

Vivendo com endometriose: o impacto da fisioterapia na vida das mulheres

Living with Endometriosis: The Impact of Physiotherapy on Women's Lives

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RESUMO

A endometriose é uma doença ginecológica inflamatória crônica que impacta significativamente o bem-estar físico, emocional e social das mulheres, tendo a dor pélvica como uma de suas manifestações mais incapacitantes. Este estudo teve como objetivo investigar a influência da fisioterapia na vida de mulheres diagnosticadas com endometriose. Trata-se de uma pesquisa qualitativa, descritiva e de delineamento transversal, realizada com cinco mulheres em acompanhamento de fisioterapia uroginecológica em uma clínica-escola universitária. A coleta de dados ocorreu por meio de questionário estruturado e entrevistas semiestruturadas, com posterior análise segundo a Análise de Conteúdo. Os achados evidenciaram que a fisioterapia contribuiu para a redução da dor, o relaxamento da musculatura do assoalho pélvico, a melhora da capacidade funcional e o aumento da qualidade de vida. As participantes também relataram benefícios emocionais, como maior bem-estar, autonomia e melhor desempenho nas atividades de vida diária. Conclui-se que a fisioterapia constitui um componente relevante no cuidado multidisciplinar à mulher com endometriose, auxiliando no manejo dos sintomas e na promoção da qualidade de vida.

Palavras-chave: Endometriose. Fisioterapia. Assoalho Pélvico. Saúde da Mulher. Qualidade de Vida.

ABSTRACT

This study aimed to investigate the influence of physiotherapy on the lives of women diagnosed with endometriosis. A qualitative, descriptive, and cross-sectional study was conducted with five women undergoing urogynecological physiotherapy at a university teaching clinic. Data were collected through a structured questionnaire and semi-structured interviews and analyzed using Content Analysis. The findings demonstrated that physiotherapy contributed to pain reduction, pelvic floor muscle relaxation, improved functional capacity, and enhanced quality of life. Participants also reported positive emotional changes, including greater well-being, increased autonomy, and improved performance of activities of daily living. These findings reinforce physiotherapy as a relevant component of multidisciplinary care for women with endometriosis, highlighting its role in symptom management and the promotion of overall quality of life.

Keywords: Endometriosis. Physiotherapy. Pelvic Floor. Women's Health. Quality of Life.

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1. INTRODUCTION

Endometriosis is a chronic inflammatory gynecological disease characterized by the presence of functional endometrial-like tissue outside the uterine cavity, most commonly affecting the pelvic peritoneum, ovaries, and rectovaginal septum, and more rarely involving extra-pelvic sites such as the heart, pleura, and central nervous system (Donatti et al., 2022). A widely accepted explanatory model is Sampson's implantation theory (1921), which proposes that retrograde menstruation enables endometrial cells to reach ectopic locations, where they implant, proliferate, and bleed cyclically. These processes trigger chronic inflammation, fibrosis, and adhesions that compromise pelvic structures and surrounding tissues.

Although the etiopathogenesis of endometriosis has not yet been fully elucidated, current evidence supports a multifactorial origin involving genetic susceptibility, hormonal imbalance, and immunological dysfunction, all of which contribute to lesion establishment and disease progression (Adamyán et al., 2025; Bianco et al., 2010). The disease manifests heterogeneously, ranging from asymptomatic presentations to severe clinical burden. The most frequently reported symptoms include chronic pelvic pain, dyspareunia, and infertility, which together constitute the classical clinical triad. Pelvic pain is typically cyclical and progressive, often worsening during the premenstrual period, persisting after menstruation, and radiating to the lumbar region and lower limbs (Parasar et al., 2017).

The symptom profile of endometriosis is closely related to the anatomical and functional characteristics of the female reproductive system, which undergoes cyclic hormonal variations from menarche to menopause (Standring et al., 2005). The female pelvis contains complex and highly innervated structures, including the uterus, ovaries, fallopian tubes, vagina, bladder, rectum, and pelvic floor musculature, all of which may be directly or indirectly affected by endometriotic lesions (Pang et al., 2024; Yoshimura et al., 2023). The pelvic floor, composed of superficial and deep muscle layers organized into anterior, middle, and posterior compartments, plays a central role in urinary, fecal, sexual, and postural function (Bordoni et al., 2023; Tim et al., 2021). Alterations in these structures, whether due to inflammation, adhesions, or chronic pain, may significantly impair functional capacity and quality of life (Pinto, 2024; Standring et al., 2005).

Diagnosis of endometriosis remains challenging and is frequently delayed. Although definitive diagnosis traditionally requires surgical confirmation through videolaparoscopy, physical examination findings, such as pain on uterine mobilization, uterine retroversion, and increased ovarian volume, along with imaging and laboratory tests, may provide high diagnostic reliability and support clinical decision-making (Bausic et al., 2022; Gama et al., 2023). Magnetic resonance imaging has emerged as a particularly valuable diagnostic tool, especially for deep infiltrating endometriosis, demonstrating high sensitivity and specificity exceeding 90 percent and enabling assessment of lesion extent beyond laparoscopic visualization (Lorusso et al., 2021).

Endometriosis exerts a substantial biopsychosocial impact, affecting physical health, emotional well-being, sexual function, fertility, and social participation. Epidemiological data underscore its public health relevance, in Brazil, approximately seven million women were diagnosed with endometriosis between 2013 and 2022, with the highest incidence reported in 2022, while global estimates indicate that around 176 million women are affected worldwide (Datusus, 2022). These figures highlight the urgency of early diagnosis and timely intervention to mitigate long-term morbidity.

Management of endometriosis is individualized and may involve pharmacological, surgical, and conservative approaches, selected according to symptom severity, lesion location, reproductive goals, and patient preferences (Chen et al., 2023). Hormonal therapies, such as combined oral contraceptives, progestins, dienogest, and gonadotropin-releasing hormone agonists and antagonists, aim to suppress ovulation and menstruation, creating a hypoestrogenic environment that reduces lesion activity and pain (As-Sanie et al., 2025; Vercellini et al., 2025). Surgical treatment, particularly laparoscopic excision of lesions and adhesiolysis, may be indicated in selected cases and has demonstrated benefits in pain reduction, fertility preservation, and functional recovery when performed by specialized multidisciplinary teams (Grigoriadis et al., 2024; Pergolizzi et al., 2024).

Beyond medical and surgical interventions, complementary strategies play a critical role in comprehensive care. Nutritional approaches targeting inflammation and hormonal modulation, such as diets rich in antioxidants, fiber, resveratrol, and adequate vitamin D intake, have shown positive effects on symptom control and inflammatory balance (Thrastardottir et al., 2023). Psychological support is equally essential, as women with endometriosis experience higher rates of anxiety, depression, and reduced quality of life,

with coping-based interventions demonstrating improvements in emotional regulation and pain perception (Canete, 2022; Gehenne et al., 2021).

Physical exercise has also been identified as a protective and therapeutic factor, contributing to anti-inflammatory cytokine release, hormonal regulation, improved pain tolerance, and enhanced immune function. Aerobic, active, and passive exercises, particularly when combined with pelvic floor strengthening, have been associated with reduced symptom severity and improved functional outcomes (Ensari et al., 2022; Lemos et al., 2019; Xie et al., 2025).

Within this multidisciplinary framework, physiotherapy has gained increasing relevance in the management of endometriosis. Interventions targeting pelvic floor function, including manual therapy, kinesiotherapy, biofeedback, electrotherapy, transcutaneous electrical nerve stimulation, Pilates-based exercises, acupuncture, and therapeutic ultrasound, have demonstrated efficacy in pain reduction, muscle relaxation, functional restoration, and improvement of physical and emotional well-being (Santana, 2022; Soares, 2020; Placek et al., 2022). Strengthening evidence-based physiotherapeutic approaches is therefore essential for advancing patient-centered, comprehensive care for women living with endometriosis. Physiotherapy has been incorporated into the care of women with endometriosis mainly because of its effects on pain and physical function. However, less attention has been given to how these changes are reflected in everyday life. Studies in the area have generally prioritized clinical outcomes or the effectiveness of specific techniques, which does not always allow a more detailed understanding of how treatment is experienced beyond the clinical setting.

In the context of a chronic condition such as endometriosis, these experiences tend to involve adjustments that go beyond symptom control. From a biopsychosocial perspective, physiotherapy can also be related to how women manage daily activities, deal with persistent symptoms, and reorganize aspects of their routine over time. These dimensions appear in the literature, although they are not explored in a consistent or in-depth manner. Based on this perspective, the present study aimed to investigate the influence of physiotherapy on the lives of women diagnosed with endometriosis.

2. MATERIALS AND METHODS

Type of Research

The research was characterized by a qualitative approach, with a descriptive nature and a cross-sectional design, using a field diary as a data collection instrument. This type of study aims to understand and describe phenomena, perceptions, sensations, and habits, prioritizing interpretative data analysis rather than numerical measurement, according to Manzato and Santos (2012).

Research Setting

The study was conducted at the teaching clinic of Centro Universitário INTA – UNINTA – Campus Itapipoca, a facility dedicated to the practical training activities of students from the Physical Therapy, Nutrition, and Nursing programs, where healthcare services are provided to the general community.

Physiotherapeutic Intervention

Physiotherapeutic care followed the institutional protocol adopted at the University Teaching Clinic for the management of pelvic pain associated with endometriosis. Participants attended two sessions per week, each lasting around 50 minutes, over a period that generally extended to approximately four months.

The intervention included pelvic floor muscle training, stretching exercises, manual techniques aimed at muscle relaxation, and the use of transcutaneous electrical nerve stimulation (TENS). In practice, these resources were combined within each session according to the therapeutic needs identified, without a fixed sequence of application. In general terms, the sessions involved exercises directed at pelvic floor function, along with strategies focused on reducing muscle tension and discomfort.

Although the protocol offered a general framework for care, adjustments were made throughout the treatment based on the participants' clinical presentation, especially in relation to pain complaints and functional limitations. The procedures were carried out by undergraduate physiotherapy students under the supervision of licensed professionals, in accordance with the clinical routine of the teaching clinic.

Sample

The study sample consisted of five women residing in the municipality of Itapipoca who had a diagnosis of endometriosis, agreed to participate in the research, and underwent treatment at the University Teaching Clinic (CEU). Women diagnosed with endometriosis

and assisted at the Teaching Clinic of [withheld for evaluation], who agreed to participate in the study by signing the Informed Consent Form, were included. Women with cognitive impairment, other associated gynecological or abdominal conditions, those under 18 years of age, or those who did not respond to the research instruments were excluded. The number of participants was sufficient to meet the data saturation criterion, evidenced by the recurrence of content in the discourses and the absence of new relevant information, in accordance with qualitative research assumptions (Bardin, 1977; Minayo, 2017).

Instruments

Two instruments were used for data collection. The first instrument consisted of a structured questionnaire aimed at collecting information related to the participants' socioeconomic profile and lifestyle habits. The second instrument was a semi-structured interview, developed by the authors and composed of 12 questions, which addressed aspects related to the process of endometriosis diagnosis, emotional reactions to the confirmation of the disease, prior knowledge and family history, pain intensity and perception, impact on activities of daily living, treatments performed for symptom management, motivation for seeking treatment, adherence and duration of physical therapy, therapeutic resources used during sessions, and the influence of physical therapy on the participants' quality of life.

Data collection procedures

Initially, the participants were informed about the objectives of the research and the procedures adopted. Data collection was carried out from April to May 2025, on Tuesdays and Thursdays, from 6 p.m. to 10 p.m., corresponding to the clinic's operating hours. The interviews were conducted in a reserved room provided by the coordination of the University Teaching Clinic (CEU), after the signing of the Informed Consent Form. The participants' reports were recorded using a mobile device and subsequently transcribed into a text editor. After transcription, the audio files were discarded. To ensure participants' anonymity, numerical identification was used.

Ethical Procedures and Data Analysis

Data analysis was conducted using Content Analysis, according to Bardin (1977), following the stages of pre-analysis, material exploration, and treatment of results, inference, and interpretation. Initially, a floating reading of the interview transcriptions was performed, followed by coding of the discourses and the construction of thematic categories. From this

process, the following analytical categories emerged: reaction to the diagnosis of endometriosis, perceptions during physical therapy treatment, and impact of physical therapy on quality of life. The findings were interpreted in light of the relevant scientific literature. Regarding ethical aspects, participation was voluntary and occurred after the signing of the Informed Consent Form. The study complied with the ethical principles established by the Brazilian National Health Council Resolutions No. 466/2012 and No. 510/2016 and was approved by the Research Ethics Committee, according to approval opinion 7.275.941

3. RESULTS

Table 1.

Sociodemographic and clinical characteristics of the participants

Participant	Age (years)	Skin color	Occupation / Academic status	Time since diagnosis	Time in physiotherapy
1	24	Brown	Undergraduate student / Commercial activity	≤ 2 years	≥ 6 months
2	34	White	Commercial sector worker	> 5 years	≥ 1 year
3	20	Brown	Undergraduate student	≤ 1 year	< 6 months
4	34	White	Commercial sector worker / Undergraduate student	3–5 years	≥ 6 months
5	26	Brown	Commercial sector worker	2–3 years	≥ 6 months

Fonte: autores (2025).

Five women diagnosed with endometriosis participated in the study, aged between 20 and 34 years, self-identified as White or Brown, and residing in the municipality of Itapipoca.

Most participants reported balancing professional activities, predominantly in the commercial sector, with enrollment in undergraduate programs, reflecting a routine marked by physical, academic, and emotional demands. Regarding clinical characteristics, all participants had a confirmed diagnosis of endometriosis and were undergoing urogynecological physical therapy at the time of data collection.

For analytical purposes, participants were identified by sequential numbering (Participant 1 to Participant 5), ensuring anonymity. Content analysis of the narratives revealed convergent perceptions concerning the experience of living with endometriosis and the role of physical therapy in symptom management. Three main thematic categories emerged: (1) emotional and subjective reactions to the diagnosis, (2) perceived effects of physiotherapy on pain and pelvic floor function, and (3) impact of physiotherapy on daily activities and quality of life.

When questioned about the emotional reactions related to the reality of the endometriosis diagnosis, marked by intense and diffuse pain, lower limb edema, reduced ability to perform activities of daily living, and the confirmation of an incurable condition, the participants reported experiences of fear, uncertainty, and emotional distress. One participant stated: *“I was very afraid that I would not be able to get pregnant one day, and distressed about having to live with a disease that has no cure and to experience pain during every menstrual period; however, having a diagnosis gave me hope to seek treatment that could help me achieve a better quality of life”* (Participant 1, 24 years).

Similarly, another participant highlighted the lack of knowledge about the disease and the anxiety generated by the diagnosis: *“Because it is not a well-known disease, I was very afraid and scared, since I did not know what endometriosis was and even thought it could be the beginning of cancer. The pain I felt led me to the emergency room, sometimes fainting. After the diagnosis, I had many doubts, and anxiety took over due to the uncertainties about how my life would be with an incurable disease”* (Participant 2, 34 years). Concerns about infertility were also evident, as expressed by Participant 3 (20 years): *“When I received the diagnosis, I was very scared because I had already heard about the disease and knew it could cause infertility, which made me very afraid of not being able to get pregnant in the future.”*

In addition, emotional reactions such as shock and difficulty in understanding the condition were reported: *“I had no reaction; I stayed in shock for a few minutes trying to*

understand what endometriosis actually was, because I had no idea about this disease” (Participant 4, 34 years). Despite these initial reactions, the diagnosis was also perceived as a starting point for seeking care, as noted by Participant 5 (26 years): *“My reaction was fear; however, having a diagnosis of endometriosis motivated me to seek professionals who could provide appropriate treatment so that I could have a better quality of life.”*

When reporting their perceptions after initiating physical therapy treatment, the participants emphasized improvements related to pain reduction, relaxation of pelvic floor muscles, and increased ability to perform daily activities. Participant 1 (24 years) reported: *“Today I feel well, because physical therapy helps me a lot with pain relief, and I have less tension in my pelvic floor muscles, especially during sexual intercourse. I feel better and more willing to perform my daily activities.”*

Participant 2 (34 years) highlighted changes in functionality and lifestyle: *“With physical therapy, I realized that besides endometriosis, a sedentary lifestyle made me feel even worse. By doing the exercises, I now feel better performing my daily activities and experience significant pain relief. Before treatment, during my menstrual period, I could not move; today I can carry out my daily routine normally.”* Improvements in overall well-being were also reported, as described by Participant 3 (20 years): *“I see myself in a constant process of improvement, day by day. After each physical therapy session, I feel light and well, with less abdominal bloating and a better quality of life.”*

Participant 4 (34 years) noted partial but meaningful symptom relief: *“After physical therapy treatment, I feel very good overall. The pain does not completely disappear, but it decreases significantly. I can feel the relaxation of my pelvic floor muscles and I have more energy to perform my daily activities.”* Likewise, Participant 5 (26 years) emphasized systemic improvements: *“I feel that my body responded very positively to physical therapy, with pain relief in the pre- and post-menstrual periods, reduced swelling in my legs and abdomen, and greater willingness to perform my work activities.”*

Regarding the role of physical therapy in quality of life, participants highlighted its essential contribution to symptom management and overall well-being, particularly when reflecting on the possibility of living without treatment. Participant 1 (24 years) stated: *“I cannot see my life without physical therapy, because I have a much better quality of life, improved mobility, and overall improvement in my daily routine. Physical therapy was a turning point in my life since I started treatment.”*

Similarly, Participant 2 (34 years) reported: *“I cannot imagine my life without physical therapy treatment. It helped me a lot with pain relief, which used to traumatize me, and today I feel much better.”* Participant 3 (20 years) reinforced the immediate benefits of treatment: *“I cannot imagine it today, because since the first days of physical therapy treatment, I experienced significant relief from pre- and post-menstrual pain, and it also helps me a lot in my daily activities.”*

The indispensability of physiotherapy was also emphasized by Participant 4 (34 years): *“I cannot imagine my life at all without physical therapy, because it is fundamental to my quality of life. It helps me wonderfully with pain relief, making me feel lighter.”* Finally, Participant 5 (26 years) highlighted the contrast with the pre-treatment period: *“No, because physical therapy helps improve the symptoms of endometriosis. I feel a very big difference compared to before starting treatment, and I cannot imagine my life without it.”*

Overall, the participants reported that physiotherapy contributed to pain reduction, pelvic floor muscle relaxation, increased functional capacity, and greater autonomy in activities of daily living. These improvements were consistently associated with enhanced emotional well-being and a perceived improvement in quality of life, highlighting the relevance of physiotherapy within the multidisciplinary care of women with endometriosis.

4. DISCUSSION

Reaction to the diagnosis of endometriosis

The diagnosis of endometriosis was not described by participants as a simple or neutral moment. In most cases, it was associated with fear and uncertainty, and sometimes with a sense of shock. Similar reactions have been reported in studies on the impact of chronic gynecological conditions (De Queiroz Moura et al., 2025; Silva et al., 2022), although, in this study, these feelings seemed closely related to previous experiences of not fully understanding what was happening with their bodies.

At the same time, receiving a diagnosis did not appear to introduce entirely new concerns, but rather to reorganize experiences that had already been present. For some participants, it functioned as a way of making sense of symptoms that had been ongoing for some time. This aspect has been discussed in the literature as part of the process of

recognizing illness (Ramos et al., 2018), although it does not necessarily reduce the emotional impact of the diagnosis itself.

In the Brazilian context, where delays in diagnosis are still common, this process may be even more complex. Concerns related to fertility and the future were recurrent in the reports and seem to reflect not only the clinical condition, but also broader expectations associated with it. These findings suggest that attention to emotional aspects should not be secondary in care, especially in conditions marked by uncertainty and persistence of symptoms (Rodrigues et al., 2022).

Perceptions during physical therapy treatment

Participants often referred to physiotherapy in relation to changes that became noticeable in daily situations. Pain relief was mentioned, but it did not appear as the only relevant aspect. Some reports also included references to reduced tension and greater ease in carrying out routine activities. Similar findings have been described in studies on physiotherapy for chronic pelvic pain (Varela et al., 2022), although these aspects are not always explored in detail.

Not all changes seemed to occur at the same pace. In a few cases, participants described a gradual return to activities that had previously been avoided. This does not necessarily mean that symptoms were no longer present, but rather that they were handled differently. In this sense, the findings may be related to what has been discussed in the literature as self-efficacy in chronic conditions (Soares, 2020), although this was not directly assessed in the present study.

There were also mentions of more general improvements, such as feeling physically better or less uncomfortable. These aspects are less frequently emphasized in clinical studies, but they appear in broader discussions on physiotherapy in endometriosis (Varela et al., 2022). Still, these interpretations need to be considered with caution, particularly given the qualitative nature of the study and the context in which the intervention took place.

Impact of physical therapy on quality of life

In the participants' accounts, physiotherapy was frequently described as something difficult to replace. This was not limited to symptom relief. In several cases, the reports referred to changes in daily routines or in the way everyday activities were managed. Some participants explicitly compared their current situation with the period before starting

treatment. Similar findings have been reported in studies on quality of life in endometriosis (Vidal et al., 2024).

This perception, however, does not occur in isolation. Living with a chronic condition often involves the use of multiple strategies, including non-pharmacological approaches such as physiotherapy. These strategies have been associated with maintaining functionality and supporting daily activities (Xie et al., 2025; Vercellini et al., 2025), although their effects are not uniform.

It is also important to consider the context in which the data were produced. The study was conducted in a teaching clinic, where follow-up tends to be closer. This may influence how participants perceive care. In addition, the small number of participants limits broader interpretations. Even so, the findings suggest that physiotherapy may be relevant in the management of endometriosis in daily life.

5. FINAL CONSIDERATION

The present study aimed to examine the perceptions of women diagnosed with endometriosis regarding physiotherapy and its impact on quality of life. The findings indicate that physiotherapy plays a significant role in pain reduction, functional improvement, and the enhancement of physical and emotional well-being, supporting its relevance as a therapeutic strategy in the management of endometriosis.

One of the main strengths of this study is its qualitative design, which allowed for an in-depth exploration of the participants' lived experiences. In addition, the use of Content Analysis facilitated the identification of coherent analytical categories that are consistent with existing literature. Participants' accounts further underscore the importance of urogynecological physiotherapy in promoting autonomy and improving quality of life.

The study has several limitations. Data collection was limited to a single geographic region, and the sample size was small, consisting of five women receiving physiotherapy at the time of the study. Furthermore, difficulties in identifying a larger number of women with a confirmed diagnosis of endometriosis within the municipality limited the diversity of experiences represented in the analysis.

With respect to theoretical and practical implications, the findings highlight the importance of integrating physiotherapy into multidisciplinary care for women with endometriosis. Physiotherapy contributes not only to the management of physical symptoms

but also to the promotion of emotional and social well-being. From a theoretical standpoint, this study expands understanding of the experience of endometriosis by foregrounding the perspectives of affected women.

Future research should include larger and more diverse samples and be conducted across different healthcare contexts to further elucidate the effects of physiotherapy in the management of endometriosis. Such studies may contribute to the refinement of clinical practices, improved access to diagnosis, and the development of comprehensive care strategies for women's health.

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