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Sexual activity among Nigerian women following successful obstetric fistula repair

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Abstract

Objective: To evaluate post-operative sexual activity among women who have undergone obstetric fistula repair.

Methods: The present descriptive cross-sectional study recruited married women who had undergone successful obstetric fistula repair who were attending reunion activities at Bingham University Teaching Hospital, Jos, Nigeria, between March 13 and March 15, 2014. Participants were interviewed regarding penetrative vaginal intercourse after surgery, and any changes in sexual desire, arousal, orgasm, sexual satisfaction, and the presence of coital pain compared with before they experienced obstetric fistula.

Results: There were 102 patients who participated in interviews; 23 (22.5%) reported not being able to engage in penetrative vaginal intercourse and 12 (52%) of these patients ascribed this to a "tight" or "narrow" vagina. Compared with the pre-fistula period, 63 (61.7%) patients reported reduced sexual desire, 57 (55.9%) reported lack of or inadequate lubrication during intercourse, 12 (11.8%) reported anorgasmia, and 60 (58.8%) reported reduced attainment of orgasm. Dyspareunia was reported by 48 (47.1%) patients; 43 (90%) experienced superficial or deep dyspareunia, and 5 (10%) experienced both. A lack of and lower sexual satisfaction were reported by 20 (19.6%) and 40 (39.2%) patients, respectively.

Conclusion: Following obstetric fistula repair, many women experienced difficulty engaging in penetrative vaginal intercourse and reported sexual dysfunction. Management of sexual dysfunction should be part of fistula rehabilitation programs.

KEYWORDS

Nigeria; Obstetric fistula; Sexual dysfunction; Sexual life

1 | INTRODUCTION

Obstetric fistula is one of the commonest preventable pregnancy-related morbidities and social calamities; cause by prolonged obstructed labor, it is almost exclusively confined to women in low-income countries.[1–3] Obstetric fistula is often associated with social isolation due to odors resulting from the continuous leakage of urine, feces, or both. Consequently, published studies of obstetric fistula often focus on the successful surgical management of the condition, aiming to close the fistulae, halting incontinence,[4,5] a condition often celebrated once achieved. However, women who experience obstetric fistula often face other sexual and psychosocial adverse events before and after surgical repair that are neglected, including loss of self-esteem, divorce/separation, depression, infertility, and sexual dysfunction.[6,7]

Severe vaginal injuries resulting from obstructed labor can result in the loss of a substantial portion of the vagina; in some cases scarring can occur that could impair penetrative vaginal intercourse. Following successful obstetric fistula repair, adverse events including severe vaginal fibrosis leading to gynatresia, vaginal stenosis, and shortening of the vagina can occur. Dyspareunia, apareunia,[7] and possibly other forms of female sexual dysfunction can impact negatively on the sexual function and wellbeing of the women affected. The high rates of separation and divorce among fistula patients[2,8] could also be related to sexual challenges experienced by these women, even after successful repair. Data on sexual experiences and sexual-dysfunction rates following obstetric fistula repair are rare; however, among general populations of sexually active women in Nigeria and Denmark, sexual-dysfunction rates of 53.3% and 11.0% have been reported, respectively.[9,10]

Despite the importance of sexual relationships within healthy marital relationships, there is a paucity of data regarding sexual wellbeing and the management of sexual difficulties following successful obstetric fistula repair. Given that the discussion of sex can often be seen as taboo, and many women might not volunteer such information to healthcare providers, successfully treated obstetric fistula patients could be suffering in silence. The aim of the present study was to ascertain details of post-operative sexual activities among women in marital relationships who have successfully undergone obstetric fistula repair.

2 | MATERIALS AND METHODS

The present descriptive cross-sectional study enrolled women in marital relationships who had undergone successful obstetric fistula repair procedures at Evangel Vesico-Vaginal Fistula Centre, Bingham University Teaching Hospital, Jos, Nigeria, and who were attending the center's annual reunion activities between March 13 and 15, 2014. To be eligible for inclusion, patients had to have undergone fistula repair during the 6 months preceding data collection. Patients who were separated, divorced, or unmarried were excluded; it was thought that these patients could be unlikely to divulge information about sexual activity owing to sexual intercourse outside of marriage being a social taboo in Nigeria. Patients provided verbal consent to participate and the Human Research and Ethics committee of Bingham University Teaching Hospital, Nigeria, provided ethical approval for the study.

The study institution provides ancillary services including counseling for mental health and family problems, as well as physiotherapy. Following repair, patients also receive training in skills including tailoring, knitting, jewelry making, agriculture, and business. Participants were interviewed individually in private by two trained female healthcare workers using a pre-tested questionnaire. Face-to-face interviews were performed in English or Hausa (local language) depending on respondents' spoken languages. The annual reunion events at the study institution include women from across Nigeria who have endured obstetric fistula and undergone repair successfully; these events celebrate surgical success and to encourage patients with obstetric fistula to remain optimistic for treatment.

The interviews collected socio-demographic and obstetric data, and details of obstetric fistula type. Participants were asked whether they could engage in penetrative vaginal intercourse following fistula repair; if they responded negatively they were asked the reasons for their response. Participants were also asked to rate their sexual desire, arousal, attainment of orgasm, and overall sexual satisfaction in comparison with the period preceding the development of obstetric fistula. Sexual desire was rated as "No," "Very low," "Low," "Same," or "Higher." Participants responding "No" were considered to have inhibited sexual desire and those responding "Very low" or "Low" were considered to indicate reduced sexual desire. Sexual arousal could be defined as "Inadequate lubrication," "Adequate lubrication," or a "Lack of lubrication" during sexual intercourse. The attainment of orgasm was categorized as "Never," "Very low," "Low," "Same," or "Higher;" "Never" was considered to indicate anorgasmia, and "Very low" or "Low" indicated a reduced rate of achieving orgasm. Possible sexual-satisfaction responses were "No," "Low," "Same," or "Higher." Response of "No" and "Low" indicated a lack of sexual satisfaction or reduced satisfaction.

Inquiries were also made with respect to any experience of pain during sex, types of pain, and how often pain was experienced. Pain during sex was defined by experiences of pain during sexual intercourse, and was categorized as deep or superficial.

Patient data were recorded using Microsoft Excel 2010 (Microsoft, Redmond, WA, USA) and descriptive analyses using simple percentages were performed using SPSS version 20 (IBM, Armonk, NY, USA).

3 | RESULTS

In total, 196 women attended who had undergone successful obstetric fistula repair during the 6 months preceding the 2014 reunion activities; 68 (34.7%) were excluded because they were either divorced or separated and, of the 128 eligible participants, 26 declined to participate, resulting in 102 patients being included in the present study. The mean±SD age of the participants was 31.9±7.2 years (range 15–45 years). There were 66 (64.7%) patients who were aged 35 years or younger and 70 (68.6%) participants reported being married at or before 20 years of age; the mean±SD age at the time of marriage was 19.7±4.3 years (range 10–30 years). The women were from 24 different ethnic groups across 13 states, primarily from northern regions of Nigeria (Table 1). Among the participants, 84 (82.4%) were Christian and 18 (17.6%) were Muslim. Farming was the most common occupation among participants and a majority had Arabic (literate in Arabic only), primary, or no formal education. The mean±SD parity among participants was 3.9±2.7 (mode 2.0).

A majority of patients reported developing an obstetric fistula during their first (39 [38.2%]) or second (24 [23.5%]) delivery and the mean±SD gravidity at the development of obstetric fistula was 2.7±1.8. There were 92 (90.2%) patients who underwent vesico-vaginal fistula repair, 6 (5.9%) underwent recto-vaginal fistula repair, and 4 (3.9%) underwent both vesico-vaginal and recto-vaginal fistula repairs.

Upon enquiries regarding sexual activity following obstetric fistula repair, 79 (77.5%) patients disclosed that they had engaged in

TABLE 1 Sociodemographic and obstetric characteristics (n=102).

Characteristic	No. (%)
Age, y	
≤20	8 (7.8)
21–25	9 (8.8)
26–30	21 (20.6)
31–35	28 (27.5)
36–40	20 (19.6)
≥41	16 (15.7)
Ethnic group	
Hausa	14 (13.7)
Irigwe	12 (11.8)
Berom	10 (9.8)
Tarok	8 (7.8)
Fulani	7 (6.9)
Mada	5 (4.9)
Eggon	4 (3.9)
Others[a]	42 (41.2)
Educational status	
None/Arabic[b]	24 (23.5)
Primary	40 (39.2)
Secondary	33 (32.4)
Tertiary	5 (4.9)
Occupation	
Farmers	45 (44.1)
Trading	20 (19.6)
Housewives	13 (12.7)
Civil servants	7 (6.9)
Others[c]	17 (16.7)
Parity	
1	16 (15.7)
2–4	53 (52.0)
≥5	33 (32.4)

[a]Other ethnic groups were Anaguta, Igbo, Yoruba, Chawe, Mwaghvul, Ron, Challa, Tiv, Idoma, Gbagi, Gurai, Koro, Kilba, Kataf, Jukun, Mupun, and Afizere.
[b]Arabic education: literate in Arabic only.
[c]Other occupations were tailoring, house/domestic help, Student.

penetrative vaginal intercourse and 23 (22.5%) participants revealed that they had been unable to do so; of those unable, 12 (52%) attributed it to a "narrow" or "tight" vagina. Other reasons reported for not engaging in penetrative intercourse were pain during intercourse and lack of sexual desire on the part of either a patient or their partner (Table 2).

In comparison with before the occurrence of obstetric fistula, 4 (3.9%) and 59 (57.8%) participants reported inhibited and reduced sexual desire, respectively; 13 (12.7%) patients reported a total lack of lubrication and 44 (43.1%) disclosed an inability to maintain lubrication throughout vaginal intercourse (Table 3). There were 12 (11.8%) participants who indicated they had been unable to achieve orgasm after fistula repair and 60 (58.8%) reported a lower rate of attaining orgasm.

TABLE 2 Explanation for patients not engaging in penetrative vaginal intercourse after obstetric fistula repair (n=23).

Reason	No. (%)
Narrow or tight vagina	12 (52)
Pain during sexual intercourse	5 (22)
No sexual desire	4 (17)
Husband experiences no sexual desire	2 (9)

When asked to compare their overall sexual satisfaction following fistula repair with before the occurrence of their obstetric fistula, 20 (19.6%) participants reported that they were now experiencing no sexual satisfaction, 40 (39.2%) reported a reduced rate of satisfaction, and 37 (36.3%) and 5 (4.9%) patients reported the same or higher levels of sexual satisfaction, respectively. Further, in comparison with the pre-fistula period, 54 (52.9%) women disclosed that they were now experiencing no pain during vaginal intercourse, whereas 25 (24.5%) and 23 (22.5%) participants reported occasional and frequent episodes of pain during sexual intercourse, respectively. Among the 48 (47.1%) patients who were experiencing dyspareunia, 24 (50%) and 19 (40%) reported superficial or deep dyspareunia, respectively, and 5 (10%) patients reported both superficial and deep dyspareunia.

4 | DISCUSSION

In the present study, 22.5% of participants reported being unable to engage in penetrative vaginal intercourse following fistula repair and over half of these patients attributed this to a "tight" or "narrow" vagina. Further, a majority of study participants were experiencing sexual dysfunction, reduced sexual desire, arousal, and orgasm, and reported displeasure with their overall sexual satisfaction.

Sexuality is an important component of women's overall wellbeing, with quality of life and sexual dysfunction contributing to personal and interpersonal stress;[11] this could be especially important among women with genital tract injuries from either obstetric trauma or surgical interventions. Ischemic damage to the vagina resulting in the development of obstetric fistula is usually associated with varying degrees of scarring.[12] A sonographic study by Adetiloye et al.[13] detected fibrotic changes in 32.0% of patients with a fistula and minor vaginal fibrosis in 36.0%. Reports have suggested that sexual function can also be negatively affected by vaginal surgeries including anterior and posterior colporrhaphy.[14,15] Vaginal scarring, fibrosis, and stenosis are other potential adverse events of obstetric fistula repair, particularly when a substantial portion of the vagina is involved in the fistula process, and if flaps or tissue grafts are used during fistula repair with or without some degree of vaginoplasty.[15] Severe gynatresia following obstetric fistula repair could impair or even prevent penetrative vaginal intercourse.

TABLE 3 Patient ratings of the changes to sexual response cycles compared with pre-fistula period (n=102).

Variable	No. (%)
Sexual desire	
No desire	4 (3.9)
Very low	16 (15.7)
Low	43 (42.2)
Same	36 (35.3)
Higher	3 (2.9)
Sexual arousal (lubrication)	
Lack of lubrication	13 (12.7)
Inadequate lubrication	44 (43.1)
Adequate lubrication	45 (44.1)
Attainment of orgasm	
Never	12 (11.8)
Very low	10 (9.8)
Low	50 (49.0)
Same	25 (24.5)
Higher	5 (4.9)

The proportion of patients reporting they were unable to engage in penetrative intercourse through vaginal tightness or narrowing could indicate that some of the patients had pre-operative vaginal stenosis due to the fistula-development process or post-operative vaginal stenosis, a known adverse event of obstetric fistula repair.[7,16] Though successful obstetric fistula repair restores patient dignity, self-esteem, and improves quality of life,[5,17] the sexual wellbeing of these patients is rarely considered, as indicated by the paucity of research into this aspect of their care. Owing to the taboo nature of discussing sexual issues in Nigeria, many of these women would not volunteer such information to healthcare providers unless specifically asked. This emphasizes the need to assess sexual wellbeing, including vaginal examination of patients after fistula repair, as part of routine follow-up and rehabilitation. Patients experiencing these adverse events could benefit from further interventions like vaginoplasty, which could help restore sexual function. This could reduce marital disharmony, separation, and divorce, which are common social problems among patients experiencing obstetric fistula.[2,8]

The other reasons reported for not engaging in penetrative vaginal intercourse were dyspareunia and a lack of sexual desire on the part of both patients and their partners. Dyspareunia could be related to the presence of vaginal stenosis or scarring and reduced sexual desire could result from depression and psychological trauma[18] experienced following the development of obstetric fistula.

The present study demonstrated that sexual dysfunction was common following successful obstetric fistula repair. The rates of sexual desire and arousal disorders in the present study were higher compared with figures reported among healthy sexually active women in Nigeria and Denmark.[9,10] Specifically, in a Danish study,[10] rates of lubrication insufficiency, dyspareunia, and anorgasmia were lower compared with those observed in the present study. Reports have suggested that depression and voiding difficulties are predisposing factors for sexual dysfunction.[18,19] High sexual dysfunction rates in the present study could be the product of traumatic experiences resulting from the development of obstetric fistula and the associated psychological disturbances and depression. Additionally, some patients could experience post-repair urinary incontinence, particularly stress urinary incontinence during sexual intercourse, and this could negatively affect patient wellbeing. Approximately two-thirds of the present study population had a low level of education and this could have contributed to the high level of dysfunction experienced, similar to previous report.[10,19]

Approximately half of the study participants reported experiencing pain during intercourse and dissatisfaction with their sex life. This could be related to dysfunction in other domains of the sexual response cycle and possibly vaginal stenosis. In view of the fact that female sexual dysfunction negatively impacts on women's interpersonal relationships and quality of life,[20] and that most women experiencing sexual dysfunction do not seek help,[21] it is imperative to deliberately look out for such challenges in the follow-up and rehabilitation of patients following successful obstetric fistula repair. This could be especially important in the present study population, where participants were relatively young and were in marital relationships. Patients with vaginal stenosis could benefit from serial vaginal dilation or vaginoplasty, and patients with no anatomical causes for dysfunctions in the various domains of their sexual response cycle could benefit from psychosexual counseling or therapy. This could involve husbands, who could be counseled to appreciate the specific peculiarities of fistula and its treatment. Appropriate management of these sexual problems could contribute to reducing marital disharmony, which can lead to divorce among these individuals.

The limitations of the present study included the possibility of recall bias among participants and the use of a non-standardized questionnaire for assessing female sexual dysfunction. Additionally, participants were not asked about their ability to engage in penetrative vaginal intercourse before obstetric fistula and the role of participants' partners in sexual arousal was not evaluated. However, the study did demonstrate the existence of sexual dysfunction among patients following successful obstetric fistula repair, a significant problem that should be addressed in fistula-rehabilitation programs.

In conclusion, an appreciable proportion of women who underwent successful obstetric fistula repair experienced problems engaging in penetrative vaginal intercourse, as well as dysfunction across various sexual response cycle domains. Efforts should be made to identify these patients and institute appropriate management during fistula rehabilitation to improve their overall wellbeing and quality of life.

AUTHOR CONTRIBUTIONS

All authors contributed to the design and conception of the study, and were involved in the collection, analysis and interpretation of the data. All authors contributed to the writing and revision of the article and approved the final manuscript.

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CONFLICT OF INTEREST

The authors have no conflicts of interest.

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