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SCHOOL OF PUBLIC HEALTH & INFORMATION SCIENCES

Increasing Access to HIV Pre-exposure Prophylaxis: An Assessment of Physician Barriers to Administration

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Background

There were 44,073 new HIV infections in the U.S. in 2014 and approximately 1.2 million people living with HIV, 1 in 8 of whom did not know their status.[1]

While HIV incidence in the U.S. decreased by 19% between 2005 and 2014, certain groups remain disproportionately affected.[1]

In 2014, Kentucky ranked 26th in the U.S., with an estimated HIV diagnosis rate of 9.2 per 100 000.[2]

The FDA approved Truvada®, a combination of emtricitabine (FTC) and tenofovir (TDF), as a PrEP agent in 2012. This was followed by the CDC's release of clinical practice guidelines for HIV PrEP in 2014.[3]

PrEP reduces the risk of HIV acquisition by up to 92% in at-risk populations.[3]

Clinical practices are the most feasible implementation settings for PrEP given the need for regular follow-up or clinical monitoring[4]. Physicians play a vital role in ensuring the safe and effective administration of PrEP.

Objectives

1) To assess physicians' knowledge, perceptions and attitudes towards PrEP administration
2) To inform the establishment of a PrEP clinic in Louisville, Kentucky

Methods

- Self-administered surveys (adapted from Karris et al.[5]) measuring: 1) *support for PrEP*; 2) *willingness to prescribe PrEP*; and 3) *perceived barriers to PrEP administration,* were distributed to a convenience sample of Family Medicine and Internal Medicine grand round attendees.
- The Fisher's Exact test was used to assess differences in responses between primary care (PCP) and non-primary care physicians (non-PCP).

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Results

- Ninety-seven physicians and students (combined) completed the survey (Figure 1).
- The majority of respondents **supported the use of PrEP** to prevent HIV among high-risk individuals (Figure 2).
- Only 12% of practicing physicians (mostly PCPs) have prescribed PrEP while 88% have not.
- There was a significant difference ($p < 0.001$) among specialties' **willingness to prescribe PrEP** (Figure 3)
- Physicians identified the top three **barriers to PrEP administration** as: 1) high demands on physician time, 2) high costs, and 3) potential patient toxicity.
- Majority (54%) of those who would not prescribe PrEP cited a lack of clinical knowledge as the main reason, followed by concerns about patient compliance (25%), future resistance (25%), and cost (21%).

Figure 1: Specialty of Practice

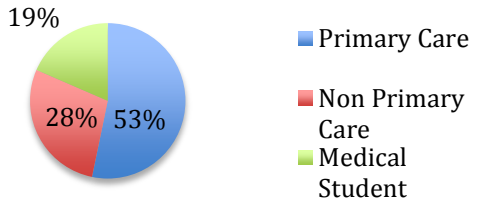


Figure 2: Support for PrEP

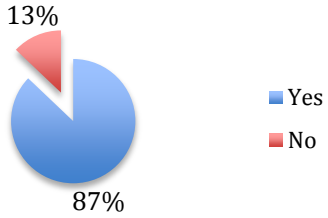
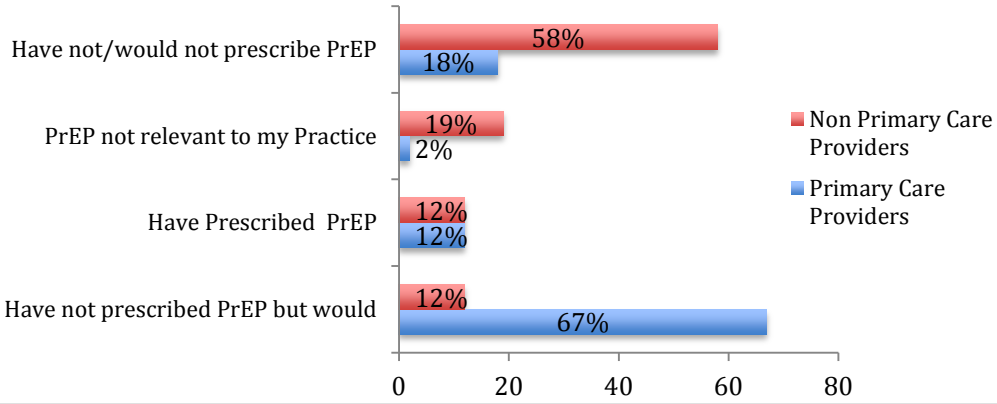


Figure 3: Physician Willingness to Prescribe PrEP



Limitations

- The use of a convenience sample may have potentially introduced selection bias.
- Sample size may limit the generalizability of findings.
- The 4-item survey may have not fully captured physician's perceptions and attitudes towards PrEP thus necessitating a larger scale study.

Conclusions

- Findings informed the design of an inter-professional clinical model for PrEP delivery that includes PCP and pharmacy collaboration.

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