Exploring Factors Affecting Antiretroviral Therapy Adherence Among People with HIV in Texas: A Qualitative Study

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Background

77%
of PWH in Texas on ART (2024)[2]
Texas HIV Plan 2027–2031 goal: 90%

92%
of PWH on ART virally suppressed (2024)[2]
Texas HIV Plan 2027–2031 goal: 95%

- Viral suppression and antiretroviral therapy (ART) adherence rates among people with HIV (PWH) in Texas are suboptimal and associated costs of nonadherence are significant.[1,2]
- The rate of new diagnoses of HIV has steadily risen in Texas since 2020.[2]
- Additionally, Black men and women in Texas are less likely to be receiving HIV care, using ART or achieving viral suppression.[2]
- Although Texas is on track to achieve its goals, more efforts are needed to improve access and adherence to ART.

Research Objective

- To describe the factors affecting ART adherence in PWH in Texas using data obtained from qualitative semi-structured interviews.

Study Design

1 Guide development
Interview guide was developed based on extant literature and expert review and questions addressed:
- Journey with HIV
- Challenges and successes managing HIV with medications
- Helpful systems and resources

2 Recruitment and screening
A certified research organization recruited participants and screened them for eligibility.
- Inclusion criteria
  - Adults ≥18 years with an HIV diagnosis
  - Texas resident
  - Under a physician's care
  - Currently prescribed ART
  - Ability to consent and participate
- Exclusion criteria
  - Not diagnosed with HIV
  - Inability to consent

3 Interviews
20 adult PWH prescribed ≥1 ART completed 1-hour semi-structured interviews (SSIs), from October to November 2025, in English or Spanish with a trained multilingual moderator; interviews were then transcribed.

4 Analysis
Two researchers coded transcripts independently and analyzed them thematically in Dedoose software.

Seven primary themes were identified that affect people's ability to stay on ART, and each points to actions managed care organizations (MCO) can take.

Figure 1. Themes, sub-themes and representative quotes from 20 interviews *(The numbers in 'Recommended actions' correspond to the list at the bottom of the figure)*

Psychosocial Stressors
- **Emotional Toll (e.g., medication as a reminder of HIV status)**
- **Burden of Secrecy (e.g., hiding medications)**
- **Guarded Serenity (e.g., minimizing fear of medication resistance)**
- **Societal Stigma**

> *"Yes, it's been hard for me to take this medication in front of someone and sometimes I have to take it and hide at the moment of taking."*

> *"Sometimes, I just don't want to be reminded that I am living with a chronic condition for the rest of my life that I'm going to have to take medication for."*

RECOMMENDED ACTIONS 1 2 3

Patient-centered Issues
- **Medication Knowledge and Beliefs (e.g., perceived benefit)**
- **Competing Priorities**
- **Language Barriers (e.g., need for interpreters)**
- **Forgetfulness**

> *"Some days I'm waking up and I'm like, "Oh, I'm late for something," and I'm running around and then I'm not seeing [my medication] till I get back home."*

> *"It took me a long time to realize that these medicines were going to work and keep me alive"*

RECOMMENDED ACTIONS 3 4

Provider-related Issues
- **Provider bias**
- **Provider knowledge (e.g., awareness around injectables)**
- **Transactional care**
- **Provider trust**
- **Concordance of race/gender/sexual orientation**

> *"...I don't feel that [my provider's] office is gay-friendly. From the moment that you see that; you have a different focus and how trusting you feel. I don't know how to explain it, but it affects you."*

> *"I was looking for doctors who had experience with [injectable]. I went to a general practitioner, and the doctor said, "I am sorry, this is the first time that I'm working with this medication...." I didn't feel good"*

RECOMMENDED ACTIONS 5 6

Healthcare System Bureaucracy and Logistics
- **Access inequity (e.g., transportation, HIV specialists)**
- **Pharmacy Services (e.g., mail order delivery and porch pirates)**
- **Availability of HIV care programs**
- **Administrative Burden (e.g., increased paperwork)**
- **Timeliness (e.g., appointment scheduling, wait times)**

> *"Getting them from the mail-order place is a little more complicated. I always am afraid they're going to deliver it to my front door, and a porch pirate is going to steal my meds"*

> *"[My husband] was diagnosed before, but I started taking medication before my husband, ...and I was sharing my medication with him...because they took longer to approve [his medication]"*

RECOMMENDED ACTIONS 7 8 9 10 11

Financial Factors
- **Medication affordability**
- **Insurance coverage and lapses**
- **Financial stability**

> *"I started having problems for my medication for HIV because sometimes I didn't have money to pay the copayment."*

> *"At that age, I would say, having to deal with that type of financial crisis and then also crisis of understanding [an HIV] diagnosis.... there was a lot of worries about it."*

RECOMMENDED ACTIONS 7 8 9

Social and Practical Support
- **Availability of and access to support groups**
- **Family and friends' attitude**
- **Involvement with HIV community (e.g., volunteering, advocacy)**
- **Acceptance within one's racial and ethnic group**

> *"We lose a lot of people in this community due to drugs, due to just not taking their medication, just out of fear or out of stupidity because there's no one that they can relate to that's ever told them to. Community, I think, does a lot, and that would be huge to have that option there."*

RECOMMENDED ACTIONS 12

Medication Attributes
- **Medication formulation (e.g., pill size, taste)**
- **Pill fatigue**
- **Medication side effects**
- **Simplified regimen**

> *"The best way would be if you had a treatment that didn't require to take the pill every day."*

> *"They gave me a white pill, and it was horrible and it was very, very challenging because the side effects were awful"*

RECOMMENDED ACTIONS 3 11

Recommended actions for MCOs

1. Strengthening psychological support services during and after diagnosis
2. Discrete packaging for medications
3. Patient counseling with focus on treatment benefits, managing pill fatigue and side effect concerns
4. Having interpreters or speech translation tools in clinics and pharmacies
5. Training providers to better understand racial and sexual orientation related concerns and stigma
6. Enhancing provider knowledge around newer medications and injectable options
7. Reducing administrative barriers and medication coverage disruptions
8. Enhancing medication delivery services and reliability
9. Improving access to federal and community programs that help with medication costs, particularly during insurance lapses
10. Providing care navigation support: more social workers and case managers who can also help with administrative issues
11. Expanding coverage for injectables
12. Creating peer support programs (virtual and in person) that are accessible to those in rural and urban areas

Study Participants (N=20)

47 years
mean age (SD ±11.6)

15 men and 5 women

70%
identified as LGBTQIA+

45%
had commercial insurance

Race/ethnicity

35% non-Hispanic White
30% Black
30% Hispanic
5% Native American

Table 1. Other Demographic Characteristics of Study Participants (N=20)

Demographic characteristics	Category	N (%)
No. of Comorbidities	None	13 (65%)
	1	5 (25%)
	More than 1	2 (10%)
Time since diagnosis	6 months - 2 years	1 (5%)
	3-5 years	2 (15%)
	6-10 years	3 (15%)
	11-20 years	7 (35%)
	>20 years	7 (35%)
Physician type	Infectious Disease Specialist (ID)	14 (70%)
	Internal Medicine physician (IM)	2 (10%)
	Family Physician/General Practitioner (FP/GP)	1 (5%)
	FP/GP and ID	1 (5%)
	IM and ID	2 (10%)
Medication regimen	Single tablet	18 (90%)
	Multi tablet	1 (5%)
	Injectable	1 (5%)
Transportation	Public Transportation	3 (15%)
	Personal car	17 (85%)
Housing	Live with family or friends without paying rent	4 (20%)
	Rent an apartment or house	8 (40%)
	Own a home	8 (40%)
Education	High school	0 (0%)
	Vocational/Trade school	6 (30%)
	Some college	6 (30%)
	College graduate	5 (25%)
	Post graduate work/degree	2 (10%)
	Received advanced degree	1 (5%)
Household Income	Less than $25,000	3 (15%)
	$25,000 to under $35,000	0 (0%)
	$35,000 to under $50,000	7 (35%)
	$50,000 to under $75,000	4 (20%)
	$75,000 to under $100,000	1 (5%)
	$100,000 to under $150,000	3 (15%)
	$150,000 or more	2 (10%)
Geographical Location	Rural	2 (10%)
	Suburban	10 (50%)
	Urban	8 (40%)
Insurance Status	Commercial	9 (45%)
	Medicare	3 (15%)
	Medicaid	1 (5%)
	Federal Insurance	2 (10%)
	ADAP/Ryan White	7 (35%)
	ACA/HIX/Obama Care	3 (15%)
	Prescription assistance programs	1 (5%)
	Uninsured	2 (10%)
Food Security Status Factors	Difficulty affording groceries regularly	7 (35%)
	Limited transportation to grocery stores	0 (0%)
	Sometimes/often do not have enough food to eat	4 (20%)
	Relying on food assistance programs	4 (20%)
	Other	0 (0%)
	None of the above	10 (50%)

Note: Percentages for Insurance Status and Food Security Status Factors sum to more than 100% because respondents could select more than one option for these items.
ADAP: AIDS Drug Assistance Program; ACA: Affordable Care Act; HIX: Health Insurance Exchange (Marketplace insurance)

Discussion and Conclusions

- This study identified seven core themes encompassing the issues influencing medication adherence among PWH in Texas.
- Strategies aimed at improving ART adherence could focus on addressing these actionable issues.
- As shown in Figure 1, several actions such as patient counseling, expanding coverage, limiting paperwork, and improving medication delivery services can be taken to help mitigate some of the barriers recorded.
- Study limitations: 1) Generalizability – a) issues identified may not represent the universe of issues related to ART adherence and b) convenience sample; 2) Data interpretation – potential impact of investigator bias was minimized through use of trained independent organizations for data collection.

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References

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