

## Research Article

# Analysis of Gender Differences in Sexual Dysfunction Perception, Prevalence, and Help-Seeking Behavior among Medical Students and Faculty at Texas Tech University Health Science Center (TTUHSC)

Lauren Cobbs<sup>1</sup>, Nicholas Householder<sup>2\*</sup>, Akshay Raghuram<sup>3</sup>, Skyler Thipaphay<sup>4</sup>, Kofi Agyare<sup>5</sup>, and Cameron Tuazon<sup>2</sup>

<sup>1</sup>Department of Internal Medicine, Texas Tech University Health Sciences Center School of Medicine, USA

<sup>2</sup>Year 2 MD Candidate, Texas Tech University Health Sciences Center School of Medicine, USA

<sup>3</sup>Department of Chemistry, Emory University, Atlanta, Georgia 30322, United States

<sup>4</sup>Fifth graders from Bean Elementary School, USA

<sup>5</sup>Consultant Anaesthetist at Royal National Orthopaedic Hospital NHS Trust, UK

**\*Corresponding author**

Nicholas Householder, Year 2 MD Candidate, Texas Tech University Health Sciences Center School of Medicine, Lubbock, Texas, USA, Tel: (480) 454-0020; Email: Nicholas.Householder@ttuhsc.edu

**Submitted:** 06 September 2022

**Accepted:** 13 October 2022

**Published:** 17 October 2022

**ISSN:** 2333-6439

**Copyright**

© 2022 Cobbs L, et al.

**OPEN ACCESS****Keywords**

- Sexual dysfunction perception
- Gender differences
- Medical-help seeking behavior
- Health-educated women

**Abstract**

**Objective:** The objective of this study is to analyze gender-differences in perception of sexual dysfunction and medical-help seeking behavior among medically-educated individuals (TTUHSC grad students and faculty).

**Methods:** Data was collected via an Omnibus survey that was administered online and sent to Texas Tech Health Sciences Center staff, faculty, and third and fourth year medical students in Lubbock, Permian Basin, Midland, and Odessa. Data from the survey was recorded and reorganized in excel for analysis.

**Results:** The results of our survey showed that far more women than men report experiencing sexual dysfunction in their lives. It was also found that women surveyed were more likely to ignore/wait and see in the first 1-2 weeks of experiencing sexual dysfunction, and were found to be more likely than men to ignore/wait and see after 2 months of experiencing sexual dysfunction. Men were more likely to make doctor's appointment after 2 months of sexual dysfunction, whereas women in this situation were found to be most likely to consult online resources at this mark.

The results of this study also indicate that health-educated women are more likely to wait 2+ months from the onset of sexual dysfunction before making a doctor's appointment, compared to health-educated men. Among the sources of trusted information regarding sexual dysfunction, men and women were found to be equally most trusting of PCPs, Specialists, and Health Websites.

**Significance:** Although sexual dysfunction is usually thought to be associated with men, it is interesting to note that women surveyed in this cohort report experiencing much higher rates of sexual dysfunction. In addition, the majority of those women surveyed stated that they would not seek medical attention from a physician for sexual dysfunction within the first two months, whereas men were far more likely to seek medical aid in this time frame.

**Conclusion:** Despite sexual dysfunction being far more present amongst health-educated women at TTUHSC, the results of study found that they were less likely to seek medical aid from a professional at both the 2 week mark, 1 month mark, and 2 month mark. We hypothesize that this may be a result of underlying societal norms, taboos, and expectations for men to be more sexual beings than women, resulting in a perception that sexual dysfunction is more "normal" in women than in men. There could also be underlying hormonal mechanisms at play, potentially influenced by widespread use of hormone-modulating birth control medication amongst women.

## INTRODUCTION

Culture, societal taboos, and heteronormative social expectations result in a wide variety of gender-specific differences in perceptions on sexual dysfunction, and subsequently influence how and when individuals seek medical aid for such problems. With recent advances in telemedicine, there has been monumental growth of private-sector telemedicine companies specifically marketing ED medication to males. Many of these companies selectively advertise over televised sporting events, as to target a male audience. These companies, such as “For Hims” or “Get Roman”, reinforce the perception that an inability to become sexually aroused is a male-predominant problem, and that a male should seek medical aid for such issues. This disparity provokes many questions, including: “does this issue equally affect women?”, “do women perceive their sexual health in the same manner that men do?”, and further, “should women’s sexual health be conceptualized the same way as males?”

While advertisements for female sexual wellbeing products seems comparatively scarce, attention may finally be moving to women’s sexual health in the medical field. As Bancroft writes in his 2003 paper: “As a consequence of the impact of Viagra on male sexual dysfunction, considerable attention is now being paid to sexual dysfunction in women, which may respond to pharmacological treatment [1]. Despite this claim being published by an expert in the field nearly two decades ago, evidence presented in this paper will show that there is still a great deal of progress yet to be made at addressing this health issue.

There are several papers elucidating the prevalence of sexual dysfunction in women generally. A 2008 census of sexual distress in United States women found that the age-adjusted prevalence of any sexual problem was 43.1%, and was 22.2% specifically for “sexually-related personal distress [2]. Another study, this one conducted in 1997, interviewed 329 women age 18-73 at an outpatient gynecological clinic and found that 38% reported anxiety or inhibition during sex and 58% of respondents reported significant orgasm difficulties [3]. A 2003 survey of 987 women in heterosexual relationships found that 24.4% of respondents reported significant distress regarding their sexual function [1]. One could assume that if the survey included single women as well, the figure could be much higher.

Sexual dysfunction seems to be more widespread among working and career-oriented women. A 2008 study by Avery-Clark compared sexual dysfunction in working and non-working women, finding that women pursuing careers were twice as likely to present with inhibited sexual desire compared to unemployed women [4]. The paper also found that career-oriented women were twice as likely to present with vaginismus [4]. Interestingly, the opposite association was found amongst males, as a 2008 paper found that unemployment had a significant detrimental effect on sexual function in men [5]. Fascinatingly, a 2008 paper found that men married to working women were significantly less likely to report inhibited sexual excitement/desire compared to husbands of unemployed women [6]. The complex and dynamic interplay between psychological and interpersonal factors clearly augments the effect of the working life on sexual function across various marriage patterns.

When it comes to female healthcare workers, the literature suggests that sexual dysfunction may be even more of an issue. A 2016 study evaluating sexual dysfunction amongst female healthcare workers age 20-65 at two hospitals in Greece found that female sexual dysfunction was “highly prevalent [7]. A 2020 study by Li et al., evaluated sexual dysfunction in male and female doctors in China, and found that the self-reported prevalence of sexual dysfunction was 20.2% in male doctors compared to 49.73% in female doctors [8]. Specifically, the authors write that female doctors were significantly more likely to present with inhibited sexual drive, decreased sexual arousal, and more prevalent orgasm problems than male doctors [8]. In Singapore, a 2002 census revealed the prevalence of sexual dysfunction among Singaporean women to be 32%. A 2019 study analyzed the prevalence of sexual dysfunction among 330 female Allied healthcare workers in Singapore, finding a much greater rate of sexual dysfunction, at 56% [9]. This study further found that age was not a significant risk factor, nor was race or marital status [9]. A 2022 survey of 385 married female healthcare workers at a Major hospital in Tehran found that 43.4% of the participants reported poor quality of sexual life, and 64.7% reported low sexual function [10]. These preliminary results potentially suggest that female healthcare workers may be at increased risk for sexual dysfunction.

## OBJECTIVES AND PURPOSE

This paper analyzes gender differences in sexual dysfunction in the narrow scope of male and female healthcare workers and medical students employed at a major community hospital and medical school, Texas Tech University Health Science Center (TTUHSC). Female sexual dysfunction in healthcare workers is an important yet underexplored topic as being female and being a healthcare worker may both be predisposing, modifiable lifestyle factors for sexual dysfunction [1,2,3,9,11,12,13,14]. Therefore, a compounding effect could potentially be present amongst female healthcare workers leading to increased prevalence of sexual dysfunction beyond what may be expected.

Specifically, the objectives of this study were: first, to evaluate and compare the prevalence of sexual dysfunction among male and female healthcare workers and medical students, and second, to analyze gender-differences in perceptions on medical help-seeking behavior among healthcare workers and medical students. This cohort was chosen specially to include faculty, third year, and fourth year medical students at Texas Tech University Health Science Center (TTUHSC) to isolate individuals that have attained a higher-education in a health-related field, actively work in an healthcare environment, and therefore should be more knowledgeable to the science surrounding sexual dysfunction.

## METHODS

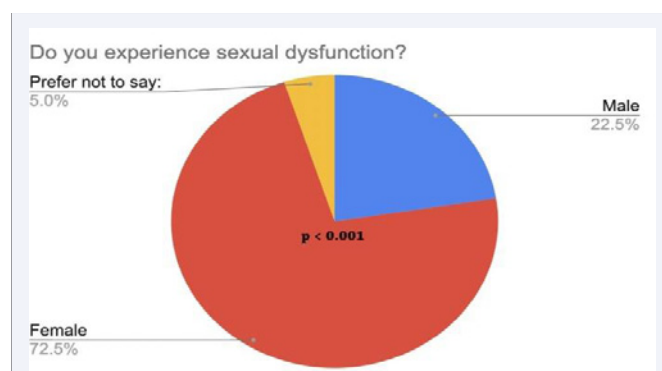
Data was collected via an online omnibus survey emailed to staff, faculty, and students at Texas Tech University Health Science Center. Before answering the indicated questions, the survey provided participants with the following clinically-accepted definitions of sexual dysfunction: “In males, sexual dysfunction is defined as conditions that include ejaculation disorders, erectile dysfunction and inhibited sexual desire.”, and “In females, sexual

dysfunction may include lack of sexual desire, difficulty in arousal or orgasm, pain during intercourse, or anxiety about sexual performance." The definitions were provided to ensure universal understanding of the medical definition of sexual dysfunction among all participants.

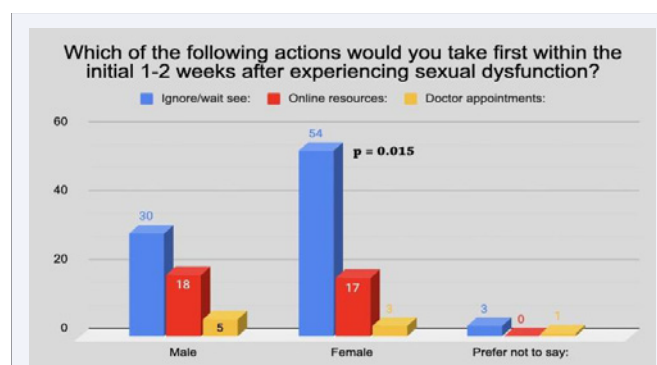
After reading these definitions, participants were asked the following questions: "Have you ever experienced sexual dysfunction?", "Which of the following actions would you take within the initial 1-2 weeks after experiencing sexual dysfunction? (ignore/wait and see, consult online resources, self treat with over-the-counter medicines, or consult your primary care physician)", "Which of the following actions would you take within the first 2 months of experiencing sexual dysfunction? (ignore/wait and see, consult online resources, self treat with over-the-counter medicines, or consult your primary care physician)", "How long would the condition have to persist before seeking help from a medical professional?", and "If you were to experience sexual dysfunction, what would you consider to be trusted sources of information?". A total of 140 (n=140) participants responded to our survey (Figure 1-3).

## STATISTICAL ANALYSIS

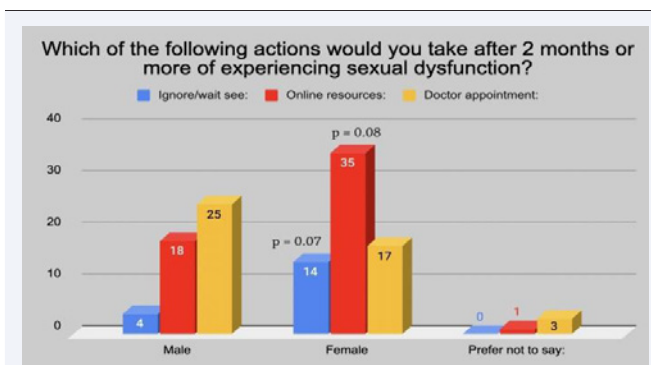
To test the statistical significance of the collected data, chi-squared correlation analysis tests were performed. The chi-squared test was chosen in order to assess whether gender-differences in responses to categorical variables were likely



**Figure 1** Self-reported prevalence of sexual dysfunction first 1-2 among respondents by gender.



**Figure 2** Perceptions in help-seeking behavior during the weeks of experiencing sexual dysfunction.



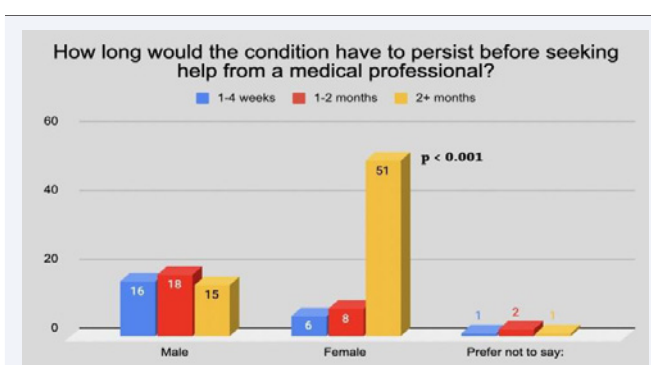
**Figure 3** Perceptions in help-seeking behavior after 2+ months experiencing sexual dysfunction.

due to chance or not. The nature of categorical responses to the survey specifically indicated the chi-squared test.

## DISCUSSION

In our cohort, 72.5% of female healthcare workers and clinical-working medical students reported experiencing sexual dysfunction, compared to 22.5% of male healthcare workers and medical students. Not only do female healthcare workers report experiencing a much higher frequency of sexual dysfunction, they also are far less likely to seek medical aid within the first two months of the condition persisting. The results presented in Figure 4 are particularly insightful, showing that female healthcare workers, despite working in the field, are significantly less likely to seek medical aid in the first 2 months of experiencing sexual dysfunction. The results of this paper show that men are more likely to seek medical aid within the first 2 months of experiencing sexual dysfunction. 78% of women surveyed reported that they would not seek medical aid within the first two months. Therefore, we have identified a key disconnect between traditional societal perceptions of sexual dysfunction and the actual prevalence of the condition among males and females. Females seem to be far more affected by this condition, are far less likely to seek help in a timely manner, and are far less targeted by advertising and marketing of medications and services for patients experiencing such an issue.

The reasons behind this distinction could be complex. There



**Figure 4** Perceptions on when to consult a medical professional during the course of experiencing sexual dysfunction.

is understandably a widespread perception that males are perhaps “more sexually driven” than women are, and therefore that the ability for a man to achieve arousal is imperative to his health. However, why does this same perception not hold true for women? Especially considering the results of this study found that health-educated women are experiencing sexual dysfunction at much higher rates, yet are far less likely to seek medical aid within the first 2+ months. Does this social perception influence both patients’ and physicians’ approach to treating sexual dysfunction in women?

One potential explanation for why female healthcare workers experience increased rates sexual dysfunction is comparatively larger workplace emotional stress, which negatively affects sexual health. However, the literature shows that this relationship is not entirely clear. A 1996 study comparing occupation stress and job satisfaction between male/female general practitioners and consultants found that females displayed less occupation stress and greater overall job satisfaction than males did [15]. This contrasts with other theories of female job satisfaction, such as one posed in 1990 by Nelson et al., stating that workplace politics and lack of career progression led to greater occupation stress and reduced life satisfaction for working women [12]. One 2011 study evaluating sexual dysfunction in male and female doctors in Scotland did not find gender differences in overall stress levels, though they did find that role complexity was related to increased stress for both genders. [19] When occupation stress is applied to sexual function, a 2012 study found evaluating female nurses found that, whether or not occupation stress was high or low, receiving a greater “reward for effort” (salary, benefits, etc.) correlated with increased sex life satisfaction [16]. Therefore, it seems that this theory is not as clear-cut as one might expect.

It is important to note that this study was conducted in 2021, during the COVID-19 pandemic, which may potentially affect sexual function due to social distancing recommendations and increased overall emotional strain. One 2022 paper found that the COVID-19 pandemic is associated with increased rates of erectile dysfunction among males, attributing this to increased rates of anxiety, depression, and PTSD [17].

## CONCLUSION

Unlike other health issues, sexual dysfunction is extremely difficult to objectively measure across genders, as validated scales are scarcely utilized, and longitudinal studies are rare [18]. This makes it challenging to establish objective trends when comparing sexual dysfunction between men and women, especially in specific cohorts such as healthcare workers. By providing all respondents with a standardized definition of sexual dysfunction, as accepted by the current literature, we aimed to improve objectivity in responses. Ultimately, we found that female healthcare workers and health-educators were significantly more likely to experience sexual dysfunction, and were less likely to seek help within the first 2 months.

The cultural and psychosocial factors that may in-part explain our findings are not limited to only the topic of sexual health. A 2021 study of disease funding by the U.S. The National Institute of Health (NIH) found that in nearly 75% of cases where a disease primarily affects one gender, the funding pattern favors

males [5]. This means that if the disease primarily affects men, it is likely to be over-funded, and if the disease primarily affects women, it is likely to be under-funded [5]. This could provide an explanation as to the cultural factors at play when analyzing why sexual dysfunction is overemphasized as a male-dominant problem among pharmaceutical and healthcare companies.

This study poses very interesting and important questions for the medical industry with regard to the diagnosis and treatment of sexual dysfunction in women. Ultimately, we aim to elucidate these trends and encourage women to seek medical attention for prolonged sexual dysfunction at similar rates to men [19,20].

Moving forward, it is clear that additional resources should be prioritized towards studying sexual dysfunction in women, educating women on sexual health, and exploring potential interventions to improve sexual function in women.

## REFERENCES

1. Bancroft J, Loftus J, Long JS. Distress about sex: A national survey of women in heterosexual relationships. *Arch Sex Behav.* 2003; 32: 193-208.
2. Shifren JL, Monz BU, Russo PA, Segreti A, Johannes CB. Sexual problems and distress in United States women: prevalence and correlates. *Obstet Gynecol.* 2008; 122: 970-978.
3. Heiman JR, Meston CM. Evaluating sexual dysfunction in women. *Clinical obstet Gynecol.* 1997; 40: 616-629.
4. Avery-Clark C. Sexual dysfunction and disorder patterns of working and nonworking wives. *J Sex Marital Therapy.* 1986; 12: 93-107.
5. May JL, Bobele M. Sexual dysfunction and the unemployed male professional. *J Sex Marital Therapy.* 1988; 14: 253-262.
6. Avery-Clark C. Sexual dysfunction and disorder patterns of husbands of working and nonworking women. *J Sex and Marital Therapy.* 2008; 12: 282-296.
7. Stamatiou K, Margariti M, Nouse E, Mistrioti D, Lacroix R, Saridi M. Female sexual dysfunction (FSD) in women health care workers. *Materia Socio-Medica.* 2016; 28: 178-182.
8. Li W, Li S, Lu P, Chen H, Zhang Y, Cao Y, Li G. Sexual dysfunction and health condition in Chinese doctor: prevalence and risk factors. *Scientific Reports.* 2020; 10: 15180.
9. Safdar F, Eng CLJ, Wai KL, Tey WS, Ang SB. Prevalence of female sexual dysfunction in Allied Health Workers: A cross-sectional pilot study in a tertiary hospital in Singapore. *BMC Women's Health.* 2019; 19: 137.
10. Arbabi T, Shahhosseini Z, Ansari F, Maasoumi R, Eslami P, Hamzehgardeshi Z. Relationship between Sexual Quality of Life with Sexual Function and Sexual Distress in clinical married employed women. Preprint: Research Square. 2022.
11. Karami, J, Shalani, B, Hoveyzi, N. Relationship between sexual self-esteem and sexual dysfunction with marital satisfaction in Nurses Hospitals Kermanshah City (Iran). *University of Medical Sciences J.* 2017; 11: 86-93.
12. Nelson DL, Quick, JC, Hitt MA, Moesel D. Politics, lack of career progress, and work/home conflict: Stress and strain for working women. *Sex Roles.* 1990; 13: 169-185.
13. Rosen R, Taylor J, Leiblum S, & Bechmann, G. Prevalence of sexual dysfunction in women: Results of a survey study of 329 women in an outpatient gynecological clinic. *J Sex & Marital Therapy.* 2008; 14: 171-188.

14. Swanson V, Power K, Simpson R. A comparison of male and female doctors. *J Occupational and Organizational Psychol.* 2011; 71: 237-260.
15. Swanson V, Power K, Simpson R. A comparison of stress and job satisfaction in female and male GPs and consultants. *Stress Medicine.* 1996. 12: 17-26.
16. Lee HH, Lung FW, Lee PR, Kao WT, Lee YL. The relationship between sex life satisfaction and job stress of married nurses. *BMC Research Notes.* 2012; 5: 445.
17. Bakr AM, El-Sakka A. Erectile dysfunction among patients and health care providers during COVID-19 pandemic: A systematic review. *Int J Impotence Sci.* 2022; 34: 145-151.
18. Hayes R, Dennerstein, L. The impact of aging on sexual function and sexual dysfunction in women: A review of population based studies. *J Sex Med.* 2005; 3: : 317-330.
19. Mirin AA. Gender disparity in the funding of diseases by the U.S. National Institutes of Health. *J Women's Health.* 2020; 30: 956-963.
20. Kadri N, McHichi AKH, McHakra TS. Sexual dysfunction in women: Population based epidemiological study. *Archives of Women's Mental Health.* 2002; 5: 59-63.