

THE IMPACT OF PATIENT CENTRED CARE ON HIV TREATMENT IN ZAMBIA

Kombatende Sikombe PhDc, MPH

Centre for Infectious Disease Research in Zambia Lusaka, Zambia.

Disclosure: None

THE IMPACT OF PATIENT CENTRED CARE ON HIV TREATMENT IN ZAMBIA

Authors: <u>Kombatende Sikombe, PhDc MPH</u>, Aaloke Mody, MD, Charles W. Goss, PhD, Ingrid Eshun-Wilson, MD, Sandra Simbeza, MPH, Anjali Sharma, PhD, Laura K Beres, PhD, Jake M. Pry, PhD, Njekwa Mukamba, MPH, Brian Rice, PhD, Jacob Mutale, Carolyn Bolton Moore, MD, Charles B Holmes, MD MPH, Izukanji Sikazwe, MBChB MPH, Elvin Geng, MD MPH

Disclosure: "None"





BILL&MELINDA GATES foundation







Retention in care: a global challenge for HIV programs

- HIV testing, linkage, and treatment initiation improving
- Securing progress increasingly falls on retention in care
- Multifaceted barriers to retention (e.g., transport, stigma, treatment fatigue)
- Most improvements focused on delivery models or architecture (e.g., differentiated service delivery, service integration)
- Data suggest that patient-provider interactions is an important driver of retention, but few empirically evaluated strategies targeting provider behavior in order to enhance patient experience and retention

Mwamba et al., BMJ GH 2018, Sikazwe et al., CID 2021

PLOS MEDICINE

Understanding preferences for HIV care and treatment in Zambia: Evidence from a discrete choice experiment among patients who have been lost to follow-up

Arianna Zanolini, Kombatende Sikombe, Izukanji Sikazwe, Ingrid Eshun-Wilson, Paul Somwe, Carolyn Bolton Moore, Stephanie M. Topp, Nancy Czaicki †, Laura K. Beres, Chanda P. Mwamba, Nancy Padian, Charles B. Holmes, Elvin H. Geng 🖬



Kilometers Willing to Travel

Zanolini et al., PLoS Med 2018

J Acquir Immune Defic Syndr • Volume 82, Supplement 3, December 2019

Human-Centered Design Lessons for HIV IS

Human-Centered Design Lessons for Implementation Science: Improving the Implementation of a Patient-Centered Care Intervention

2. Patient experience data and feedback

Exit survey in systematic sample
Feedback at staff meetings

3. Gentle facilitylevel incentive

1. Training and coaching

- Appreciative approach
- Rapport formation
- Monthly site support

Beres et al., JAIDS 2019

Study Objective



Evaluate this multi-component strategy on health care worker behavior, patient experience, retention and clinical outcome under real world service delivery conditions in Zambia

Stepped-Wedge Cluster Randomized Design



Stepped-Wedge Cluster Randomized Design



Study population and measurements

Outcome	Measurement	Population
Patient Experience	 12-item Physician- Patient Communication Behaviors Scale adapted to Zambian context on exit from clinical encounters 	 Systematic sample of adults; trained on survey (blinded to provider) before encounter Oversample lost to follow-up who are returning and new ART starters
Retention at 15 months	 Not more than 30 days late for appointment at 15 months after study start using data from electronic medical record 	 All adults who made clinic visit during period 1 in groups 1 or 4 clinics (who have 15 months of follow up under treatment or control condition without cross-over)
Treatment success at 15 months	 Confirmed viral suppression (VL<400 copies/ml) or if no viral load, tracing in the field and adjudicated care status 	 Nested prospective sub-cohort enrolled during period 1 from clinics in group 1 and 4 (15 months of follow up in treatment or control condition without cross-over)

Wachira et al., AIDS Res Treat. 2013

Study population and measurements

Outcome	Measurement	Population
Patient Experience	 12-item Physician- Patient Communication Behaviors Scale adapted to Zambian context on exit from clinical encounters 	 Systematic sample of adults; trained on survey (blinded to provider) before encounter Oversample lost to follow-up who are returning and new ART starters
Retention at 15 months	 Not more than 30 days late for appointment at 15 months after study start using data from electronic medical record 	 All adults who made clinic visit during period 1 in groups 1 or 4 clinics (who have 15 months of follow up under treatment or control condition without cross-over)
Treatment success at 15 months	 Confirmed viral suppression (VL<400 copies/ml) or if no viral load, tracing in the field and adjudicated care status 	 Nested prospective sub-cohort enrolled during period 1 from clinics in group 1 and 4 (15 months of follow up in treatment or control condition without cross-over)

Wachira et al., AIDS Res Treat. 2013

Study population and measurements

Outcome	Measurement	Population			
Patient Experience	 12-item Physician- Patient Communication Behaviors Scale adapted to Zambian context on exit from clinical encounters 	 Systematic sample of adults; trained on survey (blinded to provider) before encounter Oversample lost to follow-up who are returning and new ART starters 			
Retention at 15 months	 Not more than 30 days late for appointment at 15 months after study start using data from electronic medical record 	• All adults who made clinic visit during period 1 in groups 1 or 4 clinics (who have 15 months of follow up under treatment or control condition without cross-over)			
Treatment success at 15 months	 Confirmed viral suppression (VL<400 copies/ml) or if no viral load, tracing in the field and adjudicated care status 	• Nested prospective sub-cohort enrolled during period 1 from clinics in group 1 and 4 (15 months of follow up in treatment or control condition without cross-over)			

Overview of Analytic Approach

- Mixed-effects regression of intervention effect, with facility as random effect
- Adjustment for sex, age, care status (e.g., in care, returner, new ART), time in care, facility, and secular time, as appropriate
- Overall and stratified analyses by age, sex, and care status (e.g., in care, returner, new ART)
- For patient experience, control compared to intervention <6m and >6m to accommodate time for change to occur (analyzed as median as well as dichotomized at 15% percentile)

Patient characteristics

		Patient Experience, N (%)		Retention, N (%)		Treatment Success, N (%)		
		Control	Intervention <6m	Intervention >6m	Control	Intervention	Control	Intervention
		N=684	N=306	N=181	N=41,998	N=43,005	N=453	N=480
Sex	Female	337 (49.6)	154 (50.5)	96 (53.0)	27,461 (65.4)	27,530 (64.0)	266 (58.7)	273 (56.9)
	Male	342 (50.4)	151 (49.5)	85 (47.0)	14,537 (34.6)	15,475 (36.0)	187 (41.3)	207 (43.1)
Age, Median (IQR)		38 (31-46)	37.5 (31-45)	37 (31-45)	39 (32-46)	39 (32-46)	37 (31-44)	37 (30-44)
Care status	In care	421 (61.5)	182 (59.5)	92 (50.8)	29,370 (69.9)	29,511 (68.6)	229 (50.6)	218 (45.4)
	Returner	263 (38.4)	124 (40.5)	89 (49.2)	8,150 (19.4)	9,141 (21.3)	96 (21.2)	128 (26.7)
	New ART	-	-	-	4,478 (10.7)	4,353 (10.1)	128 (28.3)	134 (27.9)

Results: Trained-patient exit surveys (N=1,111)



Number needed to treat (NNT) for each question to change in patient experience survey

QUESTION	Control %	> 6 mos %	NNT > 6
Overall, were you satisfied with all your HIV care providers today?	14.8	5.0	10
Did you witness HIV providers behaving rude	12.0	4.6	13
Did HIV care provider greet you in a way that made you feel comfortable?	11.2	4.6	15
Was your HIV care provider happy that you came for a visit to the clinic today?	9.9	4.3	18
Was any HIV care provider very helpful to you?	19.2	7.8	9
Did you have a one-on-one conversation with your HIV care provider?	15.9	6.5	11
Did your HIV care provider give you as much information as you wanted?	20.3	9.2	9
Did your HIV care provider spend the right amount of time with you?	15.8	6.1	10

Number needed to treat (NNT) for each question to change in patient experience survey

QUESTION	Control %	> 6 mos %	NNT > 6
Overall, were you satisfied with all your HIV care providers today?	14.8	5.0	10
Did you witness HIV providers behaving rude	12.0	4.6	13
Did HIV care provider greet you in a way that made you feel comfortable?	11.2	4.6	15
Was your HIV care provider happy that you came for a visit to the clinic today?	9.9	4.3	18
Was any HIV care provider very helpful to you?	19.2	7.8	9
Did you have a one-on-one conversation with your HIV care provider?	15.9	6.5	11
Did your HIV care provider give you as much information as you wanted?	20.3	9.2	9
Did your HIV care provider spend the right amount of time with you?	15.8	6.1	10

Results: Retention at 15 months



Results: Retention at 15 months



Results: Treatment Success & Viral Suppression



Taking the Patient Perspective

"She was shocked that ... drugs [were] given her ... So she went very happy, even us we were very happy because we ... used to send patients back to say "No, go back to [your original clinic] that's where your station is." ... We have learnt to say we need to accommodate our clients because the moment we don't do that we will be losing them... we claim to say we lose them when we are the ones who chase them."

- HCW, FGD

Conclusion and Implications

- A multi-component, co-designed intervention delivered in routine service delivery setting had measurable effects on patient experience and retention, but not viral suppression
- Translates to a 70% reduction in visits with a bad experience and 56,000 visits with bad experience averted during the intervention
- Improving inter-personal dynamics between patients and providers represents a promising complement to differentiated service delivery efforts
- Even in public health settings, routine measurement of patients' experience may be an important public health strategy for improvement
- A potentially scalable approach to advance adoption of 2021 WHO Good Practice Statement on Person and Patient Centered Care in HIV programs











BILL& MELINDA GATES foundation





Georgetown University

