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Psychosocial Determinants of Sexual Health During the Perinatal Period: A Preliminary Cross-Sectional Study in Romania

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Abstract

Background: Sexual health is a fundamental pillar of well-being during the perinatal period. However, many studies suffer from scoring bias associated with zero values by failing to distinguish between women who are sexually inactive and those with physiological dysfunction. This study aimed to identify the distinct sociodemographic and psychological determinants of sexual inactivity versus sexual dysfunction quality in a Romanian perinatal cohort. **Methods**: An observational, cross-sectional study was conducted with 100 women (52% sexually active, 48% inactive). Participants were evaluated using the Female Sexual Function Index (FSFI), Patient Health Questionnaire-9 (PHQ-9), RSES (Rosenberg Self-Esteem Scale), and Generalized Anxiety Disorder-7 (GAD-7). Data were analyzed using binary logistic regression for activity status and multiple linear regression for functional quality. **Results**: Among sexually active women, 84.6% met the clinical criteria for sexual dysfunction (median FSFI = 21.6). Binary logistic regression revealed that self-esteem (RSES) was the sole independent predictor of sexual activity status (aOR = 1.144; 95% CI: 1.028–1.217, $p = 0.016$). Conversely, multiple linear regression showed that depression (PHQ-9) was the only significant independent predictor of functional quality (B = −0.73, $p = 0.006$). Maternal age, residence, and obstetric history did not significantly predict either outcome. **Conclusions**: Based on the findings of our preliminary, exploratory study, we propose a conceptual interpretation, framing perinatal sexuality as a potential two-stage process, where self-esteem appears to serve as a primary behavioral barrier for the resumption of intimacy, while depression serves as the primary disruptor of functional quality. Clinical interventions may benefit from moving beyond physical recovery to include psychological screening for body image and mood disorders to restore sexual quality of life.

Keywords: perinatal sexual health; female sexual dysfunction; self-esteem; postpartum depression; FSFI; Romania

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1. Introduction

Sexual health is recognized by the World Health Organization (WHO) as a fundamental pillar of quality of life, encompassing physical, emotional, mental, and social well-being, rather than merely the absence of disease or dysfunction [1–3]. However, the perinatal period represents a complex bio-psychosocial transition that frequently disrupts this equilibrium. As women adapt to the physiological aftermath of conception and childbirth, sexual function often deteriorates, a phenomenon characterized by alterations in desire, arousal, and satisfaction [4,5]. While the transition from pregnancy to the postpartum period is traditionally viewed as a time of recovery, the resumption of sexual activity is often complicated by a convergence of hormonal fluctuations—such as hypoestrogenism induced by lactation and physical factors, including perineal trauma and fatigue [6,7].

Despite the universality of these changes, the prevalence of female sexual dysfunction (FSD) varies significantly across populations and trimesters. In the general premenopausal population, global estimates suggest that approximately 41% of women experience some form of sexual dysfunction [8]. However, during the perinatal period, these rates escalate dramatically. Recent studies indicate that sexual dysfunction may affect 60% to 90% of pregnant women [6,9], with prevalence peaking in the third trimester and persisting at high levels (over 50%) throughout the first postpartum year [4,6]. For example, in low-resource settings, such as Ethiopia, postpartum sexual dysfunction remains highly prevalent (51.7%), often driven by adverse obstetric outcomes [4]. Similarly, data from Turkey [9] and longitudinal findings from China reviewed in the recent literature [10] demonstrate a significant decline in functional scores across all domains—desire, lubrication, and orgasm—as pregnancy progresses toward the puerperium.

While physiological determinants such as delivery mode and hormonal status are well-documented, the recent literature emphasizes the critical role of psychological factors in mediating sexual outcomes. Perinatal mood disorders, including depression and anxiety, have been shown to exhibit a significant inverse correlation with sexual function scores [11]. Depression may induce anhedonia and loss of interest, while pregnancy-specific anxiety—often related to fear of fetal harm—can act as a powerful inhibitor of arousal [4,11]. Furthermore, body image plays a pivotal, yet often underappreciated, role. The rapid morphological changes associated with pregnancy can lead to "cognitive distraction" or self-objectification during intimacy, which severely disrupts the sexual response cycle [12]. Importantly, poor body esteem may not only reduce the quality of sexual function but also appears to serve as a primary behavioral barrier, leading to the complete avoidance of sexual activity [13].

A major limitation in the existing literature is the methodological inconsistency in handling sexual abstinence. The Female Sexual Function Index (FSFI), the gold-standard assessment tool, assigns a score of zero to domains where no sexual activity is reported [14]. Consequently, many epidemiological studies inadvertently conflate sexually inactive women (due to cultural reasons, fear, or partner absence) with those suffering from severe physiological dysfunction [8,15]. This scoring bias associated with zero values obscures the true clinical picture, particularly in conservative or traditional cultural contexts where abstinence is common during the perinatal period. Although recent research in Romania has begun to map the evolution of sexual domains during pregnancy [1], there remains a paucity of data distinguishing the predictors of sexual inactivity from the predictors of sexual dysfunction within the broader Romanian perinatal population.

Therefore, the aim of this study is to assess sexual function in a cohort of pregnant and postpartum women in Romania using a stratified analytical approach. Unlike previous studies that aggregate all participants, this research seeks to: (1) identify the sociodemographic and psychological determinants of sexual inactivity; and (2) examine the impact of

depression, anxiety, and self-esteem on the quality of sexual function exclusively among sexually active women. By disentangling abstinence from dysfunction, this study aims to provide more accurate targets for clinical intervention in the Romanian context.

2. Materials and Methods

2.1. Study Design and Setting

This observational, cross-sectional study was conducted at Spitalul Clinic de Obstetrică-Ginecologie "Prof. Dr. Panait Sîrbu", a tertiary maternity center in Bucharest, Romania, between February 2025 and February 2026. The primary objective was to evaluate the prevalence of sexual inactivity and sexual dysfunction among women during the perinatal period and to identify the sociodemographic and psychosocial determinants of these conditions. The study design and reporting followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines [16].

2.2. Participants and Procedure

The study population comprised pregnant women attending prenatal clinics and women in the postpartum period admitted to the maternity ward. Participants were recruited through convenience sampling. Inclusion criteria were: (1) age 18 years or older; (2) fluency in the Romanian language to ensure comprehension of psychometric scales; and (3) provision of written informed consent. Exclusion criteria included a history of severe psychiatric disorders (e.g., psychosis), current substance abuse, or acute obstetric emergencies preventing questionnaire completion.

A total of 100 women were enrolled in the final analysis. To ensure methodological validity regarding sexual function scoring, participants were stratified into two groups based on their sexual activity status over the preceding four weeks:

Sexually Active Group (n = 52): Defined as women who reported engaging in sexual activity over the preceding four weeks.

Sexually Inactive Group (n = 48): Defined as women who reported no sexual activity in the preceding four weeks.

2.3. Data Collection Instruments

Data were collected using a comprehensive structured questionnaire comprising three sections: sociodemographic/obstetric characteristics, sexual function assessment, and psychosocial profile.

2.4. Sociodemographic and Obstetric Variables

Baseline characteristics were recorded, including maternal age, place of residence (urban/rural), parity, and gravidity. Clinical data regarding obstetric complications and history of mental health disorders were also documented.

2.5. Assessment of Sexual Function

Female sexual function was evaluated using the Female Sexual Function Index (FSFI), a 19-item multidimensional self-report instrument considered the gold standard for assessing sexual functioning. A validated Romanian version of the scale was used in the data collection [17]. The scale covers six domains: desire, arousal, lubrication, orgasm, satisfaction, and pain. Individual domain scores are calculated by multiplying the item sum by the specific domain factors. The Full Scale Score (range: 2.0–36.0) is obtained by summing the six domain scores. A total score of $\leq$26.55 was used to classify sexual dysfunction, as validated by Wiegel et al. [18]. According to the FSFI scoring manual, a domain score of 0 indicates no sexual activity [14]. To avoid statistical bias ("scoring

bias associated with zero values"), total scores and domain correlations were calculated exclusively for the sexually active subsample.

2.6. Psychosocial Measures

Validated Romanian versions of international psychometric scales were used to assess mental health and social support.

Depression (PHQ-9): The Patient Health Questionnaire-9 was used to screen for depressive symptoms. Participants rated nine items based on DSM-IV criteria on a scale from 0 ("not at all") to 3 ("nearly every day") [19].

Anxiety (GAD-7): The Generalized Anxiety Disorder-7 scale assessed anxiety symptom severity. Scores range from 0 to 21, with higher scores indicating greater anxiety. We utilized the official Romanian translation provided by the MAPI Research Institute [20,21].

Postnatal Depression (EPDS): The Edinburgh Postnatal Depression Scale, a 10-item self-report tool, was used to screen for perinatal depressive symptoms, with a maximum score of 30 [22]. The EPDS was included to capture distress specifically validated for the perinatal period, whereas the PHQ-9 was utilized as a broader measure of clinical depressive symptoms. Because the PHQ-9 is standard in the global (non-perinatal) sexual dysfunction literature, it was selected a priori for the regression models to ensure maximum comparability with other cohorts.

Self-Esteem (RSES): The Rosenberg Self-Esteem Scale assessed global self-worth via 10 items rated on a 4-point Likert scale. Higher aggregate scores indicate higher self-esteem [23].

Social Support (MSPSS): The Multidimensional Scale of Perceived Social Support evaluated support from three sources: Family, Friends, and Significant Other. The 12-item scale yields a total score and three subscale scores [24].

Pregnancy-Specific Anxiety: A 10-item scale was used to assess anxieties specific to the perinatal context (e.g., fear of childbirth, fetal health). Items were rated on a 5-point Likert scale.

2.6.1. Sample Size Calculation

Sample size was determined using the Raosoft® calculator based on the estimated volume of patients in the study setting (https://raosoftcalculator.com/, accessed on 22 March 2026). Assuming a 50% response distribution, a 95% confidence interval, and a 10% margin of error, the required sample size was calculated at 97 participants. The final sample of 100 participants met this requirement for the exploratory nature of the study.

2.6.2. Ethical Considerations

The study adhered to the ethical principles of the Declaration of Helsinki [25]. The protocol was reviewed and approved by the Ethics Council of Spitalul Clinic de Obstetrică-Ginecologie "Prof. Dr. Panait Sîrbu", Bucharest, Romania (Approval No. 1/25.02.2025).

Participation was voluntary, and written informed consent was obtained from all subjects. To protect participant privacy regarding sensitive sexual health data, all questionnaires were anonymized and stored securely. To ensure strict privacy, minimize social desirability bias, and protect participants, given the sensitive nature of the sexual health data, all questionnaires were self-administered by the women in a private, enclosed room without the presence of medical staff or their partners.

2.7. Statistical Analysis

Data analysis was performed using IBM SPSS Statistics (Version 26.0). The normality of continuous variables was assessed using the Shapiro–Wilk test and visual inspection of Q-Q plots. Given the non-normal distribution of the data, continuous variables were expressed

as medians with interquartile ranges (IQR) and compared using the Mann–Whitney U test. Categorical variables were presented as frequencies and percentages and analyzed using the Chi-square test or Fisher's exact test as appropriate.

Bivariate correlations between psychosocial scores and Female Sexual Function Index (FSFI) domains were evaluated using Spearman's rank correlation coefficient. To ensure model parsimony and mitigate overfitting, given the limited sample size, variable selection for multivariable models was based on a *p*-value threshold of <0.10 in bivariate comparisons or on clinical relevance based on the existing literature. To identify independent predictors of sexual activity status (N = 100), a binary logistic regression model was constructed, with results reported as Adjusted Odds Ratios (aOR) and 95% Confidence Intervals (CI). Model fit was validated using the Hosmer-Lemeshow test. Finally, a multiple linear regression model was employed for the sexually active subgroup (n = 52) to determine predictors of functional quality (Total FSFI score). The linear model's significance was assessed via the F-test, and variance was reported using the adjusted R^2. Multicollinearity was monitored using Variance Inflation Factors (VIF), with a threshold of <5 considered acceptable. Statistical significance for all tests was set at $p < 0.05$.

3. Results

3.1. Participant Characteristics and Baseline Comparisons

A total of 100 perinatal women were included in the final analysis, of whom 52% (n = 52) were classified as sexually active in the last four weeks and 48% (n = 48) as sexually inactive in the last four weeks. The median age of the cohort was distributed across four categories, with the 25–34 age group being the most prevalent (35%). Comparative analysis revealed no statistically significant differences between the sexually active and inactive groups regarding maternal age ($p = 0.315$), residential environment ($p = 0.118$), or obstetric history, including gravidity ($p = 0.665$) and parity ($p = 0.776$). Furthermore, clinical factors such as the presence of comorbidities ($p = 0.366$), smoking history ($p = 0.250$), and a pre-existing history of depression ($p = 0.948$) did not significantly differ by sexual activity status. Detailed sociodemographic and clinical characteristics are summarized in Table 1.

Table 1. Baseline Sociodemographic and Clinical Characteristics Stratified by Sexual Activity Status (N = 100).

Variable	Inactive Group (n = 48)	Sexually Active (n = 52)	*p*-Value
Maternal Age (years)			0.315
<25	17 (35.4)	10 (19.2)	
25–34	14 (29.2)	21 (40.4)	
35–39	12 (25)	14 (26.9)	
≥40	5 (10.4)	7 (13.5)	
Environment			0.118
Rural	19 (39.6)	13 (25)	
Urban	29 (60.4)	39 (75)	
Obstetric History			
Gravidity			0.665
1	31 (64.6)	31 (59.6)	
2	12 (25)	17 (32.7)	
≥3	5 (10.4)	4 (7.7)	

Table 1. *Cont.*

Variable	Inactive Group (n = 48)	Sexually Active (n = 52)	*p*-Value
Parity			0.776
1	33 (68.8)	33 (63.5)	
2	10 (20.8)	14 (26.9)	
≥3	5 (10.4)	5 (9.6)	
Medical History			
Comorbidities (HTN/DM)	10 (28.8)	11 (21.1)	0.366
History of Depression	20 (41.6)	20 (38.5)	0.948
Lifestyle Factors			
Smoking History	6 (12.5)	11 (21.2)	0.250
Alcohol Consumption	1 (2.1)	2 (3.8)	0.606

Data presented as n (%). *p*-values calculated using Pearson Chi-square test or Fisher's Exact Test where appropriate. Abbreviations: HTN: Hypertension; DM: Diabetes Mellitus.

3.2. Psychosocial Profile and Comparative Analysis

Assessment of psychological well-being and self-esteem revealed a distinct profile between the study groups (Table 2). Women in the sexually active group demonstrated significantly higher self-esteem scores, with a median RSES score of 23 (IQR: 20–27) compared to 20.5 (18–24) in the inactive group ($p = 0.016$). No statistically significant differences in median depression scores were observed between the groups ($p = 0.475$). Similarly, no significant differences were observed in anxiety (GAD-7) ($p = 0.870$) or pregnancy-specific anxiety levels ($p = 0.242$). Notably, perceived social support did not significantly differ between the groups ($p = 0.259$).

Table 2. Comparison of Psychosocial Profiles by Sexual Activity Status (N = 100).

Psychosocial Variable	Inactive Group (n = 48), Median (IQR)	Sexually Active (n = 52), Median (IQR)	*p*-Value
Depression (PHQ-9)	6 (3–8)	5 (2–7.5)	0.475
Anxiety (GAD-7)	7 (3.5–7)	7 (2–8)	0.870
Postnatal Depression (EPDS)	15 (10.5–15)	12.5 (6.5–16)	0.398
Pregnancy-Specific Anxiety	34 (26.5–39.5)	30 (24.5–37)	0.242
Self-Esteem (RSES)	20.5 (18–24)	23 (20–27)	0.016
Social Support (MSPSS Total)	82 (66–82)	72.5 (61.5–82)	0.259

Values are presented as Median (Interquartile Range) due to the non-normal distribution of the data. *p*-values were calculated using the non-parametric Mann–Whitney U test. Abbreviations: RSES: Rosenberg Self-Esteem Scale; EPDS: Edinburgh Postnatal Depression Scale; PHQ-9: Patient Health Questionnaire-9; GAD-7: General Anxiety Disorder-7; MSPSS: Multidimensional Scale of Perceived Social Support.

Sexual Function Profile of Active Participants

Among the sexually active cohort (n = 52), the overall sexual function was notably impaired, as evidenced by a median Total FSFI score of 21.6 (IQR: 17.6–24.9). This score falls well below the clinically validated cutoff of 26.55 for sexual dysfunction. Analysis of individual domain scores revealed the highest median values for satisfaction (4.4; IQR: 3.0–5.2) and lubrication (4.2; IQR: 3.6–4.6). Conversely, the lowest scores were observed in the desire domain, with a median of 2.4 (IQR: 1.2–2.4). The pain domain yielded a median score of 2.8 (IQR: 2.6–3.6), while arousal and orgasm scores were 3.6 (IQR: 1.2–4.2) and 4.0 (IQR: 2.4–4.8), respectively. The total FSFI scores in this group ranged widely, from a minimum of 7.2 to a maximum of 29.8. Notably, when applying the clinically validated cutoff score of 26.55, sexual dysfunction was identified in 84.6% (n = 44) of the sexually active cohort. Detailed domain-specific results are presented in Table 3.

Table 3. Sexual Function Profile of Sexually Active Participants (n = 52).

FSFI Domain	Median (IQR)	Range (Min–Max)
Desire	2.4 (1.2–2.4)	(1.2–3.6)
Arousal	3.6 (1.2–4.2)	(1.2–6)
Lubrication	4.2 (3.6–4.6)	(1.2–6)
Orgasm	4 (2.4–4.8)	(1.2–6)
Satisfaction	4.4 (3–5.2)	(1.2–6)
Pain ¥	2.8 (2.6–3.6)	(1.2–4)
Total FSFI Score	21.6 (17.6–24.9)	(7.2–29.8)

¥ Higher scores in the FSFI Pain domain indicate lower levels of pain/discomfort. Abbreviation: FSFI: Female Sexual Function Index.

3.3. Psychosocial Correlates of Sexual Function

Spearman's rank correlation analysis (Table 4) identified several significant associations between psychosocial factors and sexual function domains among active participants. Depression (PHQ-9) demonstrated a significant negative correlation with the total FSFI score ($r = -0.418$, $p < 0.01$). It was inversely associated with all specific domains except pain, showing its strongest impact on orgasm ($r = -0.506$, $p < 0.01$) and lubrication ($r = -0.444$, $p < 0.01$). Similarly, general anxiety (GAD-7) was significantly associated with a decrease in total FSFI scores ($r = -0.417$, $p < 0.01$). It showed strong negative correlations with arousal ($r = -0.473$, $p < 0.01$), lubrication ($r = -0.471$, $p < 0.01$), and orgasm ($r = -0.488$, $p < 0.01$). Notably, self-esteem (RSES) exhibited a significant positive correlation with the pain domain ($r = +0.465$, $p < 0.01$), indicating that higher self-esteem is associated with lower levels of sexual pain. In contrast, pregnancy-specific anxiety and perceived partner support did not reach statistical significance in their correlation with the total FSFI score or any individual domain ($p > 0.05$).

Table 4. Bivariate Correlations between Psychosocial Factors and Sexual Function Domains (n = 52).

Psychosocial Variable	Desire	Arousal	Lubrication	Orgasm	Satisfaction	Pain ¥	FSFI Total
Depression (PHQ-9)	−0.335 *	−0.412 **	−0.444 **	−0.506 **	−0.372 **	−0.17	−0.418 **
Anxiety (GAD-7)	−0.249	−0.473 **	−0.471 **	−0.488 **	−0.334 *	−0.285 *	−0.417 **
Pregnancy Anxiety	−0.032	−0.054	−0.075	−0.131	+0.049	−0.156	−0.035
Self-Esteem (RSES)	+0.047	+0.250	+0.206	+0.153	−0.021	+0.465 **	+0.171
Partner Support €	+0.122	+0.119	+0.223	+0.232	+0.236	−0.188	+0.221

Spearman's rank correlation coefficient (r) was used due to the non-normal distribution of the data. € Partner Support Subscale calculated as the sum of MSPSS items 1, 2, 5, and 10. ¥ Higher scores in the FSFI Pain domain indicate lower levels of pain/discomfort. * $p < 0.05$,** $p < 0.01$ Abbreviations: PHQ-9: Patient Health Questionnaire-9; GAD-7: General Anxiety Disorder-7; RSES: Rosenberg Self-Esteem Scale; Partner Support: MSPSS Partner Subscale.

3.4. Predictors of Sexual Activity Status

Binary logistic regression was performed to identify independent predictors of being sexually active during the perinatal period (Table 5). The final model demonstrated a good fit to the data (Hosmer–Lemeshow $X^2 = 9.537$, $p = 0.299$). Self-esteem (RSES) emerged as the only significant independent predictor of sexual activity status ($p = 0.016$). Specifically, for every one-point increase in the RSES score, the likelihood of being sexually active increased by 14.4% (Adjusted OR = 1.144; 95% CI: 1.028–1.217). In contrast, depression (PHQ-9) did not significantly predict activity status (Adjusted OR = 1.042; $p = 0.533$). Furthermore, after adjusting for psychological factors, maternal age ($p = 0.510$) and residential environment ($p = 0.897$) were not found to be significant predictors of whether a woman remained sexually active.

Table 5. Logistic Regression for Sexual Activity (N = 100).

Predictor	Adjusted OR (95% CI)	*p*-Value
Self-Esteem (RSES)	1.144 (1.028–1.217)	0.016
Depression (PHQ-9)	1.042 (0.916–1.186)	0.533
Maternal Age (Reference: Maternal Age $\geq$ 40 years)	—	0.510
Maternal Age (<25)	0.445 (0.092–2.161)	0.392
Maternal Age (25–34)	1.035 (0.244–4.396)	0.963
Maternal Age (35–39)	0.831 (0.191–3.609)	0.805
Environment (Rural) (Reference: Rural)	0.934 (0.334–2.613)	0.897
Constant	0.059	0.064

Model fit: Hosmer–Lemeshow X^2= 9.537, p = 0.299; Cox and Snell R^2 = 0.116; Nagelkerke R^2 = 0.155. Abbreviation: CI: Confidence Interval; OR: Odds Ratio.

3.5. Predictors of Sexual Function Quality

To identify the independent drivers of sexual function quality among the sexually active group (n = 52), a multiple linear regression analysis was conducted with the total FSFI score as the dependent variable. The overall model was statistically significant ($F(2, 49) = 5.92$, $p = 0.005$), explaining 19.4% of the variance in sexual function (Adjusted $R^2 = 0.156$). This low explanatory power indicates that while depression is a significant predictor, the vast majority of the variance in perinatal sexual function is likely driven by unmeasured physiological, relational, or obstetric confounders. Depression (PHQ-9) emerged as the only significant independent predictor of functional quality (B = −0.73, $p = 0.006$). This indicates that for every one-point increase in the depression score, the total FSFI score decreased by 0.73 points after adjusting for self-esteem. While self-esteem (RSES) was a significant predictor of activity status in the previous model, it did not reach statistical significance as an independent predictor of sexual function quality in this multivariable analysis (B = 0.359, $p = 0.115$) (Table 6).

Table 6. Multivariable Linear Regression Predicting FSFI Total Score (n = 52).

Predictor	Unstandardized B	Standard Error	*p*-Value	VIF
(Constant)	15.04	5.55	0.009	
Depression (PHQ-9)	−0.73	0.25	0.006	1.003
Self-Esteem (RSES)	0.359	0.22	0.115	1.003

Model R^2 = 0.189 (Adjusted R^2 = 0.156) Abbreviations: PHQ-9: Patient Health Questionnaire-9; RSES: Rosenberg Self-Esteem Scale; VIF: Variance Inflation Factor.

4. Discussion

The present study reveals a critical "dual burden" characterizing sexual health during the perinatal period in Romania: a high prevalence of complete sexual inactivity (48%) and a profoundly high prevalence of functional impairment among those who remain sexually active, with 84.6% meeting the criteria for sexual dysfunction. By methodologically stratifying participants into active and inactive cohorts, our findings challenge the traditional biomedical reductionism that often attributes postpartum sexual difficulties solely to hormonal fluctuations or obstetric history. Instead, we propose a conceptual interpretation, framing perinatal sexuality as a potential two-stage process, where self-esteem appears to serve as a primary behavioral barrier for the resumption of intimacy, while depression serves as the primary disruptor of functional quality.

The 48% rate of sexual inactivity observed in our cohort aligns with trends in other transitional economies, such as the high dysfunction rates (51.7%) reported in Ethiopia [4] and the precipitous declines in sexual frequency observed across trimesters in Turkey [9].

However, a striking finding in our study is the absence of demographic or obstetric predictors for inactivity; maternal age, residence, parity, and gravidity did not distinguish sexually active women from inactive ones. This suggests that withdrawal from sexual activity in this population may be less a consequence of physical incapacity and more a maladaptive psychological coping mechanism, or "avoidance behavior," driven by the psychological variables we identified.

Our logistic regression analysis identified Self-Esteem (RSES) as the sole independent predictor of sexual activity status. This supports our theory, wherein low body esteem does not merely reduce satisfaction but prevents the sexual encounter entirely. Topal et al. recently demonstrated that self-esteem is a significant predictor of sexual desire and arousal in postpartum women, arguing that the identity shifts and body dissatisfaction associated with motherhood diminish self-worth [25]. This avoidance is likely mediated by "cognitive distraction" as described by Quinn-Nilas et al. [26]. Women with poor body image during the perinatal period may become hyper-focused on their physical appearance rather than erotic cues, generating anxiety that leads to the complete avoidance of intimacy as a protective strategy [26]. Consequently, interventions targeting pelvic floor recovery alone may fail to address the root cause of abstinence if the psychological barrier of self-esteem remains unaddressed.

Among the women who successfully bypassed the primary behavioral barrier of self-esteem and engaged in sexual activity, depression emerged as the primary factor associated with impaired functional quality. The inverse correlation we observed between depression scores (PHQ-9) and functional domains—particularly lubrication and orgasm corroborates findings from the COVID-19 pandemic era in Iran, where stress and depression were strong inverse predictors of FSFI scores [11]. Furthermore, a systematic review by Atlantis and Sullivan established a bidirectional link, noting that depression disrupts the hypothalamic–pituitary–adrenal (HPA) axis and inflammatory response systems, thereby chemically inhibiting the physiological sexual response regardless of a woman's willingness to engage [27,28]. In our specific Romanian context, this aligns with Daescu et al., who identified depression, measured by Beck's Depression Inventory (BDI-II), as an independent risk factor for sexual dysfunction during pregnancy [1–3]. This suggests that while high self-esteem may permit a woman to start a sexual encounter, untreated depressive symptoms—likely manifesting as anhedonia—prevent the neurochemical sequence required for lubrication and orgasm.

When contextualizing the functional quality of our sexually active cohort (median FSFI = 21.6), the profound severity of perinatal sexual impairment becomes evident. While the global prevalence of FSD in the general premenopausal population is estimated at only 40.9% [8], our active perinatal cohort exhibited an 84.6% dysfunction rate, heavily underscoring the unique bio-psychosocial vulnerability of this transition. Our median score aligns closely with the median FSFI of 22.30 reported among pregnant Iranian women during the COVID-19 pandemic [11], a cohort similarly burdened by high psychological distress and anxiety. Interestingly, our cohort's functional scores were notably lower than those reported in a recent longitudinal Romanian study, which noted a third-trimester median FSFI of 27.7 among continuously active pregnant women [1]. This discrepancy may stem from our study's inclusion of women in the postpartum period, where the abrupt withdrawal of placental hormones, compounding physical exhaustion, and immediate perineal trauma acutely suppress the sexual response cycle beyond prenatal levels.

Beyond total scores, the domain-specific profile of our active cohort reveals a striking preservation of relational satisfaction amidst physiological decline. Consistent with our findings—where Desire was the most profoundly impaired domain (median 2.4) and Satisfaction the most preserved (median 4.4)—recent European cohorts echo this exact

dichotomy. In a Spanish late-postpartum cohort, Martínez-Galiano et al. similarly identified desire as the lowest-scoring domain (mean 2.64) and satisfaction as the highest (mean 3.88) [29]. A parallel trend was recently observed in Greece, where postpartum women maintained high satisfaction scores (mean 3.9) despite moderate-to-severe declines in physiological arousal and orgasm [7]. This recurrent international pattern suggests that while perinatal physiological changes severely blunt spontaneous sexual desire, they do not necessarily erode the overarching subjective satisfaction derived from intimacy. Women appear to cognitively adapt during the perinatal period, finding emotional fulfillment even when strictly physiological phases of the sexual response cycle are dampened.

Furthermore, The 84.6% dysfunction rate underscores the extreme bio-psychosocial vulnerability of this transition. Physiologically, this period is characterized by profound hypoestrogenism—particularly in lactating women—which directly thins the vaginal mucosa, leading to severe drops in natural lubrication and increased dyspareunia. Furthermore, the acute physical exhaustion resulting from sleep deprivation, combined with pelvic floor trauma or episiotomy recovery, acts as a massive physical barrier to arousal. Psychologically, as our data shows, the transition into motherhood shifts cognitive priorities and body image, heavily dampening spontaneous sexual desire.

Interestingly, despite this high level of preserved satisfaction, a notable finding in our study was the lack of significant association between Partner Support (MSPSS) and sexual function, a result that diverges from the consensus that relational quality buffers against dysfunction [7]. However, this finding may be explained through the lens of Parental Investment Theory [30,31]. As Lorenz et al. observed in a longitudinal study of 159 couples, higher relationship quality and support can sometimes predict a greater decline in sexual frequency postpartum, as attached couples may feel comfortable deprioritizing sex to redirect energy toward the infant [32]. Conversely, couples with weaker bonds may use sex as a tool for relationship maintenance. In our cohort, the non-significance of partner support suggests that the "internal voice" of depression may be loud enough to drown out the "external voice" of a supportive partner, or that secure partners are simply more tolerant of the woman's functional difficulties during this transition.

While previous studies have provided valuable sexual dysfunction prevalence data using the standard FSFI scoring—notably in Ethiopia (51.7%) and Turkey (98.5%)—these high rates likely represent an aggregation of behavioral abstinence, due to cultural or obstetric reasons, with physiological impairment. By stratifying our analysis to focus exclusively on the sexually active sub-group, our study isolates the true clinical drivers of dysfunction, moving beyond the scoring bias associated with zero values that can obscure the psychological reality of the perinatal transition [4,9]. As noted by Rosen et al. in the original validation of the FSFI, a score of zero conveys no meaningful information about functional capacity if the subject has not attempted intercourse [14].

The clinical implications of these findings suggest that postpartum care must address the distinct psychological drivers of initiation versus quality. Routine screening should employ tools like the RSES to identify women at risk of sexual avoidance and the PHQ-9 to identify those at risk of physiological dysfunction. Furthermore, as suggested by De Aquino et al., non-pharmacological interventions, such as psychotherapy targeting body image, should be prioritized alongside standard care to restore not just reproductive function, but quality of life [33].

5. Limitations

These findings must be interpreted within the context of certain limitations. The cross-sectional design precludes causal inference regarding the directionality between depression and dysfunction. Additionally, the reliance on a convenience sample from

a single urban tertiary-care center introduces an urban, tertiary-care selection bias. This approach inherently excludes marginalized populations, rural women with limited hospital access, and those opting for midwifery-led or home births. Therefore, these findings reflect a specific demographic and should not be generalized to broader or dissimilar clinical settings. Furthermore, while the total sample size of 100 participants was sufficient for baseline exploratory comparisons, it poses a distinct limitation for multivariable modeling. The inclusion of multiple predictors in our logistic regression with a relatively small sample size (and a subgroup of n = 52 for the linear regression model) increases the risk of model overfitting. Although variable selection was strictly limited to clinically relevant factors and those meeting a stringent bivariate *p*-value threshold, these multivariable findings are constrained by the small sample size, should be interpreted with caution, and require validation in larger cohorts. A major clinical limitation of our analysis is the omission of key clinical confounders, notably marital status, precise time since delivery, and breastfeeding/lactation status. A further conceptual limitation is our inability to differentiate between reasons for sexual inactivity. Because specific motives for abstinence (e.g., voluntary psychological avoidance vs. involuntary factors such as partner absence, cultural postpartum abstinence norms, or strict medical contraindications) were not measured, treating 'inactivity' as a homogenous behavioral group may overlook distinct clinical subgroups. Finally, pooling pregnant and postpartum women masks distinct physiological differences between trimesters and the postpartum period.

6. Conclusions

In conclusion, this preliminary, exploratory study suggests that sexual health in the perinatal period appears to be a complex process strongly associated with distinct psychological forces rather than purely obstetric factors. In our study, self-esteem was the primary factor associated with the resumption of sexual activity, while depression was the dominant factor associated with the quality of sexual function among active women. These results suggest that clinical management of perinatal sexual health should move beyond a purely physical focus to include psychological screening. Future longitudinal research is needed to determine if targeted psychological interventions can effectively improve sexual outcomes in this population.

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