HIV Screening Education for Healthcare Providers

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Background & Significance

- About 1.1 million people are living with HIV infection in the United States (CDC, 2018a).
- The CDC recommends that people between the ages of 13 and 64 get tested at least once in their lifetime (CDC, 2018b).
- HIV infection can be treated with antiretroviral therapy (ART).
- Risk of HIV transmission can be reduced by educating people who are at risk for contracting HIV about pre-exposure prophylaxis (PrEP) (U.S. Department of Health and Human Services, 2019).
- Early screening and linkage to treatment prevents opportunistic infections (Avert, 2018).
- Early identification of HIV status result in a $229,800 cost savings per person (Schackman et al., 2015).

Problem Statement

- Outpatient clinic in Plainfield, N.J., does not offer HIV screening as part of primary care screenings,
- HIV screening performed for patients:

1. presented with signs and symptoms of HIV.
2. reports a suspected exposure
3. patient requests it.

- Does not identify if a patient is at risk for contracting HIV and then link to care for PrEP.

Clinical Question

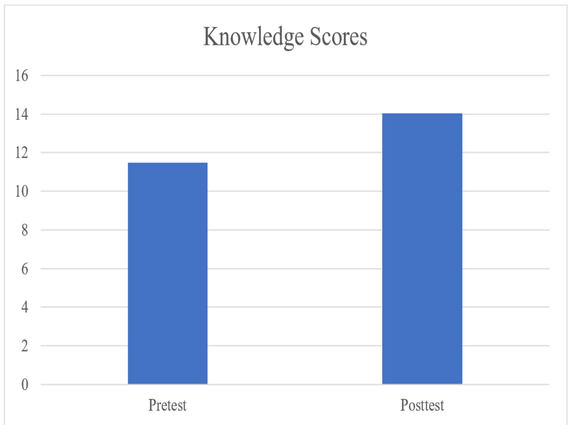
How effective is providing an HIV screening education program and incorporating the CDC-recommended HIV screening protocol into a primary care practice in increasing the rate of HIV screening and linkage to care for ART or PrEP, compared to the present complaint or symptom-based HIV screening protocol?

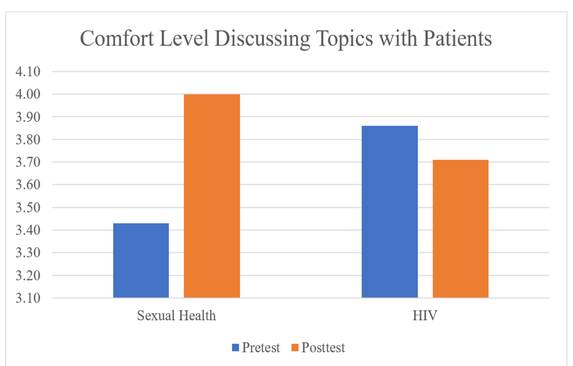
Methods

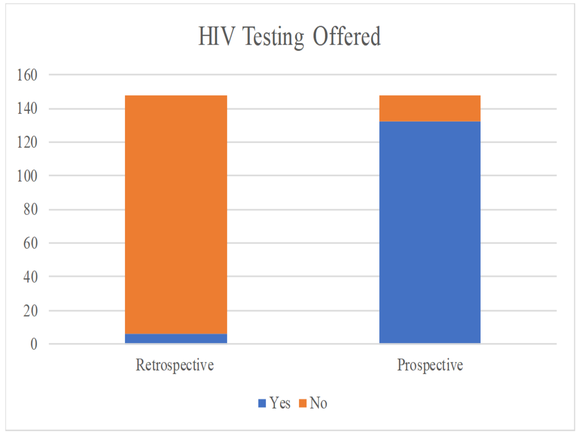
- **Design -** one group pre-test and post-test design coupled with retrospective and prospective chart reviews.
- **Sample**- seven participants
- **Pre-test & Post-test-** 17 knowledge-based questions, 2 Likert scale questions.
- **Chart audit-** 148 retrospective and 148 prospective chart review.
- **Setting** - outpatient clinic located in Plainfield in Union County, N.J.
- **Measures**

1. Changes in knowledge among healthcare providers after the HIV screening educational intervention via pre-test and post-test.
2. Rate of HIV screening for patients at this clinic between the ages of 18 and 64 over a month.
3. Change in referrals made to an HIV specialist (a) for linkage to care for ART for those who are positive for HIV and (b) for linkage to care for PrEP for those who are at risk for HIV.

- **Data Analysis**
  1. One sample *t*-test
  2. Chi-Square test







Results

Pre-test and post-test

- 17 knowledge-based questions: pre-test (*M* = 11.47) to post-test (*M* = 14.04), paired t-test (t[6] = 1.91, *p* = .11).
- Comfort discussing sexual health Likert scale: pre-test (*M* =3.43) to post-test (*M* = 4.00), (t[6] = 1.33, *p* = .23)
- Comfort discussing HIV Likert scale: (*M* = 3.86) to post-test (*M* = 3.71), (t[6] = 0.35, *p* = .74).

Retrospective & prospective chart review

- Retrospective sample: 6 of 148 patients (4.1%) were offered the HIV test.
- Prospective sample: 132 of 148 patients (89.2%) were offered the HIV test.
- Chi-Square test *p* < .0001
- 59% percent declined the test
- Four out of 148 patients (2.7%) tested negative but at high risk for HIV

Discussion

- Increase of 22.4% in knowledge among healthcare providers for knowledge-based questions.
- Increase of 16.6% in comfort discussing sexual health among healthcare providers.
- Reduction of 4%, in comfort discussing HIV among healthcare providers.
- Statistically significant increase in HIV screening a month after implementing CDC-recommended HIV screening to the practice (*p* <.0001).

Implications

Economy:

- Office staff trained to perform HIV screening.
- ➢ Screening in primary care using rapid-HIV is cost-effective.
- Screening patients for HIV and linking to care early.
- ➢ Decreased burden of mortality rate and HIV incidence rate.

Healthcare Quality and Safety:

- Healthcare providers screened patients for HIV and linked to care for PrEP.
- ➢ National HIV/AIDS Strategy emphasizes quality of care and safety.
- Knowledge of HIV status via HIV screening.
- ➢ Decreased HIV transmission.

Policy:

- Screening anyone between the ages of 18 and 64 for HIV.
- ➢ Compliant with CDC-recommended HIV screening protocol.
- Patients received the knowledge of their HIV status and linked to care for treatment.
- ➢ New Jersey Taskforce to End the HIV Epidemic by 2025.
- Healthcare providers identified patients who are at high risk for HIV and linked to care for PrEP.
- ➢ United Nations Population Fund and the Joint United Nations Programme on HIV/AIDS five pillars initiative to end the HIV epidemic.

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