Providers' Attitudes and Practices Related to ART Use for HIV Care and Prevention

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HPTN 065

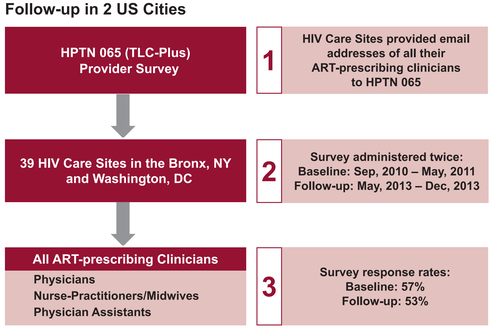
INTRODUCTION

- The HIV Prevention Trials Network (HPTN) 065 (TLC-Plus) study sought to evaluate the feasibility of an enhanced community-level test, link to care, plus treat strategy in the U.S., and efficacy of financial incentives for improving linkage to care and viral suppression.[1]
- We conducted baseline (2010-11) and follow-up (2013) surveys among ART-prescribing clinicians at sites participating in the HPTN 065 (TLC-Plus) study in the Bronx, NY and Washington, DC to assess:
  - » practices for recommending ART to their HIV-infected patients
  - » attitudes concerning early ART initiation to prevent HIV transmission
- During the 4-year period (2010-2013) between the two surveys, new scientific findings were published and recommendations for ART initiation were updated:
  - » HPTN 052 demonstrated dramatic reduction in sexual HIV transmission with ART use[2]
  - » The Department of Health and Human Services (DHHS) recommended universal ART for all HIV-infected persons in the U.S.[3]

METHODS

- ART-prescribing clinicians at 39 HIV care sites in the Bronx, NY and Washington, DC participating in the HPTN 065 (TLC-Plus) study completed a brief anonymous 29-item internet survey.[4]
- Baseline and follow-up survey data were not linked by respondent.
- We used t-tests and Kruskal-Wallis tests to assess for statistical differences in distribution of responses across the two surveys.

Figure 1: Study Flow of HIV Clinician Recruitment and Follow-up in 2 US Cities



RESULTS

Table 1: Demographic Characteristics of Respondents

Variable	Baseline (n=165)	Follow-up (n=141)	P-value
Female (%)	59.4	56.7	0.51
Median age (years)	47	47	0.73
White race/ethnicity (%)	66.1	61.7	0.28
Specialty physician (%)	33.3	41.8	0.51
Primary care physician (%)	32.1	25.5	0.51
Practicing in public clinic (%)	44.8	50.4	0.51
Median duration caring for HIV-infected patients (years)	13.3	15.0	0.11
ART training in past 3 months (%)	53.9	58.2	0.58

Table 2: Number of Patients Initiated on ART in Past 12 Months

	Baseline	Follow-up	P-value
Estimated number of patients provider initiated on ART in the past year			
Median [IQR] (no. of responses)	10 [5 - 30] (n=160)	20 [8 - 36] (n=138)	0.04
Estimated number of patients initiated on ART with the main goal of making it less likely that they would pass on HIV to their partners			
Median [IQR] (no. of responses)	0 [0 - 3] (n=147)	3 [0 - 8] (n=131)	<0.01

Table 3: Factors Influencing ART Initiation

	Baseline (n=165) (%)	Follow-up (n=141) (%)	P-value
Would you generally recommend ART be initiated for a typical HIV-infected patient…?			
With CD4 count ≤ 500 cells/mm^3	55.8	68.1	0.04
Irrespective of CD4 cell count	14.5	68.1	<0.01
Which factor would lead you to initiate ART earlier than you would otherwise?			
Patient having unprotected sex with partner(s) of unknown HIV status	63.6	81.6	<0.01
Patient in an HIV discordant sexual partnership	75.2	87.2	0.01

Table 4: ART for High Risk Behaviors

	Baseline (n=165) (%)	Follow-up (n=141) (%)	P-value
If a patient tells me that he or she is engaging in high risk behaviors, I am more likely to recommend initiating ART, irrespective of their CD4+ count.			
Strongly agree	23.0	41.1	<0.01
Agree	47.9	44.0	
Disagree	24.8	9.9	
Strongly disagree	1.2	2.1	
Did not answer	3.0	2.8	

Table 5: ART for Community Benefit

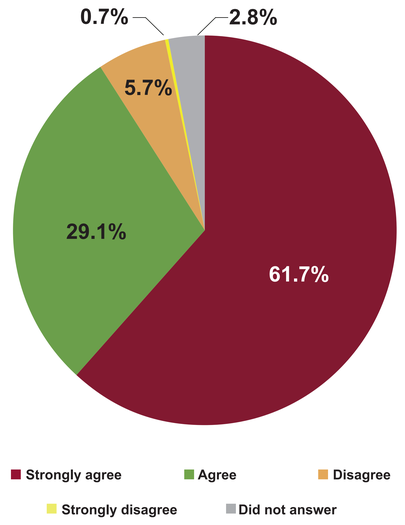
	Baseline (n=165) (%)	Follow-up (n=141) (%)	P-value
Early initiation of ART can slow the spread of HIV in a community by making patients less infectious to others			
Strongly agree	64.8	87.9	<0.01
Agree	29.7	9.2	
Disagree	2.4	0.0	
Strongly disagree	0.0	0.0	
Did not answer	3.0	2.8	

KEY RESULTS

- The percentage of providers who reported recommending ART initiation irrespective of CD4 cell count increased from baseline to follow-up (14.5% vs. 68.1%, p<0.01) as did the percentage who would initiate ART earlier for patients having unprotected sex with partners of unknown HIV status (63.6% vs. 81.6%, p<0.01) and for those in HIV-discordant sexual partnerships (75.2% vs. 87.2%, p<0.01).
- The percentage of providers who strongly agreed with the statement "Early initiation of ART can slow the spread of HIV in a community by making patients less infectious to others" also rose (64.8% to 87.9%, p<0.01).
- Providers reported initiating more patients on ART in the past year with the main goal of making it less likely that patients would transmit HIV to their sexual partners (median of zero vs. three patients, p<0.01).

Figure 2: ART for Reducing HIV Transmission (follow-up results, n = 141)

"Because ART reduces the risk of HIV transmission, I routinely recommend ART to my HIV-infected patients"



LIMITATIONS

- Could not link individual baseline and follow-up responses due to anonymous nature of the survey (an estimated 38% of clinicians were surveyed twice as determined by question "did you take this survey once before in 2010"?)
- Statistical comparisons assumed independent cross sectional surveys: we could not adjust for repeated observations since survey was anonymous
- Could not stratify changes in outcomes by jurisdiction

SUMMARY and CONCLUSION

- In the follow-up survey, respondents were significantly more likely to prescribe ART:
  - » irrespective of CD4 status
  - » when patients reported unprotected sex
  - » for patients in HIV discordant relationships
- Almost 90% of respondents "strongly agreed" that ART can reduce transmission within a community (versus 65% at baseline)
- From 2011 to 2013, a greater percentage of ART-prescribing providers in the two jurisdictions supported initiating ART for all HIV-infected patients and using ART to prevent transmission, consistent with new scientific evidence and changes in HIV treatment recommendations during the conduct of HPTN 065.[2,3]

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