Poster Number 1514

Actual versus perceived use of pharmacokinetic (primarily absorption) influential OTC agents and ART tolerability in a nationwide matched cohort of HIV patients and their healthcare provider

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ABSTRACT

Background:
Antiretroviral therapy (ART) for HIV patients is lifelong. ART efficacy is clear, adverse effects (AE) severity has decreased yet still impact outcomes. This study obtained 'real world' data comparing healthcare providers' (HCP) perceptions and clinic records to their patients' perceptions of ART tolerability and self-management.
Methods:
Study utilized Adelphi's HIV Disease Specific Programme, a cross-sectional survey including provider interviews (n=131) and matched HCP and patient self-completed surveys (n=485), conducted among HIV patients and their HCPs. Similar questionnaires focused on disease symptoms, ART AEs, other AEs, compliance, impact and reasons for switching or discontinuing therapy.
Results:
131 HCPs were interviewed (n=80 ID physicians) at 18 metro areas across the US. "Efficacy" was stated by 58% of HCPs as the most important attribute when selecting ART yet the top 5 attributes for ART selection in patient charts revealed criteria of "well tolerated by patients." ID specialists perceived 32% of all patients are experiencing ART side effects and this increases with subsequent regimens (Figure 1). HCPs interviewed revealed diarrhea as one of the most common symptoms seen with 66% stating diarrhea was the most 'most troublesome' AE. This agrees with patients, who recorded diarrhea as equal second 'most problematic symptom'. ART changes are most frequently for lack of virologic control (36%) but secondarily (28%) due to GI AEs. HCPs and patients agree on proportion experiencing diarrhea and being treated for it, yet only about 1/3 of patients receive therapy. Finally, Figure 2 depicts a concerning discrepancy between prevalence of OTC drugs used by patients vs. perceived used by HCPs.
Conclusion:
HIV patients experience and self-medicate GI-symptoms disparate with HCPs knowledge, representing a potential major detrimental influence on outcomes.

METHODS

Patient and Healthcare Provider Populations:

- Patients ≥18 years of age with HIV were eligible for inclusion in the study
  - Healthcare providers (HCPs) recorded details for the next 10 consecutive patients diagnosed with HIV
  - This analysis is based on the patients with both a self-completion form and a detailed patient record form completed by their HCP

METHODS (cont'd.)

- HCPs were infectious disease specialists, primary care physicians, and nurse practitioners who were currently making drug treatment decisions for patients with HIV
  - Infectious disease specialists were required to see ≥10 patients with HIV receiving ART per week
  - Primary care physicians and nurse practitioners were required to see ≥5 patients with HIV receiving ART per week

Study Design and Assessments:

- A sub-analysis of a cross-sectional, multinational, observational, patient-record survey using the Adelphi Disease Specific Programme (DSP) methodology was conducted between July 2014 and September 2014
  - HCPs in the United States were identified from public lists of HCPs and evaluated for their eligibility to participate in a DSP, including treating a specified minimum number of patients with HIV receiving ART each week
  - Patient record forms were prospectively completed by HCPs and then matched to patients participating in the study by means of study numbers, assigned to both HCPs and patients to maintain anonymity and allow data linkage
  - Data collected from HCPs included patient demographics, treatment history, disease symptoms and severity, and patient management information
  - Immediately after seeing their HCP, patients filled out a self-completion form, which included questions about disease symptoms from the previous 6 months, disease impact, and reasons for treatment discontinuation

RESULTS

Patients and Healthcare Providers

- A total of 131 HCPs took part in this study, providing matched patient forms completed by themselves and their patients with HIV (n=485)
  - The majority of HCPs were Infectious Disease specialists (61%), contributing 54% of the patients in the study
  - ID specialists were recruited from Northeastern region (22%), and Midwestern United States (17%), based on total HCP population

Table 1: Healthcare Providers and Patients, by Provider Specialty

	Healthcare Providers (n= 131)	Patients (n= 485)
Infectious Disease Specialists	80	262
Primary Care Physicians	42	197
Nurse Practitioners	9	26

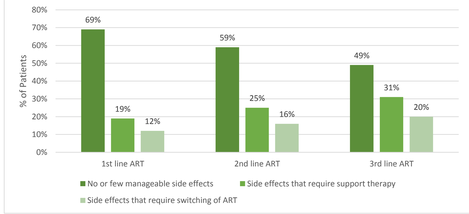
RESULTS (cont'd.)

Table 2: Patient Demographics and Disease Characteristics

Characteristics	Patients with HIV (n= 485)
Age, y, mean (SD)	40 (12.3)
Sex, male, n (%)	374 (77%)
Education Level, n, (%)	Less than high school: 35 (7%) High School/GED: 132 (27%) Some college/university: 148 (30%) College degree: 120 (25%) Postgraduate degree: 41 (8%) Other: 9 (2%)
Income Level, n, (%)	Below $25,500: 147 (29%) $25,500-$63,999: 154 (30%) $64,000 and above: 67 (14%) Preferred not to answer: 111 (24%)
CD4 count[a], mean (SD)	506 (279)
Viral load[b], copies/mL, mean (SD)	11,194 (39,372)
Current Stage of Illness, n, (%)	Primary HIV Infection Stage: 39 (8%) Asymptomatic Latent Phase: 316 (65%) Symptomatic Phase: 71 (15%) AIDS: 53 (11%) Not Stated: 6 (1%)
Number of AIDS-defining conditions (median)	0
Number of concomitant conditions (median)	1.49
Number of symptoms currently present (median)	2

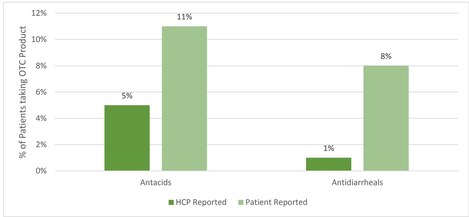
[a] Most recent CD4 count (n=472)
[b] Most recent viral load (RNA; n = 166)

Figure 1: Physician Perceived Patient Experience on ART (n=131 interviews)



- ID Specialists report that 32% of all patients are experiencing ART side effects, with this percentage increasing as the number of ART drugs increases

Figure 2: Top 2 OTC Classes Taken by Patients (n=485 patients with data provided by HCP & patients)



RESULTS (cont'd.)

- 89 patients (20%) reported to taking medication not prescribed by their physician, with 6 of the 89 patients (6.7%) not intending to tell their doctor/ nurse practitioner that they take these medications
- The number of patients that currently take calcium is 27
  - Of the 27 patients, 15 patient record forms (68%) documented that particular patient taking calcium
  - In patients that do take calcium, 11 (40%) begun therapy on their own without their physicians' recommendation
  - Bottom line: In the patients that do take calcium, 32% of practitioners do not know their patients take calcium
- The number of patients that currently take antacids is 53
  - Of the 53 patients, 29 patient record forms (55%) documented those particular patients taking antacids
  - Bottom line: In the patients that do take antacids, 45% of practitioners do not know their patients take antacids
  - However, in the patients that do take antacids (n=53), 29 (55%) were recommended to take it by their practitioner

LIMITATIONS

- Due to the format of patient record forms and patient surveys, there was no accurate way to compare PPI and H2RA use between physician's documentation versus actual use by patients

CONCLUSIONS

- The considerable discrepancy between self-medication for GI symptom relief (antacids and calcium use) between patients and physician's documentation warrants further research into survey and patient record form data
- GI side effects of ART, such as diarrhea, proves to be one of the most problematic side effects, as reported by both physicians and patients
- Improved communication between HIV patients and practitioners is key to prevent ART related side effects, ART adherence, and ultimate successful ART regimens for HIV patients

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The researchers graciously thank the patients and their physicians for helping advance understanding of this disease.