

Abstract:

HIV clinicians in the United States are diminishing in number. Primary care clinicians (PCPs) may be the solution to alleviate the HIV provider shortage. However, PCPs face their own workforce shortage. The purpose of this study was to determine PCPs’ perceived barriers and beliefs or attitudes towards their readiness to manage patients with HIV. An anonymous survey was used for this quantitative, descriptive, and cross-sectional design. The sample included 347 PCPs. The majority (59.4%, $n = 206$) believed that PCPs are the best solution for the HIV provider shortage. PCPs who were already practicing HIV medicine (83.04%, $n = 142$) were significantly more likely to agree that PCPs should help with the HIV provider shortage than PCPs who were not practicing HIV medicine (58.53%, $n= 103$, $p < .001$). To alleviate the HIV provider shortage, PCPs should be offered additional training, decreased workload, and increased compensation when treating and managing patients with HIV.

Introduction:

- There are about 1.2 million people living with HIV in the United States.
- HIV clinicians in the United States are diminishing in number.
- Approximately 50% of HIV clinicians may retire in the next 5-10 years.
- In 2020 and 2025, the PCP workforce shortage will be 45,400 and 65,800, respectively.
- PCPs may be the solution to alleviate the HIV provider shortage.

Purpose:

- This study was to determine PCPs’ perceived barriers and beliefs or attitudes towards their readiness to manage patients with HIV.

Methods:

- The study was an anonymous, quantitative, descriptive, and cross-sectional design.
- Data were collected over a 3-month period from June to September in 2016
- The questionnaire was administered via SurveyMonkey. There were 36 close-ended items on the questionnaire including demographics, knowledge, beliefs, and attitudes.
- The study population consisted of PCPs in the United States.
- Consecutive sampling was used to recruit potential participants.
- Likert-type items shortened to 3-response scale (agree, uncertain, and disagree).
- Mann-Whitney U testing was conducted to determine if PCPs who reported currently treating HIV patients versus those who reported they did not treat HIV patients differed when answering the research question. Alpha level was set at $< .05$, two-tailed.

Results

Sample Characteristics of Primary Care Clinicians (N = 347)			
Designation		Gender	
Physicians	172 (49.6%)	Male	142 (40.9%)
Physician Residents	42 (12.1%)	Female	202 (58.5%)
Physician Assistants	67 (19.3%)	Transgender	2 (0.6%)
Nurse Practitioners	66 (19.0%)		
Currently Treat HIV Patients		Mean Age	43.15 ($SD = 11.875$)
Yes	171 (49.3%)	Mean Weekly Hours	39.25 ($SD= 15.543$)
No	176 (50.7%)	Mean Years in Practice	12. 18 ($SD= 10.756$)

Knowledge, Attitudes, and Beliefs

The majority (59.4%, $n = 206$) believed PCPs are the best solution for the HIV provider shortage

The majority (53.6%, $n = 186$) knew there were approximately 50,000 new HIV cases every year; the rest of the sample (46.4%, $n= 161$) answered *no or uncertain*.

Most of the PCPs (59.7%, $n = 207$) were ready to take care of patients with HIV with some training; however, the majority (45.9%, $n = 159$) refused to attend 1- to 2- year HIV salaried specialist fellowship training.

Out of all PCPs currently treat HIV patients. 12% ($n= 20$) of PCPs agreed that they were compensated sufficiently.

Out of all PAs and NPs, 80% ($n= 107$) stated they will help alleviate provider shortage by managing and treating patients with HIV.

Primary Care+ HIV Clinicians vs. Primary Care Only

PCPs who were already practicing HIV medicine (83.04%, $n = 142$) were significantly more likely to agree that PCPs should help with the HIV provider shortage than PCPs who were not practicing HIV medicine (58.53%, $n= 103$, $p < .001$).

Primary Care Clinicians (no HIV care) Only Attitudes and Beliefs

The majority of PCPs (63.0%, $n= 110$) will consider taking care of patients with HIV if they have adequate time

About half (48%, $n= 84$) of the PCPs will consider doing HIV medicine if they will be compensated better

Discussion:

- A majority of participants believed PCPs should start managing and treating patients with HIV. PCPs who were currently involved with HIV medicine supported this notion 25% more than PCPs who were not involved with HIV medicine ($p < .001$)
- There are nearly 294,834 PCPs in the United States. Of those, about 3,101 HIV providers (primary care physicians, PAs, and NPs), who consult 10 or more HIV patients daily.
- These two numbers demonstrate from the total number of PCPs, only a small percentage of them manage and treat patients with HIV.
- Therefore, close attention should be paid to responses received by PCPs, who were not involved with HIV medicine
- Participation bias, uncalculated response rate, and generalizability (when analyzing the total sample) were some of the limitations of the study.

Recommendations and Practical Applications:

- Almost half of the PCPs were uncertain or did not know that there are about 50,000 new HIV cases every year in the country. Thus, clinicians should be educated regarding this problem.
- To provide training, an HIV fellowship is not practical for many. Integration of training in HIV care that will not impinge on routine clinical obligation may be practical.
- More PCPs may consider HIV medicine if they have a lighter schedule and are compensated better.
- About 80% of the PAs and NPs showed interest to alleviate HIV provider shortage by treating patients with HIV. Thus, encourage PAs and NPs to involve with HIV medicine.

Conclusion:

- PCPs who are currently involved with HIV medicine vastly agree that PCPs can be the solution to the HIV provider shortage, other PCPs agree and show interest to a lesser degree.
- The HIV provider shortage will continue to be a threat in the United States.
- PCPs should be offered additional training, decreased workload, and increased compensation when treating and managing patients with HIV.

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