Changes in HIV Differentiated Care Utilization during the COVID-19 Pandemic in Zambia

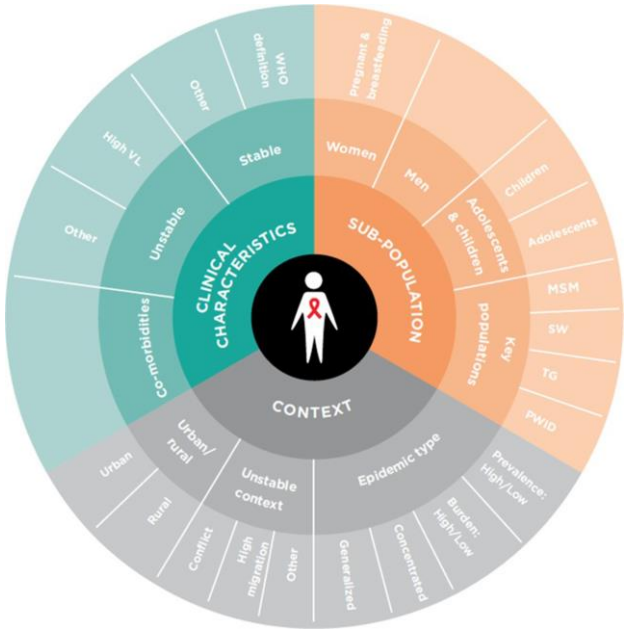
Youngji Jo[a], Bevis Phiri[d], Sydney Rosen[a], Amy Huber[b], Muya Mwansa[c], Mpande M Mwenechanya[c], Priscilla Lumano Mulenga[c], Hilda Shakwelele[d], Prudence Haimbe[d], Brooke E Nichols[a]

[a] Boston University, Boston, MA, USA
[b] Clinton Health Access Initiative, Lusaka, Zambia
[b] Health Economics and Epidemiology Research Office, Department of Internal Medicine, School of Clinical Medicine, Faculty of Health Science, University Witwatersrand, Johannesburg, South Africa
[c] Ministry of Health, Lusaka, Zambia

BACKGROUND

AIM Evaluate the extent to which DSD coverage and ART dispensing intervals have changed during the COVID-19 pandemic in Zambia.

- Differentiated service delivery (DSD) models aim to lessen the burden of patients and health systems by reducing requirements for facility visits and **adapting service delivery *"When, Where, Whom"***
- With the COVID-19 pandemic, minimizing patient contact with healthcare facilities while maintaining treatment continuity, has become more urgent, **resulting in efforts to increase DSD**.
- In March 2020, the Zambian Ministry of Health urgently promoted the 3- and 6- multi-months dispensing for patients on antiretroviral treatment (ART).
- We assessed the extent to which DSD coverage and ART dispensing intervals have changed during the COVID-19 pandemic



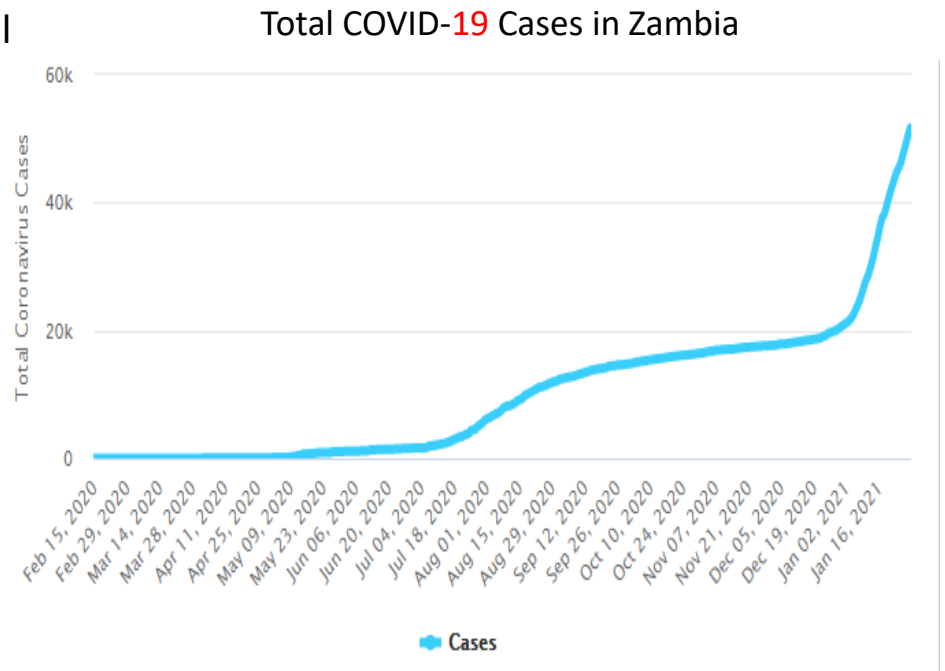
Methods

- **Data source:** 266,580 patient data from SmartCare, for 791 health facilities (across 93 districts and 10 Provinces) representing about 3/4 of all ART patients nationally.

- **Time period:** January 2019 to November 2020 (March 18, 2020 : the first COVID-19 case in Zambia)

Analysis: To compare the numbers and proportional distributions of patients enrolled in DSD models

1) Fast track + 0-2 months
2) Fast track + 3-months
3) Fast track + 4-6 months
4) Multi-month dispensing 3 months
5) Multi-month dispensing 4-6 months
6) Community adherence group
7) Home ART delivery
8) Others (e.g. after/before hours, community pharmacy, healt post, scholar, rural/urban adherence groups, mobile ART distribution, weekend clinic)



Results

Indicator	As of February 15 2020			As of October 30 2020			% increase in coverage
	n	% of total patients on ART (coverage)	% of all patients in DSD models	n	% of total patients on ART (coverage)	% of all patients in DSD models	
Model of care							
Multi-month dispensing 3 months	20,521	3%	15%	42,198	6%	20%	106%
Multi-month dispensing 4-6 months	47,677	6%	35%	66,290	9%	31%	39%
Fast track + 0-2 month dispensing	10,474	1%	8%	21,777	3%	10%	108%
Fast track + 3-month dispensing	11,712	2%	9%	19,705	3%	9%	68%
Fast track + 4-6 month dispensing	24,360	3%	18%	31,266	4%	14%	28%
Community adherence group	8,437	1%	6%	9,989	1%	5%	18%
Home ART delivery	875	0%	1%	2,978	0%	1%	240%
Other model*	10,596	1%	8%	21,744	3%	10%	105%
Total	134,652	18%	100%	215,947	29%	100%	60%
Months of ARV medications dispensed at most recent pickup							
1 month	8,691		6%	17,412		8%	100%
2 months	5,653		4%	11,005		5%	95%
3-4 months	43,012		32%	79,650		38%	85%
5-6 months	76,758		57%	102,211		49%	33%
Total	134,114		100%	210,278		100%	57%

Results

- The number of patients enrolled in any DSD model increased by 60% between February and October, from 134,652 (18% coverage) to 215,947 (29% coverage)

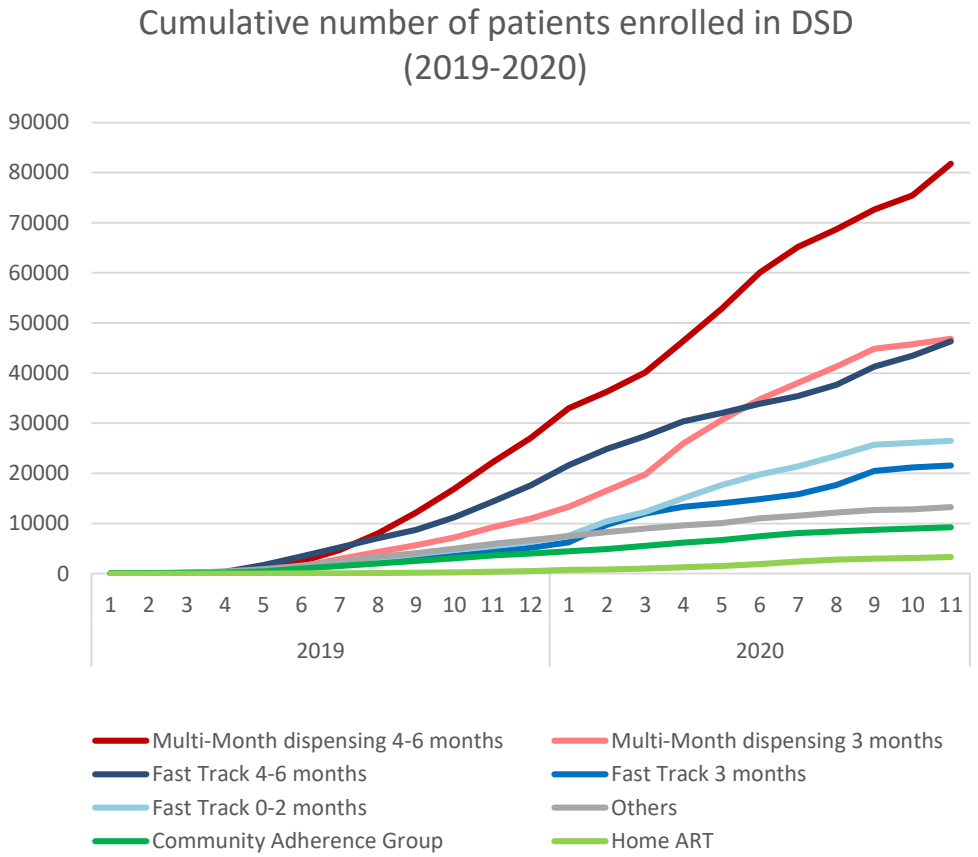
- Data shows that Home ART delivery had the greatest % increase in utilization from 875 to 2,978 (240%), while CAGs experienced the smallest change from 8,437 to 9,989, an increase by 18%

- Proportions of patients receiving a 1, 2 or 3-month supplies rose

- However proportion of 6-month dispensing fell from 57% to 49%

Results

- Multi-month dispensing 3 or 4-6 months are the most popular model
- Fast track 3 or 4-6 months are popular in urban settings (e.g. Lusaka province), while community adherence group is popular in rural setting (e.g. Eastern province)
- While % of Home ART delivery is marginal, it has been rapidly increased (183%) to relatively younger patients and those on ART treatment within 1-3 years.



		FT0-2	FT=3	FT4-6	MMS=3	MMS4-6	CAG	Home ART	Others
# increased patients enrolled DSD	Jun 2019-Feb 2020	9232	8571	21477	15090	33947	3884	805	6685
	Mar 2020-Nov 2020	14177	9597	18901	27098	41609	3687	2282	4265
	Percent increase	54%	12%	-12%	80%	23%	-5%	183%	-36%

Conclusion

- The months of the COVID-19 pandemic showed increased participation in DSD models (e.g. **Multi-Month/Fast Track in total, Home ART Delivery in percent**) for stable ART patients in Zambia but shorter dispensing intervals.

- The **shortening of dispensing intervals** is primarily due to patients switching temporarily back from Tenofovir Lamivudine Dolutegravir (TLD) to Tenofovir lamivudine Efavirenz (TLE) to mitigate threats of TLD **global supply chain.**

- **Efforts to eliminate obstacles to longer dispensing intervals should be prioritized to achieve the expected benefits of DSD models and minimize COVID-19 risk.**
  - Supply chain management (e.g. manufacturing, logistics, in-country supply and stock monitoring)
  - Out of facility distribution model (e.g. pharmacies, drop-in centers, mobile clinics)
  - Integrated service delivery (e.g. TB, NCD, PrEP or other preventive interventions)
  - Web/phone based dispensing/follow up platforms, where feasible

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THANK YOU!