unex | MED
FEIRA DE SANTANA • ITABUNA • VITÓRIA DA CONQUISTA • JEQUIÉ
GRADUAÇÃO EM MOVIMENTO
CIÊNCIAS MÉDICAS

POLYCYSTIC OVARY SYNDROME AND ITS INFLUENCE ON SEXUAL DYSFUNCTION MEDIATED BY HORMONAL, PHYSICAL, AND PSYCHOSOCIAL FACTORS: AN INTEGRATIVE REVIEW

SÍNDROME DOS OVÁRIOS POLICÍSTICOS E SUA INFLUÊNCIA NA DISFUNÇÃO SEXUAL MEDIADA POR FATORES HORMONAIS, FÍSICOS E PSICOSSOCIAIS: UMA REVISÃO INTEGRATIVA

Ana Vitoria Ferreira Lima[1], Ana Clara Salviano Couto[1], Lara Silva Mattos[1], Polyana Campos de Oliveira[1], André Luiz Lisboa Cordeiro[1]

ABSTRACT

Introduction: Polycystic Ovary Syndrome (PCOS) is an endocrine-metabolic disorder affecting women of reproductive age. It has a multifactorial etiology and may lead to sexual dysfunction, impacting both physical and mental health. **Objective:** To analyze how Polycystic Ovary Syndrome influences sexual dysfunction, considering hormonal, physical, and psychosocial factors. **Methods:** The present study consists of an integrative literature review was conducted using databases such as Biblioteca Virtual de Saúde, PubMed, and SciELO, employing descriptors including “Polycystic Ovary Syndrome,” “Stein-Leventhal Syndrome,” “Physiological Sexual Dysfunctions,” “Physiological Sexual Dysfunction,” and “Sexual Health.” **Results:** Of the 163 articles identified, fourteen met the inclusion and exclusion criteria. All studies were published between 2020 and 2025. A high prevalence of sexual dysfunction in women with Polycystic Ovary Syndrome was observed, reported in six studies. Three articles identified an association with physical factors, such as obesity, menstrual irregularity, and infertility, while three highlighted hormonal alterations. Psychosocial factors, including anxiety, depression, and body image dissatisfaction, were evidenced in five studies. In addition, two articles reported greater sexual distress, with impairments in desire, arousal, and pain during sexual intercourse. Finally, four studies observed worse sexual function compared to the control group, and one reported improvement in sexual desire following lifestyle interventions. **Conclusion:** Polycystic Ovary Syndrome was found to be associated with sexual dysfunction through hormonal, physical, and psychosocial factors, highlighting the importance of a multidisciplinary approach.

KEYWORDS

Polycystic Ovary Syndrome; Sexual Dysfunction, Physiological; Sexual Health; Psychosocial Functioning; Body Image; Body Satisfaction.

[1] Centro Universitário de Excelência (UNEX), School of Medicine, Feira de Santana, BA, Brazil.

RESUMO

Introdução: A Síndrome dos Ovários Policísticos (SOP) é um distúrbio endócrino-metabólico que afeta mulheres em idade reprodutiva. Apresenta etiologia multifatorial e pode levar à disfunção sexual, impactando tanto a saúde física quanto a mental. Objetivo: Analisar como a Síndrome dos Ovários Policísticos influencia a disfunção sexual, considerando os fatores hormonais, físicos e psicossociais. Métodos: O presente estudo consiste em uma revisão integrativa da literatura, realizada por meio de buscas nas bases de dados Biblioteca Virtual em Saúde (BVS), PubMed e SciELO, utilizando descritores como “Síndrome dos Ovários Policísticos”, “Síndrome de Stein-Leventhal”, “Disfunções Sexuais Fisiológicas”, “Disfunção Sexual Fisiológica” e “Saúde Sexual”. Resultados: Dos 163 artigos identificados, 14 atenderam aos critérios de inclusão e exclusão. Todos os estudos foram publicados entre 2020 e 2025. Observou-se elevada prevalência de disfunção sexual em mulheres com Síndrome dos Ovários Policísticos, relatada em seis estudos. Três artigos identificaram associação com fatores físicos, como obesidade, irregularidade menstrual e infertilidade, enquanto três destacaram alterações hormonais. Os fatores psicossociais, incluindo ansiedade, depressão e insatisfação com a imagem corporal, foram evidenciados em cinco estudos. Além disso, dois artigos relataram maior sofrimento relacionado à sexualidade, com prejuízos no desejo, na excitação e presença de dor durante a relação sexual. Por fim, quatro estudos observaram pior função sexual em comparação ao grupo controle, e um relatou melhora do desejo sexual após intervenções no estilo de vida. Conclusão: Verificou-se que a Síndrome dos Ovários Policísticos está associada à disfunção sexual por meio de fatores hormonais, físicos e psicossociais, ressaltando a importância de uma abordagem multidisciplinar.

PALAVRAS-CHAVE

Síndrome dos Ovários Policísticos; Disfunções Sexuais Fisiológicas; Saúde Sexual; Funcionamento Psicossocial; Imagem Corporal; Satisfação Corporal.

INTRODUCTION

Polycystic Ovary Syndrome (PCOS) is a common endocrine disorder affecting women of reproductive age. PCOS has a multifactorial etiology and involves dysfunctions in the endocrine, metabolic, sexual, and reproductive systems. The syndrome presents four clinical phenotypes. Phenotype A includes women with clinical or biochemical hyperandrogenism, ovulatory dysfunction, and polycystic ovaries on ultrasound. Phenotype B is characterized by hyperandrogenism and ovulatory dysfunction. Phenotype C includes hyperandrogenism and polycystic ovarian morphology. Phenotype D is characterized by menstrual irregularity and polycystic ovarian morphology on ultrasound.

PCOS is the most common endocrine disorder among women of reproductive age, affecting approximately 6% to 19% of this population. Hyperandrogenism and its manifestations have an impact on these women's mental health, being present in 80% to 85% of patients. Regarding these alterations, data from a cross-sectional study involving 96 women with PCOS demonstrated a high prevalence of metabolic dysfunction, with 12% classified as overweight and 48% as obese. Concerning sexual function, more than 30% of affected women may present alterations related to sexuality, often associated with body image issues, such as hirsutism. In this context, studies have shown that women with PCOS have poorer sexual function, lower satisfaction, and a higher prevalence of sexual dysfunction compared to those without the syndrome. Thus, dysfunctions in this domain are understood as persistent alterations in the sexual response that hinder the experience of satisfactory and consensual relationships, leading to emotional distress. The study of the influence of PCOS on sexual function, mediated by hormonal, physical, and psychosocial factors, provides a holistic perspective on this frequently neglected public health issue. In the medical field, the analysis of this topic expands the scope of knowledge on PCOS by incorporating women's sexual health as an essential component of clinical care. Moreover, by establishing a link between the syndrome and sexual dysfunction, it becomes possible to update treatment protocols and improve healthcare practices, thereby directly contributing to the advancement of clinical practice and evidence-based scientific knowledge.

Therefore, this review aims to analyze how Polycystic Ovary Syndrome influences sexual dysfunction, considering hormonal, physical, and psychosocial factors in women affected by the condition.

METHODS DESIGN

The present study is an integrative literature review, defined as a tool of evidence-based practice, essential for guiding clinical reasoning and decision-making grounded in

scientific data. According to Souza, Silva, and Carvalho,[10] the integrative literature review constitutes the broadest methodological approach among review types, allowing the inclusion and exploration of both experimental and non-experimental studies, based on the analysis, comparison, and synthesis of knowledge in order to adequately answer the research question.

That way, due to its comprehensive nature, the choice of an integrative review is justified by the object of study, which seeks to analyze how Polycystic Ovary Syndrome (PCOS) influences women's sexual dysfunction, considering hormonal, physical, and psychosocial factors. Due to the fact that this is a multifactorial syndrome, whose understanding involves both physiological and psychosocial aspects, a methodology that allows the integration of different research approaches is required for a broader understanding and exploration of the topic. Therefore, the integrative review provides a wide perspective on the impacts of PCOS on female sexual function by encompassing studies that address everything from hormonal changes to emotional, behavioral, and body image-related repercussions.

In order to ensure methodological rigor, the development of this study will follow the six phases of the elaboration process proposed by Souza, Silva, and Carvalho: (1) formulation of the guiding research question; (2) literature search; (3) data collection; (4) critical analysis of the included studies; (5) discussion of results; and (6) presentation of the integrative review.

DATABASES AND DESCRIPTORS

To ensure a comprehensive search for articles related to the study object, descriptors indexed in the Medical Subject Headings (MeSH) were used, a virtual platform that organizes terms in a hierarchical and standardized manner to guide literature searches and the retrieval of scientific studies. The descriptors used were:

Polycystic Ovary Syndrome, Ovarian Syndrome, Polycystic, Ovary Syndrome, Polycystic, Polycystic Ovarian Syndrome, Polycystic Ovary Syndrome, Stein-Leventhal Syndrome, Stein Leventhal Syndrome, Syndrome, Polycystic Ovary, Syndrome, Stein-Leventhal (and their corresponding Portuguese terms: *Síndrome do Ovário Policístico, Síndrome de Ovários Policísticos, Síndrome de Stein-Leventhal*) and Sexual Dysfunction, Physiological, Sexual Health, Physiological Sexual Dysfunctions, Sexual Disorders, Physiological, Sexual Dysfunctions, Physiological (and their corresponding Portuguese terms: *Disfunções Sexuais Fisiológicas, Saúde Sexual, Disfunção Sexual Fisiológica*).

The following databases were used for article retrieval: Biblioteca Virtual de Saúde (BVS), PubMed, and Scientific Electronic Library Online (SciELO). The search strategy applied in the BVS and SciELO platforms was: (*"Síndrome do Ovário Policístico" OR "Síndrome de Ovários Policísticos" OR "Síndrome de Stein-Leventhal") AND ("Disfunções Sexuais" OR "Fisiológicas Saúde Sexual" OR "Disfunção Sexual Fisiológica"*).

Finally, in the PubMed platform, the following search strategy was adopted: ("Polycystic Ovary Syndrome" OR "Ovarian Syndrome, Polycystic" OR "Ovary Syndrome, Polycystic" OR "Polycystic Ovarian Syndrome" OR "Polycystic Ovary Syndrome 1" OR "Stein Leventhal Syndrome" OR "Stein-Leventhal Syndrome" OR "Syndrome, Polycystic Ovary" OR "Syndrome, Stein-Leventhal") AND ("Sexual Dysfunction, Physiological" OR "Sexual Health" OR "Physiological Sexual Dysfunctions" OR "Sexual Disorders, Physiological" OR "Sexual Dysfunctions, Physiological").

ELIGIBILITY CRITERIA

Studies addressing the relationship between Polycystic Ovary Syndrome and female sexual dysfunction were included. The inclusion criteria were: articles published between 2020 and 2025, publications in Portuguese or English, studies addressing

hormonal, physical, or psychosocial factors related to sexual dysfunction, and women of reproductive age (between 18 and 45 years). The exclusion criteria aimed to eliminate duplicate articles, studies that did not answer the guiding research question, and papers without access to the full text.

DATA SYNTHESIS AND ANALYSIS

The project was organized through the creation of a spreadsheet in which information from the articles was collected and arranged based on: title, authorship, database, and year. Subsequently, the researchers were divided into pairs, and content evaluation and analysis were conducted using a double-blind model, an independent selection process without prior knowledge of the choices made by the other pairs. After this stage, the selected articles were compared and discussed to consolidate the final selection, ensuring impartiality and minimizing potential selection biases. At the end of the discussion, as a way to synthesize the evidence found, the articles were organized according to title, authorship, database, journal, country, year, and main findings related to the topic.

Subsequently, qualitative content analysis was performed, aiming to interpret the nuances presented in the selected articles regarding the influence of aspects related to Polycystic Ovary Syndrome and its impact on sexual function. This technique consists of organizing, identifying, and examining the meanings present in the articles. In addition, the studies were classified according to a hierarchical evidence level scale proposed by Souza, Silva, and Carvalho (2010). The levels were defined as follows:

Level 1: Meta-analysis

Level 2: Secondary randomized clinical trial

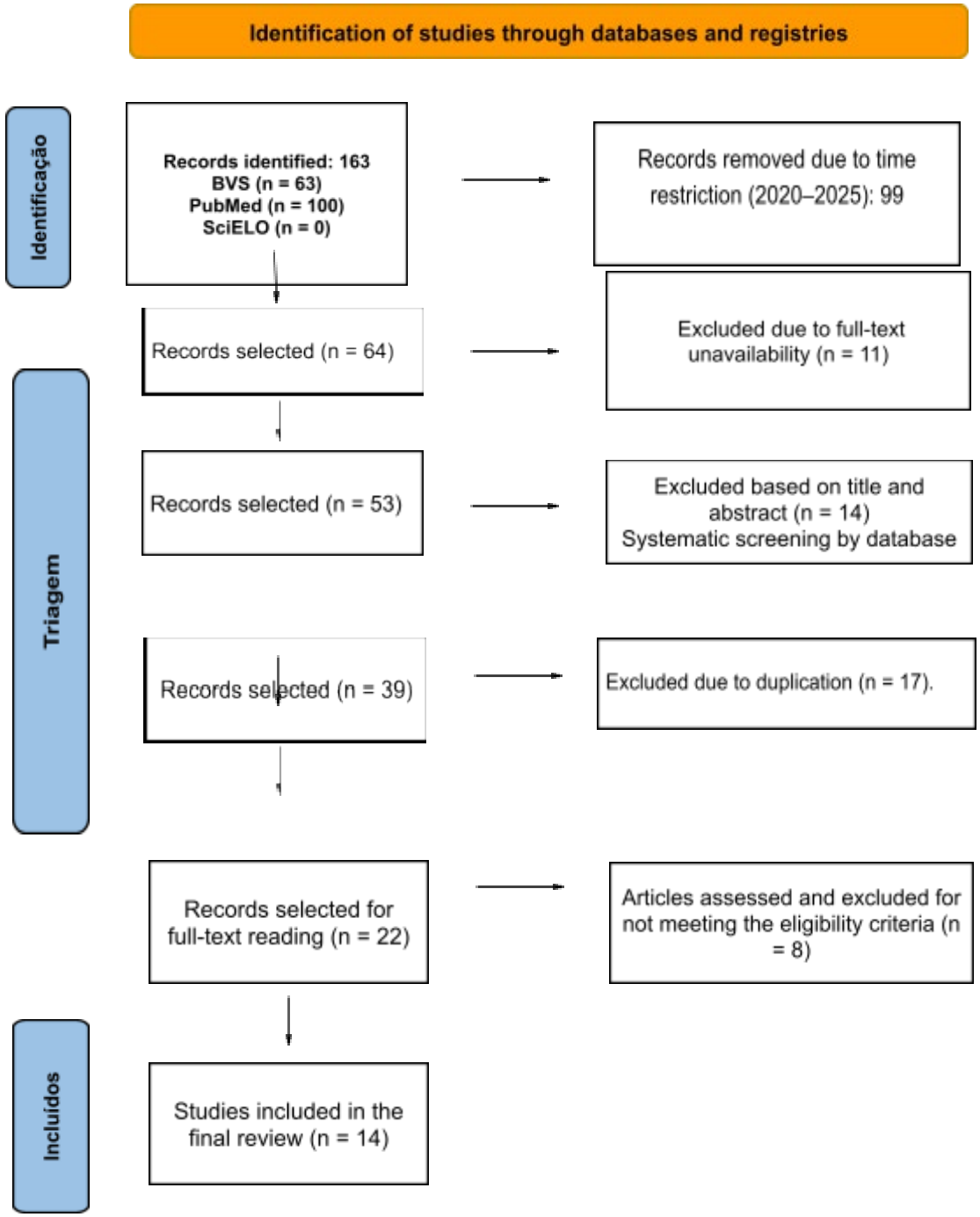
Level 4: Cross-sectional and case-control studies.

From this process, the following thematic categories were identified: hormonal factors in PCOS, physical/clinical factors, psychosocial factors, sexual function, and scientific findings. These axes guided the presentation of the results described below.

RESULTS

In the present integrative review, 163 studies were retrieved from the selected databases, including 63 from the BVS, 100 from PubMed, and 0 from SciELO. After applying the time filter (2020–2025), 99 studies remained. Subsequently, 11 articles were excluded due to unavailability of full text, 14 after title and abstract screening, and 17 due to duplication. Thereafter, 8 studies were excluded for not meeting the eligibility criteria. Following this process, 22 relevant studies were selected for full-text reading and evaluation. At the end of the selection process, 14 articles were included for critical appraisal and data extraction, composing the integrative review. The detailed flow diagram of the screening process is presented in Figure 1.

Figure 1. Flow diagram of study selection



Source: own authorship.

Characterization of the Study Material

The analyzed articles were retrieved from the PUBMED and BVS databases and were published in internationally relevant journals, such as *Scientific Reports*, *Reproductive Sciences*, *Gynecological Endocrinology*, *Fertility and Sterility*, *Saudi Medical Journal*, and *Revista da Associação Médica Brasileira*. These journals

predominantly belong to the fields of women's health, gynecological endocrinology, human reproduction, and medical sciences, reflecting the multidisciplinary nature of research on Polycystic Ovary Syndrome and its relationship with female sexual function. The main focus of the studies addresses PCOS and its correlation with hormonal, psychosocial, and physical factors, highlighting how these elements, together, affect sexual function in women with this syndrome. The studies discuss not only endocrine imbalances but also the emotional, social, and body-related repercussions that influence quality of life and female sexuality in the context of the diagnosis, emphasizing the importance of researching and addressing this topic.

The publications include studies conducted in several countries, including Syria, China, Iran, Turkey, Brazil, United States of America, Saudi Arabia, and the United Kingdom, demonstrating broad geographic representation and cultural diversity in addressing the topic. Regarding the methods employed, cross-sectional and case-control studies predominated, complemented by randomized clinical trials and meta-analyses, indicating a diverse body of evidence with different methodological levels. Most articles presented level 4 evidence, characteristic of observational studies, although high-level publications such as meta-analyses (level 1) were also identified. These findings are summarized in Table 1, allowing for an understanding of the methodological and scientific profile of the included studies and providing support for the critical analysis that will be further explored in the discussion section.

Table 1. Characteristics of the Study Material

Authors	Study title	Journal	Year	Level of Evidence	Study design
Alshiekh et al.[11]	Polycystic ovary syndrome negatively affects sexual function and	Scientific Reports	2025	4	Case-control
	lower urinary tract symptoms in syrian women: a case-control study				
Tian et al.[12]	Sexual function in Chinese women with polycystic ovary syndrome and correlation with clinical and biochemical characteristics	Reproductive Sciences	2021	4	Cross-sectional
Tahmasbi et al.[13]	Polycystic ovarian syndrome elevates the distress of sexual pain in Iranian women with infertility	BioMed Central	2024	4	Cross-sectional
Pastoor et al.[14]	Sexual function in women with polycystic ovary syndrome: a systematic review and meta-analysis	Human Reproduction Update	2018	1	Meta-analysis

Dogan, Yoldemir[15]	The association between female sexual function and metabolic features of the polycystic ovary syndrome in Turkish women of reproductive age	Gynecological Endocrinology	2024	4	Cross-sectional
Altuntaş et al.[16]	Depression, anxiety, body image scores, and sexual dysfunction in patients with polycystic ovary	Gynecological Endocrinology	2022	4	Cross-sectional
	syndrome according to phenotypes				
Aba, Aytek[17]	Body image and sexual function in women with polycystic ovary syndrome: a case-control study	Revista da Associação Médica Brasileira	2022	4	Case-control
Tian et al.[18]	Sexual function in Chinese women with different clinical phenotypes of polycystic ovary syndrome	Gynecological Endocrinology	2023	4	Cross-sectional
Steinberg et al.[19]	Lifestyle modifications alone or combined with hormonal contraceptives improve sexual dysfunction in women with polycystic ovary syndrome	Fertility and Sterility	2021	2	Secondary analysis of a randomized clinical trial

Alsaidan et al.[20]	Body shape concerns, sexual satisfaction, and associated factors among patients with polycystic ovarian syndrome	Saudi medical journal	2025	4	Cross-sectional
Bahador et al.[21]	Sexuality and psychological well-being in different polycystic ovary syndrome phenotypes compared with	BMC Saúde da mulher	2022	4	Cross-sectional
	healthy controls: a cross-sectional study				
Pastoor et al.[7]	Sexual dysfunction in women with PCOS: a case control study	Human Reproduction	2023	4	Case-control
Mantzou et al.[8]	Impaired sexual function in young women with PCOS: the detrimental effect of anovulation	The Journal of Sexual Medicine	2021	4	Case-control
Mojahed et al.[22]	Depression, sexual function and sexual quality of life in women with polycystic ovary syndrome (PCOS) and healthy subjects	Journal of Ovarian Research	2023	4	Cross-sectional

Source: own authorship.

Table 2 presents a synthesis of the 14 studies included in this review, providing information on author/year, country, sample size, participant characteristics, study design, measurements, and main findings, with most studies published in English. In general, the articles address sexual dysfunction in women with Polycystic Ovary Syndrome from different perspectives. These findings reinforce the multifactorial nature of the syndrome and will be discussed in greater detail in the discussion section, which will address the following thematic areas that emerged from the analysis process: (a) hormonal factors in PCOS; (b) physical/clinical factors; and (c) psychosocial factors.

Table 2. Summary of the included studies

Study (Author/Year)	Country	Sample	Participants	Method	Measurements	Main Results
Alshiekh et al. (2025)[11]	Syria	178	Sexually active women of reproductive age (18–45 years). Of these, 88 with PCOS and 90 without PCOS.	Data collection through a structured questionnaire composed of three sections.	Sociodemographic characteristics, Female Sexual Function Index (FSFI), and Bristol Female Lower Urinary Tract Symptoms (BFLUTS).	Higher prevalence of obesity, menstrual irregularity, infertility, and sexual dysfunction in the PCOS group, with reduced orgasm frequency, without significant differences in desire, arousal, and lubrication.
Tian et al. (2021)[12]	China	1000	Chinese women with polycystic ovary syndrome (PCOS), aged between 18 and 45 years.	The Chinese version of the Female Sexual Function Index (FSFI) was used to assess sexual function, with additional questions possibly related to sexual life.	FSFI and assessment of clinical, biochemical, anthropometric, and hormonal parameters.	High prevalence of sexual dysfunction (~80%) in women with PCOS, with negative associations between FSFI scores and age and adiposity, and limited association with hormonal factors, except for total testosterone

						and satisfaction.
Tahmasbi et al. (2024)[13]	Iran	190	103 women with PCOS and 87 women without PCOS aged over 18 years and diagnosed with infertility.	Data collected from a cross-sectional study conducted in 2018.	Sociodemographic and clinical data collected by checklist (assessed by the Ferriman-Gallwey scale). Sexual function was assessed by the Female Sexual Function Index (FSFI); sexual distress by the Female Sexual Distress Scale-Revised (FSDS-R); and psychological symptoms by DASS-21, used as covariates.	PCOS was associated with greater sexual distress in infertile women, intensifying distress related to sexual dysfunction, pain during sexual intercourse, and impaired desire and arousal. After adjustment for anxiety and depression, only the association of PCOS with pain and sexual distress remained.
Pastoor et al. (2018)[14]	United Kingdom	3,903	Participants aged 14 years or older with an adequate diagnosis of PCOS.	Systematic review with meta-analysis of observational studies.	Validated sexual function questionnaires and visual analog scales (VAS).	Global impairment in women with PCOS, with negative impact of body image and reduced sexual satisfaction and attractivenes

						s.
Dogan, Yoldemir (2024)[15]	Turkey	466	Women with PCOS, aged between 20 and 40 years, attended in outpatient gynecology clinics (Pendik Training and Research Hospital/Marmara University), from April 2018 to September 2020.	Comparative cross-sectional study between women with and without PCOS.	Anthropometric assessment, hirsutism (Ferriman-Gallwey), hormonal/metabolic profile, insulin resistance (HOMA-IR), FAI, ovarian ultrasonography, and McCoy Female Sexuality Questionnaire (MFSQ).	Women with PCOS presented worse anthropometric parameters, increased levels of LDL-C, DHEA-S, androstenedione, HOMA-IR, FAI and LH, and lower levels of estradiol. There was no correlation between sexual function and metabolic alterations.
Altuntaş et al. (2022)[16]	Turkey	240	Women with untreated PCOS, attended at the endocrinology outpatient clinic of Recep Tayyip Erdoğan University, in Turkey, between 2020 and 2021.	Prospective cross-sectional study conducted with 167 women of reproductive age with PCOS	Scales were applied to assess depression (Beck Depression Inventory - BDI), anxiety and depression (Hospital Anxiety and Depression Scale - HADS), General Health Questionnaire	Higher levels of depression, anxiety, and worse perception of body image in women with PCOS, especially phenotypes A and B.

				and 73 healthy controls.	(GHQ), and body image (Body Cathexis Scale - BCS). Hirsutism scores, serum androgen levels, and metabolic parameters were recorded.	
Aba, Aytek (2022)[17]	Turkey	192	Women with and without PCOS, who were admitted to the Reproductive Health and Family Planning Center of Şişli Kolan Hospital, in Istanbul, between January and June 2019.	A case-control study, in which women were interviewed in the hospital and divided into study group (with PCOS) and control group (healthy).	Information was collected using the Sociodemographic Data Form, the Body Image Scale, and the Female Sexual Function Index (FSFI).	Worse sexual function in women with PCOS, without significant differences in body image perception compared to the control group.
Tian et al. (2023)[18]	China	1500	Women who attended the Department of Gynecological Endocrinology, Beijing Obstetrics and Gynecology Hospital.	Cross-sectional study with classification by PCOS phenotypes (A, B, C and D).	FSFI, SF-12 (12-Item Health Survey), and clinical and hormonal characteristics that likely affect sexual function.	Higher risk of sexual dysfunction in phenotypes A and B, with worse mental quality of life, showing association between phenotypic severity and sexual

						function.
Steinberg et al. (2021)[19]	United States	114	Women aged between 18 and 40 years, with BMI of 27 to 42 kg/m² and diagnosis of PCOS by modified Rotterdam criteria.	Secondary analysis of a randomized clinical trial (OWL-PCOS) for 16 weeks, divided into 3 treatment groups.	FSFI and Female Sexual Distress Scale-Revised (FSDS-R). PCOS-related quality of life, depressive symptoms, BMI, and hormonal parameters were also assessed.	Improvement in sexual desire in groups with lifestyle intervention, without significant change in the overall sexual function score.
Alsaidan et al. (2025)[20]	Saudi Arabia	432	Adult women with PCOS who attended the Maternity and Children's Hospital in Mecca, Saudi Arabia, had at least one follow-up visit and were mentally stable.	Analytical cross-sectional study, conducted through structured questionnaires and data collection between August 2023 and June 2024.	Body shape concern was assessed by BSQ-8C, and sexual function by FSFI. Spearman correlation was applied to determine the correlation between these two aspects.	High prevalence of sexual dysfunction associated with clinical sociodemographic factors and dissatisfaction with body image.
Bahadori et al. (2022)[21]	Brazil	242	Sexually active women aged between 18 and 40 years, diagnosed with PCOS and referred to the infertility clinic of Arash Hospital,	Cross-sectional study with 192 women with PCOS and 50 healthy controls.	FSFI and psychological well-being scales – HADS (Hospital Anxiety and Depression Scale) and SF-12.	Women with PCOS presented worse sexual function scores on FSFI, in addition to higher levels of anxiety and

			between May 2018 and February 2019.			depression on HADS, compared to the control group. Phenotype B showed the worst results.
Pastoor et al. (2023)[7]	Netherlands	135	Heterosexual women with and without PCOS, aged between 18 and 40 years, in a stable relationship and without comorbidities.	Prospective observational case-control study with 135 women (68 with PCOS and 67 in the control group).	Screening using liquid chromatography–tandem mass spectrometry and validated sexual function questionnaires.	Women with PCOS presented worse sexual function, greater sexual distress, and higher frequency of clinical sexual dysfunction and distress compared to the control group.
Mantzou et al. (2021)[8]	Greece	209	76 women with PCOS aged between 20 and 30 years and 133 healthy women as control group.	Case-control study comparing 76 young women with PCOS and 133 from the healthy control group.	Assessment of anthropometric characteristics, hormonal profile, and sexual function through FSFI.	Sexual dysfunction was independent of BMI and partially related to hormonal alterations, with anovulation as the main determinant of sexual dysfunction.
Mojahed et al. (2023)[22]	Iran	216	106 married women with a definitive diagnosis of PCOS and	All participants were asked to complete	Sexual function, depression, and sexual	Women with PCOS presented higher prevalence

			active sexual life and 106 healthy married women with active sexual life.	valid and reliable Persian versions of the Beck Depression Inventory (BDI), FSFI, and Female Sexual Quality of Life (SQOL-F).	quality of life were assessed by BDI, FSFI, and SQOL-F. Correlation coefficient was applied. Linear regression analysis was performed. Internal consistency of SQOL-F was evaluated using Cronbach's alpha.	of depression and worse sexual function and quality of life compared to the control group. A negative correlation was observed between depression and sexual function, and a positive correlation between sexual function and sexual quality of life. Depression and sexual function were independent predictors of sexual quality of life.

Source: own authorship.

DISCUSSION

Our study aimed to explore the impact of Polycystic Ovary Syndrome on sexual dysfunction. For this analysis, we considered the influence of hormonal, physical, and psychosocial factors. Our findings demonstrated a high prevalence of sexual dysfunction in women with PCOS, associated with an overall impairment of sexual function. Testosterone was identified as the hormone partially associated with reduced female sexual satisfaction. Another observed aspect was that women with greater body fat

accumulation presented worse sexual function. Additionally, a higher risk of sexual dysfunction and poorer psychosocial outcomes was observed in women with phenotypes A and B of PCOS.

Hormonal factors and sexual dysfunction in PCOS

It was possible to analyze, from the perspective of hormonal factors related to Polycystic Ovary Syndrome and their impact on sexual function, studies with heterogeneous results. According to Tian, women with PCOS present a higher risk of female sexual dysfunction; this factor is associated with the hyperandrogenism observed in this population. When evaluating hormonal parameters and sexual function, testosterone was the only hormone directly related. The association between sexual dysfunction and testosterone levels occurs mainly in the domain of sexual satisfaction. However, the mechanism responsible for this relationship has not yet been fully elucidated. A possible hypothesis refers to the impact of excess

testosterone, present in women with PCOS, on female phenotypic characteristics, such as hirsutism, severe acne, and alopecia. These manifestations may compromise body self-image and the perception of femininity and attractiveness, factors potentially related to reduced sexual satisfaction. Tian also highlights possible selection biases associated with the nature of the topic, due to its sensitive nature of the topic of sexuality for many Chinese women. On the other hand, Dogan and Yoldemir evaluated the hormonal and metabolic profile in women with PCOS. Levels of FSH, LH, estradiol, total testosterone, DHEA-S, androstenedione, SHBG, blood glucose, lipid profile, and insulin resistance were analyzed. It was found that, despite the identified hormonal alterations, there was no correlation between these changes and female sexual function in women with PCOS. The divergence in results between the study by Tian and that of Dogan and

Yoldemir may be related to methodological differences, including the use of different questionnaires to assess sexual function. Tian et al. used the Female Sexual Function Index (FSFI), a multidimensional questionnaire used to evaluate six domains of female sexual function: desire, arousal, lubrication, orgasm, satisfaction, and pain. Whereas, Dogan and Yoldemir used the McCoy Female Sexuality Questionnaire (MFSQ), an instrument used to analyze different aspects of sexuality, including sexual interest, vaginal lubrication, orgasm, satisfaction with the frequency of sexual activity, and partner-related aspects. Additionally, there are differences in the population and cultural characteristics of the analyzed samples that may influence the obtained results. Furthermore, the clinical and hormonal heterogeneity of women with PCOS, associated with the influence of psychological factors and body self-image, may contribute to the variability of findings.

In contrast, Mantzou et al., observed that sexual dysfunction in women with Polycystic Ovary Syndrome occurs only partially as a result of hormonal alterations, suggesting that other mechanisms, such as chronic anovulation, may play a determining role in sexual dysfunction in these women. In agreement, Tian identified lower scores on the Female Sexual Function Index (FSFI) in women with PCOS phenotype A, characterized by the presence of ovulatory dysfunction, compared to phenotype C, in which ovulatory dysfunction is absent. Such a finding therefore suggests a correlation between anovulation and sexual dysfunction. In women with PCOS and ovulatory dysfunction, progesterone levels are reduced as a result of anovulatory cycles, since the absence of ovulation prevents the adequate production of this hormone. Supporting the anovulation mechanism, Mantzou et al. observed that higher progesterone levels showed a positive correlation with greater sexual satisfaction and with FSFI scores, suggesting that the reduction of this hormone due to anovulation may contribute to poorer sexual function. In addition, a negative correlation was observed between bioavailable

testosterone and female sexual health, as also reported by Tian Altuntaş et al, analyzed serum androgen levels and metabolic parameters. A higher prevalence of hyperandrogenism and oligo-anovulation was observed in phenotypes A and B, with a greater association with sexual dysfunction. Mental health scales were also analyzed, assessing psychological factors such as depression, anxiety, and body perception, which showed a stronger association with sexual dysfunction than isolated hormonal factors.

Collectively, the data suggest that although PCOS is characterized by significant endocrine alterations, the direct relationship between isolated hormonal parameters and female sexual function is insufficient to explain sexual dysfunction in women with PCOS. There is a need to consider additional parameters and their contribution to female sexual health. In this context, future studies should adopt a multidimensional and multicultural approach, integrating standardized hormonal, metabolic, and psychological factors, in order to more comprehensively understand the mechanisms involved in sexual dysfunction in this population, taking into account phenotypic heterogeneity.

Physical/Clinical Factors

Beyond hormonal alterations, PCOS presents a range of clinical manifestations and physical changes that negatively affect female sexual function, leading to sexual dysfunction. According to Alshiekh et al. and Tian et al., PCOS has significant consequences for women's health and quality of life. These direct consequences include excessive hair growth, acne, subfertility, difficulties with weight loss, metabolic syndrome, cardiovascular diseases, and psychological disorders such as depression and anxiety, directly contributing to increased sexual dysfunction.

In this context, clinical factors such as hyperandrogenism play a considerable role, as associated manifestations, including hirsutism and acne, negatively impact body

image perception, thereby influencing female sexual response. According to Pastoor et al., women with Polycystic Ovary Syndrome experience impairments across various domains of sexual function, including arousal, lubrication, orgasm, and satisfaction, compared to those without the syndrome. Moreover, metabolic alterations commonly present in PCOS, such as obesity and insulin resistance, also impair sexual function. The authors suggest that these effects are likely mediated by hormonal, vascular, and inflammatory mechanisms, as well as by their impact on self-esteem and quality of life.

From this perspective, it has been observed that women with Polycystic Ovary Syndrome exhibit heightened concern with physical appearance, which leads to reduced sexual satisfaction and a sense of pressure to maintain a certain body aesthetic. Thus, the physical repercussions of PCOS, particularly those that are visible and related to body appearance, play a central role in decreasing sexual satisfaction, highlighting the importance of considering clinical and physical aspects when addressing sexual dysfunction in this population. However, according to Basirat et al., no significant differences were observed in sexual function related to physical health, suggesting that PCOS may affect mental quality of life more than physical health.

Within this context, it becomes clear that, for the proper functioning of female sexual activity, a balance between endocrine, metabolic, clinical, and physical factors is necessary. According to Aba and Aytek, hyperandrogenic dermopathy, the feeling of not being attractive due to overweight, elevated BMI, excessive acne, low lubrication, and hair loss in women with PCOS are variables that can affect the perception of sexual attractiveness. The combination of these elements can cause low self-esteem and problems in sexual relationships with partners, so that as body dissatisfaction increases among women with PCOS, their negative perception of sexual function also grows.

Thus, it is evident that the physical, clinical, and androgenic characteristics of PCOS directly impact the sexual function of women with the syndrome. Accordingly, the clinical presentation and phenotype of these patients should be carefully considered in comprehensive and compassionate care, so that medical treatment approaches are tailored to each woman's specific needs, whether related to overweight, hirsutism, or skin alterations. All of this aims to provide greater comfort, quality of life, enhanced self-esteem, and improved sexual satisfaction for women with Polycystic Ovary Syndrome.

Psychosocial Factors

It has been observed, in the psychosocial context, that PCOS is associated with decreased quality of life. This is mainly related to emotional aspects, such as symptoms of depression, anxiety, eating disorders, and sexual dysfunction. In addition, clinical signs and hormonal factors can also significantly influence emotional distress. According to Jones et al. and Hahn et al., these physical, psychological, and physiological repercussions of PCOS can compromise both self-image and interpersonal relationships, directly affecting personal well-being.

Women with PCOS showed a greater psychological impact compared to those in the control group, demonstrating a statistically significant difference between the groups. Based on this analysis, it was concluded that PCOS phenotype B was the most prevalent, presenting the highest score and, consequently, more intense psychological symptoms compared to the other phenotypes.[21] These same authors also evaluated the quality of life of these women in relation to their health, identifying that the control group had the highest mental quality of life, while the PCOS phenotypes showed lower scores, with phenotype B receiving the lowest score in this domain.

Another relevant aspect, highlighted by Mojahed et al., is how menstrual irregularity and subfertility can impact the mental health of women with PCOS. The

feeling of losing control over one's own body, associated with the difficulty of becoming pregnant due to anovulation and oligoovulation caused by PCOS, undermines self-confidence and is related to increased levels of anxiety and depression. However, Basirat et al. observed that in some studies there were no significant differences in depression levels between women with the syndrome and those without; yet, when infertility was considered, women with PCOS exhibited significantly higher depressive symptoms. These results suggest that the psychosocial repercussions of the syndrome do not occur in the same way for all women, varying according to individual, reproductive, and contextual factors.

Thus, it becomes evident that psychosocial factors play a central role in the development and maintenance of sexual dysfunction in women with PCOS, acting interdependently with physical and hormonal changes. Characteristics such as emotional distress, low self-esteem, body image dissatisfaction, infertility, and subfertility contribute to impairments in sexual desire, arousal, and satisfaction. Furthermore, it is clear that these factors affect each patient differently, reinforcing that the sexual experience in PCOS is multifactorial and individualized. Therefore, a comprehensive and personalized approach is necessary with these women, to assess not only clinical and hormonal aspects but also the unique psychological and social factors of each patient, with the aim of improving sexual function and quality of life.

Study Limitations

This study presented as a limitation the predominance of observational studies, which restricts the inference of causality between PCOS and sexual dysfunction. In addition, the methodological heterogeneity of the included studies, particularly regarding assessment instruments and sample characteristics, hindered the direct comparison of results. The predominant use of self-report instruments may introduce response bias and

subjectivity in the evaluation of sexual function. Furthermore, the literature search was conducted in a limited number of databases, which may not have captured the entirety of the available evidence. It should also be noted that the search strategy in the BVS and SciELO databases, conducted using descriptors in Portuguese, may have partially limited the retrieval of studies in other languages, although English descriptors were employed in the PubMed database. Finally, the possibility of selection bias cannot be completely excluded.

Study Contributions to Practice

This study aims to produce reliable literature on the topic and expand knowledge about the factors associated with the etiology and exacerbation of sexual dysfunction in women of reproductive age with PCOS. The findings of this review contribute to the identification of more effective healthcare measures by highlighting the need for a multidisciplinary approach in the care of women with this syndrome, taking into account hormonal, clinical, and psychosocial aspects. Thus, the results can support the development of more individualized therapeutic strategies and provide guidance for medical professional practice.

CONCLUSION

It can be concluded that sexual dysfunction in women with PCOS is associated with multiple interrelated factors, highlighting a global impairment of sexual function. Hormonal aspects, such as hyperandrogenism and anovulation, have a significant influence, but do not act in isolation. In addition, physical factors, including acne, hirsutism, and weight gain, strongly affect self-esteem and mental health, with a higher prevalence of anxiety and depression, thereby contributing to the impairment of sexual function. Moreover, the syndrome's phenotypes influence outcomes, with phenotypes A and B being associated with greater psychological impact and hormonal alterations. This

reinforces that sexual dysfunction in PCOS is multifactorial and complex, and its management should be individualized, addressing diverse aspects and involving multiple healthcare professionals, with the aim of improving these women's quality of life. Accordingly, it is recommended that future studies use larger samples and standardized instruments to comprehensively explore the determinants of PCOS. This approach will allow for an expanded understanding of the topic and the development of more effective strategies focused on sexual health and overall quality of life for these patients.

REFERENCES

FEDERAÇÃO BRASILEIRA DAS ASSOCIAÇÕES DE GINECOLOGIA E OBSTETRÍCIA. **Síndrome do ovário policístico**. São Paulo: FEBRASGO, 2023. Disponível em: https://www.febrasgo.org.br/media/k2/attachments/sindrome-.pdf. Acesso em: 21 nov. 2025.

TEEDE, H. J. et al. Recommendations from the international evidence-based guideline for the assessment and management of polycystic ovary syndrome. **Human Reproduction**, v. 33, n. 9, p. 1602-1618, 2018. DOI: https://doi.org/10.1093/humrep/dey256.

BRASIL. Ministério da Saúde. **Protocolo clínico e diretrizes terapêuticas: síndrome do ovário policístico**. Brasília, DF: Ministério da Saúde, 2019. Disponível em: https://www.gov.br/saude/. Acesso em: 21 nov. 2025.

LANA, M. P. et al. Metabolic compromise in women with PCOS: earlier than expected. **Revista da Associação Médica Brasileira**, v. 66, n. 9, p. 1225-1228, 2020.

LOH, H. H. et al. Sexual dysfunction in polycystic ovary syndrome: a systematic review and meta-analysis. **Hormones**, Athens, v. 19, n. 3, p. 413-423, 2020.

EFTEKHAR, T. et al. Sexual dysfunction in patients with polycystic ovary syndrome and its affected domains. **Iranian Journal of Reproductive Medicine**, v. 12, n. 8, p. 539-546, 2014.

PASTOOR, H. et al. Sexual dysfunction in women with PCOS: a case control study. **Human Reproduction**, v. 38, n. 11, p. 2230-2238, 2023. DOI: https://doi.org/10.1093/humrep/dead193.

MANTZOU, D. et al. Impaired sexual function in young women with PCOS: the detrimental effect of anovulation. **The Journal of Sexual Medicine**, v. 18, n. 11, p. 1872-1879, 2021. DOI: https://doi.org/10.1016/j.jsxm.2021.09.004.

BRASIL. Ministério da Saúde. **Saúde sexual e saúde reprodutiva**. Brasília, DF: Ministério da Saúde, 2013. Disponível em: https://bvsms.saude.gov.br/bvs/publicacoes/saude_sexual_saude_reprodutiva.pdf. Acesso em: 21 nov. 2025.

SOUZA, M. T.; SILVA, M. D.; CARVALHO, R. Integrative review: what is it and how to do it. **Einstein**, São Paulo, v. 8, n. 1, p. 102-106, 2010.

ALSHIEKH, A. et al. Polycystic ovary syndrome negatively affects sexual function and lower urinary tract symptoms in Syrian women: a case-control study. **Scientific Reports**, v. 15, n. 1, art. 987, 2025. DOI: https://doi.org/10.1038/s41598-025-85544-8.

TIAN, X. et al. Sexual function in Chinese women with polycystic ovary syndrome and correlation with clinical and biochemical characteristics. **Reproductive Sciences**, v. 28, n. 11, p. 3181-3192, 2021. DOI: https://doi.org/10.1007/s43032-021-00612-4.

TAHMASBI, B. et al. Polycystic ovarian syndrome elevates the distress of sexual pain in Iranian women with infertility. **BMC Women's Health**, v. 24, n. 1, art. 364, 2024. DOI: https://doi.org/10.1186/s12905-024-03181-x.

PASTOOR, H. et al. Sexual function in women with polycystic ovary syndrome: a systematic review and meta-analysis. **Reproductive BioMedicine Online**, v. 37, n. 6, p. 750-760, 2018. DOI: https://doi.org/10.1016/j.rbmo.2018.09.010.

CEVIK DOGAN, M.; YOLDEMIR, T. The association between female sexual function and metabolic features of polycystic ovary syndrome in Turkish women of reproductive age. **Gynecological Endocrinology**, v. 40, n. 1, art. 2362249, 2024. DOI: https://doi.org/10.1080/09513590.2024.2362249.

CETINKAYA ALTUNTAS, S. et al. Depression, anxiety, body image scores, and sexual dysfunction in patients with polycystic ovary syndrome according to phenotypes. **Gynecological Endocrinology**, v. 38, n. 10, p. 849-855, 2022. DOI: https://doi.org/10.1080/09513590.2022.2118708.

ABA, Y. A.; AYTEK SIK, B. Body image and sexual function in women with polycystic ovary syndrome: a case-control study. **Revista da Associação Médica Brasileira**, v. 68, n. 9, p. 1264-1269, 2022. DOI: https://doi.org/10.1590/1806-9282.20220367.

TIAN, X. et al. Sexual function in Chinese women with different clinical phenotypes of polycystic ovary syndrome. **Gynecological Endocrinology**, v. 39, n. 1, art. 2221736, 2023. DOI: https://doi.org/10.1080/09513590.2023.2221736.

STEINBERG WEISS, M. et al. Lifestyle modifications alone or combined with hormonal contraceptives improve sexual dysfunction in women with polycystic ovary syndrome. **Fertility and Sterility**, v. 115, n. 2, p. 474-482, 2021. DOI: https://doi.org/10.1016/j.fertnstert.2020.08.1396.

ALSAIDAN, A. A.; THIRUNAVUKKARASU, A.; ALSULAMI, H. H. Body shape concerns, sexual satisfaction, and associated factors among patients with polycystic ovarian syndrome: a cross-sectional study in Western Saudi Arabia. **Saudi Medical Journal**, v. 46, n. 1, p. 94-101, 2025. DOI: https://doi.org/10.15537/smj.2025.46.1.20240797.

BAHADORI, F. et al. Sexuality and psychological well-being in different polycystic ovary syndrome phenotypes compared with healthy controls: a cross-sectional study. **BMC Women's Health**, v. 22, n. 1, art. 390, 2022. DOI: https://doi.org/10.1186/s12905-022-01983-9.

MOJAHED, B. S. et al. Depression, sexual function and sexual quality of life in women with polycystic ovary syndrome and healthy subjects. **Journal of Ovarian Research**, v. 16, n. 1, art. 105, 2023. DOI: https://doi.org/10.1186/s13048-023-01171-9.

HOFFMAN, B. L. et al. **Williams gynecology**. 2nd ed. New York: McGraw-Hill, 2014.

BASIRAT, Z. et al. Stress, depression, sexual function, and alexithymia in infertile females with and without polycystic ovary syndrome: a case-control study. **International Journal of Fertility & Sterility**, v. 13, n. 3, p. 203-208, 2019. DOI: https://doi.org/10.22074/ijfs.2019.5703.

JONES, G. L.; HALL, J. M.; LEDGER, W. L. Health-related quality of life measurement in women with polycystic ovary syndrome: a systematic review. **Human Reproduction Update**, v. 14, n. 1, p. 15-25, 2008. DOI: https://doi.org/10.1093/humupd/dmm030.

HAHN, S. et al. Clinical and psychological correlates of quality of life in polycystic ovary syndrome. **European Journal of Endocrinology**, v. 153, n. 6, p. 853-860, 2005. DOI: https://doi.org/10.1530/eje.1.02024.