

Patterns of Men's Use of Sexual and Reproductive Health Services

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CONTEXT: Men have been neglected as a target population for sexual and reproductive health services. As a result, little is known about the rates and antecedents of men's service utilization.

METHODS: Data from the 2002 National Survey of Family Growth were used to examine utilization of sexual and reproductive health services among 3,611 men aged 20–44 who had ever had sex with a woman. Associations between demographic and behavioral variables and measures of service utilization were assessed in univariate and logistic regression analyses.

RESULTS: Only 48% of men reported receiving sexual and reproductive health services in the past year. The testicular exam was the most commonly received service (35%), but half of men who had had a testicular exam had received no other sexual and reproductive health services. Levels of unmet need for services among men engaging in sexual risk behaviors were substantial (32–63%). The odds of having received nontesticular services were elevated among men who were nonwhite and older, engaged in sexual risk behaviors, had had a physical exam and had public health insurance. The odds of having received only a testicular exam were elevated among men who were white, had lower levels of sexual risk, had had a physical exam and had private or no insurance.

CONCLUSIONS: Men who have sex with women are not receiving adequate levels of sexual and reproductive health care, and the care they receive is neither comprehensive nor integrated. Standards of clinical care need to be defined and communicated to men and providers.

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Sexual and reproductive health care providers in the United States have traditionally served women and, with the spread of HIV and AIDS, men who have sex with men. Heterosexual men remain largely invisible, although there have been calls for change.^{1–6} For example, one of the public health goals of the Healthy People 2010 initiative is increased male involvement in sexual and reproductive health programs.⁷ Male involvement is a prerequisite for the accomplishment of other goals in the program as well, including improvements in the sexual and reproductive health of men and their partners, and in the well-being of families.

The need for more accessible sexual and reproductive health services for men is demonstrated by the fact that although condom use has increased during the past two decades, levels of unprotected sex and other sexual risk behaviors among men remain high. For example, data from the 2002 National Survey of Family Growth (NSFG) indicate that more than one-third of sexually active men who were neither married nor cohabiting had not used a condom during sex at any time in the past four weeks. The prevalence of condom nonuse increased with age, from 26% among 15–19-year-olds to 55% among 25–29-year-olds and 73% among 40–44-year-olds.⁸ Moreover, nearly one-fourth of men aged 15–44 reported having had 15 or more female partners during their lifetime, and the

proportion was even higher (one-third) among black men in this age-group.⁹

Given these high levels of risky behavior, it is unfortunate that the U.S. health care system fails to meet the sexual and reproductive health care needs of men. One indication of the system's deficiency is the lack of formal screening or service guidelines for males. Although one 2005 document offers guidelines for men during and beyond adolescence,¹⁰ most suggested standards of care focus on adolescents.^{11–13} Moreover, the standards that have been articulated vary from document to document, and this lack of a consensus means that neither health care providers nor their clients are informed about what services men should receive and when they should receive them.

The inadequate response to the sexual and reproductive health needs of heterosexual men in the United States is related to other factors as well. First, men who have sex with women are not perceived as the primary population at risk for the two highest-priority sexual and reproductive health issues: unplanned pregnancy and HIV and AIDS. Second, access to condoms, the major method by which men prevent pregnancy and STDs, does not require a health care visit. Third, although several medical specialties and health care settings focus on women's sexual and reproductive health, and HIV services target

men who have sex with men, there are no comparable specialties and few settings that focus on the sexual and reproductive health needs of heterosexual males. Development of responsive men's services requires substantial change in the organization of sexual and reproductive health service delivery, as well as in the training of health care providers, both of which may help explain the continued lack of services.¹⁴⁻¹⁷

Men also face economic barriers to sexual and reproductive health care. Twenty-three percent of men aged 15-49 have no health insurance; the proportion is highest (37%) among men in their early 20s, an age at which sexual risk-taking is especially common.⁴ Even among men who have coverage, insurance often does not reimburse clients or providers for the sexual and reproductive health services (including counseling and education as well as medical care) that men need.

Moreover, demand factors may impede the use of sexual and reproductive health care among men who have access to services. Men make substantially fewer health care visits than women,¹⁸⁻²⁰ a finding that persists even among people with health problems.²¹ The low level of health care service use by men may be rooted in social constructions of masculinity, which deter men from acknowledging their health care needs and accessing services.²² Dominant representations of masculinity emphasize strength, self-reliance, robustness and risk-taking, none of which is compatible with perceiving health care needs or seeking services (particularly preventive care). Finally, because a large proportion of STDs are asymptomatic, men often are unaware that they need care even when infected.²³

RESEARCH ON MEN'S USE OF SERVICES

The small body of studies on men's sexual and reproductive health service utilization, conducted primarily in the 1990s, documented that men were underserved and prompted advocacy for male services.^{24,25} In response to the calls for services, the U.S. Office of Population Affairs and its Office of Family Planning issued an initiative in 1997 that funded community-based health and social service organizations to deliver clinical and educational sexual and reproductive health services to men. One limitation of extant research on men's utilization of services is that the studies are outdated and do not capture the potential impact of this federal initiative.

Another factor that limits knowledge about men's utilization of sexual and reproductive health care is that the research has focused primarily on teenagers.²⁵⁻²⁷ It is important to examine men's receipt of such care beyond the teenage years because levels of HIV and other STDs are highest among men in their 20s.²⁸ In addition, older males are less likely than adolescents to encounter sexual and reproductive health information in their daily lives.²⁹ For example, in 2000, 73% of states, 87% of school districts and 86% of high schools required that students receive HIV education in high school.³⁰ Although the

content of school-based sex education is often limited, these programs provide a formal context for discussion that is absent for older men. Research is needed to examine access to and patterns of sexual and reproductive health care utilization among men 20 and older.

Data on women's receipt of sexual and reproductive health services raise questions about care for men that have not been addressed. For example, women are more likely to receive clinical gynecologic services (Pap and pelvic exams) than any other sexual or reproductive health service—a pattern that is particularly evident among women who are white, are well educated and have high incomes.³¹ What kinds of sexual and reproductive health services are men most likely to receive? Does the pattern of care that men receive vary by race, education, income or other individual characteristics?

The 2002 NSFG provides data that address these limitations. In the analyses presented here, we used NSFG data to provide a timely and in-depth portrait of the rates and patterns of sexual and reproductive health care use among men aged 20-44. We also examined the factors that may be associated with whether men receive various types of sexual and reproductive health care.

METHODS

Data and Measures

We analyzed data from the in-person and audio computer-assisted self-interview questionnaires for the 4,928 men aged 15-44 interviewed for the 2002 NSFG. The NSFG uses a nationally representative multistage area probability sample; the 2002 sampling design and procedures have been described in detail elsewhere.³² The response rate for the male survey was 78%.

We focused our analysis on the 3,611 men aged 20-44 who had had oral, anal or vaginal sex with a woman at least once. We omitted men who had had sex only with men because information about sexual and reproductive health is more limited for men who have sex with women than for men who have sex exclusively with men.* In the multivariate analyses, we further limited the sample to the 3,418 men who were non-Hispanic white, non-Hispanic black or Hispanic, as the number of men from other racial and ethnic backgrounds was too small to include in subgroup analyses.

The time frame for all behavioral measures and non-fixed individual characteristics (e.g., health insurance status, relationship status) was the year before the 2002 NSFG interview. Our most comprehensive sexual and reproductive health services variable was receipt of any of the following during that interval: birth control (including condom) advice or services; STD advice, counseling, testing or treatment; HIV advice, counseling or testing; advice about sterilization; or a testicular exam. Because a sizable minority of men who had received services had

*Ninety-two percent of the men in our sample described themselves as heterosexual.

TABLE 1. Percentage distribution of men aged 20–44 who had ever had sex with a woman, by selected characteristics, 2002 National Survey of Family Growth

| Characteristic | % (N=3,611) |
|---|----------------|
| SOCIAL/DEMOGRAPHIC | |
| Age | |
| 20–24 | 18.4 |
| 25–29 | 18.1 |
| 30–34 | 20.1 |
| 35–39 | 21.1 |
| 40–44 | 22.2 |
| Race/ethnicity | |
| White | 65.8 |
| Hispanic | 16.9 |
| Black | 11.5 |
| Other | 5.9 |
| Income as % of poverty level | |
| 0–149 | 21.3 |
| 150–299 | 28.4 |
| ≥300 | 50.3 |
| Relationship status | |
| No partner | 19.1 |
| Noncohabiting partner | 17.4 |
| Married/cohabiting | 63.6 |
| RISK BEHAVIOR | |
| Casual relationship with last partner† | |
| Yes | 14.8 |
| No | 85.2 |
| Sex with nonmonogamous female‡ | |
| Yes | 12.0 |
| No | 88.0 |
| Multiple/concurrent partners‡ | |
| Yes | 9.9 |
| No | 90.1 |
| Other†,§ | |
| Any | 4.7 |
| None | 95.3 |
| HEALTH CARE ACCESS | |
| Had a physical exam† | |
| Yes | 44.4 |
| No | 55.6 |
| Health insurance† | |
| Private | 68.7 |
| Public | 9.5 |
| None | 21.8 |
| SEXUAL AND REPRODUCTIVE HEALTH CARE | |
| Received any care† | |
| Yes | 48.1 |
| No | 51.9 |
| Total | 100.0 |

†In 12 months prior to survey. ‡More than two partners in past year or more than one partner now. §Gave money or drugs for sex; received money or drugs for sex; had sex with an injection-drug user; or had sex with an HIV-positive person. Notes: Characteristics were measured at time of survey unless otherwise noted. Sample size is unweighted; percentages have been weighted to provide nationally representative estimates. Percentages may not total 100.0 because of rounding.

had only a testicular exam, we constructed two other summary measures: receipt of only a testicular exam and receipt of at least one nontesticular sexual or reproductive health service.

A range of additional individual attributes—social and demographic factors, sexual risk factors and access to

health care—were included as variables. The social and demographic factors were age, race and ethnicity, family income (categorized as 0–149%, 150–299%, or 300% or more of the poverty level) and relationship status. The sexual risk factors, which served as a proxy for need for care, were whether a man had had a casual relationship* with his last sex partner; whether he had had more than two partners in the year before the interview or had more than one partner at the time of the interview; and whether he had given or received money or drugs for sex, had sex with an injection-drug user or had sex with a person who was HIV-positive in the previous year. Finally, access to health care was measured by health insurance status (private, public or no insurance) and whether a man had had a physical exam in the past year. Respondents who had had both public insurance (Medicaid, Medicare, state-sponsored health plan, Medigap, military health care, Indian Health Service or other government health care) and private insurance in the previous year were coded as having had public insurance.

Analysis

Data were analyzed using SPSS version 14. All univariate analyses were conducted on weighted data to yield nationally representative estimates. Given the complex nature of the NSFG's sampling design, we used the SPSS complex samples program in all bivariate and multivariate analyses to provide corrected variance estimates for significance tests. This program employs the Taylor series linearization method to generate the variance estimates. We derived odds ratios from bivariate and multivariate logistic regressions from within the complex samples program.

The absence of national standards for men's sexual and reproductive health care precluded the possibility of estimating unmet need for care by comparing the observed level of care with an accepted standard. However, we used a two-step process to indirectly estimate unmet need. First, we estimated the proportion of men who engaged in various sexual risk behaviors and who did not use a condom at their last sexual encounter. We then estimated unmet need as the proportion of these men who had not received any nontesticular sexual and reproductive health services in the year before the interview.

The logistic regression models of service utilization included three sets of variables previously found to be associated with health care utilization—namely, the social and demographic variables, sexual risk factors and health care access variables noted above.^{33,34} We conceptualized men's marital and cohabitation status as a sexual risk factor, rather than as a demographic characteristic, in the logistic regression models, because men who are in casual and shorter-term relationships tend to engage in higher levels of sexual risk behavior than those who are married or cohabiting.

*A relationship was defined as casual if the respondent was not married to, cohabiting with, engaged to or steadily dating his partner.

RESULTS

Sample Characteristics

The 3,611 men included in our analysis were relatively evenly distributed among five-year age-groups (Table 1). Sixty-six percent of the men were white, 17% were Hispanic and 12% were black. Half of the respondents had incomes of at least 300% of the poverty level, and most (64%) were married or cohabiting. Fifteen percent reported that they had had a casual relationship with their most recent sex partner, and 10% had had more than two partners in the previous year or currently had multiple partners. Five percent had had sex with an injection-drug user or with an HIV-infected individual, or had given or received money or drugs for sex. A sizable minority (44%) of men reported having had a physical exam in the year before the survey. More than two-thirds (69%) had private health insurance, and 22% had no health insurance. Overall, 48% of the men reported having received some type of sexual or reproductive health service in the 12 months before the interview.

Receipt of Services

Among men who had engaged in sexual risk behaviors, the unmet need for sexual and reproductive health care was substantial (Table 2). A sizable proportion (31–51%) of these men had not used a condom at last sex, and 32–63% of those who had not used a condom at last sex had not received nontesticular sexual and reproductive health care during the past year. If the levels of sexual behavior reported in the NSFG accurately represent the levels among all U.S. men aged 20–44 who have ever had sex with a woman, then more than one million men in three of the four sexual risk categories neither used a condom at last sex nor received nontesticular sexual and reproductive health care during the past year. In addition, among men at risk of involvement in an unintended pregnancy* (34% of the sample), unmet need was high. Forty-nine percent (representing 17.5 million U.S. men) had not used a condom at last sex, and 65% of these men had not received nontesticular sexual and reproductive health services in the last year (not shown).

The sexual or reproductive health service that respondents had most often received was a testicular exam (35%; Table 3), followed by services for HIV (21%) or STDs (19%). Relatively small proportions of men reported having received services for or advice about birth control (including condoms) or sterilization. When we restricted the measure of sexual and reproductive health care to receipt of nontesticular services, the rate of care was reduced from 48% to 30% (not shown).

The predominance of testicular exams over nontesticular sexual and reproductive health services is more

*Respondents were considered to be at risk of involvement in an unintended pregnancy if they did not want a child, neither they nor their partner had been sterilized and they had not used reliable birth control at last sex in the year before the survey.

TABLE 2. Percentage of men engaging in selected sexual risk behaviors who did not use a condom at last sex, percentage of those not using a condom at last sex who had an unmet need for sexual and reproductive health services, and estimated number of U.S. men with unmet need

| Behavior | Did not use condom at last sex | Unmet need† | No. (in 000s) |
|--|--------------------------------|-------------|---------------|
| Casual relationship with last female partner | 30.7 | 32.1 | 1,059 |
| Sex with nonmonogamous female | 48.7 | 51.4 | 1,351 |
| Multiple/concurrent partners‡ | 42.2 | 47.9 | 1,068 |
| Other§ | 50.9 | 62.8 | 660 |

†Among men who did not use a condom at last sex, proportion who received no nontesticular services in past year. ‡More than two partners in past year or more than one partner now. §Gave money or drugs for sex; received money or drugs for sex; had sex with an injection-drug user; or had sex with an HIV-positive person. Note: Behaviors refer to the 12 months before the survey unless otherwise noted.

evident if the sample is restricted to eligible men who had received at least one service in the past year. Seventy-three percent of such men reported having received a testicular exam, a far larger proportion than had received services for or advice about HIV (44%), STDs (40%), birth control (20%) or sterilization (5%). Moreover, more than half (52%) of men who had had a testicular exam had received no other sexual and reproductive health services in the previous year, compared with 15% of men who had received HIV services, 16% of men who had received STD services and 9% of men who had received birth control services. Finally, a testicular exam, but no other sexual or reproductive health service, appears to be a routine part of a physical examination for men. Seventy-one percent of men who had had a physical exam in the year before the interview had had a testicular exam during that interval, but only 45% had received nontesticular sexual and reproductive health services (not shown).

TABLE 3. Percentage of all men, and percentage of men receiving at least one sexual or reproductive health service, who received specific services; and percentage of men receiving specific services who received only those services

| Service | Received this service | | Received only this service |
|---------------------------------------|-----------------------|-----------------------------|----------------------------|
| | All men | Men who received ≥1 service | |
| Testicular exam | 35.3 | 73.4 | 51.6 |
| HIV services | | | |
| Testing/advice | 21.3 | 44.3 | 14.5 |
| Testing | 16.2 | 34.1 | 14.3 |
| STD services | | | |
| Testing/treatment/advice | 19.0 | 39.6 | 15.8 |
| Testing/treatment | 15.6 | 32.5 | 17.8 |
| Birth control services/advice† | 9.6 | 20.0 | 8.7 |
| Sterilization advice | 2.5 | 5.1 | 10.1 |

†Including condoms.

Patterns of Nontesticular Care

Data on the three most common types of nontesticular services (STD care, HIV care and birth control services) indicate that men do not generally receive comprehensive sexual and reproductive health care. Seventy percent of men reported having received none of these services in the year before the survey. Among men who had received at least one service, the data on comprehensiveness of care yielded a mixed picture. On the negative side, 48% reported having received only one of the services (not shown). On the positive side, nearly one-third had received two services, and 20% had received all three. Fifty-seven percent of men who had received nontesticular care had had a testicular exam as well.

HIV Tests

The NSFG data challenge the notion that HIV testing is conducted for sexual and reproductive health reasons and that such testing functions as a gateway to related services. Among men who had had an HIV test in the year before the interview, fewer than half (43%) reported that they had had the test for sexual and reproductive health reasons—that is, because they or their doctor had wanted to know their HIV status (Table 4). Nineteen percent reported that they had been tested for a practical reason that had no direct relationship to sexual and reproductive health (e.g., hospitalization, surgical procedure, marriage license or application for health insurance). The remaining 38% chose “some other reason” as their motive for testing.

Fifty-seven percent of men who had had an HIV test for sexual health reasons reported that they had talked to a doctor about HIV in the year before the survey or had received HIV information or counseling from a health care provider in that interval. The proportions were substantially smaller among men who had had an HIV test for practical reasons (35%) or had been tested for “some other reason” (34%).

Sexual and reproductive health issues may have played a role in HIV testing among some men who cited practical or other reasons for their tests. To cast the widest net for identifying HIV testing within a sexual and reproductive health context, we counted both men tested for sexual and reproductive reasons and those tested for practical or

TABLE 4. Percentage distribution of men who had an HIV test, and percentage of those tested who received other HIV or STD services, in past year, by reason for HIV test

| Reason for HIV test | Had HIV test | Received HIV information/counseling† | Received STD test/treatment |
|--------------------------------|--------------|--------------------------------------|-----------------------------|
| All | 100.0 | 44.7 | 55.5 |
| Sexual and reproductive health | 42.6 | 57.1 | 66.4 |
| Practical reason‡ | 19.3 | 35.4 | 30.8 |
| Other | 38.1 | 33.9 | 50.9 |

†Includes men who talked to a doctor about HIV or received advice or counseling from a provider about HIV. ‡Includes tests required for hospitalization or to obtain a marriage license, insurance policy or surgical procedure.

TABLE 5. Odds ratios (and 95% confidence intervals) from logistic regression analysis assessing associations between selected characteristics and receipt of nontesticular sexual or reproductive health care or of testicular care only

| Characteristic | Nontesticular care | Testicular care only |
|--------------------------------------|---------------------|------------------------|
| SOCIAL/DEMOGRAPHIC | | |
| Age | 1.03 (1.01–1.05)*** | 0.99 (0.97–1.01) |
| Race/ethnicity | | |
| Black vs. white | 2.12 (1.57–2.86)*** | 0.50 (0.35–0.71)*** |
| Hispanic vs. white | 1.51 (1.14–1.99)** | 0.55 (0.36–0.84)** |
| Black vs. Hispanic | 1.41 (1.05–1.89)* | 0.90 (0.57–1.42) |
| Income as % of poverty level | | |
| 0–149% vs. ≥300% | 1.18 (0.87–1.60) | 0.77 (0.51–1.16) |
| 150–299% vs. ≥300% | 0.89 (0.69–1.16) | 0.91 (0.64–1.31) |
| RISK BEHAVIOR | | |
| Not married/cohabiting† | 1.39 (1.09–1.78)** | 0.69 (0.51–0.95)* |
| Multiple/concurrent partners‡ | 1.77 (1.22–2.58)** | 0.53 (0.31–0.89)* |
| Others,†† | 2.03 (1.22–3.39)** | 0.61 (0.26–1.41) |
| HEALTH CARE ACCESS | | |
| Health insurance†† | | |
| Public vs. none | 3.82 (2.30–6.36)*** | 0.26 (0.15–0.47)*** |
| Private vs. none | 0.91 (0.69–1.21) | 1.27 (0.87–1.86) |
| Public vs. private | 4.19 (2.77–6.33)*** | 0.21 (0.12–0.35)*** |
| Had a physical exam†† | 3.66 (2.88–4.66)*** | 17.45 (11.94–25.50)*** |

*p<.05. **p<.01. ***p<.001. †Reference group consists of respondents who had no partner as well as those who were married or cohabiting. ‡More than two partners in past year or more than one partner now. §Gave money or drugs for sex; received money or drugs for sex; had sex with an injection-drug user; or had sex with an HIV-positive person. ††In 12 months prior to survey. Note: Characteristics were measured at time of survey unless otherwise noted. The variable “casual relationship with last partner” was omitted from this analysis because of high correlation with “married or cohabiting.”

nonspecific reasons who had received HIV information, counseling or advice from a medical professional in the year before the survey. Even with this expanded definition, the proportion of all men who had received HIV testing for sexual and reproductive health reasons was only 8% (not shown)—half of the proportion of all respondents who received HIV tests. In other words, among U.S. men aged 20–44 who have ever had sex with a woman, half of those who have an HIV test are motivated by reasons unrelated to sexual and reproductive health.

From a sexual and reproductive health perspective, a sensible approach to care would combine HIV testing with STD testing. If a man is at risk for HIV, he is likely at risk for other STDs as well. However, only 56% of men who reported having had an HIV test over the past 12 months had had an STD test in that interval. The proportion was larger (66%) among men who had had their HIV test for sexual and reproductive health reasons.

Predictors of Receipt of Care

Multivariate models reveal notable differences in the predictors of nontesticular and testicular sexual and reproductive health care (Table 5). Among social and demographic variables, age was positively associated with receipt of nontesticular care (odds ratio, 1.03) but had no

relationship to receipt of a testicular exam only. Black and Hispanic men were significantly more likely than white men to have received nontesticular care (2.1 and 1.5, respectively) and less likely to have received a testicular exam only (0.5 and 0.6). Black men also were more likely than Hispanic men to have received nontesticular care (1.4).

All three sexual risk behavior measures were associated with receipt of care. Men who had a partner but were neither married nor cohabiting were more likely than other men to have received nontesticular care (odds ratio, 1.4) and less likely to have had a testicular exam only (0.7). The same pattern of care was true for men with multiple or concurrent partners versus those without (1.8 and 0.5). Finally, men who had engaged in any of the other sexual risk behaviors were more likely than other men to have received nontesticular care (2.0).

We also examined the relationship between health care access and receipt of sexual and reproductive health care. Compared with men who had private or no insurance, respondents with public insurance were significantly more likely to have received nontesticular care (odds ratios, 3.8–4.2) and significantly less likely to have received a testicular exam only (0.2–0.3). However, men with private insurance were no more likely than those without insurance to have received either form of care. Having had a physical exam in the past year was positively associated with receipt of both types of care, but the magnitude of the relationship was substantially greater for receipt of a testicular exam only. Men who had had a physical exam had 3.7 times the odds of those who had had no exam of having received nontesticular care; however, they had 17.5 times the odds of having had a testicular exam only.

DISCUSSION

Safe and responsible sexual decision-making requires action from men as well as from women. To act safely and responsibly, men need screening and clinical care. They also need counseling and education about sexual health, safer-sex behaviors, shared responsibility for contraception and parenting, and the rights of both men and women to have volitional and pleasurable sexual experiences.

Despite these needs, half of men aged 20–44 who had ever had sex with a woman had not received any sexual and reproductive health care in the 12 months prior to the 2002 NSFG, and only 30% of such men had received nontesticular sexual and reproductive health care. It is encouraging that men who engaged in sexual risk behaviors were more likely than other men to have received nontesticular services. At the same time, sizable numbers of men at heightened risk for STDs or unplanned pregnancy had received no nontesticular sexual and reproductive health care in the year prior to their interview.

An important obstacle to men's receiving adequate levels of sexual and reproductive health care is the lack of professional consensus regarding standards of care. Neither men themselves nor their providers receive clear messages about the types of services that men should

receive, or how often they should receive them. Addressing the unmet need for services requires a consensus document that establishes guidelines of care for adolescent and nonadolescent men, insurance coverage for the recommended services and plans for communicating these standards of care to providers and the public.

Considerations for Service Delivery

When men do receive sexual and reproductive health services, the care is fragmented. Far more men receive testicular than nontesticular care. Moreover, although testicular exams are a routine aspect of physical exams for men, nontesticular sexual and reproductive health care apparently is not. This finding is interesting, given the current debate about the clinical value of testicular exams: Evidence does not support their effectiveness in reducing mortality and morbidity from testicular cancer.³⁵ Whatever one's position in this debate, a testicular exam by itself does not address men's need for counseling about or services for HIV and other STDs, pregnancy prevention and other sexual and reproductive health matters. None of the proposed standards for routine sexual and reproductive health care for men endorses a model that prioritizes a testicular exam over other sexual and reproductive health services for men aged 20–44.

A comprehensive service delivery model would include, at minimum, HIV, STD and birth control services (including female methods, sterilization and emergency contraception), as well as a testicular exam for all sexually active men. These services would consist of counseling or advice about these topics and, for some men, testing and treatment. Although this analysis indicated that men are not receiving comprehensive care, further research is needed to examine the determinants of comprehensiveness of the nontesticular sexual and reproductive health services men receive.

The 2006 initiative from the Centers for Disease Control and Prevention (CDC) endorsing routine HIV screening in health care settings for all patients aged 13–64³⁶ raises concerns about the attainment of comprehensive sexual and reproductive health services for men. Integrating HIV testing into routine physical exams may help to destigmatize and increase testing, as well as to link it to other sexual and reproductive health services; to this end, the initiative explicitly endorses routine HIV testing for any patient receiving STD tests. We are concerned, however, about the delinking of HIV testing and counseling. Although HIV tests conducted in the year prior to the 2002 NSFG were supposed to be linked to pretest counseling, a substantial proportion of men reported having been tested without receiving any counseling. The CDC guidelines will only increase this practice. Although the acceptance of testing without pretest counseling may increase the likelihood that medical providers will conduct HIV tests, it represents a formal acceptance of non-integrated services and misses a significant window of opportunity for education and counseling.

A consensus document that defines standards of care for clinical practice is essential.

Our multivariate analysis indicated that men of color are more likely than white men to receive nontesticular sexual and reproductive health care, even after racial and ethnic differences in income, relationship status, sexual risk behavior and connectedness to the health care system have been controlled for. What might explain this finding? One possible explanation is that health care providers may consciously or unconsciously use race and ethnicity in assessing whether to offer nontesticular sexual and reproductive health services to men. They may be more likely to ask about sexual behavior and to routinely provide nontesticular sexual and reproductive health services for men from higher-risk demographic groups than for those from lower-risk groups. If they do not ask men from the latter groups about their sexual behavior, they have no information about these men's need for services. In short, providers' assessments about the need for sexual and reproductive health screening and care may be based more on a man's group risk profile than on his individual risk behavior.

Another possibility is that men raised in communities with higher levels of sexual risk behavior (e.g., black men) may have been exposed to, and developed a normative acceptance of, men's need for and receipt of sexual health care. Thus, regardless of their actual sexual risk behaviors or need for care, such men may be more willing than others to access services and to report their sexual and reproductive health concerns to providers. Conversely, accessing services may be more stigmatizing, and thus less likely, for men from lower-risk communities, where exposure to sexual and reproductive health care may be uncommon. NSFG data do not enable a direct test of either of these hypotheses.

The association of health insurance with men's use of sexual and reproductive health services requires further examination as well. Our findings suggest that insurance is not simply an economic enabler. For example, men with private insurance were no more likely than those with no health insurance to have received sexual and reproductive health care. Private insurance may not adequately cover the costs of care and thus may not provide economic access to services.

Men with public insurance, however, had significantly elevated odds of having received nontesticular care. The relationship held even when we controlled for poverty, sexual risk behavior and access to health care, all of which could affect receipt of sexual and reproductive health services. The finding may be a methodological artifact of the heterogeneous nature of the public health insurance category. (In the NSFG, this category included Medicaid, Medicare, military health care, Indian Health Service, state-sponsored health plans and other government health care.)

Alternatively, the type of health insurance men have may be a proxy for their source of sexual and reproductive health care, as men with private insurance generally receive care from private physicians and those on public insurance often receive clinic-based care. As with race and ethnicity, providers in these different settings may rely on

the aggregate characteristics and sexual risk profiles of their client population when serving individual clients. Private providers, who tend to see more socioeconomically advantaged clients, may assume a lower need for sexual and reproductive health care and not routinely ask about or screen for needs in this domain. In contrast, providers in clinics, who see a more disadvantaged population, may assume need and therefore more routinely provide services. In fact, sexual and reproductive health services may be standard components of care in many clinic settings. Because the NSFG does not provide data on where men older than 24 received their sexual and reproductive health care, we could not examine this issue.

Similarly, because we lacked data on men's source of care, we could not examine this variable's relationship to receipt of care. The NSFG provided complete data for women, and findings indicate that the setting in which women received care—private providers or HMOs versus clinics—was strongly associated with the type of care received.¹⁸ The lack of data on men's providers also constrained our ability to explore whether the racial and ethnic differences in the types of sexual and reproductive health care men received were related to the source of care.

Another limitation of this analysis is that because the 2002 cycle of the NSFG was the first to include males, inevitable problems in question wording complicated the interpretation of some findings. For example, a critical issue in assessing the comprehensiveness of sexual and reproductive health care for men is whether they are given information about female methods as well as about condoms. However, because the birth control services question did not distinguish between female contraceptives and condoms, we could not examine this issue.

CONCLUSION

Our findings support the need for work at several levels to reach the Healthy People 2010 goal of increasing men's access to sexual and reproductive health care. Specifically, a consensus document that defines standards of care for clinical practice is essential; this document should specify the sexual and reproductive health services that men need and the ages and intervals at which they should receive them. These standards need to be widely and effectively communicated to both providers and consumers of care. Communication to consumers requires the creation of developmentally and culturally appropriate messages to convince sexually active men that it is necessary and appropriate for them to obtain sexual and reproductive health care. Training of health care providers is critically needed so that they will be able to deliver the services defined by the consensus document. Particular emphasis should be placed on providers' asking men about sex and their sexual behaviors, and providing the educational and counseling services men need. Finally, advocacy is necessary to obtain additional Title X funding for men's sexual and reproductive health services, so that men's services will not have to compete

with women's services for already limited resources. Advocacy is also critical to extend health insurance coverage to uninsured men and to ensure that health plans cover sexual health care.

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