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Background

- Early initiation of antiretroviral therapy (early ART) for HIV+ patients¹ and preexposure prophylaxis (PrEP) for at-risk, HIV(-) persons decreases HIV transmission^{2,3,4}
- Little is known about how clinicians implement these strategies
- The Emerging Infections Network (EIN), a national network of Infectious Diseases (ID) physicians, was surveyed in September 2014 to assess practices with early ART, PrEP and other HIV prevention methods

Methods

- An online survey of EIN members assessed intentions and practices with early ART, PrEP, and risk reduction counseling.
- Analyses were restricted to HIV providers (i.e., treat ≥ 1 HIV+ patient/year).
- Chi-square tests measured associations between categorical variables.

Results

- 574 (47%) of 1198 EIN members initiated surveys; 415 (73%) were HIV providers
- The study sample was diverse in terms of geography, experience, employment, and HIV volume (Table 1).
- Most providers (87%) typically recommended ART initiation at diagnosis irrespective of CD4 count (Table 2). However, for patients with CD4 > 500 cells/μL, many clinicians would defer ART for selected reasons.
- For HIV serodifferent couples, physicians recommended PrEP when the HIV+ partner is viremic (79%) or using ART and aviremic (35%).
- 59% of providers had counseled HIV+ pts about PrEP for partners, 41% had offered visits for partners to discuss PrEP, and 32% had prescribed PrEP (Fig 1).
- Respondents supported offering preventive interventions to persons who inject drugs (PWID), but few felt prepared to provide these (Fig 2).
- Most physicians (78%) provided risk reduction counseling to > 90% of pts newly diagnosed with HIV, yet only 30% did so for established pts (Fig 3).
- Providers who did not intend to prescribe early ART less often supported aspects of PrEP provision or had prescribed PrEP

Table 1. Descriptive Characteristics

Characteristic	Total (n=415) N (%)
US Census Bureau Regions	
Northeast	95 (22.9)
Midwest	110 (26.5)
South	114 (27.5)
West	91 (21.9)
Canada	5 (1.2)
Years of Experience	
< 5	94 (22.7)
5-14	109 (26.3)
15-24	111 (26.8)
≥25	101 (24.3)
Employment	
Federal government	23 (5.5)
Hospital/clinic	124 (29.9)
VA and military	4 (1.0)
Private/group practice	125 (30.1)
State government	3 (0.7)
University/medical school	136 (32.8)
HIV-infected patients, prior year	
1-20	71 (17.1)
21-50	102 (24.6)
>50	242 (58.3)

Table 2. Practices with ART initiation, PrEP, and Safer Conception

Survey Item	Total (n=415) N (%)
When to Initiate ART for HIV+ Patient	
At time of diagnosis, irrespective of CD4+ count	359 (86.5)
Defer until CD4+ < 500 cells/mL	44 (10.6)
Defer until CD4+ < 350 cells/mL	8 (1.9)
Defer until CD4+ < 200 cells/mL	0 (0)
No response	4 (1.0)
Reasons to Defer Initiation of ART (CD4+ >500 cells/μL) ^a	
Patient not ready to initiate ART	393 (94.7)
Excessive alcohol/drugs, not in recovery	274 (66.0)
Untreated depression/psychiatric illness	188 (45.3)
Limited financial support to pay for ART	204 (49.2)
Comorbidities that increase risk of ART toxicities	126 (30.4)
No HIV transmission behaviors	20 (4.8)
No response	8 (1.9)
Recommend PrEP for Serodifferent Couples when HIV+ partner... ^a	
...is viremic and plans to defer ART indefinitely	330 (79.5)
...has intermittent viremia & low ART adherence	312 (75.2)
...has an undetectable viral load on ART	147 (35.4)
No, would not recommend PrEP	27 (6.5)
Not sure	64 (15.4)
Typical Approach to Conception, Serodifferent Couples (Male+ Female-)	
Sperm processing and assisted reproduction	67 (16)
PrEP during periods of non-condom intercourse	101 (24)
Non-condom intercourse without PrEP	77 (19)
None of the above	25 (6)
Unsure	146 (35)

^aTotals > 100% as could check all that apply.

Figure 1. PrEP provision to serodifferent couples: perceived roles and experiences

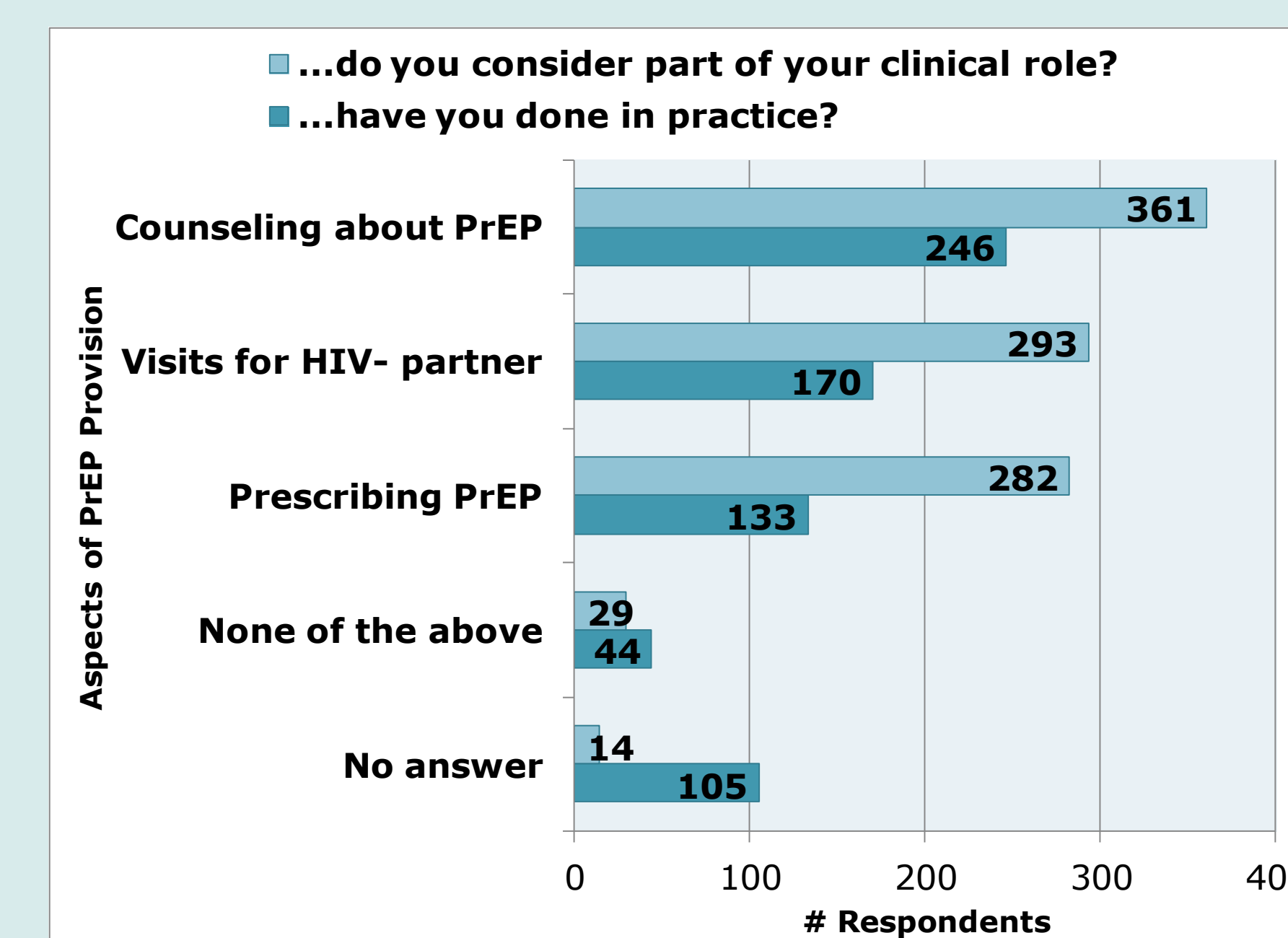


Figure 2. Prevention for persons who inject drugs

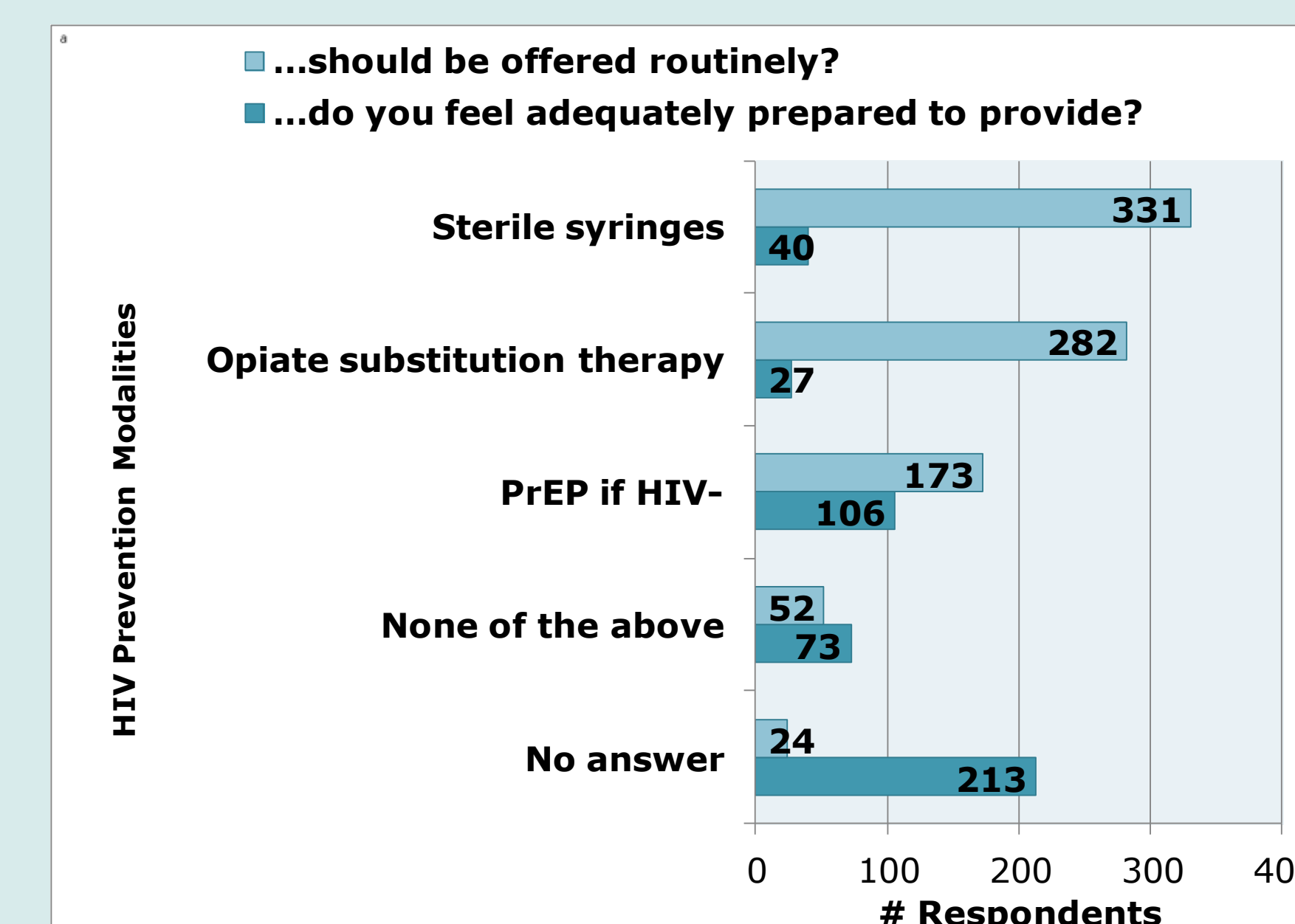


Figure 3. Risk reduction counseling for new vs. established HIV+ patients

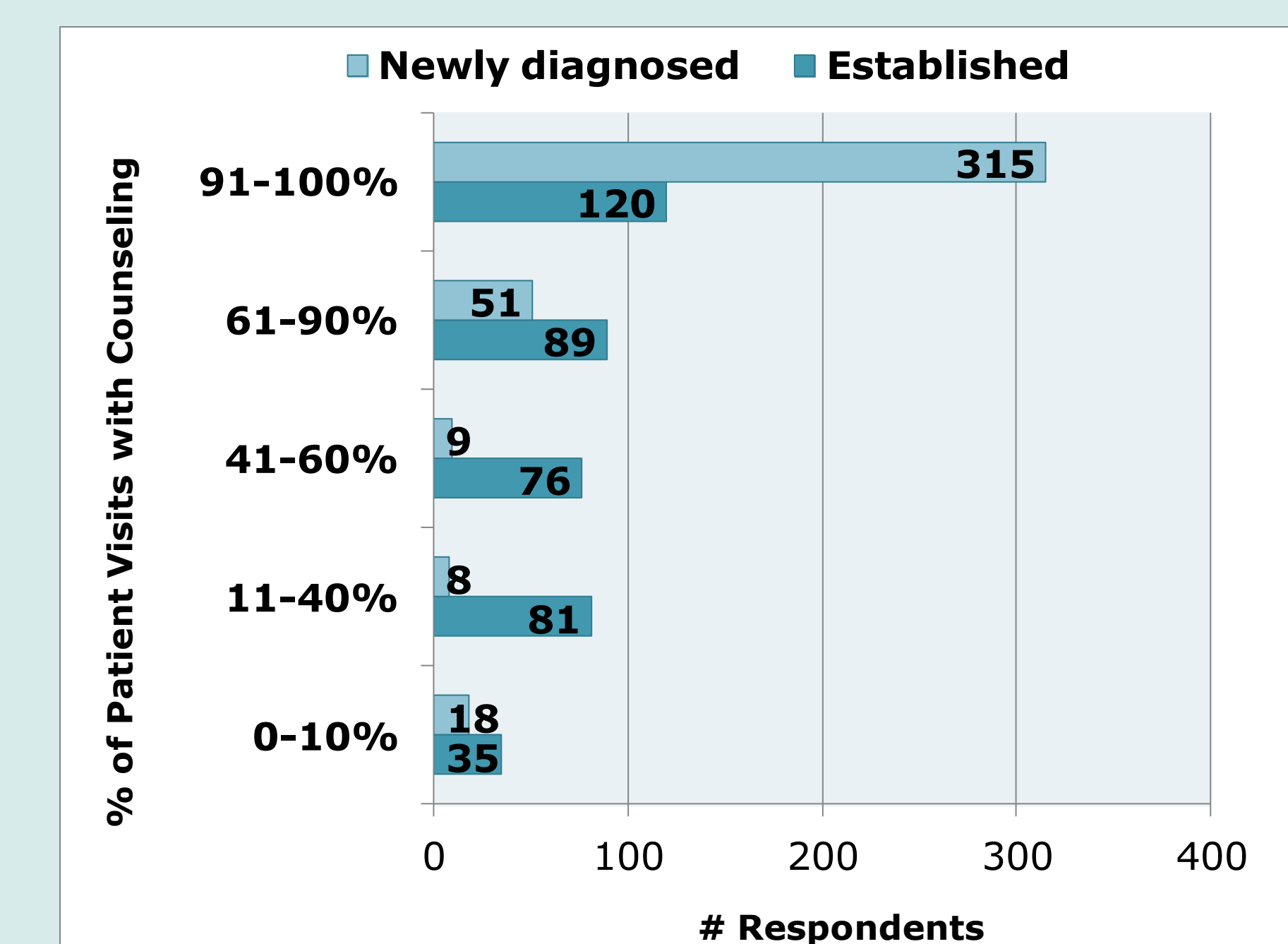


Table 3. Providers Intending vs. Not Intending to Prescribe Early ART: Differences in Responses

Survey Item	Intend to Prescribe Early ART, N (%) ^a		P-value
	No (n=56)	Yes (n=359)	
Reasons to defer initiation of ART (n=407)			
Excessive alcohol/recreational drugs	43 (76.8)	231 (64.4)	0.07
Limited financial support for ART/HIV care	37 (66.1)	167 (46.5)	0.007
Comorbidities increasing risk of ART toxicities	25 (44.6)	101 (28.1)	0.01
No HIV transmission behaviors	12 (21.4)	8 (2.2)	<.0001
Perceived ID role w/Serodifferent Couples (n=401)			
Counsel about PrEP	42 (75.0)	318 (88.6)	0.005
Offer visit to discuss PrEP with HIV-neg partner	32 (57.1)	260 (72.4)	0.02
Prescribe PrEP	30 (53.6)	251 (69.9)	0.02
No role	8 (14.3)	21 (5.6)	0.04
Experiences with Serodifferent Couples (n=310)			
Counseled about PrEP	22 (39.3)	223 (62.1)	0.001
Offer visit to discuss PrEP with HIV-neg partner	15 (26.8)	154 (42.9)	0.02
PWID should be offered... (n=391)			
PrEP (if HIV-uninfected)	14 (25.0)	159 (44.3)	0.007
None of the above ^b	12 (21.4)	40 (11.1)	0.03
Feel adequately prepared to provide PWID... (n=202)			
PrEP (if HIV-uninfected)	5 (8.9)	101 (28.1)	0.002

^aPercentages represent number of affirmative responses divided by the total number of study participants (n=415). ^bSterile syringes, opiate substitution therapy, or PrEP. PWID, Persons who inject drugs.

Limitations

- Cross-sectional, non-probability sample
- Reported and actual practices could differ

Conclusions

- ID physicians almost universally recommend early ART, and many have adopted aspects of PrEP provision into practice.
- However, clinicians may defer ART based on patient readiness or psychosocial factors, and only 1/3 of providers have prescribed PrEP.
- Providers who do not intend to prescribe early ART are also more cautious about providing PrEP
- Interventions that help physicians motivate patients to start ART, identify and overcome missed opportunities to provide PrEP, and routinely deliver risk reduction counseling are needed.

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