Sexual Medicine, 2023, **11**, 1–9
https://doi.org/10.1093/sexmed/qfad013
Original Research

Comparison of male and female perspective in couples involved in sexual relationships and facing endometriosis

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Abstract

Background: While the sexuality of patients with endometriosis is an established topic in research, the possible effect of endometriosis on partnership sexuality has come to the fore only recently. To improve counseling, more information is needed on how both partners experience sexuality in the context of endometriosis.

Aim: Previous research regarding endometriosis and sexuality normally focused on one partner to explore couples' intimate relations, whereas this study provides a comparison on both partners' perspectives on their common sexuality.

Methods: An overall 302 couples received a questionnaire based on the Brief Index of Sexual Functioning and Sexual History Form, which was modified by endometriosis specialists to better focus on endometriosis-specific aspects. To detect different perspectives on common sexuality within the couple, the Wilcoxon test and the Pearson chi-square test were performed.

Outcomes: Various aspects of couple sexuality were assessed by both partners to investigate divergent perspectives between the man and the woman within a couple.

Results: On one hand, male and female partners seem to have divergent perspectives on sexual satisfaction in general, desired frequency of sexual contacts, and the question of the female partner engaging in sexual activity despite discomfort. On the other, they have similar perspectives on who takes initiative in sexual contacts, satisfaction with variety in the sexual relationship, and the impact of sexual limitations on their satisfaction within the partnership.

Clinical implications: Endometriosis research addressing issues related to sexuality should include male partners; the same applies to consulting women with endometriosis in the context of their relationships rather than as individuals.

Strengths and Limitations: This is the first analysis conducted on a larger scale of data from both partners in couples dealing with endometriosis. As it provides quantitative information only, some qualitative information remains unexplored.

Conclusion: As both partners showed tendencies to overestimate their partners' sexual satisfaction and had different perspectives on sensitive topics in sexuality, such as the female partner engaging in sexual activity despite discomfort, addressing sexual communication could be a starting point in counseling couples dealing with endometriosis.

Keywords: spouses; sexual partners; sexual behavior; intimate relationship; sexual satisfaction; endometriosis.

Introduction

Endometriosis is a chronic disease characterized by endometric tissue outside the uterine cavity, affecting up to 10% of women in their reproductive years.[1,2] Women diagnosed with endometriosis can experience a broad variety of symptoms, such as chronic pelvic pain, infertility, dyspareunia, or fatigue.[3] Beyond the physical impact, these women are more likely to show poorer mental health, symptoms of depression,[4,5] reduced quality of life, impaired social functioning,[5,6] and lower performance at work.[6,7] In particular, pelvic pain related to endometriosis is associated with an impaired quality of life and poorer mental health.[8]

While the association among specific endometriosis lesions, other disease symptoms, and dyspareunia is highly debated,[9] patients with dyspareunia have basically reported an impact on the romantic and sexual relationship with their intimate partners.[5,10] Women with endometriosis experience lower satisfaction with their sexual relations and experience feelings of sexual aversion more often.[9,11] Intimate partners also report a negative impact on partnership sexuality.[12] The male perspective on sexuality within partnerships facing other gynecologic conditions, such as vulvodynia[13] or infertility,[14] has been the subject of research. In the field of endometriosis, information about relational and sexual patterns is often

Received: December 4, 2022. **Revised:** March 13, 2023. **Accepted:** March 21, 2023

collected exclusively through the female patient, leaving out the male partner's (MP's) point of view.

Only a few research studies have addressed the impact of endometriosis on the sexual life of a patient's intimate partner; most of these findings indicate that endometriosis has an effect on the MP's sex life as well.[12,15–18] Just 1 study suggests that men do not face sexual difficulties related to their partners' endometriosis.[19] However, while women face consequences of endometriosis symptoms directly, the effect on men is indirect and may consequently differ from women's experiences. Generally, men express a need to discuss their experiences in dealing with endometriosis and wish to receive more support than what is offered by medical staff, including with regard to sexuality.[17] To date, no quantitative research is available comparing women's and men's perceptions on their partnership sexuality when dealing with endometriosis; this hampers sexual counseling touching upon endometriosis.

This study aims to directly compare perceptions of sex life in heterosexual couples and to identify possible predictors for a shared perspective within a couple. It also evaluates whether men and women adequately assess their partners' satisfaction with their sexual lives.

Key question: Do women and men who are involved in a partnership dealing with endometriosis differ in their opinions about their sexuality as a couple?

Subsidiary question: Do women and men as individuals engaged in a heterosexual relationship facing endometriosis rate each other's sexual satisfaction adequately?

Methods

Study design

The objective of this study is to compare each partner's perception of sexuality within heterosexual couples confronting endometriosis. The study is designed as a multicenter cohort study. Data were collected within a larger matched case-control study conducted in Switzerland (CH), Germany (D) and Austria (A). The original study investigated women with endometriosis and control probands, including their partners if they were available. To ensure the quality of reporting, the article was structured per the STROBE criteria.[20]

Ethical approvement

The District Ethical Commission of Zurich, St. Gallen and Berlin examined and approved the study design. Each participant was informed about the confidential and anonymous treatment of personal data and received a consent form. Female participants received an additional form to allow access to their patient data. Only probands with signed consent forms were included in the study.

Recruitment

Women with endometriosis and controls were recruited in the University Hospital of Zurich (CH), Triemly Hospital (CH), District hospital of St. Gallen (CH), District Hospital of Baden (CH), District Hospital of Winterthur (CH), District Hospital of Schaffhausen (CH), Charité Berlin (D), University Hospital of Aachen (CH), Vivantes Clinics (D) and the University Hospital of Graz (A) as well as in private practices. A smaller number (n = 49) of patients with endometriosis in self-help groups in Germany were approached by the study team through the German Union of Endometriosis (www.endometriose-vereinigung.de).

Study participants were required to be at least 18 years old; provide a histologically confirmed diagnosis of endometriosis from patient records; and live in Switzerland, Germany of Austria. Exclusion criteria were current pregnancy or mental, linguistic, or psychiatric conditions that might impair understanding the survey. For the present analysis, only couples where the woman was diagnosed with endometriosis were included.

All women were approached directly by the study team. This recruitment process resulted in 302 available data sets from heterosexual couples (Figure 1).

Questionnaire

Patients with endometriosis received a questionnaire with 452 questions on sociodemographics, endometriosis, concomitant diseases, gynecologic issues, and different quality-of-life aspects that included intimate relationships as well as sexuality. Answers to 45 of the 452 questions served as the basis for the present analysis. To maximize the response rate, patients and their partners received a reminder to complete the survey after 1 and 3 months.

The questionnaire regarding sexuality and intimate relationships relied on the Brief Index of Sexual Functioning (BISF; Q1, Q10) and Sexual History Form (SHF; Q4, Q5, Q9), as well as on questions created by experienced endometriosis specialists (Q2, Q3, Q6-Q9, Q11-Q14; Table 3). The BISF was developed to investigate sexual functioning and satisfaction in women,[21] while the SHF is a tool to evaluate female and male sexual functioning.[22] The additional questions were designed to address the sexual issues of patients with endometriosis that were not covered by the BISF or the SHF. Questions were designed to evaluate the perception of sexuality in both partners, as represented by satisfaction with sexual life, relative frequencies of sexual activity, and initiation of sexual contact, as well as effects of endometriosis and pain on the sexual relationship. Response options were designed as single-choice Likert scales; in most cases, the questions asked for absolute or relative frequencies as well as for the actual value of the variable.

Statistics

SPSS for Windows (version 27; IBM) was used for statistical calculations. For descriptive data, *t*-tests were applied to questions evaluating continuous data, while the Pearson chi-square test was used for ordinal and nominal data. The Wilcoxon test served to detect different tendencies regarding the perception of sexuality experienced within each couple. The ordinal answer options were labeled numerically; the difference between a couple's responses was established by subtracting female partner (FP) values from MP values. Ties mean a difference of zero, while a positive difference indicates MP > FP and a negative difference MP < FP. Each test was performed 2-tailed. For the main analysis, the Bonferroni correction was used to investigate an appropriate level of significance for multiple testing. A P value <.007 and a Z value ±2.47 were determined to be significant. The effect size r was calculated according to Cohen.[23]

Results

Socioeconomic data

Socioeconomic data for both partner groups are shown in Table 1. FPs and MPs showed similar levels of education

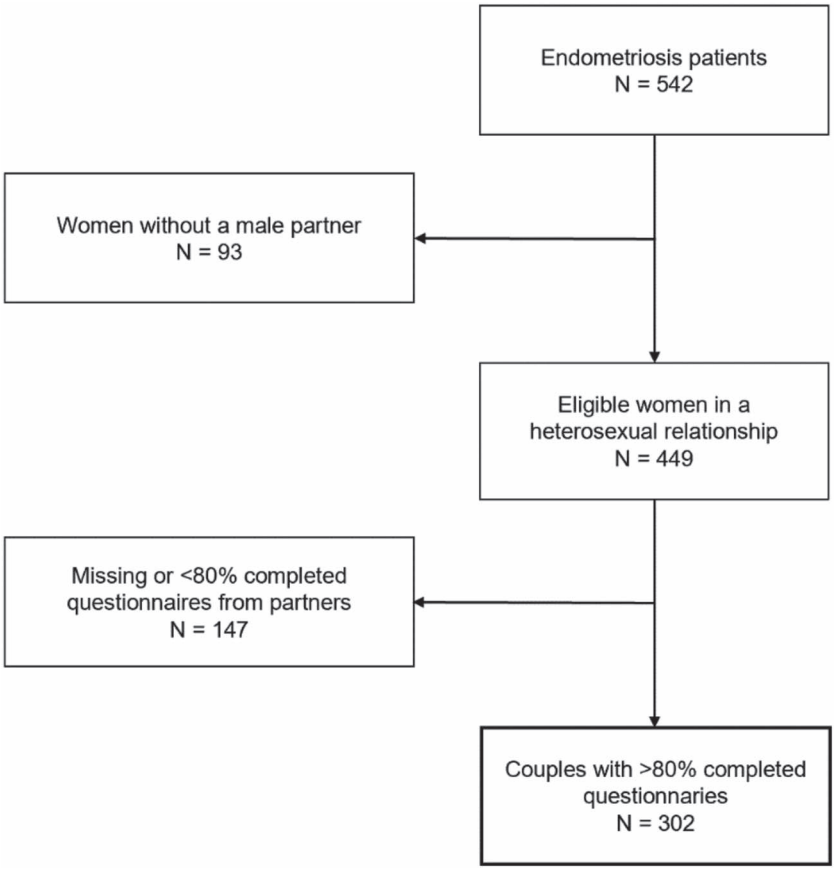

Figure 1. Recruitment of study participants.

and similar distributions in nationality. FPs worked full-time less frequently and part-time more frequently than MPs. FPs showed significantly lower individual incomes than MPs. A majority of the 302 couples (59.3%) were in a relationship for 7 to 15 years (36.1%) or >15 years (23.2%), 6.0% for <1 year, 8.6% for 1 to 3 years, and 25.4% for 3 to 7 years.

Medical and psychological background of patients with endometriosis

Table 2 presents the medical and psychological background information of FPs. Altogether, 104 women (39.25%) did not experience decent sexual counseling. A further 56 women (21.13%) were satisfied with sexual counseling to a limited degree, while 22 (12.45%) were ambivalent regarding the quality of sexual counseling. A minority of FPs were completely (n = 34, 12.83%) and highly (n = 38, 14.34%) satisfied with sexual counseling.

Comparison of the male and female perspectives on sexuality within the partnership

An overall 133 women (46.18%) reported sometimes experiencing pain preventing sexual pleasure, and 57 (19.79%) reported this to be the usual case. A third of the respondents (n = 96, 33.33%) rarely felt pain preventing sexual pleasure, and 2 (0.69%) indicated not ever experiencing pain.

Table 3 provides a comparison of perspectives on partnership sexuality within the couple. In 135 (46.3%) couples, both partners chose the same category of sexual relationship satisfaction. There was a significant difference between partners regarding satisfaction with the sexual relationship, with a medium effect size according to Cohen ($P = .002$, $Z = -3.046$, $r = 0.178$). MPs reported higher satisfaction than FPs in 99 couples (33.9%), while in 19.9% of couples, MPs cited lower satisfaction (n = 58). Most couples (n = 163, 61.7%) evaluated the relative frequency of sexual activities with their partners to be in the same category ($P < .001$, $Z = -4.717$, $r = 0.290$). Nevertheless, there was a significant difference observed between MPs and FPs on a medium scale.

In 26.9% (n = 71) of couples, the FP chose at least 1 category above the MP's choice, while in 11.4% (n = 30) of relationships, the FP chose a lower category than the MP. Asked about the frequency of the FP engaging in sexual contacts to not endanger the relationship, despite lethargy or discomfort, in 83 (39.9%) couples, FPs and MPs gave the same answer. In another 83 (39.9%) couples, FPs reported a higher frequency of such contacts than their MPs did, while in 20.2% (n = 42), FPs indicated a lower frequency of these situations than MPs. A significant level for a divergent tendency across the 208 couples was reached and indicated a medium effect ($P = .001$, $Z = -3.207$, $r = 0.222$).

Regarding the discomfort of the FP in sexual activities affecting satisfaction with the sexual life, 27.5% (n = 58) couples chose the same answer. In 107 (50.7%) couples, the FP indicated a lower impact on their sexual satisfaction than the MP, whereas 46 (21.8%) couples had a higher impact reported by the FP than the MP. There was a strong effect of partners' divergent attitudes regarding this question ($P < .001$, $Z = -5.352$, $r = 0.368$).

There was no significant difference within the partnerships for questions evaluating the impact of sexual limitations due to endometriosis on satisfaction with the partnership (MP =

Table 1. Sociodemographic information on both partners.

Demographic information on both partners	Female partner		Male partner		
	No.	%	No.	%	*P* value[a]
Education	302		302		.825
Secondary education	82	27.15	73	24.17	
Apprenticeship	95	31.46	95	31.46	
Postgraduate	103	34.11	96	31.79	
Other/missing information	22	7.28	38	12.58	
Nationality	302		302		.510
Swiss	114	37.60	110	36.40	
German	154	51.00	153	50.70	
Other/missing information	34	11.26	34	12.91	
Occupational status	302		302		<.001
Working full-time	145	48.01	253	83.77	
Working part-time	104	34.44	29	9.60	
Homemaker	30	9.93	2	0.66	
Other/missing information	23	7.62	18	5.96	
Individual monthly net income, EUR	302		302		<.001
<1000	71	23.51	25	8.28	
1000-1500	50	16.56	28	9.27	
1500-2000	54	17.88	65	21.52	
2000-2500	33	10.93	37	12.25	
>2500	38	12.58	106	35.10	
Missing information/none	56	18.54	41	13.58	

[a]Pearson chi-square; significance at .050.

FP, n = 67 [29.1%]; MP < FP, n = 81 [35.2%]; MP > FP, n = 82 [35.7%]; $P = .695$, $Z = -0.392$) and satisfaction with the variety in sexual activities (MP = FP, n = 130 [47.1%]; MP < FP, n = 68 [24.6%]; MP > FP, n = 61 [22.1%]; $P = .237$, $Z = -1.183$). In addition, both partners seemed to share the view on which partner usually initiated sexual activities (MP = FP, n = 183 [64.9%]; MP < FP, n = 38 [13.5%]; MP > FP, n = 61 [21.6%]; $P = .107$, $Z = -1.610$).

Partners' estimation of their counterparts' satisfaction with their sexual life vs the actual self-reported satisfaction

Figure 2 shows the estimates of FPs and MPs about their counterparts' satisfaction within the sexual relationship (Q14) as compared with their self-reported satisfaction with the sexual relationship (Q1) of the partner. While 128 (44.1%) overestimated their MPs' sexual satisfaction at least by 1 category, in 116 couples (40%) the MPs evaluated their FPs' sexual satisfaction within the same category reported by the MPs; 46 (15.9%) FPs underestimated their MPs' self-reported satisfaction ($P < .001$, $Z = -6008$, $r = 0.351$). Altogether, 149 (51.20%) MPs evaluated their FPs' sexual satisfaction within the same category as FPs did themselves, while 101 (34.70%) overestimated their FPs' sexual satisfaction at least by 1 category and 41 (14.09%) MPs underestimated their FPs' self-reported satisfaction ($P < .001$, $Z = -5147$, $r = 0.302$).

Descriptive data on male and female cohorts regarding perspective on sexuality

Table 4 presents results for FP and MP cohorts regarding questions related to partnership sexuality. When sexual desire was rated on a scale from 0 to 10, the score of the FP was 1.86 points lower than the MP's (mean ± SD, 4.36 ± 2.617 vs 6.22 ± 2.201; median, 4 vs 7; $P < .001$, *t*-test).

Discussion

Most MPs and FPs were satisfied with the sexual relationship with their partners, but MPs reported significantly more often higher sexual satisfaction than their FPs. MPs tended to overestimate their FPs' sexual satisfaction, while FPs had a more accurate perception of their MPs' satisfaction yet still tended to estimate their partners' satisfaction higher than in reality. A majority in both groups wished for greater frequency of sexual contacts, even though MPs indicated a stronger desire for more sexual activity than their FPs. In 40% of the couples, the MP was not aware that the FP realized sexual contacts despite listlessness or discomfort, and in 51% of cases, MPs reported a higher impact than FPs on sexual satisfaction through endometriosis-related pain.

Although women with endometriosis often fear being inadequate sexual partners,[18] in our study sexual satisfaction was high in most couples and even higher in MPs than in FPs. On one hand, this evidence might help women reduce fear of insufficiency and help them have more confidence in the quality of their sexual relationships. In line with these findings, women also longed for a higher frequency of sexual encounters, even though endometriosis-related pain and specifically dyspareunia were indeed a problem interfering with fulfilling sexual contacts. On the other, fear of insufficiency likely motivated women (in our study and those of others) to engage in sexual contacts despite endometriosis-related pain.[18] Socioeconomic status eventually influencing women's roles and communicational skills are known to influence disease symptoms[24,25] and sexual behavior[26]; however, there is currently no information on such associations in the context of endometriosis. Although MPs expressed higher sexual satisfaction, they reported higher levels of impact of pain of their FPs on their sexual satisfaction. Two-thirds of FPs experienced pain during sexual activity on a regular basis. When compared with control couples without endometriosis, men in relationships with women diagnosed with endometriosis showed lower sexual satisfaction and a greater impact

Table 2. Medical, psychological, and endometriosis-specific health aspects of female partners.

Medical and psychological data of patients with endometriosis	No.	%
Mean ± SD		
Age, y (n = 302)	37.7 ± 6.78	
Body mass index, kg/m^2 (n = 300)	23.0 ± 4.47	
rASRM stage of endometriosis (n = 302)		
I	47	15.56
II	69	22.85
III	84	27.81
IV	102	33.77
Time of first endometriosis symptoms, y (n = 285)		
0-5	103	36.14
6-10	60	21.05
>10	122	42.81
Surgical interventions related to endometriosis (n = 302)		
1	135	44.70
2	103	34.11
3	25	8.28
>4	22	4.64
Missing information	17	5.63
Chronic pain due to (n = 175)		
Endometriosis	158	90.29
Other	17	9.71
Duration chronic pain, y (n = 303)		
0-5	104	34.32
5-10	51	16.83
10-20	87	28.71
>20	41	13.53
Previous psychiatric treatment (n = 300)		
Never	230	76.67
Ambulant setting	8	2.67
Stationary setting	62	20.67
Psychotherapeutic treatment in past (n = 300)	133	44.33
Psychotherapeutic support for coping with endometriosis (n = 277)	44	15.88
Reason for psychiatric treatment (n = 282)		
Eating disorder	5	3.38
Depression/mania/anxiety disorder	31	20.95
Compulsive disorder	16	10.81
Other	15	10.14
None	81	54.73
No. of pregnancies >24 wk (n = 302)		
0	188	62.25
1	53	17.55
2	34	11.26
>3	6	1.99
Missing information	21	6.95
Fertility issues (n = 211)	155	73.46
Personal strain due to fertility issues (n = 149)		
Very strong	58	38.9
Strong	44	29.5
Medium	35	23.5
Little	8	5.4
No impact	4	2.7
Personal strain due to fertility treatment (n = 123)		
Very strong	31	25.20
Strong	46	37.40
Medium	24	19.51
Little	13	10.57
No impact	9	7.32
Frequency of stress situations on personal relationships due to fertility issues in the previous month (n = 149)		
Never	57	38.26
Rarely	32	21.48
Sometimes	31	20.81
Often	21	14.09
Always	8	5.37
Frequency of feeling guilt toward the own partner in the previous month (n = 150)		
Never	74	49.33
Rarely	25	16.67
Sometimes	26	17.33
Often	16	10.67
Always	9	6.00

Abbreviation: rASRM, revised American Society for Reproductive Medicine.

Table 3. Comparison of perspectives within the dyad.

Total no. of couples	Rating: MP < FP	Rating: MP > FP	Ties	*Z*	*P* value[c]	Effect size
Q1: Satisfaction with sexual relationship with partner						
292	58	99	135	−3.046[b]	.002	0.178
Q2: Impact of endometriosis related limitations in sexual activities on satisfaction with the partnership						
230	81	82	67	−0.392[c]	.695	
Q3: Frequency of sexual activities with partner relative to own desire						
264	71	30	163	−4.717[c]	<.001	0.290
Q4: Satisfaction with variety of sexual activities						
276	68	78	130	−1.183[b]	.237	
Q5: Initiation of sexual activities by male or female partner						
282	38	61	183	−1.610[b]	.107	
Q6: Frequency of female partner engaging in intercourse despite discomfort or pain						
208	83	42	83	−3.207[c]	.001	0.222
Q7: Impact of sexual discomfort of the female partner on satisfaction with sexual life						
211	46	107	58	−5.352[b]	<.001	0.368

Abbreviations: FP, female partner; MP, male partner. [a] Pearson chi-square; significance at .007. [b] Based on negative ranks. [c] Based on positive ranks.

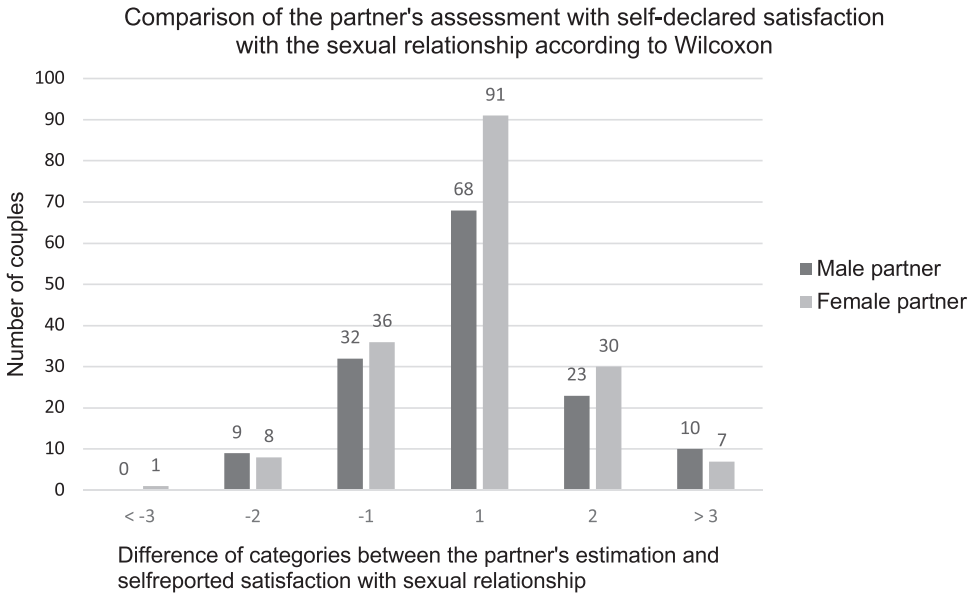

Figure 2. Comparison of the partner's assessment with self-declared satisfaction with the sexual relationship.

of sexual difficulties on partnership happiness.[18] Another reason for the different levels of satisfaction might be fertility issues: more than two-thirds of the participating couples were concerned with reproduction, known to be associated with reduced relationship and sexual satisfaction[27,28] as well as a higher prevalence of sexual dysfunction.[29] Since sexual satisfaction has been identified as a predictor for partnership stability in previous research,[26] these results—in combination with the knowledge that in MPs, a lower satisfaction with relationship sexuality seems to be a predictor for a possible breakup[30,31]—emphasize the need for the integration of sexual counseling into medical support in cases of endometriosis.

In our sample, FPs and, to an even higher degree, MPs tended to overestimate their partners' sexual satisfaction. Mechanisms leading to this perception may range from sexual communication deficits to social desirability bias. This indicates potential for improvements in communication within the couple, especially as separately conducted qualitative interviews in couples facing endometriosis show a reduction in communication about one's own needs, to avoid burdening the partner with one's personal struggles.[16] The mechanism of poorer sexual communication in couples with dyspareunia as compared with controls has shown the lower sexual communication skills of FPs, while their MPs do not present any impairments in communication.[32] Based on findings in women with dyspareunia, educating women with endometriosis in sexual communication might result in better sexual functioning of the FP, even if pain experiences remain the same.[33] It is well known that pain perception is closely related to psychological factors[34] so that psychotherapeutic support might be a valuable resource for improvement. Our results confirm not only a high prevalence of endometriosis-related pain but also a serious impact on sexual pleasure. This is even more relevant, since MPs underestimated the frequency of sexual engagement with their partners despite their discomfort. As having sex with a partner who is perceived as lethargic or in pain will decrease sexual pleasure, open communication on actual well-being, sexual desire, and feelings would allow a reduction in unnecessary burdens on sexuality. Evaluating the motivations of FPs for such contacts—for example, the

Table 4. Cohort-based analysis of perspectives on couple sexuality.

	Female partner		Male partner		
	No.	%	No.	%	*P* value
Q8: Strain on the relationship due to endometriosis	287		281		.020[a]
(Very) strong	65	22.65	45	16.01	
Medium	64	22.30	55	19.57	
(Very) weak	158	55.05	181	64.41	
Q1: General satisfaction with the sexual partnership	299		294		.074[a]
(Very) satisfied	199	66.56	173	58.84	
Neither satisfied nor dissatisfied	57	19.06	65	22.11	
(Very) dissatisfied	43	14.38	56	19.05	
Q2: Influence of endometriosis related restrictions in sexual life on satisfaction with partnership	299		285		.704[a]
(Very) strong	55	18.39	42	14.70	
Medium	63	21.07	58	20.40	
(Very) weak	136	45.48	131	46.00	
No restrictions	45	15.05	54	18.90	
Q3: Relative frequency of sexual contact with partner	277		287		<.001[a]
Less often than desired	132	47.65	179	63.70	
As often as desired	124	44.77	99	35.23	
More often than desired	21	7.58	3	1.07	
Q9: Frequency of desire for sexual activity in the previous month	296		287		<.001[a]
Never	37	12.50	9	3.14	
1/mo	36	12.16	8	2.79	
2 or 3/mo	76	25.68	57	19.86	
1/wk	63	21.28	59	20.56	
2 or 3/wk	72	24.32	108	37.63	
1/d	10	3.38	30	10.45	
>1/d	2	0.68	16	5.57	
Q10: Pleasure in sexual activities in the previous month	293		289		<.001[a]
No sexual activity	53	18.09	57	19.72	
No joy at all	8	2.73	1	0.33	
Joy in <25% of all cases	18	6.14	5	1.73	
Joy in ∼50% of all cases	23	7.85	11	3.81	
Joy in ∼75% of all cases	75	25.60	37	12.80	
Always sensation of joy	116	39.59	178	61.59	
Q4: Satisfaction with sexual diversity in current sexual life	291		279		.718[a]
Extremely satisfied	108	37.11	101	36.20	
Satisfied	114	39.18	97	34.77	
Little satisfied	16	5.50	23	8.24	
Little dissatisfied	24	8.25	24	8.60	
Dissatisfied	17	5.84	21	7.53	
Extremely dissatisfied	12	4.12	13	4.66	
Q11: Sexual desire rating, 0-10	295		287		<.001[b]
0	20	6.78	2	0.70	
1	29	9.83	8	2.79	
2	36	12.20	7	2.44	
3	37	12.54	20	6.97	
4	27	9.15	21	7.32	
5	43	14.58	41	14.29	
6	32	10.85	40	13.94	
7	30	10.17	64	22.30	
8	27	9.15	47	16.38	
9	8	2.71	19	6.62	
10	6	2.03	18	6.27	
Q12: Partners reaction in case of sexual intercourse not going well	281		273		.322[a]
Accepting and understanding	212	75.44	190	69.60	
Frustrated and annoyed	26	9.25	28	10.26	
Anxious and blaming themselves	22	7.83	30	10.99	
Neutral or indifferent	21	7.47	25	9.16	

[a]Pearson chi-square; significance at .050. [b]*t*-test, 2-tailed; significance at .050.

fear of breakdown of a relationship or the desire for a child—might help develop strategies that allow a satisfying sexual relationship for both partners. Reasons for having sex despite lack of desire or pain in women without documented health issues range from normalizing the experience of dyspareunia and putting their partners' satisfaction first to considering pain to be insignificant and gender-specific constraints.[35] In addition, the discrepancy in desire detected in this sample might be an explanation, since such discrepancy in healthy couples can lead to the sexual acquiescence of women.[36]

Despite discrepancies between MPs and FPs, both reported appreciating a higher frequency of sexual contacts. As such, this motivation might serve as a promising basis to improve not only the quantity but also the quality of partnership sexuality, when problems resulting from endometriosis are addressed with adequate sexual counseling.

Strengths and limitations

This study is, to our knowledge, the first one to have collected dyadic information about partnership sexuality in heterosexual couples dealing with endometriosis. There was a high response rate from MPs as compared with other research investigating intimacy.[33] Since patient recruitment also involved patients from gynecologic practices, the risk of selection bias of patients from a tertiary care center with a higher impact on quality of life[37] is considered to be negligible.

The focus of this study is on heterosexual couples and provides information on heteronormative relations dealing with endometriosis. The adjustments to the questionnaires to make them endometriosis specific might make the survey more exact for patients but with reduced comparability. Also, the situation of non–German-speaking partners remains unexplored. As the recruitment for MPs happened through FPs, there was no medical or psychological report about MPs' health status. Despite the high response rate, not all questionnaires were complete, which is most likely due to the intimate content of the study. As the data's characteristics are quantitative, there might be more unexplored qualitative information about how couples facing endometriosis develop dyadic coping strategies or about unknown implications of endometriosis on the sexual relationship.

The study focused on couples in a relationship. Therefore, the impact of endometriosis on the sexual relationship might be underestimated, since dyspareunia as a symptom of endometriosis can be part of why relationships are not initiated or why they come to end.[10] In addition, partners in a more stable relationship are more likely to participate in dyadic research.[38] As all reviewed studies recruited the MP through the FP enrolled in the study and as most of the couples included in the study were in a relationship for >7 years, there might be a bias toward recruiting couples who have sufficient copings strategies to deal with the burden of endometriosis. As a field of future research, this might be an interesting population to scan for coping strategies instead of problems concerning sexuality.

Clinical implications

Women with a gynecologic condition such as endometriosis do not necessarily report issues with their sexuality,[10] which emphasizes the importance of a wholesome patient history. Not more than 27.2% of FPs reported the experience of decent sexual counseling as positive; in the other 72.9%, either no counseling regarding sexuality took place or the quality of sexual counseling was perceived as insufficient. As such, sexuality should be addressed in a well-prepared standardized manner. A useful approach might be to establish the routine use of a patient-reported tool to evaluate the multidimensional burden of endometriosis.[39] Possible implications on the sexuality of the MP have been evaluated in several studies,[15–18] with 1 study showing contradictory results.[19] Our study is, to our knowledge, the first one to evaluate the perceptive accuracy of partners' shared sexuality and to identify reference points (discrepancy in desire, sexual contacts despite FP's discomfort, possible ways to increase frequency of sexual contact) that are worth addressing when counseling a couple dealing with endometriosis.

Since the perceived interests and behavior of an intimate partner has a positive influence on the mental well-being of patients with endometriosis,[40] it is important to highlight the importance of the partner's needs in a relationship. The exploration of dyadic coping on partnership regarding sexuality in patients with endometriosis has been very limited[40]; nevertheless, a majority of MPs reported changes in sexuality due to endometriosis[18] and expressed the need to have these issues addressed.[16] This underlines the importance of further research on sexual communication in relationships, since it is a predictor for sexual and relationship satisfaction in healthy couples.[41]

Conclusion

Couples dealing with endometriosis seem to have different perspectives on certain aspects of their shared sexuality. Divergent points of view were reported on the satisfaction with the frequency of sexual contacts, general sexual satisfaction within the partnership, and the effect of discomfort of the FP on personal sexual satisfaction. Both partners showed tendencies to overestimate their partners' sexual satisfaction, and MPs underestimated the frequency of their correspondent partners engaging in sexual contacts despite discomfort, to not jeopardize the relationship. These points underline the importance of sexual counseling that includes both partners when facing endometriosis.

Take-home messages

- Men and women facing endometriosis overestimate their partners' sexual satisfaction.
- Men underestimate the frequency of their partners engaging in sexual contacts despite discomfort.
- Sexual counseling addressing both partners should be part of medical support in endometriosis.

Author contributions

Conceptualization: BL, FaH, ASKS, PI, MR, MMW, FeH, SvO, ME. Data curation: BL, FaH, ASKS, Formal analysis: BL, FaH. Investigation: BL, FaH, ASKS, PI, MR, MMW, FeH, SvO, ME. Methodology: BL, FaH, ASKS, MR. Project administration: BL. Resources: BL, MR, MW, FeH, SvO, ME. Supervision: BL. Validation: BL, FaH. Visualization: BL, FaH, ASKS. Writing–original draft: BL, FaH. Writing–review and editing: BL, FaH, ASKS, PI, MR, MMW, FeH, SvO, ME.

Funding

None declared.

Conflicts of interest: None declared.

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