opportunity to use Digital Innovations to Inform, Engage and Link



Facebook Messenger (real-person and chatbot

response) receives on average 30-60

conversations per day.

Currently, the chat bot living on <u>MvPEP</u> Facebook page and website may receive between 1 000 – 5 000 conversations per month with an 85% positive feedback rating – dependent on boosting budget! Since implementation in April 2020, a total of 13 389 conversations took place. Engagement is primarily driven by users reaching out to the project which demonstrates online interest:



Defining metrics for evaluating reach and quality of digital innovations:

 As at end of October, Sister Unathi (chatbot) has engaged 6211 users by having over 16 000 conversations.





Multiple channels and tactics to reinforce the message and increase reach: - underutilised

	Online / digital reach				Radio	Social mobilisation reach						
AUDIENCE	Facebook*	Twitter*	Instagram	myprep.co.za	Community Radio*	Stakeholder engagements	Dialogues	Youth VIP events*	Mobile van outreach*	In-facility Health Talks*	Since ince January Project Pr	Since inception in January 2018, Project PrEP bas
AGYW (15-24)	2 905 911	-	-	5 253 (aged 18-24)	2 257 665	378	2 096	3 883	7 552	18 431	initiated 10219 in dividuals on PrEP of which 5589	
Women 25+	844 813	-	-	20 877		98	544	947	770	7 432		5589
ABYM (15-24)	1 746 327	-	-	4 666 (aged 18-24)		143	792	1 431	2 364	5 000	(54.69%) are AGYW.	
Men 25+	524 739	-	-	17 978		26	144	277	510	3 099		
Other (Demographics not specified)	-	157 248	2767	78 425		-	-	-	-	-		
TOTAL	6 021 790	157 248	2767	127 199	2 257 665	645	3 576	6 538	11 196	33 962	5 810 173	
* Some individuals ma	y be reached m	nore than once	through one o	r multiple chan	nels.							

Table 1: Total demand creation reach for Project PrEP, November 2018-30 September 2020

Online engagement (comments, likes, shares) on Facebook posts only, measured at 385 600 since inception, excluding private messages received and responded to daily. Since inception,





2. Opportunity – Many UPIs that are under utilized and lack data to support use



User Provider Interfaces to Reach Young People and Scale Prevention and

- School Based and Community Models

Treatment Interventions:

- Integrating with existing services – ANC, PNC, Contraception
- Youth Care ClubsSelf Care

BUT, important questions need to be answered re: - feasibility, acceptability, uptake, coverage, effectiveness

Source: HIV biomedical prevention strategy in SA: BCG

Long-Acting Injectable Cabotegravir; Dapivirine Ring; HIVSS, Sub-Cutaneous and Injectable Contraception

adherence and continuation barriers - underutilized or understudied





Determine:

- Inputs needed at country and local level to implement and scale interventions
- Cost effectiveness modelling impact

3. New technologies that have potential to overcome access,



Assess supply and demand:

- Health system readiness to introduce new methods vertical vs horizontal integration
- Capacity building needs of health workers tools, job aids, training platforms
- Demand Creation for new methods at all levels of the eco-system

Determine:

- Service delivery models and entry points to care
- Feasibility, acceptability, uptake, continuation/persistence on methods
- Real time data to inform timeous policy and programmatic shifts



4. Youth Engagement in Design and Scale up of Interventions

- Ownership of brand identity
- Advocacy
- Ensures responsiveness to the needs of adolescents
- Wits RHI Generation PrEP: Simunye
 - a group of nationally representative youth who provides input, oversight and guidance on programmatic and communication activities
 - Regular capacity building sessions and regular fun...
 - Available for insights to all GOV depts and implementing partners
 - 4 per year in-person sessions
 - Further engagement through zoom and WhatsApp
 - Active ambassadors int heir communities have started their own HIV prevention ambassador groups and currently training other youth



Multiple Opportunities to Improve Prevention and Treatment



FOCUSED IMPLEMENTATION SCIENCE CAN BE A CATALYST

- Align to policy and national priorities dissemination of evidence as real time as possible dissemination (translational research)
- Limits implementation mistakes at scale, particularly in limited resource settings
- Allows catalyst TO SCALING PREVENTION AND TREATMENT INTERVENTIONS
- Allows rapid progression to scale effective strategies at the right scale and cost
- Identify adaptations needed for programmes as translated to different settings HINC to LMIC
- Allows for health systems strengthening approaches and addresses both demand and supply side of intervention implementation
- To test the most effective combination interventions at the correct intensity and right coverage for impact (DREAMS)
- Bear in mind COVID-19 responsiveness

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Thank you!

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