

"I have to feel comfortable": Attitudes Towards Pharmacy Administered LA-ART in a cohort of people with HIV

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Background

Long-acting injectable antiretroviral therapy (LA-ART) has transformed the landscape of treatment and prevention for Human Immunodeficiency Virus (HIV).

Currently available LA-ART must be administered by a healthcare provider, most commonly, by a nurse in a clinic setting.

Additional workflows, patient management, and maintenance care activities required with LA-ART can be challenging to integrate into overburdened and/or resource-limited health systems.

United States pharmacists are doctorate trained (PharmD) healthcare professionals who provide additional services such as vaccinations, medication therapy adjustment, or medication furnishing via protocol. Tasking community pharmacies to administer LA-ART is one potential opportunity to diffuse workload and increase access. Prior to implementing and disseminating these types of pharmacy services it will be important to understand potential patient perceptions of this differentiated care model.

Methods

In order to assess attitudes, implementation barriers, and facilitators for community pharmacy-based administration of LA-ART a **mixed-methods study** was conducted in four geographic areas of the United States (Central Alabama, Northern California, Southern Florida, and Southern Texas). The study recruited three key stakeholder groups:

- Clinic staff members
- Pharmacy staff members
- Persons with HIV

Eligibility: This analysis focused on the stakeholder subset of persons with HIV. Persons with HIV were eligible for inclusion if they self-reported having HIV, were currently on antiretroviral therapy, and resided one of the four geographic areas. Participants completed a baseline electronic survey and an individual, semi-structured interview.

Analysis:

- Demographics of participants were characterized using descriptive statistics
- Interviews were recorded and transcribed verbatim. Three study team members (JC, YC, and MS) met several times to review transcripts and generate a codebook. Transcripts were uploaded to Dedoose (UCLA, Los Angeles) and coded by two team members (JC, MS).
- Thematic analysis was conducted to examine statements regarding attitudes and the perceptions of relative advantages (pros) or disadvantages (cons) of pharmacy-administered LA-ART.
- Statements expressing attitudes towards pharmacy-administered LA-ART were extracted into a Microsoft Excel (Redmond, WA, USA) spreadsheet and further subcoded as positive, negative, or neutral.

Results

26 persons with HIV were recruited. Two did not complete the interview portion of the study, were lost to follow up, and were excluded from the study (total n=24).

Participants primarily identified as Black persons of older age (mean 53 years) with high educational attainment. Most had been diagnosed with HIV over 6 years ago and all were on ART. Seven persons were already using LA-ART.

Attitudes

Participants contributed a median of 4 (IQR 3-6, max=9) statements describing attitudes towards pharmacy-administered LA-ART.

- Median positive statements = 2
- Median negative statements = 0
- Median neutral statements = 1

Examples of attitude statements

- Positive: *"I don't have a problem with it. You'd want to believe that they know what they're doing. I mean, I think for the most part, I would be confident that they would."*
- Negative: *"For my needs and personal life, I would never get a HIV injection from a pharmacy, ever."*
- Neutral: *"It's just me accepting the pharmacist doing it and being comfortable with them."*

Persons already on LA-ART expressed more negative attitudes towards pharmacy-administered LA-ART while persons not on LA-ART expressed more positive attitudes (p < 0.01).

Persons from South Florida expressed more negative attitudes towards pharmacy-administered ART. Of note, this group also had the most persons already on LA-ART.

Women held more mixed attitudes whereas men and transgender persons expressed more positive attitudes.

Pros and Cons of Pharmacy Administered LA-ART

Quotes expressing pros and cons of having pharmacies administer LA-ART are highlighted below. The majority of statements noted potential convenience of getting LA-ART at a pharmacy due to expanded hours or locations. Cons identified concerns about pharmacy staff turnover, their experience and training, wait times/availability, and maintaining privacy and confidentiality.

"...the convenience of going in and, 'Okay, I'm only here for my long-term antiviral,' so I'm going to get my shot and then after that I'm going to be able to go. Versus when you get it at the clinic, something else might happen to pop up and you're actually there a little bit longer."

"If your doctor's office is only open from 8:00 to 4:00 and you're working 8:00 to 4:00, you could only get the shot seven days. If you miss your appointment, then you have seven days in order to get the shot. If you miss that, then you got to go back on the pill regimen. If you can't get into your doctor's office, it's easier to go into the pharmacy to get it."

"...Comfortability or comfortable. Because I've been going to my Walgreens or my CVS for years now. I've lived in my neighborhood for years. I've been going to the same Walgreens or CVS over and over again, so I'm quite comfortable with the neighborhood, the pharmacy itself."

Table 1: Demographics (n=24)

Location, n (%)	
Alabama	6 (25)
California	10 (42)
Florida	6 (25)
Texas	2 (8)
Age, years, mean (SD)	53 (13.9)
Female sex at birth, n (%)	12 (50)
Gender n (%)	
Man	11 (46)
Woman	12 (50)
Transgender woman	1 (4)
Self-reported Race, n (%)	
White	7 (29)
Black	12 (50)
Hispanic or Latino	2 (8)
Asian or Pacific Islander	1 (4)
Other	2 (8)
Educational attainment, n (%)	
Completed high school	5 (21)
Some college	9 (38)
Four-year college or Graduate degree	7 (30)
Years since diagnosis	
1-5 years	1 (4)
6-10 years	5 (21)
> 10 years	18 (75)
Currently on ART	24 (100)
Self-reported undetectable viral load at last lab	23 (96)
Self-reported ART adherence in last 30 days	
Very poor/poor	0 (0)
Fair	1 (4)
Very good/Good	1 (4)
Excellent	22 (92)
Pharmacy used to obtain ART	
Retail/chain	11 (46)
Independent	1 (4)
Clinic-associated	3 (13)
Mail-order	6 (25)
Hospital or Other	3 (12)
How ART is obtained	
Pick up at pharmacy	7 (29)
Pharmacy delivery or mail	13 (54)
Both	1 (4)
Other	3 (13)
Average # visits to pharmacy	
1 or more times/month	13 (55)
~Every 2 months	4 (17)
~Every 3 months	1 (4)
Hardly ever	6 (25)
Currently on long-acting injectable ART	7 (29)
Likelihood of trying LA-ART in the future (if not on LA-ART now)	
Definitely/probably will not consider trying	2 (12)
Might/might not consider trying	5 (29)
Probably/definitely will consider trying	10 (59)

Discussion

Attitudes around pharmacy-administered LA-ART were mostly positive in this study.

Pharmacy convenience (hours/locations) will depend on how LA-ART systems are set up. Walk-ins may not be sustainable & LA-ART might not be available at all locations. Despite this, experience with vaccine appointments suggests pharmacies can increase convenience and access.

Patients receiving LA-ART may have existing trusted relationships with their clinics which causes hesitation to change. A warm handoff between clinic and pharmacy may increase confidence and utilization of pharmacy services.

Concerns about pharmacy staff turnover underscore importance of adequate staffing, communications training, and continuity of care to foster trusting pharmacist-patient relationships for successful pharmacy-administered LA-ART.

Conclusion

Identifying and addressing expectations and concerns regarding pharmacy-administered LA-ART in persons with HIV can assist in optimizing future services.

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