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Sexually Transmitted Infection Related Stigma and Shame Among African American Male Youth: Implications for Testing Practices, Partner Notification, and Treatment

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Abstract

A self-administered, street intercept survey was conducted in order to examine the relation of stigma and shame associated with sexually transmitted infections (STI) to STI testing practices, partner notification, and partner-delivered treatment among young African American men ($n = 108$) in a low-income, urban community in San Francisco with high STI burden. Multivariate logistic regression revealed that increasing STI-related stigma was significantly associated with a decreased odds of STI testing, such that every standard deviation increase in stigma score was associated with 0.62 decreased odds of having been tested (aOR: 0.62, 95% CI: 0.38–1.00), controlling for age. STI stigma was also significantly associated with a decreased willingness to notify non-main partners of an STI (aOR: 0.64 95% CI: 0.41–0.99). Participants with higher levels of stigma and shame were also significantly less likely to be willing to deliver STI medication to a partner (stigma aOR: 0.57, 95% CI: 0.37–0.88; shame aOR 0.53 95% CI: 0.34–0.83). Findings suggest that STI-related stigma and shame, common in this population, could undermine STI testing, treatment, and partner notification programs. The medical establishment, one of the institutional factors to have reinforced this culture of stigma, must aid efforts to reduce its effects through providing integrated services, reframing sexual health in campaigns, educating clients, and providing wider options to aid disclosure and partner notification practices.

Introduction

IN THE UNITED STATES THERE ARE STARK DISPARITIES with regard to sexually transmitted infections (STIs), with extremely high rates occurring within the African American community, particularly among young African Americans.¹ Data from the Centers for Disease Control (CDC) demonstrate that African Americans have the most severe burden of HIV of all racial/ethnic groups in the United States. This group accounted for 44% of all new HIV infections among adults and adolescents (≥ 13 years of age) in 2010, although they make up only 14% of the United States population,²; of annual new infections in African Americans, one third are in youth aged 13–24.³ Among a nationally representative sample of adolescents, 21% of black respondents tested positive for gonorrhea, chlamydia, or trichomoniasis compared with 3% of white respondents, 8% of Hispanic re-

spondents, and 6% of Asian respondents.⁴ In fact, a review of racial/ethnic disparities across the broad array of health outcomes measured by the Healthy People 2010 objectives found that STIs and HIV accounted for the greatest health disparities affecting African Americans.⁵ These disparities exist for both young African American men and women.⁶

STI/HIV disparities underline the urgent need for improving access to sexual health services and outreach in the African American community, where utilization of preventive healthcare services is also low. Compared with whites, African Americans are less likely to have visited a healthcare provider in the prior year, less likely to have a primary source of healthcare, and more likely to be seen in an emergency department.⁷ Although young adults consistently have the highest rates of STIs of any age group, they are notoriously hard to reach, often underutilizing health services.⁸ Furthermore, African American men are less likely than women to

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have contact with the healthcare system,⁹ tend to wait longer to seek care when they experience symptoms, and are less likely to perform self-examinations or be screened for chronic/infectious diseases.¹⁰ As a result, young African American men comprise a priority population for facilitating improved access to and utilization of healthcare services, including sexual health services. This need is exemplified by the National HIV/AIDS Plan, which has reducing HIV-related health disparities as one of its three primary goals.¹¹

Most research examining sexual health service utilization in traditionally underserved communities has focused on socio-demographic characteristics and structural constraints, such as access to insurance or the physical accessibility of clinics. However, barriers to care go far beyond issues of access to services, rather, barriers to care include aspects of the medical, social, and cultural environment that discourage STI/HIV testing and treatment, such as stigmatization and shame surrounding STIs. Stigma has been described as an individual's fears that he/she will be subject to negative societal attitudes and discrimination because of having a particular trait, whereas shame refers to the internalization of social ideas and the resultant negative self-opinion.¹² It has been proposed that marginalized groups can experience much higher levels of stigma because of a 'layered stigma' effect.¹³ To date, a handful of studies have found an association between higher levels of STI-related stigma and shame and failure to test for STIs among males and females.^{12,14} Other investigators have noted a relationship between STI-related stigma and shame and prolonged care-seeking intervals^{15,16} and reduced likelihood of discussing STIs with partners or health service workers.^{13,17-19} There has been limited research however, on the effect of STI-related stigma and shame on African American men, their STI testing practices, and the association between STI-related stigma and shame and partner treatment in this population.

We assessed STI stigma and shame in this understudied population by examining the relation between STI-related stigma and shame on three outcomes: STI testing, partner notification, and patient-delivered partner treatment (PDPT). We hypothesized that increased STI-related stigma and shame would be inversely associated with STI testing, partner notification, and PDPT. We tested these hypotheses by conducting a survey with African American male youth living in a low-income, high STI morbidity neighborhood of San Francisco.

Methods

Study population

Between June and July of 2010, participants were recruited in an area of San Francisco with high rates of poverty, crime, and unemployment,²⁰ as well as the highest gonorrhea rate and the second highest chlamydia rate for adolescents (ages 14-20) in the city.²¹ Eligibility criteria included self-identifying as an African American male resident of San Francisco, 15-24 years of age. This age group has the highest rates of bacterial STI in California.²²

Procedure

Trained outreach personnel from the San Francisco Department of Public Health STI-Control Branch recruited 112 men for this study. We approximated an inclusive and representative sample by mapping 13 recruitment routes that

geographically covered the study target area, including both commercial and residential areas of the community (e.g., housing developments). Outreach workers walked these routes in the afternoon hours between the hours of 2:30 and 6:00 p.m., recruiting participants by systematically approaching all young men consecutively on the route. They then administered a brief eligibility checklist, reviewed an information sheet, and obtained oral consent to participate. The survey was conducted anonymously; participants responded to a self-administered survey on an iPod touch device either inside a local community partner organization or on a stoop or quiet area of the street. Survey items included sociodemographic characteristics, sexual behaviors, health seeking behaviors, preferences for STI services, and items eliciting information on personal and contextual factors that may enable or prevent healthy behaviors. Upon completion, participants were offered a \$10 dollar gift card. Those who chose not to participate were asked the reason for refusal. The study protocol was approved by the Committee for Human Research (CHR) at the University of California, San Francisco.

Measures

We measured STI-related stigma and shame using the stigma and shame scales developed by Fortenberry et al.¹⁴ Fortenberry found an α of 0.77 for the five item STI-related stigma scale and an α of 0.80 for the six item STI-related shame scale; both scales have been utilized and validated in other studies.^{12,14,23} As in the Fortenberry research, items were rated on a five point Likert response scale with categories ranging from "strongly disagree" to "strongly agree" (see Table 1).

Health seeking behaviors included (1) having ever been tested for STIs and HIV, (2) preferences for partner notification, and (3) willingness to deliver medicine to a partner for an STI (PDPT). Two partner notification variables were created, one for main partners and one for other (non-main) partners, using responses to two questions. "If you had an STI, then your (main/other) partners should also be treated with medicine. How would you prefer to tell your (main/other) partner that they should be treated?" Those responding that they would either bring a partner a letter from a doctor or would take the medicine directly to the partner were categorized as willing to self-notify; those responding that they would ask a health worker to contact the person/people, or would not tell them at all, were categorized as not willing to self-notify. Respondents also responded "yes" or "no" to the question "Would you ever give medicine to a partner for an STD?" Covariates included age, which was classified as 15-19 or 20-24; level of education, which was categorized into "less than high school," "graduated high school," and "more than high school;" and socioeconomic status, which was assessed by self-reported perception of how their family lived: "barely making ends meet" or "making it."²⁴

Data analysis

As the STI-related stigma and shame scale has been previously validated,^{12,14,23} we used confirmatory factor analysis (CFA) to explore model fit of the two factor scale. The potential range for the stigma scale was 5-25 and the range for the shame scale was 6-30. For CFA, we used the weighted least-squares with mean and variance adjustment (WLSMV) estimator in Mplus Version 6 (Muthén and Muthén, 2010),

TABLE 1. RESPONSES TO STI-RELATED STIGMA AND SHAME SCALE (N=108)

| Item | Factor loading | Strongly disagree n % | Somewhat disagree n % | Don't disagree or agree n % | Somewhat agree n % | Strongly agree n % |
|--|----------------|--------------------------|--------------------------|-----------------------------------|-----------------------|-----------------------|
| <i>Stigma questions</i> | | | | | | |
| I would feel dirty if a doctor examined me for an STD | 0.77 | 55 (50) | 13 (12) | 17 (15) | 15 (14) | 11 (10) |
| Getting an STD would make me feel lonely | 0.72 | 41 (37) | 15 (14) | 18 (16) | 20 (18) | 17 (15) |
| Getting examined for an STD makes people think I have no morals | 0.82 | 52 (47) | 18 (16) | 16 (14) | 16 (14) | 9 (8) |
| Most people I know think that an STD is a sign of a weak character | 0.57 | 30 (27) | 19 (17) | 30 (27) | 21 (19) | 11 (10) |
| Getting an STD means I have no morals | 0.91 | 49 (44) | 16 (14) | 27 (24) | 13 (12) | 6 (5) |
| <i>Shame Questions</i> | | | | | | |
| Getting an STD means a person is dirty | 0.75 | 36 (32) | 15 (14) | 19 (17) | 23 (21) | 18 (16) |
| People with STDs have been hanging with the wrong crowd | 0.67 | 23 (21) | 20 (18) | 30 (27) | 23 (21) | 15 (14) |
| Getting and STD means I don't keep myself clean | 0.91 | 47 (42) | 14 (13) | 19 (17) | 18 (16) | 13 (12) |
| People with STDs should be ashamed of themselves | 0.84 | 42 (38) | 8 (7) | 36 (32) | 15 (14) | 10 (9) |
| Getting and STD means I don't take care of myself | 0.89 | 47 (42) | 10 (9) | 24 (22) | 18 (16) | 12 (11) |
| Getting examined for an STD means I'm not clean | 0.79 | 55 (50) | 10 (9) | 25 (23) | 11 (10) | 10 (9) |

which is suitable for ordered response categories. All remaining data analyses were conducted using STATA Version 11.0 (StataCorp LP, College Station, TX). Nonparametric tests were used to determine associations between perceived STI-related stigma and shame and respondent characteristics, behaviors, and outcomes, including Kruskal–Wallis tests for ordinal variables and rank sum Mann–Whitney tests for binary variables. We assessed covariates that were associated with STI-related stigma and shame at $p < 0.15$ in bivariate analyses for confounding in multivariate regression. We used multivariate logistic regression to test the hypothesis that individuals who reported more STI-related stigma and shame would be less likely to report having ever been tested for STIs, to notify a partner of an STI, and to deliver PDPT, than would those who reported less STI-related stigma and shame. Final multivariate models controlled only for age. Stigma and shame scores were standardized for multivariate logistic regression for ease of interpretation. To complement logistic regression odds ratios, we also used a Poisson regression approach to generate approximate prevalence ratios to facilitate interpretation of our results; we report prevalence ratio results in the text to complement tabled odds ratios from the logistic models.

Results

A total of 202 potential subjects were approached of which 34 (17%) refused intercept, 9 had already participated, and 28 failed to meet eligibility. Of the 131 potential participants who were screened and eligible, 112 (85%) enrolled and completed the survey, 3 (2%) enrolled but did not complete the survey, and 17 (13%) declined participation, for which the most common explanation was lack of time. One participant's completed survey was not saved on the survey device and data were, therefore, lost. Three participants who

stated that they were between 15 and 24 years during screening then gave ineligible ages on the survey and were not included in this analysis. This left a total of 108 participants for analysis.

The median and interquartile range (IQR) of the STI-related stigma scale was 12 (7–15); median (IQR) of the STI-related shame scale was 15 (9–20). Good global model-data fit was obtained with five items in the stigma dimension and six items in the shame dimension [$\chi^2(43) = 92.06, p \leq 0.01$; comparative fit index (CFI) = 0.97; root mean square error of approximation (RMSEA) = 0.10; weighted root mean square residual (WRMR) = 0.72];²⁵ all factor loadings were strong in magnitude (see Table 1). The scales had strong α coefficients of 0.82 and 0.88 for stigma and shame, respectively. This compared well with previous performance of the scales, which ranged between 0.77 and 0.92 for the stigma scale and between 0.80 and 0.89 for the shame scale.^{12,14,23}

More than two thirds of the participants were 15–19 years old, and 31% were 20–24 years old (see Table 2). Forty-two percent had not yet graduated from high school (many were still in school), 41% had graduated from high school, and 18% reported having attended or currently attending vocational training or college. Three quarters of respondents socioeconomically classified their family as “making it.” Eighty-nine percent of the respondents had had sex, with roughly half having a debut age of ≤ 13 (55%). In the past 3 months, 71% had had sex with a “main partner” and 68% had had sex with a “non-main partner.” Seventy-three percent of respondents had ever been tested for an STI, with a similar number reporting that they were likely to get tested for an STI in the next year; 67% had been tested for HIV.

Bivariate analysis showed a positive association between having been tested for STIs with the following characteristics: older age ($p = 0.01$), more years of schooling ($p = 0.01$), higher level of education ($p = 0.02$), having had sex in the last

TABLE 2. MEDIAN AND INTERQUARTILE RANGE (IQR) AND LEVEL OF ASSOCIATION OF STI-RELATED STIGMA AND SHAME BY SOCIODEMOGRAPHIC AND BEHAVIORAL CHARACTERISTICS

| <i>Cohort characteristics</i> <i>Overall median (IQR)</i> | <i>Total</i> <i>n = 108^b n (%)</i> | <i>STI-related stigma^a</i> <i>12 (7–15) Median (IQR)</i> | <i>STI-related shame^a</i> <i>15 (9–20) Median (IQR)</i> |
|--|--|--|---|
| <i>Sociodemographics</i> | | | |
| <i>Age</i> | | | |
| 15–19 | 75 (69.4) | 13 (8–16) | 16 (10–20) |
| 20–24 | 33 (30.6) | 10 (6–14) | 14 (8–21) |
| <i>Level of education</i> | | | |
| Less than high school | 45 (41.7) | 13 (9–15) | 17 (11–20) |
| Graduated high school | 44 (40.7) | 11 (7–16) | 15 (9–22.5) |
| More than high school | 19 (17.6) | 8 (6–16) | 10 (7–17) |
| <i>Perceived income</i> | | | |
| Barely making it | 29 (26.9) | 12 (8–15) | 13 (9–20) |
| Making it | 79 (73.2) | 11 (7–17) | 15 (9–20) |
| <i>Currently in school</i> | | | |
| Yes | 72 (66.7) | 12 (8–15.5) | 16 (10.5–20) |
| No | 36 (33.3) | 10 (6.5–15) | 13 (8.5–19.5) |
| <i>Currently working (in past 3 months)</i> | | | |
| Yes | 64 (59.3) | 12 (7–15) | 15 (9–21.5) |
| No | 44 (40.7) | 11.5 (7–16.5) | 15 (9.5–20) |
| <i>Behaviors</i> | | | |
| <i>Ever had sex</i> | | | |
| Yes | 96 (88.9) | 12 (7–16) | 15 (9.5–20) |
| No | 12 (11.1) | 9 (7–14.5) | 18 (9–21.5) |
| <i>Age of sexual debut^c</i> | | | |
| ≤ 13 | 53 (55.2) | 11 (7–15) | 16 (10–20) |
| ≥ 14 | 43 (44.8) | 13 (8–16) | 14 (9–20) |
| <i>Seen a doctor for any reason in the last year</i> | | | |
| Yes | 71 (65.7) | 11 (7–15) | 15 (10–20) |
| No | 37 (34.3) | 13 (7–16) | 16 (9–21) |
| <i>STI tested previously</i> | | | |
| Yes | 79 (73.2) | 11 (7–15) ^f | 14 (9–20) |
| No | 29 (26.9) | 15 (9–17) | 17 (11–22) |
| <i>HIV tested previously</i> | | | |
| Yes | 72 (66.7) | 10.5 (7–14.5) ^f | 14 (9–20) |
| No | 36 (33.3) | 14.5 (8.5–17) | 17 (10–20) |
| <i>Ever had an STI</i> | | | |
| Yes | 20 (18.5) | 8.5 (6–13) ^f | 11 (8–19) |
| No | 88 (81.5) | 13 (8–16) | 16 (10–20) |
| <i>Would self-notify main partner about STI^d</i> | | | |
| Yes | 72 (72.0) | 10.5 (7–14.5) | 14.5 (8.5–19) |
| No | 28 (28.0) | 14 (8.5–17) | 17.5 (11–23) |
| <i>Would self-notify non-main partners about STI^d</i> | | | |
| Yes | 67 (65.7) | 11 (7–15) | 14 (8–20) |
| No | 35 (34.3) | 13 (9–17) | 17 (11–22) |
| <i>Would give medicine to a partner for STI</i> | | | |
| Yes | 74 (68.5) | 10 (7–15) ^g | 12 (8–18) ^g |
| No | 34 (31.5) | 14.5 (11–17) | 18 (14–23) |
| <i>Would talk to someone about STI^c</i> | | | |
| Yes | 76 (73.1) | 10 (7–14.5) | 13 (9–18) ^f |
| No | 28 (26.9) | 14.5 (8.5–17.5) | 19 (11.5–23) |

^aTests were rank sum for binary categories and Kruskal–Wallis for variables with more than two categories.

^bNumbers vary slightly because of missing responses.

^cIncludes only those who are sexually active.

^dExcludes those who do not have a specified partner. Options for self-notification coded as “yes” if selected “would bring a letter from the doctor” and “would take medication directly to you,” and “no” if selected “would ask a health worker to contact them” and “wouldn’t tell them at all.”

^eIncludes talking to parent, other family member, teacher, coach, counselor, or friend. Excludes nonresponse.

^f $p \leq 0.05$; ^g $p \leq 0.01$.

TABLE 3. ADJUSTED ODDS RATIOS (ORs) AND 95% CONFIDENCE INTERVALS (95% CI) OF EVER BEING STI TESTED, SELF-NOTIFYING PARTNERS OF STI (MAIN AND NON-MAIN), AND BRINGING MEDICATION TO PARTNERS, BY STI-RELATED STIGMA AND SHAME

| Variable | Ever STI tested Adjusted OR (95% CI) | Would self-notify main partner of STI Adjusted OR (95% CI) | Would self-notify other partner of STI Adjusted OR (95% CI) | Would bring medication to partners Adjusted OR (95% CI) |
|--------------------|--|---|--|--|
| STI-related stigma | 0.62 (0.38–1.00) | 0.65 (0.41–1.03) | 0.64 (0.41–0.99) | 0.57 (0.37–0.88) |
| STI-related shame | 0.74 (0.46–1.19) | 0.67 (0.43–1.05) | 0.71 (0.47–1.08) | 0.53 (0.34–0.83) |

All estimates adjusted for age.

3 months ($p=0.02$), and being <13 years of age at sexual debut ($p=0.03$). It was also found to be associated with inconsistent condom use with a main partner ($p=0.02$). Perception of personal risk was low (88.9%) and showed no association with STI testing history (bivariate data not shown).

Reporting less STI-related stigma was associated with the following health behaviors: ever having been tested for an STI ($p=0.02$), ever having had an HIV test ($p=0.05$), ever having had an STI ($p=0.04$), preference to self-notify main partners and non-main partners (not significant – both $p=0.08$), and willingness to bring a partner STI medication (highly significant $-p\leq 0.01$). Reporting lower levels of shame was significantly associated with willingness to bring a partner STI medication ($p\leq 0.01$) and talking to someone about STIs ($p=0.02$). STI-related stigma and shame were not associated with condom use with either a main partner or “other” partner.

Multivariate analysis controlled only for age, as age and education were highly collinear. Models indicated that increasing levels of STI-related stigma, but not shame, was significantly associated with ever having been STI tested. Every standard deviation increase in stigma score was associated with decreased odds of having been tested (aOR, 0.62; 95% CI, 0.38–1.00). Using a Poisson regression approach to approximate a prevalence ratio, this estimate is equivalent to an 11% reduced likelihood of being STI tested for every standard deviation increase in STI-related stigma. Those reporting less stigma and shame were also more likely to report preference to self-notify partners of STI and intent to bring medications to partners, although not all associations were significant (see Table 3). Controlling for age, every standard deviation increase in STI-related stigma was associated with a 0.64 decrease in odds in preference to self-notify “other” (non-main) partners (aOR, 0.64; 95% CI, 0.41–0.99). Every standard deviation increase in STI-related stigma and shame was associated with a decreased odds of intention to bring medication to partners (aOR, 0.57 95% CI, 0.37–0.88 and

aOR, 0.53 95% CI, 0.34–0.83, respectively). Using prevalence ratios, every standard deviation increase in STI-related stigma and shame is associated with 16% and 18% reduced likelihood of bringing medication to a partner, respectively.

In an attempt to explore the mechanisms of effect or directionality of the association, we also examined the association between stigma and shame and (1) getting STI tested and (2) having a positive STI result (see Table 4). Through this investigation, we noted a significant trend: higher median (IQR) stigma and shame scores among participants who had never been tested for STI [stigma=15 (9–17); shame=17 (11–22)], average stigma and shame scores among those who were tested and received a negative result [stigma=11 (7–15); shame=14.5 (10–20)], and the lowest scores among those who tested and received a positive result for an STI [stigma=8 (5–15); shame=11 (8–20)].

Discussion

Our findings support the hypothesis that STI-related stigma and shame are associated with getting tested, partner notification, and PDPT among male African American youth in a low-income, high STI prevalence neighborhood. Specifically, lower levels of STI-related stigma were associated with a history of being tested for STI whereas lower levels of STI-related shame were not significantly associated with testing history; however, estimates went in the expected direction. These findings are congruous with previous research. One study that examined care-seeking behavior and testing practices among urban men and women of mixed age and race found that both stigma and shame were higher among people who had not tested for gonorrhea or HIV in the past year.¹⁴ Other studies reported similar findings, one among urban, predominantly black youth, demonstrated that STI-related stigma (but not shame) was inversely associated with odds of having been tested for STIs.¹² Our findings similarly showed stigma to be more associated than shame was with testing practices. This may be because stigma involves the

TABLE 4. STI-RELATED STIGMA AND SHAME IN RELATION TO HAVING BEEN TESTED FOR STIs AND TEST OUTCOME

| Variable | Never STI tested Median (IQR) | STI tested–negative result Median (IQR) | STI tested–positive result Median (IQR) |
|---------------------------------|----------------------------------|--|--|
| STI-related stigma ^b | 15 (9–17) | 11 (7–15) | 8 (5–15) |
| STI-related shame ^a | 17 (11–22) | 14.5 (10–20) | 11 (8–20) |

Test for trend ^a $p\leq 0.05$; ^b $p\leq 0.01$.
IQR, interquartile range.

belief that others, rather than your own feelings, are conferring negative attributes on you; therefore, in relation to sharing information with others about your sexual health, stigma may have a greater impact than shame.

We also found a trend that the lowest stigma and shame scores corresponded to participants who had had a positive STI result, average stigma and shame scores corresponded to those who had tested with a negative STI result, and the highest stigma and shame scores were found among those who had never tested. As a result, we can infer that whereas people's stigma/shame around STI may determine their testing behaviors, the experience of getting tested may also shape one's STI-related stigma/shame. Perhaps the testing experience reduces stigma and shame to a greater extent when one receives a positive result, because it requires acceptance that anyone can get an STI, and, as in most cases these are easily treatable, the situation is not as bad as had been imagined. It is also possible that those with the lowest stigma and shame are more likely to get tested and more likely to report positive results. Therefore, although this study provides evidence of the importance of addressing stigma and shame to reduce the disproportionate burden of STIs among African American young men, there is need for longitudinal research to investigate the direction of this relationship.

Lower levels of both STI-related stigma and shame are associated with increased intentions to bring medication directly to partners (PDPT), which is supported by previous research. One study showed that STI/HIV-related stigma may deter partner notification in that young people may be dissuaded from broaching the subject of STIs with their partners and with clinicians/health service workers, to avoid disclosing names for partner tracing.¹⁷ Another study investigating the acceptability of patient-delivered partner screening and treatment among urban American STI clinic patients found that stigma was a barrier to the use of these services.¹⁸ Other studies have also shown stigma to impact on disclosure to partners as well as providers.^{13,19} Partner notification and PDPT programs have been demonstrated to greatly improve health outcomes;²⁶ PDPT for chlamydia and gonorrhea has been available in San Francisco since 1998 and is integrated into STI partner management. STI-related stigma and shame could negatively affect the success of such programs. Stigma was more highly associated than shame with willingness to self-notify partners of an STI, particularly "other" partners. As stated, this may suggest a weaker influence of shame in personal relationships and a stronger influence of perceived stigma associated with STIs. Other studies have shown disclosure and use of PDPT to be less likely to occur for casual partners,²⁷ as was also suggested by this research. It may be the case that a variety of referral and treatment options need to be available for index patients to choose from; options that meet different needs for different types of partners. These could include: provider referral, contract referral (partner notification by healthcare personnel for those partners who fail to visit the health clinic by an agreed date) or patient referral with or without PDPT, home sampling kits, index patient counseling, contact cards, and provision of additional information.

Young African American men are at risk for STIs, but are simultaneously less likely to access healthcare services. Previous research has shown an association between stigma and prolonged care-seeking intervals for males and fe-

males,^{15,16} and that stigma may be an important factor for adolescents' decisions to disclose sexual behavior information to health practitioners.²⁸ Other research has demonstrated that adolescents with higher stigma *and* shame were more likely to delay seeking services.^{13,15,23,29} Some have attributed this to "anticipated stigma," which can be measured using a different scale, and is designed to assess the extent to which individuals anticipate negative intra- and interpersonal consequences should they contract HIV/STIs in the future, and operates independently of personal endorsement of stigmatizing beliefs or stereotypes.^{30,31} Although our research did not investigate anticipated stigma or potential delays in seeking care, we did see a large percentage of youth not seeing doctors regularly (34%). However in this area of San Francisco, where outreach services are numerous, a large proportion of men had been tested for STI and HIV, although approximately 18% of those tested had been tested in jail or juvenile hall; in California, all youth are STI tested at entry to correctional unit facilities.³²

Other investigators have called for a need to understand the sources of STI stigma and shame in order to better target responses.^{13,31} Although rarely assessed in the literature on STI stigma, some have posited that stigma and shame stem from prevalent sociocultural norms; as sex has historically been a stigmatized behavior, STIs are stigmatized as well. As a result, sexual stigma combined with the perpetuated notion of individual responsibility/blame for not adopting certain behaviors has made STIs the "symbols of immoral or irresponsible behavior."¹³ Institutional factors may also reinforce this culture of stigma, including public health and medical institutions and their use of the media, which may have inadvertently contributed to the stigmatization of STIs through scare tactics as well as emphasis on personal autonomy, moral failure and blame, or judgmental attitudes by some providers. Reversing this trend requires the health establishment to play a pivotal role in demystifying and reframing STIs in future awareness-raising campaigns, and re-education of providers to ensure nonjudgmental service provision.^{33,34}

Several limitations of this study are worth noting. This is a small sample, which impacts the power to detect associations. As STI screening was not a component of the study, STI self-report was used and can be unreliable. The age ranges of 15–19 and 20–24 as covariates of the study are wide, and therefore do not permit detailed investigation of adolescent sexual risk-taking behavior at each age. Although sampling was systematic, the sample is not representative of all youth in the area. Finally, our site, San Francisco, is a unique urban environment, and the findings of this analysis may not be generalizable to other urban areas. Despite limitations, this study confirms previous research that STI-related stigma and, to a lesser degree shame, may impact access to prevention, diagnosis, treatment, and partner notification practices among young African American men.

Conclusions

The results of this investigation hold implications for health services working with African American male youth. Reducing the negative connotations associated with STIs may facilitate uptake of STI services in this population, critical to achieving more equitable and improved sexual health. Addressing STI stigma in sexual health programming

can be achieved by integrating STI services and positive messaging, reinforcing STI care as a component of holistic health for youth. Isolating STI services and messages that produce negative and discriminatory perceptions may only contribute to STI stigma and shame. Integrated services¹² have been recommended, especially for people of color who experience major health disparities and barriers to accessing services^{35,36} and for attracting and retaining young clients, especially by virtue of offering convenience and “camouflaging” services that carry stigma.³⁷ Integrated services in this context may lead to raised awareness, increased uptake and frequency of testing, less delay in care seeking, and greater uptake and success of partner notification and treatment programs. Furthermore, partner notification within such integrated services can be enhanced with counseling and support offered to the index patient on how to disclose STI status and communicate with partner/s; providing patients with “coping skills” is underway in some facilities in accordance with CDC recommendations.¹⁸ Educational materials exist that serve to empower and enable patients to refer their partners if needed. These should be available as standard along with neutral, trustworthy, and sensitive instructional and packaging information with the treatment.

Further examination is required to fully understand the different dimensions of stigma and the roles of stigma and shame along with attributions of responsibility and blame commonly associated with STIs, and how this effects disclosure and communication with partners.³⁸ In particular, as indicated in this research, there are differences among disclosure, referral, and PDPT between main and casual partners that needs to be explored further, as does the need to promote a shift in social attitudes and norms within the African American community with regard to perceptions of STIs, which can be spearheaded by the public health and medical establishments.

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