A Multilevel Approach to ARV Implementation Strategies for YBSMM

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Objectives

- Review qualitative findings
- A quantitative preview
- Engage audience about incorporation of quantitative data with qualitative results
- Engage in meaningful discussion about how to expand our notions of ARV delivery systems

Background

 Antiretroviral (ARV) uptake among young Black sexual minority men (YBSMM) along the status-neutral continuum is lower than necessary for GTZ goals to end the HIV epidemic by 2030

 Multiple studies indicate that Black men are less likely to use PrEP and be virally suppressed

 Understanding how YBSMM want to procure ARV may provide us with additional tools for ending HIV in this population

Importance of Understanding YBSMM Delivery Preferences

 Intersectional stigma and the synergistic effects of unequal social, economic, and political conditions heighten vulnerability to HIV and AIDS for BSMM

 Ease of ARV delivery for both treatment and prevention of HIV by YBSMM is a critical first step in medication adherence, key for prevention of onward transmission (Cabral et al., 2018)

Lack of Differentiated ART Delivery in the U.S.

 DART, the practice of delivering ARVs based on patient preferences, has been adopted in a number of countries with generalized HIV epidemics

- Ex: mobile units in Uganda, Malawi, South Africa
- DART can be cost-saving (Roberts, et al. 2019)
- We require novel ARV delivery approaches for the success of vulnerable populations along the HIV care continuum

Objectives

Elucidate young Black men's ARV delivery preferences through focus groups for implementation of patient-centered ARV delivery systems along a status-neutral continuum.

Determine the relationship of multilevel factors (individual, interpersonal, and structural) to ARV delivery options among a population-based sample of N=98 YBMSM aged 18-34 in Chicago, Illinois.

Methods

- We conducted focus groups and in-depth-interviews from HIVpositive and HIV-negative men using ARV for treatment or prevention of HIV (N=24)
- Our investigation focused on three primary modalities: 1) pharmacy pick-up; 2) mail delivery; and 3) mobile van delivery
- Men's interest in long-acting injectable antiretroviral therapy (LAI-ART) was also explored
- We recruited participants from The N2 Study (R01MH112406, Duncan and Schneider)

Methods

- Eligibility criteria: 1) aged 18 to 34 years old, including: 2) Black or African American; 3) cis-gender male; 4) identified as a sexual minority (i.e., a cisgender man who has sex with men); 5) previously prescribed ARV medication for HIV treatment or PrEP for HIV prevention.
- Focus groups and interviews were conducted via Zoom
- We used the RADaR technique, a rapid qualitative analytic method, to analyze participants' preferred methods of ARV delivery, as well as barriers and facilitators to receiving their ARV medication (Watkins, 2017)

Table 1. Characteristics of YBSMM using ARV across the status neutral HIV continuum

Variables (N=24)	N (%)
Age [median (IQR)]	29 (27-31)
Race/ethnicity Black	24 (100)
HIV status Positive Negative	8 (33) 16 (67)
Education High school Some College AA or AS BS or MS Missing	3 (12) 9 (39) 3 (12) 6 (25) 3 (12)
Sexual Orientation Gay Bisexual Queer No response	18 (75) 3 (13) 1 (4) 2 (8)
Employment Employed Unemployed	13 (54) 11 (46)
ARV Delivery Preferences Mail delivery Pharmacy pick-up Mobile van	14 (58) 10 (42) 0 (0)

Major Themes

- 1) Despite having a preferred delivery method (e.g., mail delivery or pharmacy) that was highly acceptable, challenges persisted in obtaining ARV medication
- 2) Mobile vans raised suspicions and were generally dismissed as a feasible delivery option for ARV
- 3) Some viewed LAI-ART as an innovative new delivery model, almost all participants expressed wanting more education on this modality
- 4) Previously stigmatizing medical encounters shaped future perceptions of stigmatization related to ARV

Preferred Delivery Modalities

PX

Mail Delivery

I just found it to be more convenient having it delivered because it would be hard to get to the pharmacy to pick it up when I'm working. Then, I get off work, the pharmacists are closed, and so just having it mailed to my house was just simpler. -PrEP user, age 34

...But going there [the doctor's office], it puts you back in that depressing mood, that depressing energy. I don't like to be up in there. I'd rather just handle my business at home, get the stuff mailed to me so I wouldn't have to go and get back in that space all over again . -PLWH, age 30

Challenges to Mail Delivery

The doctor just sent me a bottle of Atripla to the house and my brother ended up finding it and like, 'What is this?' I'm outed at the same time that this new shit happening to me. I think the stigma behind it, it never goes away no matter what your experience is. -PLWH, age 32

My family is aware. The thing with that is, if it does get delivered to them, then I would have to travel across town, which is another barrier, and I don't have a car, so I'm on a bus. It normally takes an hour, hour and a half to get from my house to their house. -PLWH, age 29

Preferred Delivery Modalities

Pharmacy Delivery

...the pharmacy that's within the doctor's office or clinic actually have a higher understanding of the medicines they're giving you than most other pharmacies that don't really carry that medicine would...They understand the medicine. If you can get your medicine that day they'll make sure they can get you at least a 30-day sample bottle to hold you over until you can get your next dose. **–PLWH, age 28**

I like the fact that the pharmacy is always in its own space in the back. So, it kind of takes away from the actual store situation. **-PrEP user, age 28**

Challenges to Pharmacy Delivery

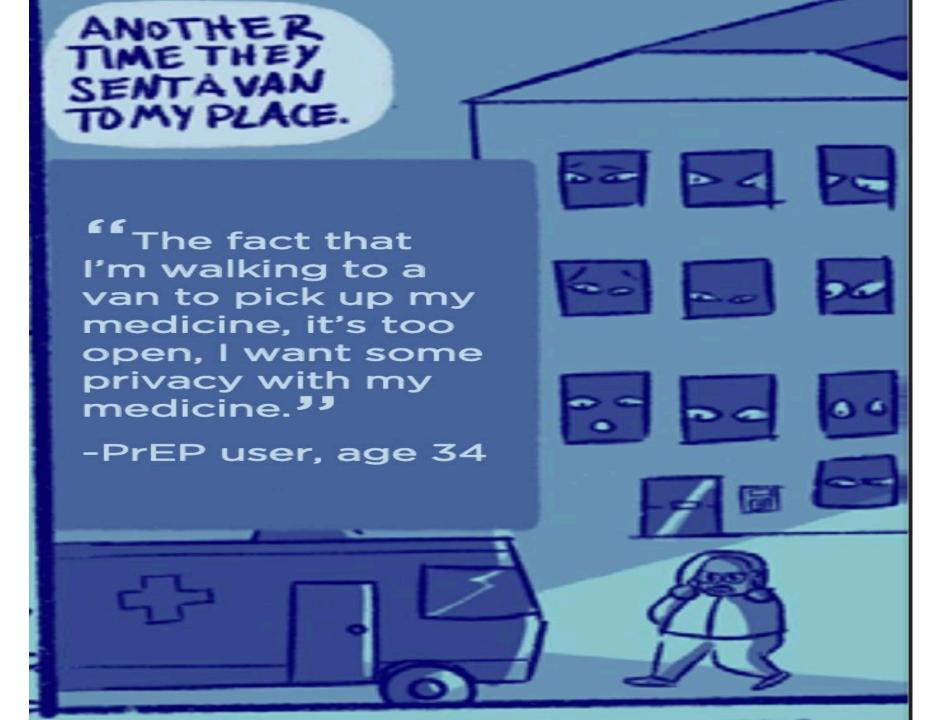
Okay. Well, [I was] homeless at that time, it was basically because sometimes maybe my phone wasn't on, or I could not afford public transportation...Well, like I said, if I didn't have a way to get to public transportation and the pharmacy was like not in the area, I would probably have to walk about 20, 30 blocks to get to a pharmacy to get what I needed. -PLWH, age 28

...I mean, I would wait in the line, sometimes it would make me...late for work or late for something that I'm doing later on that day. But, if I'm at the pharmacy and I'm there and I got to wait, I'm waiting, I just prefer not to wait. I mean, there was a couple of times where I have just come back another day, but like I said, I don't want to wait in a long line to pick up my prescription. -PrEP user, age 34

Reactions to Mobile Van ARV Delivery

No, it's very much so loud, like shh, so I don't need all that, just deliver it or I'd rather stand in line at Walgreens and pick up my medication then because at least I know they don't know whose medicine I'm picking up, it could be for my grandma, they don't know that part. But I'm just saying with a mobile van, no. -PrEP user, age 25

I've seen them. I'm educated on those vans. I actually talked to a few of those people from those vans when I first got my diagnosis. A lot of people helped me from those vans, but I never got my medication from any of those vans, no. **-PLWH, age 29**



Reactions to LAI-ART

I think it'll protect more people if they do the injectable and people actually adhere to it because if you only got to take a shot once every two months...I think it'll save more people, protect more people... -PrEP user, age 29

The whole HIV thing I'm kind of over. So I just want to keep it basic and simple and just take my pills every day. The injectables...it's something that kind of make you comfortable or lackadaisical or something...I feel like it would be hard to keep up with the dates to come in and get the shots. -PLWH, age 29

...I would have to do a little bit more research on what you're talking about because it's interesting to me to find that it's actually an injection that can actually be used and I don't have to actually take medication every day... -PLWH, age 29

Stigma Shapes ARV Procurement Experiences

...I was having health issues...she asked my friend to step out the room who took me to the doctor, and she just accused me of having HIV. I was just like, 'Bro, I'm taking PrEP'. -PrEP user, age 28

...I don't know, they might wonder what medicine or what type of medicine am I getting from the pharmacy. Nosy people. -PLWH, age 29

And then it almost felt like he kept asking repeatedly, 'Are you sure that you need this refill?' As if I was going to do something else with this stuff? It's like...Can you act professional? -PrEP user, age 27

Discussion

- YBSMM require flexible options for ARV procurement across the status-neutral HIV care continuum, including mail delivery and pharmacy pick-up
- Education around LAI-ART is required for YBSMM who may benefit from this option.
- DART systems may help to increase uptake and adherence or ARV
- Pharmacy-led PrEP/HIV treatment may be well utilized in this population

There is no differentiated antiretroviral (ARV) delivery (DART) model in the US, which is the practice of adapting services to clients' needs along the HIV care continuum. While it has cost-saving potential, it also may allow for easier procurement of medications for those who need it most, such as Black sexual minority men (BSMM).







Quantitative Analysis Mirrors Qualitative Analysis

Table 1. Bivarate analysis among YBSMM Characteristics and ARV Delivery Preferences by serostatus					
	Total Sample (N=98)	HIV Positive (n=39)	HIV Negative (n=59)	p-value	
Preferred Delivery of					
Medications					
Regular Clinic	76 (86%)	27 (87%)	49 (86%)	1.00	
Walk-in Clinic	72 (82%)	25 (81%)	47 (82%)	0.80	
Mobile Clinic	43 (49%)	13 (42%)	30 (53%)	0.30	
Pharmacy	69 (78%)	23 (74%)	46 (81%)	0.50	
Mail	40 (46%)	19 (63%)	21 (37%)	0.02	
Preferred Method				0.05	
(Ranking)				0.05	
Regular Clinic	37 (43%)	16 (52%)	21 (38%)		
Walk-in Clinic	19 (22%)	3 (9.7%)	16 (29%)		
Mobile Clinic	4 (4.6%)	1 (3.2%)	3 (5.4%)		
Pharmacy	14 (16%)	3 (9.7%)	11 (20%)		
Mail	13 (15%)	8 (26%)	5 (8.9%)		
Bold indicates a p-value ≤ 0.05. Missing data for PrEP/HIV (10%)					

Future Directions

- Qualitative manuscript submitted, pending review
- ?Quantitative manuscript
- Zine release party (artwork by Robin Cogdell, Visual Communications Designer at the Center for Interdisciplinary Inquiry and Innovation in Sexual and Reproductive Health (Ci3))



Questions?

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