Observational Study

Medicine

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UnPrEPed for HIV prevention services

Hesitancy among US primary care providers

Amanda Blair Spence, MD[a,*], Cuiwei Wang, MS[a], Katherine G. Michel, PhD, MPH[a], Daniel Merenstein, MD[b], Michael Kharfen, BA[c], Lakshmi Goparaju, PhD[a], Seble Kassaye, MD, MS[a]

Abstract

Provision of HIV prevention services by primary care (PCP) healthcare providers is critical to reduce the number of new HIV infections. We examined the performance of HIV risk assessments and provision of HIV prevention services by PCPs. In our cohort, less than one-half of respondents asked about sex and drug use all or most of the time, and among those that did not routinely ask about sex and drug use only 66% and 59%, respectively, would ask given more time. Less than a quarter of respondents noted that HIV prevention services were part of their clinical practice. These findings demonstrate gaps in the provision of HIV prevention services by a key population of healthcare providers.

Abbreviations: DC = District of Columbia, HIV = human immunodeficiency virus, PCPs = primary care providers, PrEP = pre-exposure prophylaxis.

Keywords: HIV prevention, HIV risk assessment, PrEP, primary care

1. Introduction

In 2019, there were an estimated 34,000 new HIV infections in the United States despite the availability of highly effective prevention strategies such as HIV pre-exposure prophylaxis (PrEP).[1,2] Implementation of PrEP is a key component in the strategy to End the HIV Epidemic, but in 2020 only ~25% of the estimated 1.2 million persons with PrEP indications received PrEP.[3]

Centers for Disease Control and Prevention PrEP use guidelines and the US Preventive Services Task force recommend routine collection of sexual history to identify persons at risk for HIV and that sexually active individuals be informed about PrEP.[2,4]

2. Objective

To estimate assessment of HIV risk during routine health examination by primary care providers (PCPs) in the post-PrEP era.

3. Methods

Licensed healthcare providers in the District of Columbia (DC) were invited to participate in a cross-sectional online survey (August–September 2019). This survey was distributed using a Department of Health maintained email listing of licensed healthcare provided in DC. Participants were offered a gift card at completion of the survey. We assessed provider demographics, practices, and HIV knowledge. HIV knowledge was assessed with 18 questions (true/false, multiple choice) with 1 point assigned for each correct answer. This analysis is limited to primary care providers (PCPs).[5] This study was approved by the Georgetown University Medical Center Institutional Review Board.

4. Findings

Among the 15,003 individuals to whom the email was successfully delivered, 5308 opened the email, and 539 opened the survey link. Of the 436 participants who completed the survey, 118 identified as PCPs (Table 1). Sixty percent (n = 71) were female, 64% (n = 75) White, and the median age was 41 years (IQR 34, 53.75). The median number of years in practice was 11.5 (IQR 7, 24.75), and 44% (n = 52) practiced in an academic setting. The mean HIV general knowledge score was 15.8 of 18 (SD 1).

Forty-nine percent (n = 58) asked about sex and 28% (n = 33) injection drug use all or almost all the time (Table 2). Age, sex, and race were similar between those who regularly discussed sex versus those that did not. However, obstetricians-gynecologists asked about sex more often than other physician types

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[a] Division of Infectious Disease, Georgetown University Medical Center, Washington, DC, USA, [b] Department of Family Medicine, Georgetown University Medical Center, Washington, DC, USA, [c] District of Columbia Department of Health, HIV/AIDS, Hepatitis, STD & TB Administration, Washington, DC, USA.

**Correspondence: Amanda Blair Spence, Division of Infectious Disease, Georgetown University Medical Center, 3800 Reservoir Road NW, 5th Floor PHC, WA, DC 20007, USA (e-mail: abs132@georgetown.edu).*

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Table 1

Survey participant demographic information.

	N = 118 (%)
Provider specialty	
Internal medicine	42 (35.6)
Family medicine*	28 (23.7)
Pediatrics**	33 (28.0)
OB/GYN	15 (12.7)
Sex at birth	
Female	71 (60.2)
Male	44 (37.3)
Unknown	3 (2.5)
Provided care to PLWH	
Yes	111 (94.1)
No/Unknown	7 (5.9)
Race	
White	75 (63.6)
Asian	25 (21.2)
Black/AA	10 (8.5)
Other/Unknown	8 (6.7)
Ethnicity	
Hispanic	5 (4.2)
Non-Hispanic	103 (87.3)
Unknown	10 (8.5)
Sexual orientation	
Heterosexual	104 (88.1)
LGB	10 (8.4)
Unknown	4 (3.4)
Median age (IQR), yrs	41 (34, 53.75)
Median yrs in practice (IQR)	11.5 (7, 24.75)
Practice setting	
Academic	52 (44.1)
Tertiary care (nonacademic)	5 (4.2)
Community care clinic	18 (15.3)
Private	26 (22.0)
Other	17 (14.4)
Mean HIV knowledge (SD)	15.8 (1.0)

IQR = interquartile range, LGB = lesbian, gay, bisexual, OB/GYN = obstetrics/gynecology, PLWH = person living with HIV, SD = standard deviation.

*includes 1 internal medicine-pediatrics physician.

**includes 1 adolescent medicine physician.

Table 2

Survey participant question responses.

	Primary care N = 118 (%)
Would like to spend more time on average per patient than currently spends with each patient	
Yes	85 (72)
No	27 (21)
About how often do you ask if patients are sexually active?	
None or almost none of the time	8 (6.8)
25% of the time	14 (11.9)
About half of the time	21 (17.8)
75% of the time	11 (9.3)
All or almost all the time	58 (49.2)
About how often do you talk about safer sex with patients?	
None or almost none of the time	15 (12.7)
25% of the time	15 (12.7)
About half of the time	25 (21.2)
75% of the time	23 (19.5)
All or almost all the time	34 (28.8)
About how often do you ask if patients are using injection drugs?	
None or almost none of the time	21 (17.8)
25% none of the time	15 (12.7)
About half of the time	23 (19.5)
75% of the time	20 (17.0)
All or almost all the time	33 (28.0)
I would ask about if my patients were sexually active if I had more time.	
AGREE	65 (55.1)
DISAGREE	47 (39.8)
I would talk about safe sex with my patients if I had more time.	
AGREE	75 (63.6)
DISAGREE	37 (31.4)
I would ask if patients are using injection drugs if I had more time.	
AGREE	65 (55.1)
DISAGREE	47 (39.8)
I feel comfortable talking with my patients about their risk of acquiring HIV.	
AGREE	107 (90.7)
DISAGREE	5 (4.2)
I am not comfortable talking with my patients about their sex practices.	
AGREE	20 (16.9)
DISAGREE	92 (78.0)
Talking about safer sex with my patients is not my responsibility.	
AGREE	10 (5.4)
DISAGREE	102 (86.4)
I am comfortable talking with my patients about their injection drug use practices.	
AGREE	82 (69.5)
DISAGREE	30 (25.4)
Providing HIV prevention services is not part of my clinical practice	
AGREE	25 (21.2)
DISAGREE	87 (73.7)
Specialists trained in HIV prevention counseling are more appropriate for delivering HIV prevention services than are primary care providers.	
AGREE	25 (21.2)
DISAGREE	87 (73.7)
Primary-care provider delivered interventions are the most effective way to reduce the risk of HIV acquisition	
AGREE	98 (83)
DISAGREE	14 (12)

with 80% asking about sex routinely versus 44% of other primary care physicians. Seventeen percent (n = 20) of respondents were uncomfortable talking with patients about their sex practices, and 26% (n = 30) were uncomfortable discussing injection drug use. Forty percent (n = 47) of PCPs would not ask about sexual activity or injection drug use given more time. Among those who did not routinely ask about sex and drug use 65% (n = 36/55) and 54% (n = 32/59) respectively would not ask given more time. Twenty-one percent (n = 25) noted providing HIV prevention service was not part of their clinical practice and that specialists trained in HIV prevention counseling were more appropriate for delivering HIV prevention services.

Eighty-three percent (n = 98/118) of respondents believed the primary care delivered interventions were the most effective way to reduce the risk of HIV acquisition. Among those with this belief, 54% (n = 20/37) and 51% (n = 26/51) of those that did not routinely ask about sex or drug use respectively would do so given more time. Seventy-nine percent (n = 77/98) of those that believed that primary care delivered interventions were the most effective way to reduce the risk of HIV acquisition reported that HIV prevention services were part of their clinical practice.

5. Discussion

DC has a high HIV prevalence of 1.7% and HIV incidence of 32.9 new cases per 100,000. Despite a historic routine

requirement for HIV related continued medical education for licensure,[5] provider's sexual activity and drug use assessments were inconsistent, more than one-fifth of surveyed PCPs were not inclined to provide HIV prevention services, and almost as many reported discomfort with talking about sex and drug use. While, inadequate time has been cited as a barrier to the delivery of HIV prevention services during routine primary care, in our cohort 40% of PCPs were reluctant to routinely ask about sex or drug use even if given more time.[2] If PCPs do not assess sex and drug use, implementation of HIV preventions at scale may remain limited. Further, we noted gaps in the delivery of services even among individuals who acknowledge the importance of primary care delivered interventions for HIV prevention.

As with any survey, findings can be skewed by the sample population. The respondents to our survey are similar in age to the overall DC physician workforce, but women were over represented in our sample as compared to the number of reported female physicians in the DC Physician Workforce Capacity Report.[6] However, this survey was conducted in an area primed to care for persons with and at risk for HIV. We would expect in this population higher rates of completion of these routine health assessments and delivery of services. There may be additional and larger gaps in knowledge and willingness to incorporate behavioral assessments in other regions of the US. Our findings suggest that additional research is needed to understand impediments and incentivize participation in HIV prevention service delivery. This includes an exploration of why providers do not provide these services which was not elucidated in our survey. Expansion of HIV prevention healthcare delivery systems may require the engagement of non-physician and mid-level providers to meet national End the HIV Epidemic targets.

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Author contributions

Conceptualization: Amanda Blair Spence, Seble Kassaye.
Data curation: Amanda Blair Spence, Cuiwei Wang.
Formal analysis: Cuiwei Wang.
Funding acquisition: Seble Kassaye.
Writing – original draft: Amanda Blair Spence.
Writing – review & editing: Amanda Blair Spence, Cuiwei Wang, Katherine G. Michel, Daniel Merenstein, Michael Kharfen, Lakshmi Goparaju, Seble Kassaye.

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