

## Prevalence of sexual dysfunction in patients with inflammatory bowel disease from a northeastern hospital in Brazil

Prevalência de disfunção sexual em pacientes com doença inflamatória intestinal de um hospital do Nordeste do Brasil

Prevalencia de disfunción sexual en pacientes con enfermedad inflamatoria intestinal de un hospital del noreste de Brasil

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### Abstract

**Objective:** To evaluate the prevalence of sexual dysfunction (SD) and the main associated factors in patients with inflammatory bowel disease (IBD) undergoing follow-up at the University Hospital of the Federal University of Sergipe. **Methods:** This is a cross-sectional study with 69 patients diagnosed with Crohn's Disease (CD) or Ulcerative Colitis (UC) of both sexes who have had previous sexual intercourse and are undergoing outpatient follow-up. Clinical and epidemiological aspects were evaluated and the Female Sexual Function Index and the International Index of Erectile Function were applied. The Student's t test was used for parametric analysis between continuous variables, and the Mann-Whitney test for non-parametric analysis. To verify the association between categorical variables, the chi-square test or, if necessary, Fisher's exact test was used. The BioEstat 5.0 software, with free distribution, was used, considering a statistical significance interval of 95%. **Results:** of the 69 patients, 39 (56.5%) were women, with a mean age of  $38 \pm 12.2$  years. The overall prevalence of SD was 59.4%, with a predominance among women (82%). There was no difference in the mean scores between the phenotypes, and there was no correlation between age or time of diagnosis. A positive association was found between SD and the presence of seton ( $p = 0.032$ ) among women. **Conclusion:** the prevalence of SD was high among patients with IBD assisted by the tertiary center, especially among women, being associated with the use of a seton in this group.

**Keywords:** Inflammatory Bowel Disease; Crohn Disease; Ulcerative Colitis; Hospitals; Prevalence.

### Resumo

**Objetivo:** Avaliar a prevalência de disfunção sexual (DS) e os principais fatores associados em pacientes com doença inflamatória intestinal (DII) em acompanhamento no Hospital Universitário da Universidade Federal de Sergipe. **Métodos:** Estudo transversal com 69 pacientes diagnosticados com Doença de Crohn (DC) ou Retocolite Ulcerativa (RCU) de ambos os sexos, com histórico de atividade sexual e em seguimento ambulatorial. Foram avaliados aspectos clínicos e epidemiológicos, e aplicados o Índice de Função Sexual Feminina (FSFI) e o Índice Internacional de Função Erétil (IIEF). O teste t de Student foi utilizado para variáveis contínuas paramétricas e o teste de Mann-Whitney para não paramétricas. Para associação entre variáveis categóricas, utilizou-se o teste do qui-quadrado ou, se necessário, o teste exato de Fisher. Utilizou-se o software BioEstat 5.0, de distribuição gratuita, considerando intervalo de

significância estatística de 95%. Resultados: Dos 69 pacientes, 39 (56,5%) eram mulheres, com média de idade de  $38 \pm 12,2$  anos. A prevalência geral de DS foi de 59,4%, com predomínio entre mulheres (82%). Não houve diferença nos escores médios entre os fenótipos, nem correlação com idade ou tempo de diagnóstico. Foi encontrada associação positiva entre DS e presença de sedenho ( $p = 0,032$ ) entre as mulheres. Conclusão: A prevalência de DS foi elevada entre os pacientes com DII acompanhados no centro terciário, especialmente entre as mulheres, estando associada ao uso de sedenho neste grupo.

**Palavras-chave:** Doença Inflamatória Intestinal; Doença de Crohn; Retocolite Ulcerativa; Hospitais; Prevalência.

## Resumen

Objetivo: Evaluar la prevalencia de disfunción sexual (DS) y los principales factores asociados en pacientes con enfermedad inflamatoria intestinal (EII) en seguimiento en el Hospital Universitario de la Universidad Federal de Sergipe. Métodos: Estudio transversal con 69 pacientes diagnosticados con Enfermedad de Crohn (EC) o Colitis Ulcerosa (CU), de ambos sexos, con antecedentes de actividad sexual y en seguimiento ambulatorio. Se evaluaron aspectos clínicos y epidemiológicos, y se aplicaron el Índice de Función Sexual Femenina (FSFI) y el Índice Internacional de Función Eréctil (IIEF). Se utilizó la prueba t de Student para variables continuas paramétricas y la prueba de Mann-Whitney para no paramétricas. Para verificar la asociación entre variables categóricas, se utilizó la prueba de chi-cuadrado o, si era necesario, la prueba exacta de Fisher. Se utilizó el software BioEstat 5.0, de distribución gratuita, considerando un intervalo de significancia estadística del 95%. Resultados: De los 69 pacientes, 39 (56,5%) eran mujeres, con una edad media de  $38 \pm 12,2$  años. La prevalencia general de DS fue del 59,4%, con predominio en mujeres (82%). No hubo diferencias en los puntajes medios entre los fenotipos, ni correlación con la edad o el tiempo de diagnóstico. Se encontró una asociación positiva entre DS y la presencia de setón ( $p = 0,032$ ) entre las mujeres. Conclusión: La prevalencia de DS fue alta entre los pacientes con EII atendidos en el centro terciario, especialmente entre las mujeres, estando asociada al uso de setón en este grupo.

**Palabras clave:** Enfermedad Inflamatatoria Intestinal; Enfermedad de Crohn; Colitis Ulcerosa; Hospitales; Prevalencia.

## 1. Introduction

Inflammatory Bowel Disease (IBD) is a chronic and recurrent condition of the gastrointestinal tract (GIT) that comprises different phenotypic presentations, the most prominent being Crohn's Disease (CD) and Ulcerative Colitis (UC) (Allocca et al., 2018). Both have increasing prevalence and incidence worldwide and can affect individuals of any age, especially young adults (Balestrieri et al., 2020).

Over the past few decades, an important focus has been placed on the quality of life (QoL) of IBD patients, culminating in the development of multiple tools to assess the impact of the pathology on the various biopsychosocial and spiritual domains that characterize individual health (Bel et al., 2015).

Sexual health is recognized by the World Health Organization as one of the fundamental aspects of the human being's QoL. However, knowledge of the deleterious effects of IBD on sexual function is still limited, especially in developing countries (Silva et al., 2018), making it difficult to access the multidisciplinary care needed to approach these patients (Domislovic et al., 2021). It is estimated that, globally, between 20 and 50% of IBD patients present some degree of sexual dysfunction (SD) (Silva et al., 2018).

Therefore, this study aims to assess the prevalence of SD and its possible associations with clinical and epidemiological aspects of patients with CD and UC who undergo outpatient follow-up and infusion of biologicals in a reference center in northeastern Brazil. It is expected to contribute to the assessment of SD during clinical practice to become routine throughout the follow-up of these patients, optimizing their QoL.

## 2. Methodology

This is a cross-sectional study, of quantitative nature (Pereira et al., 2018) using simple descriptive statistics with data classes, mean values, standard deviations, absolute frequency and relative percentual frequency (Shitsuka et al., 2014; Akamine & Yamamoto, 2009) and statistical analysis (Bekman & Costa Neto, 2009) and carried out between January and September 2022, through the application of structured and validated questionnaires in patients with IBD who are monitored at the IBD

outpatient clinic and application of biologics in the biologic's infusion center, both located at the University Hospital of the Federal University of Sergipe, located in the city of Aracaju.

Patients with a diagnosis of CD or UC of both genders, over 18 years of age, who are sexually active, who are undergoing regular outpatient follow-up and who agreed to participate in the study by signing the Informed Consent Form were included in the study. Nursing mothers, people with physical disabilities, patients diagnosed with SD prior to the diagnosis of IBD, patients who did not read and questionnaires with less than 75% of complete completion were excluded from the study.

Patients were approached prior to their appointments at the coloproctology outpatient clinic and at the Biologicals Infusion Center of the University Hospital of the Federal University of Sergipe and informed about the intention to include them in the study, whose purpose and objectives were briefly explained. Then, the physical questionnaire was applied by one of the researchers. For patients who did not have time to apply the physical form locally, they were offered the option of sending the online version, containing the same questions as the physical form, through the Google Forms platform to a valid email address. The initials of the patients' names were kept in a spreadsheet to control the applied questionnaires, avoiding repeated applications.

Initially, sociodemographic aspects such as age, marital status, race and origin were evaluated. Then, clinical parameters of the disease were evaluated, such as phenotype, time since diagnosis, current use of biologics and other classes of IBD medications, disease location, CD behavior according to the Montreal classification (Silverberg et al., 2005); presence of extraintestinal manifestations (EIM) related to the main diagnosis and information about previous surgeries, including procedures such as seton and ostomies. Comorbidities such as systemic arterial hypertension, diabetes mellitus and depression were also considered. The disease was considered active in patients who had a compatible clinical and report during the outpatient consultation.

The third stage consisted of applying the questionnaires aimed at assessing SD. In case of female participants, the Female Sexual Function Index (FSFI) was applied. The instrument has psychometric translation and validation in several languages, including Portuguese, and evaluates six domains along 21 items: desire, excitement, lubrication, orgasm, satisfaction and dyspareunia (Wiegel, Meston, & Rosen, 2005). Each index answer receives a score between 0 and 5. The total score for each domain consists of the sum of the values of each question multiplied by a correction factor. The sum of each domain will generate a score between 2 and 36, with higher values representing better sexual function indices. A score  $\leq 26.55$  is interpreted as equivalent to SD (Wiegel et al., 2005).

For male participants, the International Index of Erectile Function (IIEF-15) was applied. The questionnaire assesses 5 domains through 15 items: erectile function, orgasmic function, sexual desire, satisfaction with sexual relations and general satisfaction with one's own sexual function (Rosen et al., 1997). A total score  $< 43$  points corresponds to SD and a score  $< 26$  corresponds to erectile dysfunction (ED). The score obtained in the "erectile function" domain, between 6 and 30 points, is distributed and interpreted into 5 intervals: no erectile dysfunction (ED), mild ED, mild to moderate ED, moderate ED and severe ED, with higher scores corresponding to lower correlation with ED (Rosen et al., 1997).

Continuous variables were described using mean and standard deviation or median and variance, depending on the data distribution pattern, verified using the Shapiro-Wilk test. Categorical variables were described using absolute frequency and relative percentage. Student's t test was applied for parametric analysis of the correlation between continuous variables with a tendency to normality, while the Mann-Whitney test was used for non-parametric analyses. The correlation between SD and the variables time since diagnosis and age was performed using Spearman's correlation test. To verify the difference between proportions of categorical variables, the chi-square test was used or, if necessary, Fisher's exact test. The BioEstat 5.0 software, freely distributed, was used, considering a statistical significance interval of 95%.

This study was appreciated and approved by the Ethics Committee for Research on Human Beings of the Federal University of Sergipe (CAAE 16480819.9.0000.5546).

### 3. Results

Of the 100 patients invited to participate in the study, 69 forms (69%) were received with complete completion, 3 patients refused to participate in the study due to unavailability or for not having an active sex life, 5 participants answered incompletely and 23 did not return the questionnaire.

Of the 69 participants included in the study, 51 were diagnosed with CD and 18 with UC, 39 (56.5%) were female and the median age was 38 (19 – 67) years. A total of 12 participants had an active disease (17.4%), with an average time since diagnosis equal to 8.8 years, with a longer disease period among patients with CD (mean of 9.55 years). The involvement of the terminal ileum was the most prevalent among patients with CD ( $n = 8$ , 15.6%), but a significant number of participants did not know how to inform the location or behavior of the disease ( $n = 18$ , 37.2% for CD and  $n = 16$ , 77.7% for UC). Most participants were using immunobiological therapy ( $n = 53$ , 76.8%), with infliximab being the most used agent, and 20 patients (29%) reported previous surgeries related to the evolution of IBD (Table 1).

**Table 1** - General characteristics of the studied population.

|                                                   |                                                                |
|---------------------------------------------------|----------------------------------------------------------------|
| <i>n = 69</i>                                     |                                                                |
| <b>Female sex (%)</b>                             | 39 (56,5%)                                                     |
| <b>Median of age, years (IQ)</b>                  | 38 (19 – 67)                                                   |
| <b>Diagnosis, <i>n</i> (%)</b>                    |                                                                |
| <b>CD</b>                                         | 51 (73,9%)                                                     |
| <b>UC</b>                                         | 18 (26,1%)                                                     |
| <b>Time since diagnosis, years (SD)</b>           | 8,8 (7,22)                                                     |
| <b>Disease activity</b>                           |                                                                |
| <b>Men</b>                                        | 4 (13,3%)                                                      |
| <b>Women</b>                                      | 8 (20,5%)                                                      |
| <b>Disease location<sup>a</sup>, <i>n</i> (%)</b> |                                                                |
| <b>CD:</b>                                        |                                                                |
| <b>L1; L2; L3; L4; L1+L4; L3+4</b>                | 6 (11,7%); 6 (11,7%); 4 (7,8%); 8 (15,6%); 1 (1,9%); 6 (11,7%) |
| <b>Not informed</b>                               |                                                                |
| <b>UC:</b>                                        | 19 (37,2%)                                                     |
| <b>E1; E2; E3</b>                                 | 3 (16,6%); 2 (11,1%); -                                        |
| <b>Not informed</b>                               | 14 (77,7%)                                                     |
| <b>CD presentation<sup>a</sup>, <i>n</i> (%)</b>  |                                                                |
| <b>B1; B2; B3</b>                                 | 6 (11,7%); 3 (5,9%); 11 (21,5%)                                |
| <b>Fistulizing</b>                                | 11 (21,5%)                                                     |
| <b>Not informed</b>                               | 31 (60,7%)                                                     |
| <b>Previous surgery, <i>n</i> (%)</b>             | 20 (29%)                                                       |
| <b>CD</b>                                         | 18 (90%)                                                       |
| <b>UC</b>                                         | 2 (10%)                                                        |
| <b>Smoking, <i>n</i> (%)</b>                      | 3 (4,3%)                                                       |
| <b>Comorbidities</b>                              |                                                                |
| <b>Systemic arterial hypertension</b>             | 7 (10,1%)                                                      |
| <b>Diabetes</b>                                   | 0                                                              |
| <b>Glucocorticoids use, <i>n</i> (%)</b>          | 13 (18,8%)                                                     |

|                                              |            |
|----------------------------------------------|------------|
| <b>Immunosuppressants use, <i>n</i> (%)</b>  | 29 (42%)   |
| <b>Aminosalicylates use</b>                  | 30 (43,7%) |
| <b>Biologics use, <i>n</i> (%)</b>           | 53 (76,8%) |
| <b>Depression, <i>n</i> (%)</b>              | 19 (27,5%) |
| <b>Psychotropics use, <i>n</i> (%)</b>       | 18 (26%)   |
| <b>Active perianal disease, <i>n</i> (%)</b> | 19 (27,5%) |
| <b>Ostomies, <i>n</i> (%)</b>                | 4 (5,8%)   |

IQ: interquartile interval; CD: Crohn's disease; UC: Ulcerative colitis; SD: standard deviation \*According to the Montreal classification. Source: Research data, (2025).

The overall prevalence of SD among participants (IFSF  $\leq 26.55$  and IIFE  $\leq 42$ ) was 59.4% ( $n = 41$ ), with a predominance among the female population ( $n = 32$ , 82%) and the lowest scores being registered in the domains "excitement" and "pain or discomfort". In the male population, 9 cases of SD were identified (30%), with no cases of ED, defined by an IIEF-15 score  $\leq 26$ . However, 15 male participants (50%) had mild to moderate impairment of erectile function (score  $13 \leq \text{or} \leq 18$  in the "Erectile Function" domain).

No correlation was detected between SD and age or time since diagnosis in men ( $p = 0.905$  and  $p = 0.204$ , respectively) or women ( $p = 0.167$  and  $p = 0.249$ , respectively). As for the type of diagnosis, there was no statistically significant association between the phenotype and the male ( $p = 1$ ) and female ( $p = 0.884$ ) SD indices (Tables 2 and 3).

**Table 2** - Overall and phenotype score on the Female Sexual Function Index (FSFI).

|                        | Phenotype    |             |             |          |
|------------------------|--------------|-------------|-------------|----------|
|                        | General      | CD          | UC          |          |
|                        | Mean (SD)    | Mean (SD)   | Mean (SD)   | <i>p</i> |
| <b>Overall FSFI</b>    | 17,86 (8,34) | 20.0 (9,2)  | 18.5 (5,29) | 0.8849   |
| <b>Desire</b>          | 3,10 (1,44)  | 3.00 (1,45) | 3.00 (1,19) | 0.5735   |
| <b>Excitation</b>      | 2,88 (1,44)  | 2.27 (1,33) | 3.1 (1,19)  | 0.3187   |
| <b>Lubrication</b>     | 3,1 (1,69)   | 2.82 (1,85) | 2.70 (1,15) | 0.8399   |
| <b>Orgasms</b>         | 3,01 (2,2)   | 2.89 (2,36) | 2.40 (1,71) | 0.4994   |
| <b>Satisfaction</b>    | 2,96 (2,27)  | 2.65 (2,43) | 2.80 (2,09) | 0.7846   |
| <b>Discomfort/pain</b> | 2,78 (1,65)  | 2.44 (1,76) | 2.80 (1,31) | 0.4994   |

SD: standard deviation; CD: Crohn's disease; UC: Ulcerative colitis. Source: Research data (2025).

**Table 3** - Overall and phenotype score on the International Index of Erectile Function (IIEF).

|                          | Phenotype   |             |             |          |
|--------------------------|-------------|-------------|-------------|----------|
|                          | General     | CD          | UC          |          |
|                          | Mean (SD)   | Mean (SD)   | Mean (SD)   | <i>p</i> |
| Overall IIEF-15          | 55,7 (14,7) | 55,0 (14,1) | 57,6 (17,2) | 1.00     |
| Erectile function        | 22,6 (6,55) | 21,9 (6,26) | 22,8 (7,81) | 0.778    |
| Orgasmic function        | 7,83 (2,39) | 7,77 (0,48) | 8,00 (2,82) | 0.796    |
| Sexual desire            | 7,8 (1,97)  | 7,63 (1,81) | 8,25 (2,43) | 0.398    |
| Intercourse satisfaction | 10,4 (2,54) | 10,2 (2,72) | 10,8 (2,03) | 0.439    |
| General satisfaction     | 7,06 (2,58) | 7,09 (2,46) | 7,0 (3,07)  | 0.981    |

SD: standard deviation; CD: Crohn's disease; UC: Ulcerative colitis. Source: Research data (2025).

Among the clinical variables of the female population, an association was identified between SD and the presence of thirst ( $p = 0.032$ ). The verification of the association between SD and disease location and behavior was not carried out due to the low number of patients who answered these questions (Table 4).

**Table 4** - Association between female sexual dysfunction and clinical variables.

| Clinical variable              | Female sexual dysfunction<br><i>p</i> |
|--------------------------------|---------------------------------------|
| Presence of ostomies           | 1.000                                 |
| Presence of seton              | 0.032*                                |
| Disease activity               | 1.000                                 |
| Active perianal disease        | 0.675                                 |
| Previous surgeries             | 0.960                                 |
| Extraintestinal manifestations | 0.167                                 |
| Depression                     | 0.150                                 |
| Use of glucocorticoids         | 0.336                                 |
| Use of immunosuppressants      | 0.415                                 |
| Use of biologics               | 1.000                                 |
| Uso de aminosalicilates        | 0.438                                 |

\*  $p < 0.05$ . Source: Research data (2025).

Among the men participating in the study, no associations were identified between the presence of SD and clinical variables. In this population, due to the low response rate, it was not possible to establish an association between SD and the location and behavior of the disease (Table 5).

**Table 5** - Association between male sexual dysfunction and clinical variables.

| Clinical variables             | Male sexual dysfunction<br><i>p</i> |
|--------------------------------|-------------------------------------|
| Presence of ostomies           | 0.224                               |
| Presence of seton              | 1.000                               |
| Disease activity               | 0.272                               |
| Active perianal disease        | 0.688                               |
| Previous surgeries             | 0.298                               |
| Extraintestinal manifestations | 1.000                               |
| Depression                     | 1.000                               |
| Use of glucocorticoids         | 0.356                               |
| Use of immunosuppressants      | 0.282                               |
| Use of biologics               | 0.597                               |
| Uso de aminosalicilates        | 1.000                               |

Source: Research data (2025).

Both in men and in women, no associations were found between SD and disease activity, presence of depression, medications in use or history of previous surgeries.

#### 4. Discussion

The impairment of sexual function in patients with IBD is a topic of growing interest in scientific literature. It is estimated that the average prevalence of SD in patients with IBD is approximately 40% worldwide (Silva et al., 2018), which is significantly higher compared to healthy individuals and may affect more than half of women with IBD (Rivière et al., 2017; Roseira et al., 2020). Despite this, patients with SD have similar rates of interest in maintaining romantic relationships and sexual activity (Marín et al., 2013). Valuing the patient's subjective perception of the impacts of IBD on QoL as an indicator of therapeutic efficacy includes, therefore, adequate management of possible sexual function impairments (Irvine et al., 1994).

The high prevalence of SD among the population of this study (59.4%), especially among women (82%), is a consistent finding in many of studies with IBD patients (Silva et al., 2018; Szydlarska et al., 2019; Rivière et al., 2017; Eluri et al., 2018). A systematic review of Brazilian studies on SD among women with different clinical conditions identified prevalences between 31.2% and 79.3% in the Northeast region, while up to 57% of healthy women had some degree of SD throughout Brazil (Wolpe et al., 2017). Even in the absence of SD, women with or without IBD are more concerned with aspects of sexuality such as attractiveness, body image, sexual performance, loneliness and fertility (Rooy et al., 2001), which may influence the disparity in SD indicators between genders. An important impairment of domains related to the organic component of SD in women, such as pain and discomfort, was identified, which differs from the findings of greater impairment of domains related to sexual desire and libido in European populations with IBD (Rivière et al., 2017; Leenhardt et al., 2019). Despite the association between SD and the presence of seton detected in this study, the limitation regarding the complete characterization of the location, extension and behavior of the disease prevented the evaluation of other clinical variables possibly associated with this pattern.

Even though it is notably less common among men with IBD, SD prevalence rates of up to 50% have been reported in European studies, while the prevalence in the healthy population is approximately 15% (Rivière et al., 2017; Szydlarska et al., 2019). Unlike existing studies, ED was not detected in the studied population, even though half of the participants had mild to moderate impairment of erectile function. A recent cohort found a 94% prevalence of ED in men recently diagnosed with IBD (Shmidt et al., 2019). In contrast to this finding, the population involved in the present study had a high average of years living



with the disease (7.01 years in men) and there was no correlation between disease duration and SD or ED. General satisfaction with sexual life was the only parameter to show moderate to severe levels of dysfunction, which has already been observed in studies whose population also had a high average of years living with the disease (Eluri et al., 2018). However, this observation did not present a statistically significant correlation.

In accordance with existing comparative data, there was no statistically significant difference between the prevalence of SD between patients with CD and UC (Silva et al., 2018; Eluri et al., 2018). Studies with patients with IBD often involve participants with highly heterogeneous clinical characteristics, such as symptom patterns, CD location and behavior, extent of UC and history of previous surgeries. The recent cross-sectional study by Nøhr et al. recorded higher levels of dyspareunia and difficulty reaching orgasm among women with CD, however, as in the present study, the pattern of involvement of CD and UC was not completely described (Nøhr et al., 2020). Additionally, data on the association between EIM of each disease and SD are scarce (Leenhardt et al., 2019), and this relationship was not observed in the current study.

There is no consensus regarding the influence of disease activity in the presence of SD (Leenhardt et al., 2019). Although some studies report the presence of this relationship, it has been shown that the development of SD during disease activity can be explained by the simultaneous presence of depression and body dysmorphic disorder (Szydlarska et al., 2019; Rooy et al., 2001). However, studies that include disease activity as a variable often use heterogeneous methods for its detection (Leenhardt et al., 2019). Although no association was found between SD and disease activity in this study, it is worth noting that standardized tools were not used among participants.

The relationship between previous surgeries and SD is controversial, since there is great heterogeneity between the types of surgery and techniques considered in each study (Leenhardt et al., 2019). A systematic review estimated the prevalence of SD to be between 0 and 26% in men after total colectomy with ileorectal anastomosis, with impairment mainly of erectile function (Sanders et al., 2016). Studies that considered different types of surgery showed no difference between operated and non-operated men, while women presented post-surgical SD associated with the presence of ostomy, in addition to worse satisfaction with body image (Muller et al., 2010; Timmer et al., 2008). No association was identified between SD and the history of surgeries in the current study. However, the proportion of individuals reporting previous surgeries in this study was relatively lower than in the cross-sectional studies.

Among the main independent predictors of SD in IBD identified in the literature are depressive disorders (Szydlarska et al., 2019; Muller et al., 2010; Timmer et al., 2008; Zhang et al., 2021). Interestingly, no association was identified between the presence of depression and SD in the studied population. In the cross-sectional study by Bel et al., after univariate logistic regression, it was established that the presence of depression would be the main mediator of the association between disease activity and SD (Bel et al., 2015). In the present study, although all the patients involved had an active disease, the vast majority underwent regular treatment for depression (94.7%). In a case series by Yanartas et al. it was observed that the adequate treatment of psychiatric comorbidities for at least 6 months was related to improvement in the levels of general and sexual QoL (Yanartas et al., 2016).

The impact of pharmacological therapy on the sexual function of patients with IBD is not entirely clear. A cross-sectional study found that 10% of 217 participating patients had low adherence to treatment due to the negative effect of medications on libido and sexual performance (Timmer et al., 2008). In some studies with patients using corticosteroids in periods of exacerbation, the drug was associated with the presence of SD, considered an independent predictor of the outcome in a case-control study (Eluri et al., 2018; Zhang et al., 2021). The same was not observed with the use of biologics, immunosuppressants or aminosalicylates (Zhang et al., 2021). Most participants in this study used biologics (76.8%), indirectly reflecting a population with a longer disease period and possibly with a greater number of complications related to IBD. Despite this, there was no association between drugs and SD.



This study has several limitations. The cross-sectional design is not adequate to define the causal relationship between the variables involved and SD, and this remains a necessary point to be explored by subsequent studies in Brazil. The moderate response rate (69%) made it unfeasible to perform some association measures. Moreover, this is the perspective of a tertiary center, where most patients present more severe and chronic conditions, and the data must be interpreted in the context of tertiary care. However, so far there is no data in the literature about SD in patients with IBD in this region of the country, with reports being scarce at the national level. Thus, the initial assessment of the prevalence of SD in this population is a positive aspect of the study.

## 5. Conclusion

The quality of sexual life is a frequent concern among people with IBD. Although the increase in the prevalence of SD in this population has been evident in recent decades, its multifactorial etiology still represents a challenge for the development of targeted diagnostic and therapeutic approaches.

In this study, the prevalence of SD in patients assisted by the University Hospital of the Federal University of Sergipe was high and predominant among women, with no associations with age or time of diagnosis being detected. Among the clinical variables considered, there was a statistically significant association between SD and the presence of thirst in the female population.

Knowledge about SD in patients with IBD is still scarce, which highlights the need for active questioning by health professionals about the patient's perception of aspects of their sexual function, intending to optimize general QoL and reduce disease-related morbidity.

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