ARTICLE

# Prevalence of sexual dysfunction and pursuit of sexual medicine evaluation among male physicians—a survey

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We sought to characterize the prevalence of sexual dysfunction and barriers to treatment among male physicians. Between June and December 2022, male physicians were invited to complete a questionnaire regarding sexual function. Surveys were disseminated electronically via social media and professional medical societies using Qualtrics (Provo, UT). In totla, 235 responses were included in the final analysis. The mean age of respondents was 36.3 ± 7.4 years (range 23–72). 27 (11.5%) reported having seen a doctor for sexual health. Of these 27, 40.7% saw a physician for erectile dysfunction, 29.6% for low libido, 22.2% for premature ejaculation, 7.4% for delayed ejaculation, and 33.3% for other concerns. An additional 29 (12.3%) considered establishing care for sexual issues but didn't, mostly due to being too busy. 46 (19.6%) respondents reported having taken medication to improve erectile function. Therefore, in a cohort of young male physicians, 23.8% had seen or considered seeing a doctor for sexual health concerns, and nearly 1 in 5 had taken medication for erectile dysfunction. Male physicians appear to be at higher risk for sexual dysfunction than the general population and face significant and unique barriers in access to care for sexual dysfunction.

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## INTRODUCTION

Male sexual dysfunction, an umbrella term that includes erectile dysfunction (ED), diminished libido, and abnormal ejaculation or orgasm, has been shown by numerous studies to be highly prevalent, affecting up to 40% of men by the age of 40 [1–5]. Beyond the well-established association between sexual dysfunction and comorbid conditions such as cardiovascular disease and diabetes [6–9], sexual dysfunction is also highly associated with depression, stress, and relationship issues [10–15]. Physicians very commonly experience stress, burnout, and work-life dissatisfaction, possibly at twice the rate of the general working population [16]. As a result, physicians may suffer from both physical and psychological manifestations, such as depression, fatigue, and strain on interpersonal relationships, possibly placing them at higher risk for sexual dysfunction compared to the general population in the setting of augmented psychosocial stressors and their associated physical consequences [17–22]. However, there is a lack of scientific literature examining the prevalence of sexual dysfunction among male physicians.

We characterized rates of sexual dysfunction among male physicians. We secondarily sought to identify barriers to sexual healthcare utilization among male physicians and risk factors associated with sexual dysfunction.

## MATERIALS & METHODS

Between June 2022 and December 2022, male physicians aged 18 and older were invited to complete a questionnaire regarding sexual function. All male physicians who had graduated medical school were eligible participate, regardless of training level (resident, fellow, attending). Surveys were disseminated electronically via social media and professional medical societies using the Qualtrics online survey tool (Provo, UT).

The questionnaire gathered demographic information from 235 respondents as well as responses to questions regarding sexual function and sexual health-related healthcare utilization. Erectile and ejaculatory function were surveyed using the questions comprising the International Index of Erectile Function Erectile Function Domain (IIEF-EF) and the Male Sexual Health Questionnaire-Ejaculatory Dysfunction (MSHQ-EjD) Short Form [23, 24]. The survey also included an adaptation of the Maslach Burnout Inventory for Medical Professionals (MBI-HSS-MP), which includes 22 questions to assess burnout [25, 26]. In the MBI-HSS-MP, each question earning a possible score of 0 to 6 and total possible burnout score ranging from 0 to 132 (with higher scores indicating more burnout).

Informed consent was obtained electronically from all subjects prior to beginning the survey. Responses were collected and statistical analyses were performed in Qualtrics and Stata. Significant associations were evaluated using the chi-square or Fisher's exact tests for categorical data or the two-sample t-test or analysis of variance for continuous data. For statistical tests, p-values at or below 0.05 were considered significant. Center values are specified as median or mean in the text.

This research has been reviewed and approved by an Institutional Review Board (IRB).

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**Table 1.** Study demographics among survey participants ($N = 235$).

| Variable | *N* (%) |
|---|---|
| Age | |
| ≤29 years | 27 (11.5%) |
| 30–39 years | 115 (48.9%) |
| 40–49 years | 36 (15.3%) |
| 50–59 years | 11 (4.7%) |
| ≥60 years | 2 (0.9%) |
| Missing | 44 (18.7%) |
| Specialty | |
| Surgeon | 115 (48.9%) |
| Urologist | 79 (33.6%) |
| Non-Surgeon | 113 (48.1%) |
| Other | 7 (3.0%) |
| Sexual Orientation | |
| Straight (heterosexual) | 208 (88.5%) |
| Gay | 19 (8.1%) |
| Bisexual | 4 (1.7%) |
| Other | 4 (1.7%) |
| Relationship Status | |
| Single, never married | 14 (6.0%) |
| Married/domestic partnership | 182 (77.4%) |
| Significant Other | 36 (15.3%) |
| Divorced/separated & single | 3 (1.3%) |

## RESULTS

A total of 235 responses were included in the final analysis, including 115 (48.9%) surgeons and 113 (48.1%) non-surgeons. The mean age of respondents was 36.3 ± 7.4 years (range 23–72). The majority of respondents ($N = 208$, 88.5%) identified as heterosexual. Study demographics are reported in Table 1.

Among respondents, 27 (11.5%) reported having seen a doctor for sexual health-related issues. Of these, 11 (40.7%) saw a physician for ED, 8 (29.6%) for low libido, 6 (22.2%) for premature ejaculation, 2 (7.4%) for delayed ejaculation, and 9 (33.3%) for some other concern, with some respondents indicating seeing their physician for multiple sexual health issues. An additional 29 (12.3%) respondents considered establishing care for sexual issues but did not due to being too busy ($N = 18$, 62.1%), feeling embarrassed (N = 14, 48.3%), feeling it was not a priority at the time ($N = 12$, 41.4%), or being too familiar with the doctors within the healthcare system ($N = 8$, 27.6%). Six of the 29 (20.7%) reported forgoing seeing a physician because they self-medicated to address their sexual health concern. Of the 56 respondents who had either seen or thought about seeing a physician for sexual health issues, the mean IIEF-EF score was 24.4 ± 8.7 with 18 (32.1%) qualifying as having at least mild ED and 7 (12.5%) having severe ED (Table 2). Although not statistically significant, a lower rate of male physicians working >60 h/week saw or thought about seeing a physician for sexual health issues compared to male physicians working <60 h/week (34.8% vs 57.6%, $p = 0.09$) (Fig. 1).

Forty-six (19.6%) respondents reported having taken medication to improve erectile function. Among these, 22 (47.8%) reported taking pills "rarely," 12 (26.1%) "sometimes," 9 (19.6%) "most of the time," and 3 (6.5%) "every time."

There was no statistically significant difference in median burnout score between respondents who had seen a physician for sexual health issues and those who had not (73.9, interquartile range [IQR] 68.8–79.1 vs. 75.3, IQR [73.0–77.6], $p = 0.62$); however, respondents who thought about seeing a doctor but did not had higher median burnout scores compared to respondents who did not (83.3, IQR 76.8–89.9 vs. 74.0, IQR 71.6–76.4, $p = 0.01$).

**Table 2.** Erectile and ejaculatory function in respondents who either have seen or considered seeing a physician for sexual health concerns ($N = 56$).

| | |
|---|---|
| IIEF-EF Score | 24.4 ± 8.7 |
| No ED (26–30) | 38 (67.9%) |
| Mild ED (22–25) | 7 (12.5%) |
| Mild to moderate ED (17–21) | 1 (1.8%) |
| Moderate ED (11–16) | 3 (5.4%) |
| Severe ED (6–10) | 7 (12.5%) |
| MSHQ-EjD Score | 16.3 ± 3.6 |
| 16–20 | 36 (64.3%) |
| 11–15 | 16 (28.6%) |
| 6–10 | 4 (7.1%) |

*IIEF-EF* international index of erectile function, erectile function domain, *MSHQ-EjD* Male Sexual Health Questionnaire-Ejaculatory Dysfunction.

Only 12 (5.1%) respondents reported having ever been diagnosed with low testosterone. Of those, 6 (50.0%) were prescribed a former of testosterone supplementation (testosterone replacement therapy, clomiphene citrate, human chorionic gonadotropin, and/or anastrozole), whereas 6 (50.0%) did not pursue treatment. There was no significant association between low testosterone and whether or not respondents had seen or thought about seeing a physician for sexual health; neither was there any significant association between low testosterone and ED or ejaculatory dysfunction scores.

## DISCUSSION

To our knowledge, this is the largest survey examining the prevalence of sexual dysfunction among male physicians. Our results suggest that a significant proportion of young male physicians may be at risk for sexual dysfunction: 23.8% of the study cohort reported having seen or considered seeing a doctor for sexual health concerns, and 19.6% reported taking medication for ED.

The prevalence of sexual dysfunction in this physician cohort was relatively high when compared to age-similar cohorts in the general population. Notably, the mean age of respondents in the survey was 36.3 years old with 48.9% of our respondents between 30–39 and 75.7% being under 50 years old. This represents a relatively young study population compared to other longitudinal, population-based studies examining male sexual dysfunction, which tend to include older participants overall due to the strong association between sexual dysfunction and increasing age [2]. The Massachusetts Male Aging Study surveyed men between 40 and 70 years old and found that at age 40, 40% of men in their cohort acknowledged some degree of impaired sexual function and 10% recognized a decline in sexual function with each succeeding decade [3]. Another report by the National Health and Social Life Survey found that 31% of a cohort of younger men ages 18 to 59 years reported sexual dysfunction [27]. ED, the most common subtype of sexual dysfunction, was endorsed by 22% of men in the US aged 20–75 according to the multinational Men's Attitudes to Life Events and Sexuality (MALES) study [28]. However, Laumann et al. specifically reported age-stratified rates of ED, which was prevalent in just 7% of men aged 18–29, 9% of men aged 30–39, and 11% of men age 40–49 [5]. In this context, the prevalence of sexual dysfunction in approximately one quarter of young physician respondents suggests a higher rate of sexual dysfunction among physicians compared to non-physicians. Our findings are consistent with those of Bulut et al., which found higher rates of ED in male healthcare workers (nurses and physicians) to a control group of non-healthcare workers ($p < 0.001$) [29].

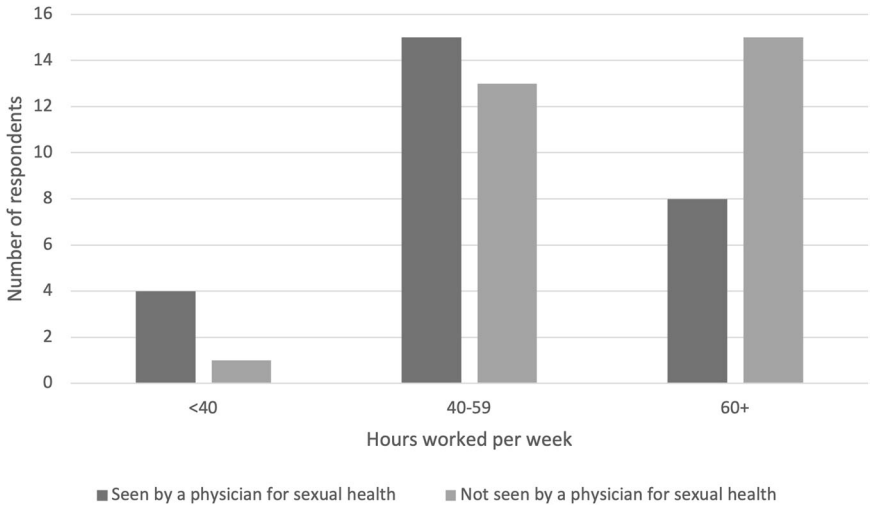


**Fig. 1 Number of respondents who saw a physician for sexual health concerns vs.** Number of respondents who thought about seeing a physician for sexual health concerns but did not, stratified by hours worked per week ($n = 56$).

These high rates of sexual dysfunction among male physicians may be partially attributed to the high levels of occupational stress and burnout experienced by medical professionals. The demanding nature of a medical career and training, long hours, and exposure to traumatic events may all contribute to the development of sexual dysfunction [16, 18]. We found a statistically significant difference in burnout scores between respondents who considered seeing a physician for sexual health issues (but ultimately didn't) and those who had never considered seeing a physician, indicating that burnout likely contributes to sexual dysfunction among physicians.

The survey responses also indicated the presence of numerous barriers in access to sexual healthcare among male physicians. The 29 (12.3%) respondents who considered establishing care for sexual issues but didn't cited reasons such as being too busy, feeling embarrassed, feeling it was not a priority at the time, and being too familiar with the doctors within the healthcare system. Importantly, almost half of these respondents endorsed feeling embarrassment as a barrier to establishing care, reinforcing prior research that social stigma may make it difficult for male physicians to seek help for sexual health concerns: numerous studies have found that men seek medical help at lower rates compared with women across a diverse range of health concerns, including both general physical health issues and mental health issues [30–35]. In addition, we found significant relationship between number of hours worked per week and whether respondents had seen a doctor for sexual, which suggests not only that working longer hours may be a risk factor for sexual dysfunction, but also that workdays that are too long may constitute a barrier in themselves to establishing sexual healthcare. Therefore, providing physicians with more control over their work schedules and promoting work-life balance may be important in preventing sexual dysfunction. Overall, these findings highlight the need for stronger support systems within our institutions to combat both demanding work schedules and social stigma as barriers to addressing sexual health concerns.

Our study also found that 46 (19.6%) of respondents had taken medication in the past to improve erectile function. This suggests that the majority of male physician respondents with concerns regarding ED were able to access appropriate pharmacological treatments. However, it is also possible this number is artificially inflated considering physicians, particularly urologists (which comprised a substantial minority of respondents) have better access to ED medications than the general population and are able to easily self-medicate.

This study was subject to several limitations. First, while disseminating the survey through social media and email allowed us to reach a broad scope of potential respondents, this limited our ability to determine a true response rate, as the denominator of possible survey participants is unknown. Second, this approach may have also increased the potential response bias in a number of ways. For example, individuals who were most interested in our study and/or more likely to take the survey may have been more likely to experience sexual dysfunction. Likewise, urologists are over-represented in the study population due to the authors' specialty affiliations and urology-specific reach on social media and beyond. As with any self-report measure, it is also possible that social stigma or other biases influenced responses. Third, the survey was conducted during the Covid-19 pandemic, during which there was significantly increased stress and burnout among healthcare workers. Prior studies have shown increase in sexual dysfunction among the general and healthcare population during the pandemic, and this may have impacted the survey results [29, 36, 37]. Lastly, despite the substantial sample size, the survey was not adequately powered to detect differences across medical specialties, levels of training, practice types, and other healthcare-related subcategories.

In conclusion, in a cohort of young male physicians, approximately one quarter of men reported sexual dysfunction and one fifth of men had taken medication for ED. Given the highly demanding work schedules, occupational stress, and a variety of other factors associated the medical profession, male physicians appear to be at higher risk for sexual dysfunction than the general population. Moreover, male physicians face significant and unique barriers in access to care for sexual dysfunction. These findings indicate a need for specific interventions to support sexual health among male physicians.

## DATA AVAILABILITY

The data that support the findings of this study are available from the corresponding author, JAH, upon reasonable request.

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## AUTHOR CONTRIBUTIONS

JL, JD, and JH conceived of the presented idea and study design. JL, JD, JA, DR, and JH contributed to the design of the survey and the collection and analysis of survey results. All authors contributed to the dissemination of the survey to respondents. All authors discussed the results of the survey and provided input on the drafted and final manuscripts.

## COMPETING INTERESTS

The authors declare no competing interests.

## ADDITIONAL INFORMATION

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