

ORIGINAL RESEARCH

Trust in physicians among young sexual minority men

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(Jessica Jaiswal)**Abstract**

Trust in physicians and the medical establishment more broadly is critical for access to and provision of relevant healthcare services. This is especially true for sexual minority men (SMM) as their healthcare is negatively impacted due to stigma and discrimination which in turn affects disclosure of sexual behavior and sexual orientation. This study sought to understand trust in physicians (TIP) as it relates to anal sex position, difficulty in paying for healthcare, insurance status, and pre-exposure prophylaxis (PrEP) use. This study employs data from a cross-sectional survey conducted between February 2018 and February 2019. The final analytic sample is 179 sexual minority men who reported an human immunodeficiency virus (HIV) negative serostatus and identified as a sexual minority person (*i.e.*, non-heterosexual). The present use of the Trust in Physicians Scale is further dichotomized for analytical purposes. The results show that slightly over half of the participants (52%, $n = 93$) reported trusting their physicians. Higher trust in physician scores were associated with preference of anal sex position (insertive or receptive as opposed to versatile/no preference), less difficulty in paying for health care services, people who were uninsured, and those who were currently using PrEP. In conclusion, TIP plays a critical role in disclosure of sexual orientation and sexual behaviors that allow for the delivery of necessary and appropriate healthcare services. Findings from this study can be used to develop best practices for taking patient histories that foster trust and disclosure of sensitive health information.

Keywords

Sexual minority men; Trust in physicians; PrEP; Healthcare

1. Introduction

Trust in physicians is an integral part of health care provision and the patient-physician relationship. Interpersonal trust is defined as a person's belief that physicians' words and actions are credible and reliable [1]. The patient-physician relationship is inherently hierarchical due to the patient's dependency on the physician's knowledge and use of treatments [2]. A patient who trusts their physicians believes that the physician is acting in the best interest of the patient and will provide supportive care [1]. Trust in physicians is linked to the degree to which patients seek routine medical care [3], adhere to prescribed medication [4], and maintain long term relationships with providers [3]. It can also impact a patient's comfort levels with disclosing health information [5], and is linked to self-reported ability to manage chronic diseases, and health improvement [6]. Additionally, patients with higher trust in their physicians are more likely to report engaging in health behaviors such as exercise and safer sexual practices [7]. Insurance also affects trust; trusting one's healthcare provider to put the patient's needs above all else and to refer to the proper specialists has been found to be higher in those with indemnity and Preferred Provider Organization plans (PPO) (*i.e.*, a type of medical plan

that offers coverage to the enrollee *via* a network of select providers) as opposed to those in closed and open Health Management Organizations (HMO) (*i.e.*, a type of medical plan that limits coverage to services provided only by providers who work for or contract with the insurance plan) combined [8].

Health inequities are most pronounced among minoritized communities. For example, in the U.S., structural racism-driven inequities in medical care continue to worsen [9]. Differences in trust in physicians is associated with racial disparities in health and access to health care, specifically among Black people. In one study, white respondents were 37% more likely to trust their physicians than Black respondents [10]. Historical precedents such as the Tuskegee experiments, ongoing systematic discrimination, and socioeconomic inequalities are some of the factors that influence trust in physicians across marginalized individuals in the U.S. [10].

Sexual minority men (SMM), another minoritized population in the U.S., also experience disproportionate healthcare-related inequalities. Young SMM experience myriad, intersecting forms of oppression, highlighting the intersectional nature of their daily lived experiences [11]. Unpartnered SMM are less likely to have private health insurance than hetero-

sexual or same-sex couples [12]. Specifically, Black sexual minority men are also less likely to have insurance than Black and white heterosexual men [13]. Sexual minority people also experience financial barriers to medical care, and studies have shown that gay men of color have significantly elevated uninsurance rates relative to straight white men (Odds Ratio 1.7). For instance, compared to heterosexual counterparts, in one study showed that 17% of gay men delayed or did not receive care because of cost in the preceding year (as opposed to 11.7% of heterosexual men) [14]. In terms of insurance status, research indicates that uninsured adults are less likely to get preventive and physician care, resulting in fundamental differences in health outcomes [15]. All of the factors can lead to SMM having higher financial barriers to care along with a lack of resources and providers specific for their health needs, furthering the lack of access to care in this population.

Additionally, due to provider-based discrimination and lack of resources for sexual minority health, some choose not to seek or maintain care. Trust in physicians among SMM is an emerging area of research [16] as this population often faces discrimination in healthcare settings [17], heterosexist assumptions made by providers [18], and a lack of provider knowledge about the specific healthcare needs of SMM [19]. Experiences of stigma, micro-aggressions, and lack of physician knowledge of SMM's healthcare needs have also been linked to decreased trust in physicians. Prior studies have shown significant correlations between healthcare provider trust and PrEP uptake among different populations [20–22]. Among them, one study of young Black SMM showed that experiences of discrimination and homophobia in healthcare provider interactions appeared to negatively influence PrEP uptake [23]. Another study of a cohort of Latinx SMM found greater lack of trust was associated with decreased outcomes in all stages of PrEP engagement as an HIV prevention strategy [21]. One study discovered that not being on PrEP was one characteristic associated with lower patient-provider trust among SMM, but using only a five-question scale giving limited analytical power [24]. These studies suggest that trust in physicians, or more often, lack of trust, is a salient concern for this often marginalized population, especially in regard to HIV prevention.

Although most literature on physician trust and SMM focus on HIV prevention, less is known about trust in physicians generally. Specifically, there is a lack of understanding around the potential relationship between preferred anal sex position and trust in physicians. Stigma associated with preferred anal sex position is well documented in the literature [25] and is often associated with non-disclosure of sexual activity due to fears of homophobic micro-aggressions by providers [25] and lack of physician knowledge of the healthcare needs of gay men [22]. Although preferences for anal sex positions are often used by SMM in establishing their identities, limited studies have analyzed current HIV prevention strategies and outcomes that vary based on different sexual roles, let alone investigations on the correlations between preferred anal sex positions and trust in physicians endorsements, which can be also be predictive of HIV care outcomes. Therefore, examining how trust in physicians is associated with certain socio-demographic and structural factors pertaining to healthcare access can allow

providers to ascertain best practices for working with SMM and responding to their needs. This study sought to understand the relationship between trust in physicians in sexual minority and variables such as anal sex position, difficulty in paying for healthcare, insurance status, and pre-exposure prophylaxis (PrEP) use.

2. Methods

2.1 Study design and analytic sample

This analysis relies on data from the mixed-methods Health-Related Beliefs Study, a supplement to the P18 Cohort Study. All participants for the Health-Related Beliefs Study were recruited from participants enrolled in The P18 Cohort study, the parent study. The P18 Cohort Study is a prospective longitudinal cohort study that explores HIV, substance use, and mental health within a syndemic framework among a racially, ethnically, and socioeconomically diverse sample of young adult men and gender women who have sex with men who are living in New York City (NYC). The details of the P18 Cohort Study have been published elsewhere [26]. Briefly, participants for the P18 Cohort Study were recruited *via* lesbian, gay, bisexual, transgender, intersex, queer/questioning, asexual and other sexual minority identity terms (LGBTQ+) community events, queer spaces, street-intercept in NYC neighborhoods, and dating/hookup sites (*e.g.*, Grindr, Hornet, Scruff and CraigsList). Participants were eligible for the P18 study if they were between 18 and 19 at the time of the outreach event, assigned male at birth, had a HIV negative serostatus at the time of recruitment, reported having sex with another person assigned male at birth within the previous six months, and provided written informed consent.

The Health-Related Beliefs Study is a cross-sectional study that employs a convenience sampling methodology from the P18 Cohort Study. All participants enrolled in the Health-Related Beliefs Study were invited to enroll in this supplemental study during their biannual visit, by phone or by email. All recruitment efforts took place from February 2018 to February 2019. To be eligible for this study, participants needed to have a HIV-negative serostatus as confirmed by HIV antibody testing during their P18 study visit and provide written informed consent. All eligible participants completed a brief computer-based survey covering topics such as experiences with healthcare providers, thoughts about the healthcare system, and sexual health related beliefs. The analytic sample comprised cisgender men to avoid conflating the experiences of SMM and transgender women. Thus, participants self-reporting as cisgender male and non-heterosexual were included in the analysis. This resulted in 179 out of 202 eligible and verified survey responses. It should be noted that the key sociodemographic factors (*e.g.*, race, gender, sexual orientation) of the participants in the supplemental study ($n = 202$) did not differ significantly from the Phase 2 P18 Cohort Study ($n = 665$).

2.2 Measures

2.2.1 Sociodemographic variables

Sociodemographic variables analyzed in this study include age, race, ethnicity, sexual orientation, and preferred anal sex

position. The Patient Protection and Affordable Care Act established that children under 26 are eligible for dependent coverage under their parent/guardian's group plan. For analytical purposes we dichotomized participants' age into either 26 and younger or 27 and older. Originally asked separately in two questions, participants' race and ethnicity were collapsed into one single variable with four categories: Hispanic (with any race), non-Hispanic White, non-Hispanic Black, and non-Hispanic Other Racial/Ethnic Group (those who identified "Asian or Pacific Islander", "American Indian/Alaska Native" and "Other"). Given the study interest, only participants who self-identified as either Gay or Bisexual/Pansexual/Queer were retained for analyses. The preferred anal sexual position was asked and recoded as "Exclusively/Primarily Top" for those who exclusively or primarily preferred the insertive role, "Exclusively/Primarily Bottom" for those who exclusively or primarily preferred the receptive role, and "No preference/Versatile" for any who answered no preferred anal sex position.

2.2.2 Healthcare structural variables

This study recorded participants' insurance status and applicable insurance types. When asked about insurance type, insured participants' responses were collapsed into either "private insurance", if their insurance was paid by their parents or employers, or "public insurance", if they were under Medicare, Medicaid, or other unspecified public insurance programs. Participants were categorized as either "insured" or "uninsured". Participants were also asked how difficult it was for them to pay their healthcare costs, and responses were trichotomized to "difficult" for those choosing "extremely difficult" or "somewhat difficult", "easy" for those choosing "extremely easy" or "somewhat easy" and "neither easy nor difficult". Participants' self-rated health status was dichotomized into "good" reporting "somewhat good" or "extremely good" and "bad" for all other responses. Finally, participants' responses to their current and historical use of PrEP were collected dichotomously (yes/no).

2.2.3 Trust in physicians

This study utilized a modified version of the Trust in Physician (TIP) Scale. Developed by Anderson and Dedrick in 1990, the TIP Scale includes 11 items and has an alpha of 0.90 [27]. The P18 Cohort Study modified the scale by replacing "doctor" with "healthcare provider" in each item. Participants were asked to rate on a Likert scale of 1–5 for each item, with 1 indicating "strongly disagree" and 5 indicating "strongly agree". Previous studies have reported successes in using this scale to measure physician dependability, confidence in physician knowledge and skills, and confidentiality and reliability of the information received from the physician [28].

In analyzing the TIP scores, each response to the 11 items were assigned a numeric score from 1 to 5. In positively worded items, a score of 1 to 5 is assigned to "strongly disagree", "somewhat disagree", "neither agree nor disagree", "somewhat agree" and "strongly agree". Such positively worded items include Q2, Q3, Q4, Q6, Q8, Q9 and Q10. In negatively worded items, a score of 1 to 5 is assigned to "strongly agree", "somewhat agree", "neither agree nor

disagree", "somewhat disagree" and "strongly disagree". Such negatively worded items include Q1, Q5, Q7 and Q11. Subsequently, a continuous, cumulative score, ranging from 11 to 55, was created by summing up each participant's responses to the 11 items. A higher cumulative score indicates a greater level of trust toward healthcare providers.

2.3 Analytic plan

The demographic and behavioral characteristic of this subsample will be described *via* univariate analyses including means, medians, confidence intervals (CI), and standard deviations (SD) for continuous variables and counts and proportions for categorical variables. The primary outcome is self-reported TIP endorsement. The outcome will be first quantified according to each question, respectively as described above. The individual score for each question will be added up to form a cumulative score. The internal consistency reliability of the adapted TIP scale questionnaire will be evaluated using inter-item correlation coefficients. Frequencies of different responses using a Likert scale to each TIP question will be reported.

Potential facilitators or barriers of TIP endorsement among SMM will be dichotomized considering the relatively small sample size of this supplemental study. Bivariate analyses will be conducted to determine specific variables that were significantly associated with the outcome (TIP endorsement) using linear regression models or one-way Analysis of Variance (ANOVA) tests among those who self-identify as sexual minority men. Variables with $p < 0.05$ will be considered statistically significantly associated with the outcome and entered into a multivariable linear regression model. Such a model will be able to take into consideration multiple facilitators or barriers in predicting TIP scale scores at the same time. Collinearity between each significant variable will be assessed using Pearson's Chi-square and Fisher's Exact test, and the Hosmer and Lemeshow's goodness of fit test will be used to evaluate fit of the final model. All statistical analyses were evaluated for statistical significance at $\alpha = 0.05$, using two-sided tests and performed using R.

3. Results

The numbers of responses to each of the eleven TIP scale questions, along with the questions themselves, were recorded in Table 1. How each question was worded differently (*i.e.*, implying trust or mistrust towards healthcare providers) were noted in further analyses. Table 2 gives the inter-item correlation coefficients between the eleven questions, which range from -0.284 (between questions 5 and 6) to 0.510 (between questions 6 and 8). This range reflects that the items were reasonably homogenous while having sufficiently unique variance to achieve unidimensionality. Among all correlation coefficients that were significant at the 0.05 level, questions 6 and 8 ($p = 0.510$), 2 and 3 ($p = 0.493$), and 1 and 5 ($p = 0.488$) showed the three highest correlation coefficients. The wordings of these questions employed a non-directional language to include both positive and negative statements in the adapted TIP scale questions to reduce the risk of introducing systematic

TABLE 1. Counts and frequencies of endorsements of trust in physician scale items among young sexual minority men. N = 179, NYC.

	Strongly disagree		Somewhat disagree		Strongly agree		Somewhat agree		Neither agree nor disagree	
	n	%	n	%	n	%	n	%	n	%
Q1. I doubt that my healthcare providers really care about me as a person.	53	29.61	42	23.46	15	8.38	25	13.97	44	24.58
Q2. My healthcare providers are usually considerate of my needs and puts them first.	8	4.47	23	12.85	38	21.23	64	35.75	46	25.70
Q3. I trust my healthcare providers so much that I always try to follow their advice.	11	6.15	18	10.06	32	17.88	74	41.34	44	24.58
Q4. If my healthcare providers tell me something is so, then it must be true.	20	11.17	36	20.11	13	7.26	48	26.82	62	34.64
Q5. I sometimes distrust my healthcare providers' opinion and would like a second one.	16	8.94	30	16.76	20	11.17	66	36.87	47	26.26
Q6. I trust my healthcare providers' judgement about my medical care.	5	2.79	10	5.59	31	17.32	91	50.84	42	23.46
Q7. I feel my healthcare providers do not do everything they should for my medical care.	32	17.88	43	24.02	14	7.82	43	24.02	47	26.26
Q8. I trust my healthcare providers to put my medical needs above all other considerations when treating my medical problems.	10	5.59	17	9.50	29	16.20	61	34.08	62	34.64
Q9. My healthcare providers are a real expert in taking care of medical problems like mine.	6	3.35	17	9.50	34	18.99	72	40.22	50	27.93
Q10. I trust my healthcare providers to tell me if a mistake was made about my treatment.	10	5.59	25	13.97	33	18.44	68	37.99	43	24.02
Q11. I sometimes worry that my healthcare providers may not keep the information we discuss totally private.	50	27.93	36	20.11	11	6.15	32	17.88	50	27.93

TABLE 2. The inter-item correlation coefficients between the eleven trust in physician items. N = 179, NYC.

Items	1	2	3	4	5	6	7	8	9	10	11
1	1.000										
2	0.171*	1.000									
3	0.122	0.493***	1.000								
4	-0.029	0.315***	0.355***	1.000							
5	0.488**	0.162*	0.219**	0.001	1.000						
6	-0.205**	0.169*	0.147*	0.222**	-0.284***	1.000					
7	0.397***	0.021	0.054	-0.159*	0.328***	-0.153*	1.000				
8	-0.162*	0.092	0.084	0.177*	-0.076	0.510***	-0.118	1.000			
9	0.004	0.299***	0.417***	0.293***	0.172*	0.003	-0.020	0.148*	1.000		
10	0.110	0.281***	0.215**	0.169*	0.048	0.020	0.006	0.215**	0.431***	1.000	
11	0.374***	0.065	0.119	0.016	0.335***	-0.213**	0.407***	-0.121	0.102	0.108	1.000

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

biases into the survey responses. The inclusion of both positive and negative inter-item correlations was an expected result of including both positive and negative statements in the TIP scale questions, indicating the validity of the survey responses.

3.1 Sample characteristics

Table 3 describes the sociodemographic characteristics of the sample. Among the 202 participants who completed the survey, we analyzed responses ($n = 179$) from cis-gender, SMM participants. Most participants were 26 years or younger (79%, $n = 142$). The majority of the sample were currently insured (85%, $n = 152$). Hispanic/Latinx (with any race) accounted for the largest (30%, $n = 53$) ethnic presentation, followed by non-Hispanic Black (29%, $n = 52$), non-Hispanic White (25%, $n = 44$), and non-Hispanic Other (17%, $n = 30$). Additionally, 42% ($n = 71$) of participants identified their preferred anal sex position as exclusively or primarily top, leaving 39% ($n = 67$) that exclusively or primarily preferred bottom and 19% ($n = 32$) who were versatile or had no preferred anal sex position.

A quarter (25%, $n = 33$) of study participants reported that they had used PrEP before, while nearly a quarter (24%, $n = 42$) reported they were actively on PrEP at the time they completed the survey. For the 152 insured participants, 59% ($n = 90$) and 41% ($n = 62$) received private and public insurances, respectively. For the 27 uninsured participants, 30% ($n = 8$) reported living without insurance within 3 months, 26% ($n = 7$) between 3 months and 1 year, 22% ($n = 6$) between 1 year and 2 years, and 22% ($n = 6$) more than 2 years, respectively. When asked about their self-rated health status, 89% ($n = 160$) rated their health as good and 11% ($n = 19$) rated their health as bad. Overall, nearly half of the sample (47%, $n = 70$) reported that they found it easy to pay for healthcare costs, compared to 30% reported difficulty and 25% reported neither easy nor difficult.

3.2 Trust in physicians reports

The participants reported an average cumulative TIP score of 37.4 (95% CI: (36.11, 38.59); SD = 8.42). Table 3 summarizes the uni- and bi-variate analyses where the cumulative TIP scale score was treated as the outcome variable. For all facilitators and barriers analyzed, simple linear regression models and one-way ANOVA tests were used, subsequently identifying that the TIP scores differed significantly by preferred anal sex position ($F = 3.443$, $p < 0.05$), insurance type ($F = 3.508$, $p < 0.05$), reported difficulty paying for healthcare costs ($F = 11.88$, $p < 0.001$), self-rated health status ($F = 9.356$, $p < 0.001$), and current PrEP use ($F = 8.403$, $p < 0.001$). Those reported being exclusively/primarily top or bottom in sexual encounters ($n = 138$), less difficulty paying for healthcare costs ($n = 70$), good self-rated health status ($n = 160$), having private insurance plans ($n = 90$), and were on active PrEP medications ($n = 42$) reported higher TIP scales.

The identification of multiple facilitators and barriers in predicting TIP scores among SMM is reflected in the application of a multivariate linear regression model. Such a model allowed for the analysis of the relationship between SMM's endorsement of items on the TIP scale based on the specific sociodemographic and healthcare structural variables applicable,

while adjusting for the simultaneous influence on the outcome. The model also allowed easily interpretable coefficients for each facilitator or barrier that gives a positive or negative value, correspondingly. The multivariate linear regression models were performed and are shown in **Supplementary Table 1**. When putting the five sociodemographic characteristics into one single multivariate linear regression model, being versatile or having no preferred anal sex position, not actively on PrEP, and being uninsured were statistically significant in predicting lower TIP scores, whereas exclusively or primarily topping in sexual encounters and reporting less or no difficulty paying for healthcare was statistically significant in predicting high TIP score.

4. Discussion

Trust in physicians is a critical component of both the patient-provider relationship as well as a facilitator to accessing healthcare services. Among young SMM, trust in physicians as well as the healthcare system more generally have served to reduce access to healthcare [29], limit disclosure of sexual orientation and behaviors [30], as well as ensure that the healthcare needs of this population are not met [23]. The findings presented here suggest that race, ethnicity, and sexual orientation were not significantly associated with trust in physicians; however, other sociodemographic characteristics such as preferred anal sex position, difficulty in paying for services, insurance and current PrEP use play a significant role in a patient's trust in their physician.

While not commonly discussed in the relevant literature, preferred anal sex position as the top (insertive partner) and bottom (receptive partner) were associated with higher reported trust in physicians. In this study, lower TIP endorsements were found among participants who had versatile anal sex roles or didn't have a specific anal sex role at all. This can be a result of how physicians adopt entrenched homophobic opinions, assuming SMM fall into exclusive sexual positions and correspondingly communicating differently with different sex roles. Such a disposition concurs with both heterosexist and sexist gender norms [31]. Recent studies have found that providers lack adequate training on the sexual health needs of sexual minority men as well as the lack of understanding of gay sex [32]. As a result, disclosure of a preference for versatile sexual encounters may be met with homophobic microaggressions that erode trust in physicians [31].

Financial concerns such as difficulty in paying for healthcare services and lack of insurance have long been associated with reduced trust in the healthcare system and more specifically physicians [33]. Furthermore, the inability to pay for care and not having health insurance are disparities that are highly reflective of being in a marginalized community with historical and ongoing health inequities [33]. Much of the extant academic scholarship focuses on discrimination based on race and ethnicity [34] and sexual orientation [34] but recent scholarship has illuminated the often-invisible economic discrimination faced by patients in lower socioeconomic groups [34]. Individuals that have experienced unsatisfactory or discriminatory healthcare interactions and are less likely to trust physicians themselves [24, 30].

TABLE 3. Uni- and bi-variate analyses of endorsement of trust in physician items by subject sociodemographic. N = 179, NYC.

Characteristics	Univariate analysis			Bivariate analysis				<i>p</i> -value
	N	n; Mean	%; Range, SD	Limited trust, N = 86		Trust, N = 93		
				n; Mean	%; Range	n; Mean	%; Range, SD	
Age	179	26.2	(24.1, 28.2) (0.9)	26.1	(25.6, 26.7)	26.3	(25.5, 27.0)	0.6
Age category								
Younger than 27	179	142	79	72	84	70	75	0.2
27 and older		37	21	14	16	23	25	
Race								
Black		59	33	31	36	28	30	0.1
White	179	49	27	17	29	32	34	
Other		42	23	25	20	17	18	
Latino/x		29	16	13	15	16	17	
Ethnicity								
Non-hispanic	179	126	70	60	70	66	71	0.9
Hispanic		53	30	26	30	27	29	
Sexual orientation								
Gay	179	149	83	69	80	80	86	0.3
Bisexual/Pansexual/Queer		30	17	17	20	13	14	
Preferred anal sex position								
Exclusively/Primary top		71	42	28	35	39	43	0.3
Exclusively/Primary bottom	170	67	39	33	41	38	42	
Versatile/No preference		32	19	19	24	13	14	
Insurance type								
Private		90	50	34	40	56	60	0.016
Public	179	62	35	38	44	24	26	
Uninsured		27	15	14	16	13	14	
Difficulty paying healthcare costs								
Easy		70	47	27	40	18	22	<0.001
Difficult	149	45	30	20	29	50	62	
Neither easy nor difficult		34	23	21	31	13	16	
Where to get healthcare								
Primary care provider	158	105	66	44	61	61	71	0.2
Non-primary care provider		53	34	28	39	25	29	
Self-rated healthcare status								
Good	179	160	89	72	84	88	95	0.018
Bad		19	11	14	16	5	5.4	
Currently on PrEP								
Yes	176	42	24	13	15	29	32	0.013
No		134	76	71	85	63	68	
Ever taken PrEP								
Yes	133	33	25	22	31	11	17	0.063
No		100	75	48	69	52	83	

PrEP: pre-exposure prophylaxis; SD: Standard Deviation.

Current use of PrEP as a facilitator of trust in physicians is a function of finding a provider who knows about the specific healthcare needs of SMM and is comfortable prescribing the medication [35]. Additionally, the requirements to continue PrEP use include additional testing and screening that necessitate more frequent visits to an individual's healthcare provider as well as open and honest communication about sexual behaviors. In this way, PrEP acts as a conduit for increased disclosure and fosters patient—provider communication in a setting that is more likely to be LGBTQ-friendly [36]. Recent scholarship has found that patients who seek care from providers that are comfortable discussing and prescribing PrEP report higher levels of trust in physicians and greater satisfaction with healthcare services [36]. Overall, this study found preferred anal sex position, self-rated health status, insurance type, difficulty paying for healthcare services, and current PrEP uptake as predictors of endorsement of trust in physicians SMM.

Regarding limitations, the small sample size required that variables be dichotomized. For instance, anyone who did not identify as homosexual were grouped into an overarching category of bisexual, pansexual, and queer men. While this was done for statistical purposes, it undoubtedly obscures and limits the nuances of participant experiences. Additionally, since insurance type is only asked in terms of public or private, the impacts of various insurances (such as being on Medicaid) cannot be studied. Furthermore, the Patient Protection and Affordable Care Act allows dependents to remain on a parent or guardian's insurance until the age of 26. Since we did not ask how insurance was obtained, it is possible that individuals on their parent's insurance may not seek sexual health related services out of concern for accidental disclosure of sexual activity. Both limitations inhibit our ability to understand exactly how insurance may act as a facilitator or barrier to health services. Third, the nature of the data set and the cross-sectional survey does not allow to study trends over time or any causality. The sample population was also based in New York City, a location with a large concentration of health and community service organizations. It is also known to be more welcoming to the queer community than other regions of the country, with a long history of providing specialized health services. This may also have impacted the ability for this population to access care as well as increase comfort in disclosing sexual orientation and sexual behaviors to their provider. These factors may serve to promote trust in physicians. New York City also has a large number of public hospitals for those with or without insurance and also has several state-sponsored affordable insurance plans. This context may also have expanded the ability for this population to obtain care [37]. In addition, there have been numerous PrEP awareness campaigns conducted by the New York City Department of Health and Mental Hygiene such as the Stay Sure and Play Sure campaigns. Campaign posters were placed on the subway trains and bus shelters across NYC. Given the visibility of these campaigns, it is likely that this increased the awareness of PrEP among participants in our study and may have increased the acceptance and use of PrEP among our sample. Future studies should examine trust among young SMM who have significantly less access and exposure to

public health messaging and PrEP access.

Furthermore, self-rated health care status was qualified as very bad, bad, neither good nor bad, good, and very good. In order to assess this data, it was dichotomized into “good” and “bad”.

Age of respondents (25–27 at time of data collection) may be an additional limitation to understanding the broader landscape of trust among SMM generally. Research has shown that trust in physicians does increase with age and length of time spent with a physician, therefore this study may have been impacted by the limited amount of years patients have spent with their providers [38]. Future research should assess how age and cumulative healthcare experiences may affect trust. Despite these limitations, this analysis reveals importantly relationships between specific demographic characteristics of SMM and different levels of trust in physicians.

4.1 Policy implications

Given the pace of new anti-queer and anti-bodily autonomy legislation that is the current state of reality in the U.S., this paper highlights the need for policy to protect the healthcare rights of the LGBTQ+ community. According to the American Civil Liberties Union, there were 510 anti-LGBTQ+ bills introduced in the U.S. in 2023. While not all of these bills will become law, the harmful effects remain. These laws function insidiously discouraging members of the LGBTQ+ community from seeking services, fostering a lack of trust between patient and provider, encouraging non-disclosure of sexual orientation and sexual behaviors, and reproducing shame and stigma among queer people. Each of these factors harm the health of LGBTQ+ identified people and deny their ability to fully express their identities within society. To protect the health of LGBTQ+ individuals, policy makers should sponsor bills that enshrine the healthcare civil rights of this population at the state level. Not only does this protect the health of the LGBTQ+ community locally, but it also protects Section 1557 of the Patient Protection and Affordable Care Act from legal challenges that could see this legislation be deemed unconstitutional.

4.2 Clinical implications

There is a number of implications of this study for medical providers who care for SMM. Individual clinicians and healthcare systems more broadly can make intentional efforts to earn the trust of SMM patients. Cost is increasingly a barrier to care in the U.S. for many patients, but disproportionately for minoritized groups such as SMM. Providers should learn about ways to mitigate financial barriers for patients (*e.g.*, linking patients to safety net clinics and payment assistance programs for PrEP) and engage patients with multidisciplinary team members—such as insurance navigators and community health workers—who can help patients understand their eligibility for benefits like Medicaid. Clinicians can also advocate for a more equitable health care system that reduces barriers to care for SMM. Access to HIV PrEP remains inadequate for many SMM in the U.S., and lack of provider education is one important barrier. HIV PrEP training programs should emphasize the importance the primary care providers offer PrEP to eligible

patients, while highlighting the benefit of PrEP prescribing to the patient-provider relationship. Finally, the finding of reduced trust in physicians among patients with no preferred anal sex position suggests that medical providers need additional training on how to have affirming, non-judgmental conversations with SMM about sexual position.

5. Conclusions

The findings presented here shed light on the nuanced trust relationship between providers and young SMM patients. Furthermore, the results of this study enhance the literature around trust in medical settings as well as expanding the use of the TIP Scale to SMM populations. Findings can be used to inform future guidelines for provider training around the healthcare needs of SMM and racially diverse populations as well as the critical need to establish trust providers and patients of marginalized identities. Additionally, this study highlights the critical role of trust in physicians when considering the initiation of biomedical interventions such as PrEP. Moreover, this study highlights the need for additional research examining trust among queer femme populations as well as transgender and gender diverse individuals. This is critically important as states such as Tennessee work to actively harm the health of SMM through the elimination of Ending the Epidemic funding that provides critical HIV counseling and testing services. In political climates where access to publicly funded sexual healthcare services is determined by residence, physicians in private practice become essential to the provision of these services and trust in physicians is paramount for patient disclosure of sexual orientation, sexual behaviors, and sexual health needs.

AVAILABILITY OF DATA AND MATERIALS

The data presented in this study are available on reasonable request from the corresponding author.

AUTHOR CONTRIBUTIONS

JJ—designed the research study; performed the research. PNH—provided help and advice on the study design. YFL and MG—analyzed the data. YFL, MC, MG, JJ, TJ and BG—wrote the manuscript. All authors contributed to editorial changes in the manuscript. All authors read and approved the final manuscript.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Informed consent was obtained from all individual participants included in the study. The Study was approved by the Yale University (IRB 2000022607).

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

SUPPLEMENTARY MATERIAL

Supplementary material associated with this article can be found, in the online version, at <https://oss.jomh.org/files/article/1818164278510665728/attachment/Supplementary%20material.docx>.

REFERENCES

- [1] Huynh HP, Dicke-Bohmann A. Humble doctors, healthy patients? Exploring the relationships between clinician humility and patient satisfaction, trust, and health status. *Patient Education and Counseling*. 2020; 103: 173–179.
- [2] Berger R, Bulmash B, Drori N, Ben-Assuli O, Herstein R. The patient-physician relationship: an account of the physician's perspective. *Israel Journal of Health Policy Research*. 2020; 9: 33.
- [3] Nguyen AL, Schwei RJ, Zhao YQ, Rathouz PJ, Jacobs EA. What matters when it comes to trust in one's physician: race/ethnicity, sociodemographic factors, and/or access to and experiences with health care? *Health Equity*. 2020; 4: 280–289.
- [4] Thom DH, Ribisl KM, Stewart AL, Luke DA. Further validation and reliability testing of the trust in physician scale. *Medical Care*. 1999; 37: 510–517.
- [5] Senteio CR, Yoon DB. How primary care physicians elicit sensitive health information from patients: describing access to psychosocial information. *Qualitative Health Research*. 2020; 30: 1338–1348.
- [6] Świątoniowska-Lonc N, Polański J, Tański W, Jankowska-Polańska B. Impact of satisfaction with physician-patient communication on self-care and adherence in patients with hypertension: cross-sectional study. *BMC Health Services Research*. 2020; 20: 1046.
- [7] Fava GA, Cosci F, Sonino N, Guidi J. Understanding health attitudes and behavior. *The American Journal of Medicine*. 2023; 136: 252–259.
- [8] Reschovsky JD, Kemper P, Tu H. Does type of health insurance affect health care use and assessments of care among the privately insured? *Health Services Research*. 2000; 35: 219–237.
- [9] Churchwell K, Elkind MS, Benjamin RM, Carson AP, Chang EK, Lawrence W, *et al.* Call to action: structural racism as a fundamental driver of health disparities: a presidential advisory from the American Heart Association. *Circulation*. 2020; 142: e454–e468.
- [10] Boulware LE, Cooper LA, Ratner LE, LaVeist TA, Powe NR. Race and trust in the health care system. *Public Health Reports*. 2003; 118: 358–365.
- [11] Crenshaw KW. Mapping the margins: intersectionality, identity politics, and violence against women of color. In Fineman MA (ed.) *The public nature of private violence* (pp. 93–118). 1st edn. Routledge: New York. 2013.
- [12] Hsieh N, Ruther M. Despite increased insurance coverage, nonwhite sexual minorities still experience disparities in access to care. *Health Affairs*. 2017; 36: 1786–1794.
- [13] McWilliams JM. Health consequences of uninsurance among adults in the United States: recent evidence and implications. *The Milbank Quarterly*. 2009; 87: 443–494.
- [14] Dahlhamer JM, Galinsky AM, Joestl SS, Ward BW. Barriers to health

- care among adults identifying as sexual minorities: a US national study. *American Journal of Public Health*. 2016; 106: 1116–1122.
- [15] Ayanian JZ, Weissman JS, Schneider EC, Ginsburg JA, Zaslavsky AM. Unmet health needs of uninsured adults in the United States. *JAMA*. 2000; 284: 2061–2069.
- [16] Jaiswal J, Halkitis PN. Towards a more inclusive and dynamic understanding of medical mistrust informed by science. *Behavioral Medicine*. 2019; 45: 79–85.
- [17] Shangani S, Naanyu V, Operario D, Genberg B. Stigma and healthcare-seeking practices of men who have sex with men in Western Kenya: a mixed-methods approach for scale validation. *AIDS Patient Care and STDs*. 2018; 32: 477–486.
- [18] Jaiswal J, Griffin M, Singer SN, Greene RE, Acosta IL, Kaudeyr SK, *et al.* Structural barriers to pre-exposure prophylaxis use among young sexual minority men: the P18 cohort study. *Current HIV Research*. 2018; 16: 237–249.
- [19] Calabrese SK, Rao S, Eldahan AI, Tekeste M, Modrakovic D, Danganan D, *et al.* “Let’s be a person to person and have a genuine conversation”: comparing perspectives on PrEP and Sexual health communication between black sexual minority men and healthcare providers. *Archives of Sexual Behavior*. 2022; 51: 2583–2601.
- [20] Goparaju L, Praschan NC, Warren-Jeanpiere L, Experton LS, Young MA, Kassaye S. Stigma, partners, providers and costs: potential barriers to PrEP uptake among US women. *Journal of AIDS Clinical Research & STDs*. 2017; 8: 730.
- [21] Kimball D, Rivera D, Gonzales M 4th, Blashill AJ. Medical mistrust and the PrEP cascade among Latino sexual minority men. *AIDS and Behavior*. 2020; 24: 3456–3461.
- [22] Pregnall AM, Churchwell AL, Ehrenfeld JM. A call for LGBTQ content in graduate medical education program requirements. *Academic Medicine*. 2021; 96: 828–835.
- [23] Quinn K, Dickson-Gomez J, Zarwell M, Pearson B, Lewis M. “A gay man and a doctor are just like, a recipe for destruction”: how racism and homonegativity in healthcare settings influence PrEP uptake among young black MSM. *AIDS and Behavior*. 2019; 23: 1951–1963.
- [24] Stults CB, Grov C, Anastos K, Kelvin EA, Patel VV. Characteristics associated with trust in and disclosure of sexual behavior to primary care providers among gay, bisexual, and other men who have sex with men in the United States. *LGBT Health*. 2020; 7: 208–213.
- [25] Hascher K, Jaiswal J, Lorenzo J, LoSchiavo C, Burton W, Cox A, *et al.* ‘Why aren’t you on PrEP? You’re a gay man’: reification of HIV ‘risk’ influences perception and behaviour of young sexual minority men and medical providers. *Culture, Health & Sexuality*. 2023; 25: 63–77.
- [26] Halkitis PN, Moeller RW, Siconolfi DE, Storholm ED, Solomon TM, Bub KL. Measurement model exploring a syndemic in emerging adult gay and bisexual men. *AIDS and Behavior*. 2013; 17: 662–673.
- [27] Anderson LA, Dedrick RF. Development of the trust in physician scale: a measure to assess interpersonal trust in patient-physician relationships. *Psychological Reports*. 1990; 67: 1091–1100.
- [28] Gopichandran V, Kalsingh M, Veliah G. Psychometric properties of the trust in physician scale in Tamil Nadu, India. *Journal of Family Medicine and Primary Care*. 2017; 6: 34–38.
- [29] Griffin-Tomas M, Cahill S, Kapadia F, Halkitis PN. Access to health services among young adult gay men in New York City. *American Journal of Men’s Health*. 2019; 13: 1557988318818683.
- [30] Griffin M, Jaiswal J, King D, Singer SN, Halkitis PN. Sexuality disclosure, trust, and satisfaction with primary care among urban young adult sexual minority men. *The Journal for Nurse Practitioners*. 2020; 16: 378–387.
- [31] Schmid AT, Payam S. “I don’t want to have sex as a woman”: a qualitative study exploring sexuality and sexual practices of drag queens in Germany. *Journal of Homosexuality*. 2023; 70: 2180–2200.
- [32] Nowaskie DZ, Sowinski JS. Primary care providers’ attitudes, practices, and knowledge in treating LGBTQ communities. *Journal of Homosexuality*. 2018; 66: 1927–1947.
- [33] Chaudry A, Jackson A, Glied SA. Did the affordable care act reduce racial and ethnic disparities in health insurance coverage? *Commonwealth Fund*. 2019; 11.
- [34] Griffin M, Cahill S, Kapadia F, Halkitis PN. Healthcare usage and satisfaction among young adult gay men in New York city. *Sexual and Gender Diversity in Social Services*. 2020; 32: 531–551.
- [35] Braksmajer A, Fedor TM, Chen S, Corales R, Holt S, Valenti W, *et al.* Willingness to take PrEP for HIV prevention: the combined effects of race/ethnicity and provider trust. *AIDS Education and Prevention*. 2018; 30: 1–12.
- [36] Devarajan S, Sales JM, Hunt M, Comeau DL. PrEP and sexual well-being: a qualitative study on PrEP, sexuality of MSM, and patient-provider relationships. *AIDS Care*. 2020; 32: 386–393.
- [37] New York City Department of Health. Evaluating PrEP social marketing campaigns: NYC’s staysure. 2017. Available at: <https://www.nyc.gov/assets/doh/downloads/pdf/dires/evaluating-prep-social-marketing-campaigns.pdf> (Accessed: 09 June 2024).
- [38] Katz E, Edelstein B, Turiano NA. Age as a moderator of health outcomes and trust in physicians. *Journal of Aging and Health*. 2023; 36: 308–319.

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