



Female sexual dysfunction: lack of change in physician practice patterns over time

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Background: It is difficult to assess if the evaluation and treatment of female sexual dysfunction (FSD) has progressed. In 2003, the American Urogynecology Society (AUGS) surveyed members to measure practice patterns for FSD. Our objective was to administer a similar survey to current members of AUGS and the Society of Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction (SUFU) to evaluate existing practice patterns.

Methods: An electronic survey was administered to SUFU and AUGS members. The results were compared to prior survey results from 2003.

Results: A total of 187 physicians responded. The majority were female (75%) and at an academic or university-based practice (54%). Twenty percent of current members consider FSD screening to be extremely important versus 9% in 2003 ($P=0.002$). The most common reason for not screening was time constraints. Current practitioners report not screening because they do not know how/what to ask, whereas in 2003 physicians were more unsure about therapeutic options ($P<0.001$). In regards to post residency training, 36% were less than satisfied, significantly improved compared from 50% ($P<0.001$). Females were more likely to screen for FSD ($P=0.012$) compared to males. Those who were at least “very satisfied” with their training were more likely to screen ($P=0.019$). 87% of physicians would refer patients to an interactive phone application about FSD.

Conclusions: Screening patterns and barriers to treatment of FSD have minimally improved over the last 20 years. Many trainees continue to feel unsatisfied with FSD education. Phone applications about FSD may be a good resource in the future.

Keywords: Female sexual dysfunction (FSD); female pelvic health; sexual health training; sexual health management

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Introduction

Female sexual dysfunction (FSD) is a worldwide issue. FSD disorders are categorized by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) as “Female sexual interest/arousal disorders”, “Female orgasmic disorder”, and “Genito-pelvic pain/penetration disorders” (1). To qualify as

dysfunction, it must be present 75% of the time, for more than 6 months, causing significant distress, and not due to another medical or psychiatric disorder, substance abuse, or relationship distress. FSD was initially found to be present in 41% of premenopausal women; however, more recent analyses have estimated the prevalence of FSD to be much

higher, ranging from 22–72% in premenopausal women and up to 89% of postmenopausal women (2,3). Furthermore, there is known inequality in sexual satisfaction between men and women, with men reporting higher levels of satisfaction (4). Despite men having higher levels of sexual satisfaction, male sexual health and treatment has historically received more attention both in the scientific and lay communities compared to women (5).

The screening, evaluation and management of women's sexual health lags behind that of men. While it is assumed that the evaluation and treatment of FSD has improved with time because of increased awareness, it is difficult to quantify. In 2003, the American Urogynecology Society (AUGS) surveyed its members to assess practice patterns for FSD (6). The study found that the majority of responding physicians underestimated the prevalence of FSD. Only 22% of practitioners indicated that they always screened for FSD, and the majority were unsatisfied with post-residency training in respect to FSD.

The objective of this study was to evaluate current practice patterns and attitudes surrounding FSD, by administering a similar survey to current members of AUGS and the Society of Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction (SUFU), and therefore determine whether practice patterns have improved almost two decades later. We present this article in accordance with

the SURGE reporting checklist (available at <https://gpm.amegroups.com/article/view/10.21037/gpm-23-22/rc>).

Methods

Institutional review board approval was not required for this study. An electronic survey was sent to current SUFU and AUGS members. The email recipients had three months to respond. An initial email was sent with two reminder emails. The survey consisted of 23 multiple choice questions and took approximately ten minutes to complete. The survey questions were based on a prior survey administered to AUGS members in 2003 by Pauls *et al.* (6). Each question was originally designed to assess FSD-related practice patterns, beliefs, and attitudes among practicing physicians. Our current questionnaire also included three additional questions at the end about patient resource recommendations and physician attitudes toward smartphone applications for mobile health. The recipients included 2,900 members from AUGS and 581 from SUFU; however, only practicing physician members could respond to the survey. There was no prize incentive to complete the survey. The questionnaire is referenced in [Appendix 1](#).

Between February and July 2022, the questionnaire was sent to SUFU and AUGS members. These two physician organizations were chosen to complete the questionnaire as they represent the majority of specialists who currently manage female sexual health. All data collection was anonymous. The survey results between the 2003 AUGS survey and the current survey were compared. Differences between study groups were tested with Chi-square for categorical responses or Wilcoxon rank sum tests for ranked responses. Multiple logistic regression was used to investigate predictors of screening rates. Differences were considered significant where two-sided P values were <0.05. Analysis performed using SAS v9.4 software.

The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013). This study does not involve human experiments and does not need to provide proof of ethical review, but all relevant personnel involved in this study have given informed consent to ensure the smooth conduct of this study.

Results

One hundred and eighty-seven physician members of AUGS and SUFU responded (89 and 98 participants, respectively). This is an estimated 17% response rate from

Highlight box

Key findings

- Physicians most often do not screen for female sexual dysfunction (FSD) because of time constraints.
- Current practitioners also report not screening because they do not know how/what to ask, whereas in 2003 physicians were more unsure about therapeutic options ($P < 0.001$).

What is known and what is new?

- Screening and practice patterns for FSD have remained relatively unchanged over the last twenty years, and many trainees continue to feel unsatisfied with FSD education.

What is the implication and what should change now?

- The most common barriers to FSD treatment and evaluation are time constraints and lack of knowledge about what to ask.
- There needs to be more dedicated training throughout medical school and residency about female sexual health, as historically the focus has been on male sexual health.
- For current practicing physicians, phone applications about FSD may be a good resource when doctors are uncomfortable or have a lack of time to discuss FSD.

SUFU and 5% from AUGS. Respondent demographics are listed in *Table 1*, and the results are compared to the responses from Pauls *et al.* (6).

Survey demographics

The majority of current respondents were female (75%, $P<0.001$) and had significantly more urogynecology or female pelvic medicine and reconstructive surgery (FPMRS) experience compared to prior (84% *vs.* 59% in 2003, $P<0.001$). Current survey responders included more trainees and recent graduates, and they were located in more urban cities ($P=0.035$). Fifty-four percent of our responders were at an academic or university-based practice ($P<0.001$).

FSD assessment by physicians

Current physicians assess for FSD by asking about sexual activity (89%), dyspareunia (89%), arousal (33%), libido (29%), and orgasm (21%), while few report using validated questionnaires (19%). The perceived incidence of FSD by responders was believed to be lower than the actual estimated prevalence, with a median response of 35%, with most (54%) responding an incidence range of 21–50%. This remains low, although improved from 2003, where the majority of responders believed FSD incidence to be less than 40%.

Screening practices and barriers

Screening practices and barriers are listed in *Table 2* and compared to the responses from Pauls *et al.* (6). Twenty percent of current members consider FSD screening to be extremely important versus 9% in 2003 ($P=0.002$). The most common reason for not screening was time constraints. This is similar to the most common reason in 2003. Current practitioners also report not screening because they do not know how/what to ask, whereas in 2003 physicians were more unsure about therapeutic options ($P<0.001$). Taking a closer look at training as a barrier to screening for FSD, 36% of respondents were unsatisfied with their post residency training. Although dissatisfaction with surgical training remains low, it is significantly improved compared to 50% in 2003 ($P<0.001$).

Results by participant gender

Among current healthcare practitioners, 84% (119/141) of

female clinicians reported they screen for FSD most or all of the time while only 67% (31/46) of male clinicians reported doing so ($P=0.012$). Additionally, clinicians who were at least very satisfied with their training were more likely to screen for FSD than clinicians who were not satisfied (97%, 33/34, *vs.* 76%, 117/153, $P=0.019$). Physicians who regularly screen for sexual dysfunction are more likely to be FPMRS ($P=0.039$), be female ($P=0.012$), believe the incidence of sexual dysfunction is higher ($P=0.031$), and be more satisfied with their training ($P=0.018$) than physicians that do not screen (*Table 3*). While female clinicians were more likely to be younger ($P<0.001$) and have less experience ($P<0.001$) than male clinicians in our sample, neither age nor years of experience were significant predictors of higher screening rates (*Table 3*). In multiple logistic regression, after adjusting for physician gender, perception of sexual dysfunction incidence and overall satisfaction with training remained significant predictors of screening rates.

Additional survey questions

The current questionnaire included three additional questions about management of FSD. Current practitioners stated that resources they would most commonly refer patients to for FSD include pelvic floor physical therapy (95%), sex therapist (59%), online sources (11%), and telephone applications (5%). There were two questions about the utilization of smartphone applications for mobile health for FSD. Eighty-seven percent of current AUGS/SUFU members would feel comfortable referring patients to an interactive phone application about FSD, and 77% would be more likely to recommend the application if it was created by a physician.

Discussion

Despite the fact that about 50% of women suffer from FSD, our study demonstrates that screening patterns and reported barriers to treatment of FSD have minimally improved over the last two decades. The most common barrier to addressing FSD continues to be time constraints. This is likely multifactorial including limited clinic visit times and reluctance from patients and/or practitioners to engage in conversation about FSD, knowing that time with a patient is limited.

After time constraints, physician hesitancy to discuss FSD was a barrier. This stemmed from lack of education and training on knowing what or how to ask. Only 19%

Table 1 Demographic characteristics of responders (current *vs.* Pauls *et al.*)

Variables	2022 responses (N=187)	2003 responses (N=471)	P value
Practice composition, n [%]			<0.001 ^a
FPMRS	123 [66]	89 [19]	
Mainly urogynecology	55 [29]	203 [43]	
General gynecology	3 [2]	42 [9]	
Gynecology and obstetrics patients	6 [3]	118 [25]	
Experience, n [%]			0.009 ^b
Fellowship	30 [16]	38 [8]	
<5 years	46 [25]	75 [16]	
5–10 years	38 [20]	113 [24]	
11–20 years	31 [17]	132 [28]	
>20 years	42 [22]	89 [19]	
Region, n [%]			0.245 ^a
Midwest/central United States	39 [21]	113 [24]	
Northeast United States	58 [31]	113 [24]	
South United States	38 [20]	122 [26]	
West coast United States	46 [25]	104 [22]	
Other (Canada or outside U.S.)	6 [3]	19 [4]	
Area population size, n [%]			0.035 ^b
<50,000 inhabitants	5 [3]	33 [7]	
50,000–500,000 inhabitants	51 [27]	155 [33]	
>500,000 inhabitants	131 [70]	283 [60]	
Type of practice, n [%]			<0.001 ^a
Academic or university based	101 [54]	212 [45]	
Other	23 [12]	9 [2]	
Integrated health system (i.e., Kaiser)	14 [7]	19 [4]	
Private practice or community based	49 [26]	231 [49]	
Number of partners, n [%]			<0.001 ^b
0–1	32 [17]	155 [33]	
2–4	64 [34]	146 [31]	
>5	91 [49]	170 [36]	
Gender, n [%]			<0.001 ^a
Male	46 [25]	301 [64]	
Female	141 [75]	170 [36]	
Age, n [%]			0.051 ^b
20–30 years	8 [4]	5 [1]	
31–40 years	83 [44]	170 [36]	
41–50 years	46 [25]	169 [36]	
51–60 years	29 [16]	80 [17]	
>60 years	21 [11]	47 [10]	

Differences between study groups were tested with (a) Chi-square or (b) Wilcoxon rank sum test. FPMRS, female pelvic medicine and reconstructive surgery.

Table 2 Screening and practice pattern response comparison

Survey questions	AUGS 2003 responses	AUGS/SUFU 2022 responses	P value
Importance of FSD screening			
Not important	2%	4%	
Somewhat important	47%	35%	
Very important	42%	41%	
Extremely important	9%	20%*	0.002
Screening practice for FSD			
Most of the time/always screen	77%	80%	0.38
Never or rarely screen	23%	20%	
Most common barriers to screening			
Not enough time	78%	66%*	0.001
Unsure about therapeutic options	28%	10%*	<0.001
Do not know what/how to ask	8%	34%*	<0.001
Most patients are elderly	20%	18%	0.498
Afraid of offending patients	7%	9%	0.495
Rate your training			
Did not train post-residency	41%	16%*	<0.001
Unsatisfactory	30%	36%	
Somewhat satisfied	24%	30%*	<0.001
Very satisfied	5%	16%*	<0.001
Extremely satisfied	1%	3%	

*, significant change between groups. AUGS, American Urogynecology Society; SUFU, Society of Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction; FSD, female sexual dysfunction.

of current responders were extremely or very satisfied with their FSD training. This underlines prior data that clinicians recognize the high prevalence of FSD, but given the reduced focus on education on the topic, physicians often feel uncomfortable taking care of these patients, and therefore seldom initiate discussion (7). Our results support this, as physicians who were more satisfied with their FSD training were more likely to screen.

The study respondent demographics were also different than prior, consistent with overall changes in medicine and education patterns—our study responders were more likely to be female compared to male, and have post-residency training compared to the Pauls *et al.* cohort (8–11). Interestingly, female physicians were significantly more likely to screen for FSD than their male counterparts. This could be related to satisfaction with training or that women patients are simply more likely to engage female clinicians

with questions about sexual health (12,13).

A survey of members of the American College of Obstetricians and Gynecology (ACOG), The Endocrine Society (ENDO), the North American Menopause Society (NAMS), and the American Society for Reproductive Medicine (ASRM) showed that approximately 60% of participants rated their comfort level and knowledge of FSD as fair or poor (14). Furthermore, these physicians rarely initiated conversation about FSD or performed a comprehensive evaluation for FSD due to limited knowledge, discomfort with the subject of women's health, and/or lack of therapeutic options (14).

Given the persistently low rate of satisfaction in regards to FSD training, our study emphasizes the need to incorporate more education and teaching about FSD at all stages of training, including medical school and residency. Prior studies have shown that continued education,

Table 3 Predictors of screening practices among current clinicians

Current clinicians	No regular screening	Regular screening	P value	Adjusted P value
Practice composition, n [%]			0.039 ^a	0.063 ^c
FPMRS	19 [51]	104 [69]		
Urogynecology/gynecology	18 [49]	46 [31]		
Experience, n [%]			0.347 ^b	0.736 ^c
Fellowship	6 [16]	24 [16]		
<5 years	7 [19]	39 [26]		
5–10 years	8 [22]	30 [20]		
11–20 years	4 [11]	27 [18]		
>20 years	12 [32]	30 [20]		
Type of practice, n [%]			0.364 ^a	0.381 ^c
Academic or university based	24 [65]	77 [51]		
Hospital employed	2 [5]	21 [14]		
Integrated health system (i.e., Kaiser)	3 [8]	11 [7]		
Private practice or community based	8 [22]	41 [27]		
Gender, n [%]			0.012 ^a	–
Males	15 [41]	31 [21]		
Females	22 [59]	119 [79]		
Age, n [%]			0.160 ^b	0.242 ^c
20–30 years	2 [5]	6 [4]		
31–40 years	11 [30]	72 [48]		
41–50 years	11 [30]	35 [23]		
51–60 years	10 [27]	19 [13]		
>60 years	3 [8]	18 [12]		
Perceived incidence of sexual dysfunction, n [%]			0.031 ^b	0.034 ^c
<10%	5 [14]	7 [5]		
11–20%	9 [24]	22 [15]		
21–30%	9 [24]	36 [24]		
31–40%	4 [11]	29 [19]		
41–50%	3 [8]	19 [13]		
>50%	7 [19]	37 [25]		
Rate your training, n [%]			0.018 ^b	0.014 ^c
Post-residency	8 [22]	21 [14]		
Unsatisfactory	16 [43]	52 [35]		
Somewhat	12 [32]	44 [29]		
Very satisfied	1 [3]	28 [19]		
Extremely satisfied	0 [0]	5 [3]		

Differences between study groups were tested with (a) Chi-square, (b) Wilcoxon rank sum test, or (c) in multiple logistic regression after adjusting for the significant predictor of physician gender. FPMRS, Female Pelvic Medicine and Reconstructive Surgery.

starting in medical school can increase physician comfort in discussing sexual health (15). A comprehensive review of sexual health education by Parish and Rubio-Aurioles demonstrated that enhanced training is needed at all levels of medical education (7). A prior randomized, blinded, multicenter, controlled study by Shabsign *et al.* showed that regular continued education regarding erectile dysfunction leads to increased clinician knowledge and comfort addressing patient needs (16).

Historically, there has been a longstanding emphasis on teaching medical students and residents about male erectile dysfunction, and only recently has there been a growing body of literature focusing on women (14,17). There is a small population of physicians that specifically focus on women's sexual health, and it generally includes those with sub-specialization in FPMRS. The number of practicing FPMRS physicians is quite low and includes approximately 5% of practicing urologists and gynecologists in the United States (18-20). These low numbers reinforce the importance of widespread education and alternative screening and treatment methods, as most women may not initially see a specialist.

The British Society of Urogynaecology surveyed its members using a similar survey to Pauls *et al.* and also found a need for better education and engagement from clinicians (21). They suggested using a simple questionnaire to screen patients, who can then be seen specifically for FSD. This would allow more time for the clinician to address FSD at another visit or refer the patient to the appropriate specialist. Given that patients complete a yearly screening for depression with their primary care physicians, it would make sense to also include a yearly FSD screening.

Seeing as many practicing FPMRS/urogynecology specialists do not feel comfortable managing FSD, this is an opportunity to utilize alternative sources such as mobile health applications (app). The majority of physicians in our survey would recommend their patients to use a smartphone app, especially if it was created by a physician. There are specific apps created by physicians for patients who either have or want to learn more about FSD. Our group previously reviewed the available apps and found Rosy to be a good learning tool for patients because of the ease of use, interactive nature, and accurate review of various causes of FSD.

The strength of this study is the ability to compare survey results over two decades, to better understand areas of improvement in training and practice. While our study surprisingly indicates minimal change in the evaluation and treatment of FSD despite perceived increased awareness

of FSD, we recognize that the main limitation of our study is the low survey response rate. Although there is almost equal distribution in responses between SUFU and AUGS societies, the numbers remain low (estimated 17% response rate from SUFU and 5% from AUGS). Therefore, the study results only represent a fraction of practicing physicians. A low response rate of 9% and 12.9% has been reported in prior published surveys from SUFU and American Urological Association (AUA) members, respectively (22,23). We assume our low response rate was multifactorial. While the survey was sent electronically and assumed more convenient, as opposed to the initial study which required return of a paper survey, not all FPMRS-trained physicians have an interest in FSD and may have found the survey questions unrelatable. Additionally, there is a known degree of physician burnout and consequent reluctance to participate in non-reimbursed, work-related activities (24). There are also some members who are part of SUFU and AUGS and may have received the survey twice and only practicing physicians could fill it out, making the exact response rate unknown. Lastly, the majority of our respondents were female. Although this undoubtedly biased the responses, it reflects current female opinions on the topic of FSD. Therefore, we assume that those who completed the survey represent the most interested physicians in this topic (specifically female physicians), and the results speak for a continued need for education about FSD and growing interest for our male colleagues.

Conclusions

In conclusion, our study underscores that screening patterns and barriers to treatment of FSD have remained relatively unchanged over the last 20 years. Many FPMRS/urogynecology trainees continue to feel unsatisfied with training in FSD management, reinforcing that there needs to be more dedicated training throughout medical school and residency about female sexual health, as historically the focus has been on male sexual health. For current practicing physicians, however, phone apps about FSD may be a good resource when doctors are uncomfortable or have a lack of time to discuss FSD.

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Footnote

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References

- Diagnostic and Statistical Manual of Mental Disorders. 5. Washington: American Psychiatric Association; 2013.
- McCool ME, Zuelke A, Theurich MA, et al. Prevalence of Female Sexual Dysfunction Among Premenopausal Women: A Systematic Review and Meta-Analysis of Observational Studies. *Sex Med Rev* 2016;4:197-212.
- Khani S, Azizi M, Elyasi F, et al. The Prevalence of Sexual Dysfunction in the Different Menopausal Stages: A Systematic Review and Meta-Analysis. *International Journal of Sexual Health* 2021;33:439-72.
- Laumann EO, Paik A, Glasser DB, et al. A cross-national study of subjective sexual well-being among older women and men: findings from the Global Study of Sexual Attitudes and Behaviors. *Arch Sex Behav* 2006;35:145-61.
- Pauls RN. Sexual health and the gender gap. *Int Urogynecol J Pelvic Floor Dysfunct* 2006;17:99.
- Pauls RN, Kleeman SD, Segal JL, et al. Practice patterns of physician members of the American Urogynecologic Society regarding female sexual dysfunction: results of a national survey. *Int Urogynecol J Pelvic Floor Dysfunct* 2005;16:460-7.
- Parish SJ, Rubio-Aurioles E. Education in sexual medicine: proceedings from the international consultation in sexual medicine, 2009. *J Sex Med* 2010;7:3305-14.
- Matriculating Student Questionnaire (MSQ). AAMC. Accessed December 1, 2022. Available online: <https://www.aamc.org/data-reports/students-residents/report/matriculating-student-questionnaire-msq>
- Spencer ES, Deal AM, Pruthi NR, et al. Gender Differences in Compensation, Job Satisfaction and Other Practice Patterns in Urology. *J Urol* 2016;195:450-5.
- Gerber SE, Lo Sasso AT. The evolving gender gap in general obstetrics and gynecology. *Am J Obstet Gynecol* 2006;195:1427-30.
- Fang YM, Egan JF, Rombro T, et al. A comparison of reasons for choosing obstetrician/gynecologist subspecialty training. *Conn Med* 2009;73:165-70.
- Alyahya G, Almohanna H, Alyahya A, et al. Does physicians' gender have any influence on patients' choice of their treating physicians? *Journal of Nature and Science of Medicine* 2019;2:29-34.
- Roter DL, Hall JA. Physician gender and patient-centered communication: a critical review of empirical research. *Annu Rev Public Health* 2004;25:497-519.
- Bachmann G. Female sexuality and sexual dysfunction: are we stuck on the learning curve? *J Sex Med* 2006;3:639-45.
- Rosen R, Kountz D, Post-Zwicker T, et al. Sexual communication skills in residency training: the Robert Wood Johnson model. *J Sex Med* 2006;3:37-46.
- Shabsigh R, Sadosky R, Rosen RC, et al. Impact of an educational initiative on applied knowledge and attitudes of physicians who treat sexual dysfunction. *Int J Impot Res*

- 2009;21:74-81.
17. Sobczak JA. Female sexual dysfunction: knowledge development and practice implications. *Perspect Psychiatr Care* 2009;45:161-72.
 18. Census Results - American Urological Association. Accessed October 25, 2022. Available online: <https://www.auanet.org/research-and-data/aaa-census/census-results>
 19. Brueseke T, Muffly T, Rayburn W, et al. Workforce Analysis of Female Pelvic Medicine and Reconstructive Surgery, 2015 to 2045. *Female Pelvic Med Reconstr Surg* 2016;22:385-9.
 20. Obstetricians and Gynecologists. Accessed October 25, 2022. Available online: <https://www.bls.gov/oes/current/oes291218.htm>
 21. Roos AM, Thakar R, Sultan AH, et al. Female sexual dysfunction: are urogynecologists ready for it? *Int Urogynecol J Pelvic Floor Dysfunct* 2009;20:89-101.
 22. Welk B, McGarry P, Baverstock R, et al. Do Urodynamic Findings Other Than Outlet Obstruction Influence the Decision to Perform a Transurethral Resection of Prostate? *Urology* 2018;117:120-5.
 23. Swartz M, Vasavada S, Goldman H. Perioperative management of patients undergoing sling surgery: a survey of US urologists. *Urology* 2010;76:314-7.
 24. Shoureshi P, Guerre M, Seideman CA, et al. Addressing Burnout in Urology: A Qualitative Assessment of Interventions. *Urol Pract* 2022;9:101-7.

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Appendix 1. Survey Questions

1. In your medical practice to do you see:
 - a. All FPMRS/urogynecology patients
 - b. Mainly urogynecology
 - c. General gynecology
 - d. Gynecology and obstetrics patients
 - e. Urology patients
 - f. Other: _____

2. How long have you been in practice?
 - a. I am still in training (i.e. fellowship, residency)
 - b. <5 years
 - c. 5-10 years
 - d. 11-20 years
 - e. >20 years
 - f. I am currently retired

3. Area of practice:
 - a. Northeast United States (CT, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT)
 - b. South United States (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV)
 - c. Midwest/Central United States (IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI)
 - d. West Coast United States (AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY)
 - e. Canada
 - f. Outside of United States or Canada (*Please list*): _____

4. What is the population of the area where your practice is located?
 - a. <50,000 inhabitants
 - b. 50,000-500,000 inhabitants
 - c. >500,000 inhabitants

5. Is your primary practice:
 - a. Academic or University based
 - b. Private Practice or Community based
 - c. Integrated health system (i.e. Kaiser)
 - d. Hospital employed
 - e. Other: _____

6. Number of physician partners that you work with:
 - a. 0-1
 - b. 2-4
 - c. >5

7. What is your gender?
 - a. Male
 - b. Female
 - c. Other

8. What is your age?
- 20-30
 - 31-40
 - 41-50
 - 51-60
 - >60
9. Below is a list of questionnaires some physicians use to assess female patients for sexual dysfunction. Please indicate all those you are familiar with:
- Female Sexual Function Index (FSFI)
 - Pelvic Organ Prolapse-Urinary Incontinence Sexual Function Questionnaire (PISQ)
 - Female Sexual Distress Scale (FSDS)
 - Sexual Function Questionnaire (SFQ-V1)
 - Derogatis Interview for Sexual Functioning (DISF/DISF-SR)
 - Other: _____
 - Not familiar with any
10. Compared to other medical conditions you deal with, how important is it to screen patients for female sexual dysfunction?
- Not important
 - Somewhat important
 - Very important
 - Extremely important
11. How frequently do you screen female patients for sexual dysfunction?
- Never → Skip to Question 14
 - Rarely → Skip to Question 14
 - Most of the time → Continue to Question 12
 - Always → Continue to Question 12
12. If you Most of the Time or Always screen for female sexual dysfunction, what methods do you use? (Mark all that apply)
- 1 -2 questions about sexual activity
 - 1 -2 questions about dyspareunia
 - 1 -2 questions about libido
 - 1 -2 questions about arousal/lubrication
 - 1 -2 questions about orgasm
 - Validated Index/Questionnaire about sexual function
13. How is the information from Question 12 elicited?
- I ask patient questions
 - Patient fills out a form
 - Patient fills out a form and we discuss the answers
 - Research/clinical nurse/physician assistant asks the patient

14. What are some *barriers* to screening for sexual dysfunction (*Mark all that apply*)
- Not enough time
 - Don't know what/how to ask
 - If patient has a problem, I am unsure about therapeutic options
 - Most of my patients are elderly
 - Afraid to offend patients (i.e. cultural taboo)
 - Other: _____
15. What percentage of female patients that you see *do you believe* experience sexual dysfunction?
- <5%
 - 5-10%
 - 11-20%
 - 21-30%
 - 31-40%
 - 41-50%
 - 51-60%
 - 61-70%
 - 71-80%
 - 81-90%
 - >90%

If you do not perform surgery as part of your practice SKIP TO QUESTION 20

16. How frequently do you screen patients for sexual dysfunction after surgery for prolapse or incontinence?
- Never → *Continue to Question 17*
 - Rarely → *Continue to Question 17*
 - Most of the time → *Skip to Question 18*
 - Always → *Skip to Question 18*
17. If you said that you Never or Rarely screen for female sexual dysfunction after surgery for prolapse or incontinence, what are some of the reasons? (*Mark all that apply*)
- Not enough time
 - Don't know what/how to ask
 - Don't think surgery is *typically* related to changes in sexual function
 - If patient *does* have a problem, I am unsure about therapeutic options
 - Most of my patients are elderly
 - Afraid to offend patients (i.e. cultural taboos)
 - I see the patient too early to determine if there is a problem (i.e. not sexually active yet)
 - Other: _____

If you answered Question 17 then SKIP to Question 20

18. If you Most of the Time or Always assess for sexual dysfunction after surgery for prolapse or incontinence, what methods do you use? (*Mark all that apply*)
- 1 -2 questions about sexual activity
 - 1 -2 questions about dyspareunia
 - 1 -2 questions about libido
 - 1 -2 questions about arousal/lubrication

- e. 1 -2 questions about orgasm
 - f. Validated Index/Questionnaire about sexual function
19. How is the information from Question 18 elicited from the patient?
- a. I ask patient questions
 - b. Patient fills out a form
 - c. Patient fills out a form and we discuss the answers
 - d. Research/clinical nurse/physician assistant asks the patient
20. If you received post resident training in FPMRS/Urogynecology, how would you rate the training with respect to female sexual dysfunction?
- a. Unsatisfactory
 - b. Somewhat satisfactory
 - c. Very satisfactory
 - d. Extremely satisfactory
 - e. I did not train post-residency
21. What type of resources do you provide for patients with female sexual dysfunction? (*Circle all that apply*)
- a. Referral to pelvic floor physical therapy
 - b. Referral to sexual medicine provider (sex therapist or sexual medicine physician)
 - c. Referral to an online source (specify which one): _____
 - d. Referral to an app (specify which one): _____
 - e. Other resources: _____
22. Would you feel comfortable referring patients to use an interactive phone app for female sexual dysfunction?
- a. Yes
 - b. No
23. Would you be more likely to recommend an app for female sexual dysfunction if it was created by a physician?
- a. Yes
 - b. No