### Original Article

# Sexual dysfunction among women in a Nigerian gynecological outpatients unit

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#### **ABSTRACT**

**Background:** Sexual dysfunction is an important public-health problem, which is often less reported or explored through opportunistic evaluation during medical consultations.

**Objective:** This study was designed to determine the prevalence and patterns of female sexual dysfunction (FSD) including the sexual quality of life among female patients attending a gynecological outpatients unit in Southwest Nigeria.

**Materials and Methods:** This is a cross-sectional descriptive study of 146 consenting women who attended the gynecological outpatients' clinic of the University College Hospital, Ibadan, Nigeria, during the study period. Participants were selected using multistage sampling technique. The survey instruments were previously validated questionnaires such as Sexual Function Questionnaire (SFQ28), Sexual Quality of Life-Female Questionnaire (SQOL-F), and the Family Adaptation, Partnership, Growth, Affection and Resolve (APGAR) score. The results were analyzed using Statistical Package for Social Sciences version 17 and *P* value was set at 5%.

**Results:** The mean age was  $33.8 \pm 5.7$  years. Most (85.6%) respondents had at least one form of sexual dysfunction. The commonest dysfunction was arousal-sensation (62.4%) while the least was pain (3.4%). The mean SFQ28 and SQOL-F scores were  $58.0 \pm 12.57$  and  $28.0 \pm 11.94$ , respectively. There were no statistically significant differences in the SFQ28 and SQOL-F scores across sociodemographic factors. Women classified as belonging to dysfunctional family on Family APGAR score similarly had poorer scores for sexual dysfunction (100%, P = 0.016).

**Conclusion:** FSD is common among women attending gynecological outpatients clinic. Managing clinicians should be aware of this condition and proffer appropriate care in addition to the main presenting complaint.

Key words: Female; Nigeria; outpatients; sexual dysfunction.

#### Introduction

Sexual dysfunction constitutes a group of disorders affecting the sexual response and is an important public-health problem which is often less commonly researched.<sup>[1,2]</sup> The fact that over the years several criteria for its definition have been adopted makes its prevalence and geographic spread difficult to ascertain. Although sexual dysfunction can occur

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in both genders, available studies reveal that it is more prevalent among women.<sup>[3,4]</sup>

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Most of the earlier documentations of the female sexual response were in the 19<sup>th</sup> century and among different professions such as marital therapists, psychoanalysts, sexologists, gynecologists, and psychiatrists.<sup>[5,6]</sup> By the mid-20<sup>th</sup> century, the categorization of the female sexual response cycle, by Masters and Johnson in 1966,<sup>[7]</sup> gained wide acceptance and female sexual dysfunction (FSD) was classified into four groups. This remained for so long until the recent categorization into three groups (sexual interest/arousal syndrome, female orgasmic disorder, and genito-pelvic pain/penetration disorder) by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.<sup>[8]</sup>

The prevalence of FSD varies across different regions depending on the tools used in its diagnosis and whether affected women consider it worrisome. Commonly used tools include the American Psychiatric Association's Diagnosis and Statistical Manual for Mental Disorder, 4th text revision, the World Health Organization's International Classification of Diagnosis (ICD-10), Profile of Female Sexual Function, Female Sexual Function Index, Golombok Rust Inventory of Sexual Satisfaction, International Index of Erectile Function, Sexual Function Questionnaire (SFQ), and other researcher-made validated questionnaires. [5,6,9-13] Globally, It is estimated to be 30-50% in the USA, 52.2% in Turkey, 26–51% in Iran, and 5.5–18.6% in Malaysia.[14-17] In Nigeria, in the past decade, there seems to be a slow but steady increased interest in this area, with FSD estimated to range between 53.3% and 71.0%.[1,2,18]

FSD may be lifelong, acquired, situational, or generalized and an individual may have multiple variants of sexual dysfunctions at the same time. [19,20] More often, a combination of biological, physical, psychological, and emotional factors is usually involved. Studies have shown that it is influenced by parity rather than mode of delivery, [21] harmful practices such as Female Genital Mutilation, [22] and chronic diseases. [23-26] It affects the quality of life of affected individuals and in some instances has been reported as a cause of marital disharmony. [2,27]

Despite the growing concern about the impact of FSD, there is still paucity of data on this topic in Nigeria. This study was designed to obtain baseline data on the prevalence and types of FSD experienced among women attending the gynecological outpatients department while also determining its predictors. Additionally, the sexual quality of life of the respondents and the influence of Family Adaptation, Partnership, Growth, Affection, and Resolve (APGAR) on FSD and sexual quality of life were also determined.

#### **Materials and Methods**

It was a cross-sectional descriptive study among women attending the gynecological outpatients department of the University College Hospital, Ibadan, Nigeria between March 1 and July 31, 2012. Only first attendees were recruited. All consenting participants who attended the clinic during the study period were recruited while women with referral notes suggestive of gynecological malignancies or previous gynecological surgeries were excluded.

Participants were selected using multistage sampling technique. Four hospitals providing specialist gynecological care of at least the secondary level within the locality were considered in the initial phase, namely, University College Hospital Ibadan, Adeoyo Maternity Teaching Hospital (Yemetu), Adeoyo Maternity Teaching Hospital (Ring Road), and Our Lady of Apostle Catholic Hospital, Oluyoro, Oke-Offa Ibadan. The University College Hospital, Ibadan, was selected by simple random sampling while systematic sampling was used in selecting the eventual study respondents.

Prior to the commencement of the study, two female research assistants were trained on the use of the survey instrument and ethical approval was obtained. The survey instruments were previously validated tools such as Female Sexual Function Questionnaire (SFQ28), Sexual quality of life-female questionnaire (SQOL-F), and the Family APGAR score. SFQ28 consisted of 28 questions with each having between 5 and 7 possible response and scores reported in 7 domains of dysfunction. The SQOL-F aspect had 18 questions focusing on sexual self-esteem, emotional, and relationship issues. Each question was rated on a 6-point Likert scale ranging from 0 to 5. The Family APGAR scores had five components: adaptation, partnership, growth, affection, and resolve with each scored as 0 or 2.

FSD was defined as at least one score in any domain within the range, indicating high probability on the SFQ28. APGAR scores of >6 or <6 were classified as functional or dysfunctional families, respectively. The results were analyzed using Statistical Package for Social Sciences version 17.

#### **Results**

Table 1 shows the sociodemographic characteristics plus the mean SFQ28 and SQOL-F scores of the 146 respondents. The mean age of respondents was  $33.8 \pm 5.7$  years and the age range was 22–51 years. Most were within the age group 25–34 years (79; 54.2%) and had at least tertiary education (98; 67.1%). The common occupational groups were the skilled nonmanual (53; 36.3%) and unskilled workers

Table 1: Sociodemographic characteristics and mean FSD/FSQ scores of respondents

| Category                   | Frequency $(n=146)$ | Percentage | SFQ28 score (mean) | SQOL-F score (mean) |
|----------------------------|---------------------|------------|--------------------|---------------------|
| Age group in years         |                     |            |                    |                     |
| 15-24                      | 4                   | 2.7        | $78.8 \pm 8.2$     | $46.5 \pm 4.4$      |
| 25-34                      | 79                  | 54.2       | $86.2 \pm 13.0$    | $50.6 \pm 12.4$     |
| 35-44                      | 52                  | 35.6       | 84.8±12.8          | $50.9 \pm 12.1$     |
| >44                        | 11                  | 7.5        | 84.0±10.6          | $52.4 \pm 10.5$     |
| Occupation                 |                     |            |                    |                     |
| Professional               | 15                  | 10.3       | 83.1±12.6          | $47.2 \pm 8.7$      |
| Skilled nonmanual          | 53                  | 36.3       | 85.7±12.9          | 51.9±11.2           |
| Semi-skilled               | 15                  | 10.3       | 84.2±7.3           | $50.8 \pm 11.3$     |
| Unskilled                  | 52                  | 35.6       | 84.7±11.8          | $52.0 \pm 13.5$     |
| Unemployed                 | 11                  | 7.5        | $86.9 \pm 17.6$    | $44.1 \pm 6.5$      |
| Highest educational level  |                     |            |                    |                     |
| None                       | 6                   | 4.1        | $82.9 \pm 10.2$    | $54.7 \pm 11.8$     |
| Primary                    | 9                   | 6.2        | $78.3 \pm 6.4$     | $53.4 \pm 11.8$     |
| Secondary                  | 33                  | 22.6       | 83.3±10.8          | 51.8±11.9           |
| Tertiary                   | 98                  | 67.1       | $86.4 \pm 13.4$    | $49.7 \pm 11.9$     |
| Parity                     |                     |            |                    |                     |
| 0                          | 76                  | 52.1       | $86.5 \pm 12.0$    | $49.3 \pm 10.6$     |
| 1-3                        | 66                  | 45.2       | $83.9 \pm 12.7$    | $52.1 \pm 12.7$     |
| >4                         | 4                   | 2.7        | 79.5±7.7           | 57.3±8.5            |
| Years married/Relationship |                     |            |                    |                     |
| <10                        | 123                 | 84.3       | 84.7±13.2          | 49.6±11.5           |
| >10                        | 33                  | 15.7       | $88.4 \pm 9.8$     | 46.8±8.7            |
| Monthly income (Naira)     |                     |            |                    |                     |
| <10,000                    | 37                  | 25.4       | $77.1 \pm 8.8$     | $54.6 \pm 12.6$     |
| 10,001-25,000              | 34                  | 23.3       | $82.5 \pm 9.6$     | 51.8±11.1           |
| 25,001-100,000             | 64                  | 43.8       | 88.8±12.6          | 50.3±11.8           |
| >100,000                   | 11                  | 7.5        | 90.1±9.2           | 49.4±11.8           |

(52; 35.6%). About an equal proportion of respondents were earning less than or above 25,000 Naira monthly.

Highest SFQ28 scores were observed among respondents in age group 25–34 (86.2  $\pm$  13.0), with tertiary education (86.4  $\pm$  13.4), unemployed (86.9  $\pm$  17.6), earning more than 100,000 Naira monthly (90.1  $\pm$  9.2), married for more than 10 years (88.4  $\pm$  9.8), and nulliparous (86.5  $\pm$  12.0) while highest SQOL-F scores were obtained among women greater than 45 years (52.4  $\pm$  10.5), with primary education (53.4  $\pm$  11,8), unskilled (52.0  $\pm$  13.5), earning less than 10,000 Naira (54.6  $\pm$  12.6), less than 10 years married (49.6  $\pm$  11.5), and at least four parous experiences (57.3  $\pm$  8.5).

Figure 1 shows the prevalence of FSD among the respondents with 125 (85.6%) having at least 1 form of reported sexual dysfunction. Most FSD related to arousal phase of the female sexual response. Of the eight domains, the commonest dysfunction was arousal (sensation) (62.4%) while the least was pain (3.4%). This is shown in Figure 2.

Using the Family APGAR scoring, 28 respondents (19.2%) were classified as dysfunctional families. The entire respondent

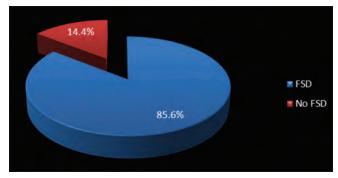


Figure 1: Prevalence of female sexual dysfunction among respondents

in the dysfunctional family group (100%) had at least one form of FSD compared to 82.2% among those with normal families (P = 0.016). This is shown in Figure 3.

Table 2 shows the associations between sociodemographic characteristics and FSD. Only the income of the respondents was statistically significant in relation to the prevalence of FSD. Women in the extremes of income groups had the highest prevalence of FSD. Using the SFQ28 scores, there were no statistically significant differences across sociodemographic factors like age groups, parity, number

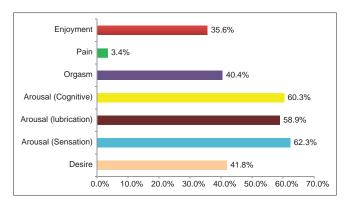


Figure 2: Types of female sexual dysfunction among respondents

Table 2: Associations with FSD among study participants

|                            | FSD number (%) | P        |
|----------------------------|----------------|----------|
| Age in years               |                | P=0.55   |
| 15-24                      | 4 (100.0)      |          |
| 25-34                      | 69 (87.3)      |          |
| 35-44                      | 42 (80.8)      |          |
| ≥45                        | 10 (90.9)      |          |
| Educational status         |                | P = 0.79 |
| Primary                    | 8 (88.9)       |          |
| Secondary                  | 29 (87.9)      |          |
| None                       | 82 (83.7%)     |          |
| Occupation                 |                |          |
| Professionals              | 8 (100.0)      | P = 0.62 |
| Skilled nonmanual          | 47 (83.9)      |          |
| Semi-skilled               | 14 (93.3)      |          |
| Unskilled                  | 44 (84.6)      |          |
| Unemployed                 | 12 (80.0)      |          |
| Monthly income (Naira)     |                | P = 0.06 |
| <10,000                    | 24 (100.0)     |          |
| 10,001-25,000              | 19 (86.4)      |          |
| 25,001-100,000             | 33 (78.6)      |          |
| ≥100,000                   | 7 (100.0)      |          |
| Years married/Relationship |                |          |
| <10                        | 108 (74.5%)    | P = 0.38 |
| ≥10                        | 18 (12.4%)     |          |
| Parity                     |                |          |
| 0                          | 60 (87.0)      | P = 0.79 |
| 1-3                        | 52 (85.2)      |          |
| ≥4                         | 3 (75.0)       |          |

of children alive, monthly income, and number of years married.

#### **Discussion**

Although an estimate of FSD from global and a few African studies puts it at less than 50% of the population, <sup>[28-31]</sup> the FSD prevalence of 85.6% found in this study is higher than previously reported in Nigeria. This may be attributed to the fact that our study utilized the use of a validated survey instrument, which was interviewer administered for completeness by well-trained personnel. Even in both

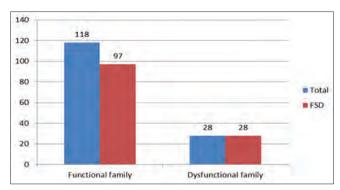


Figure 3: Relationship between family APGAR and female sexual dysfunction. *P* = 0.266; Chi-square = 1.235

developing and developed countries, the use of structured validated instruments tends to yield higher prevalence of SD.[18,32-34]

The threshold adopted in this study as defining FSD as any one of the reported domains of sexual dysfunction could also have played a role. This is supported by the study of Fajewonyomi *et al.* in Ile-Ife where similar methodology to this study was adopted and 63% of their study population had FSD, although they used a self-developed questionnaire. On the other hand, both of these studies were done in the hospital setting among women presenting at the gynecological outpatient units and the possibility of underlying gynecological or psychological issues contributing to the high prevalence cannot be confidently overruled.

This study also showed that although these patients came to the clinic for other conditions, many of them were suffering silently from FSD and these were not reported. This may be due to the reluctance of women to discuss sexual matters as previously documented in an African population, and even in developed countries, these women rather present with other medical conditions rather than sexual dysfunction. [35,36] It is therefore pertinent that health-care providers should deliberately seek information relating to sexual dysfunction so that affected women can benefit from appropriate care and intervention.

The commonest type of dysfunction observed from our study was arousal sensation (62.4%) while the least was pain (3.4%). This is unlike as a few other Nigerian studies had reported orgasmic disorders as the most common form. Arousal has to do with sexual stimulation and is facilitated by adequate foreplay. This observation may be explained by the male dominance in sexual matter, which is common in the African setting. Women are reluctant to initiate or dictate sex so as not to be perceived as promiscuous. They also do not negotiate sex and most often sacrifice their satisfaction for their partners. The fear of divorce and marital disharmony

also makes the women to be docile. All these factors could then lead to poor lubrication and lack of interest in sex.

We also studied the influence of sociodemographic characteristics such as age groups, parity, number of children alive, monthly income, and years married on the prevalence of SD. With the hormonal changes that occur with increasing age, it is thought that the prevalence of SD in the elderly should increase. This sex hormone affects libido, vaginal lubrication, and distortion of the pelvic anatomy, which may result in difficult sex. However, this study did not show any statistically significant differences across the age groups. This does not mean that sexual dysfunction is not present but affected women may not consider it worrisome and so unreported.

Childbirth is an important landmark that is well celebrated, strongly emphasized, and looked forward to in the African population. Women who are not able to get pregnant are often stigmatized and seen as outcast. Mothers in developing countries are also mostly of high parity because of the preference for large families and low usage of contraception. These women are also likely not to attend antenatal clinic, have delivery conducted by nonskilled attendant, and more likely to have obstetrics morbidities. Even without complications, repeated childbirth weakens the pelvic floor and may result in urogenital prolapse, which may affect sexual satisfaction. The cumulative expected effect is poorer scores for sexual dysfunction; however, this was not observed in this study. This may be due to the fact that only 2.7% of our study population had more than three previous parous experiences and as such the sample size may not be powered enough to observe any statistically significant difference.

Despite all these above observations, the SFQ28 scores obtained across the study population were not statistically significant when compared to the sociodemographic factors. However, a major outcome of this study is the role of the family type on FSD. Although the prevalence of FSD was high among the study population generally, all those women with dysfunctional families had FSD. This shows that functional families may help reduce the prevalence of FSD. It will need to be explored whether there are also other contributing factors.

#### Conclusion

This study has shown that FSD is underreported and common among women attending gynecological outpatients' clinic. Attending clinicians should be aware of this condition and proffer appropriate care in addition to the main presenting complaint. There is also the need for further studies on this silent condition.

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#### **Conflicts of interest**

There are no conflicts of interest.

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