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IMPACT OF PHYSICAL THERAPY ON PELVIC FLOOR DYSFUNCTION AND SEXUAL HEALTH IN POSTPARTUM WOMEN

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ABSTRACT: This study aims to investigate the impact of physical therapy on pelvic floor dysfunction and its subsequent effects on sexual function, incontinence, pelvic floor distress, and quality of life in postpartum women. A total of 100 postpartum women with diagnosed pelvic floor dysfunction participated in the study. Descriptive statistics were used to summarize participant characteristics, including age, parity, time postpartum, and baseline

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measures of pelvic floor dysfunction. Pre- and post-therapy assessments were conducted using standardized measures, including the Incontinence Impact Questionnaire (IIQ7), Pelvic Floor Distress Inventory (PFDI20), Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ12), and the Short Form 36 (SF36) for quality of life. Pelvic floor strength was assessed through physical examination. The results revealed significant improvements in sexual function ($p = 0.023$), with a moderate to strong positive correlation between sexual function and quality of life ($r = 0.72$, $p = 0.001$). Incontinence impact and pelvic floor distress showed trends of improvement but did not reach statistical significance. Pelvic floor strength showed no significant change post-therapy ($p = 0.782$). The study also observed a significant negative relationship between pelvic floor distress and sexual function ($r = -0.32$, $p = 0.012$). These findings suggest that while physical therapy can significantly improve sexual function and overall quality of life, its impact on incontinence and pelvic floor strength may require further attention. The study highlights the importance of addressing sexual health in pelvic floor dysfunction management, suggesting potential areas for refining physical therapy protocols for postpartum women.

Keywords: Postpartum, Pelvic floor dysfunction, Physical therapy, Sexual function, Quality of life, Incontinence

Introduction

Pelvic floor dysfunction (PFD) is a common and often debilitating condition that affects many women, particularly during the postpartum period (Peinado-Molina et al., 2023). The pelvic floor is a group of muscles, ligaments, and connective tissues that support the pelvic organs, including the bladder, uterus, and rectum (Quanghebeur et al., 2021). During pregnancy and childbirth, these structures are subjected to significant stress and stretching, which can lead to dysfunction (Chilaka et al., 2023). Pelvic floor disorders can manifest as urinary incontinence, fecal incontinence, pelvic organ prolapse, and sexual dysfunction, significantly impairing a woman's quality of life (QoL). It is estimated that 30–50% of women experience some form of PFD in the postpartum period, with symptoms often persisting long after childbirth (Romeikiene et al., 2021).

Physical therapy (PT) has emerged as a promising intervention for PFD, with various techniques such as pelvic floor exercises, manual therapy, biofeedback, and education on body mechanics designed to improve pelvic muscle function and alleviate symptoms (ven Rejin-

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Baggen et al., 2022). Evidence suggests that physical therapy can be an effective treatment for postpartum women suffering from PFD, yet, despite the availability of these interventions, many women do not seek or receive the necessary treatment (Kurvavska et al., 2022). The lack of awareness, social stigma, and insufficient access to trained physical therapists contribute to low treatment uptake. This highlights the need for further research to explore the impact of physical therapy on pelvic floor dysfunction and overall quality of life in postpartum women (Hite et al., 2021).

While there is existing research on the effectiveness of physical therapy in treating pelvic floor dysfunction, there remains a notable gap in understanding how specific interventions impact postpartum women across different populations (Shah et al., 2023). Much of the existing literature focuses on small sample sizes or isolated interventions, often without addressing the cumulative impact of therapy on a woman's quality of life in the long term. Additionally, there is a need for more data on the adherence to physical therapy treatments and how factors such as age, parity (number of children), and socioeconomic status influence treatment outcomes (Meister et al., 2023). Furthermore, studies focusing specifically on postpartum women are limited, as many research studies group postpartum individuals with other populations, such as those with pre-existing pelvic floor disorders. This leaves a gap in understanding the unique needs and treatment responses of postpartum women experiencing pelvic floor dysfunction.

Pelvic floor dysfunction in postpartum women remains an under-recognized issue that significantly affects their physical, emotional, and social well-being (Critchley, 2022). Despite the proven effectiveness of physical therapy in improving pelvic floor function, many women with PFD do not receive adequate treatment, which exacerbates the long-term consequences of these conditions (Toal et al., 2024). There is insufficient evidence regarding the overall impact of physical therapy on pelvic floor dysfunction specifically in postpartum women, particularly in relation to how physical therapy influences their quality of life. This study aims to bridge this gap by evaluating the effectiveness of physical therapy in improving pelvic floor function and overall well-being in postpartum women with PFD (Li, 2022).

The purpose of this study is to explore the effectiveness of physical therapy interventions in improving pelvic floor function and overall quality of life in postpartum women with pelvic floor dysfunction. By identifying the specific interventions that contribute to symptom relief and enhanced well-being, the study aims to provide evidence to guide clinical practice and

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support the development of tailored treatment protocols for this population. Moreover, the research will assess the influence of factors such as adherence to physical therapy and the type of interventions used, thereby providing a more comprehensive understanding of how to best treat postpartum pelvic floor dysfunction. Following are the objectives of this study:

- To evaluate the impact of physical therapy on pelvic floor function in postpartum women with pelvic floor dysfunction.
- To determine the effects of physical therapy on overall quality of life in postpartum women.
- To examine the relationship between physical therapy adherence and symptom improvement in postpartum women with pelvic floor dysfunction.
- To identify the types of physical therapy interventions most effective for postpartum women with pelvic floor dysfunction.
- To explore the demographic and psychosocial factors influencing the effectiveness of physical therapy in postpartum women with pelvic floor dysfunction.

This study holds significant clinical and public health relevance by providing evidence on the effectiveness of physical therapy in treating pelvic floor dysfunction in postpartum women. The findings could inform healthcare providers about the most effective physical therapy interventions, enabling them to offer more personalized and effective treatment plans for women suffering from PFD. Improved access to and awareness of physical therapy could reduce the burden of PFD on women's health and well-being.

From a policy perspective, the research could support advocacy efforts for greater insurance coverage for pelvic health treatments, as well as enhance the integration of physical therapy into routine postpartum care. Additionally, this study could raise awareness about the importance of pelvic health during the postpartum period, reducing the stigma surrounding these conditions and empowering women to seek help earlier. Overall, this research could play a pivotal role in improving postpartum care, ultimately leading to better health outcomes and a higher quality of life for postpartum women.

Literature Review

Pelvic floor dysfunction (PFD) is a prevalent condition that affects a significant portion of postpartum women, often leading to a decrease in their quality of life (QoL) (Van Hauwaert et al., 2025). The postpartum period is a critical phase in a woman's life, during which physical,

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emotional, and social changes occur. Among these changes, pelvic floor dysfunction remains one of the most common yet under-discussed issues, which may have a long-lasting impact on a woman's health and well-being (Romeikiene et al., 2021). This literature review aims to explore the current body of knowledge surrounding PFD in postpartum women, the role of physical therapy in managing these conditions, and the effects of pelvic floor rehabilitation on overall quality of life (Ghani et al., 2023).

Pelvic Floor Dysfunction in Postpartum Women

The pelvic floor consists of muscles, ligaments, and connective tissue that support the pelvic organs, such as the bladder, uterus, and rectum. During pregnancy and childbirth, these structures experience significant changes in size, strength, and elasticity, often leading to dysfunction (Wang et al., 2024). Postpartum women may experience various forms of pelvic floor dysfunction, including urinary incontinence, fecal incontinence, pelvic organ prolapse (POP), and sexual dysfunction. These conditions can result from mechanical, neurological, and hormonal changes associated with pregnancy and childbirth (Akter et al., 2024).

Urinary incontinence, particularly stress urinary incontinence (SUI), is one of the most common complaints among postpartum women, with prevalence rates ranging from 30% to 60% (Li et al., 2022). Vaginal delivery, in particular, increases the risk of SUI due to damage or stretching of the pelvic floor muscles and connective tissue (Morkved et al., 2003). Pelvic organ prolapse, the descent of pelvic organs such as the uterus, bladder, or rectum into the vaginal canal, is also prevalent, with a reported incidence of up to 50% of women experiencing some degree of prolapse by the time they reach their 50s (Chen et al., 2023).

Sexual dysfunction is another key concern for postpartum women, with approximately 50% to 75% of women reporting some form of sexual dysfunction in the first year after childbirth. This may include dyspareunia (pain during intercourse), reduced sexual desire, and difficulty achieving orgasm, often linked to pelvic floor dysfunction (Kuravska et al., 2022).

Physical Therapy for Pelvic Floor Dysfunction

Physical therapy has emerged as a first-line treatment for managing PFD, particularly for postpartum women. Pelvic floor rehabilitation generally involves a range of interventions, including pelvic floor muscle training (PFMT), manual therapy, biofeedback, and education on posture and body mechanics Lua-Mailland et al., 2023). Several studies have investigated the

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effectiveness of these physical therapy techniques in alleviating symptoms of PFD and improving overall pelvic health in women (Schutze et al., 2022).

Pelvic Floor Muscle Training (PFMT)

Pelvic floor muscle training (PFMT) is widely regarded as the cornerstone of physical therapy for PFD. PFMT involves exercises designed to strengthen and re-educate the pelvic floor muscles, improving their tone, strength, and coordination (Alouini et al., 2022). The primary goal of PFMT is to restore the muscle function of the pelvic floor, which in turn improves bladder control, reduces prolapse, and alleviates other pelvic floor symptoms (Gluppe et al., 2021).

A number of studies have demonstrated the effectiveness of PFMT in postpartum women. Bo et al. (2022) conducted a randomized controlled trial (RCT) that showed significant improvements in urinary incontinence symptoms in postpartum women who underwent PFMT. Women who performed PFMT had better muscle strength and coordination, resulting in a reduced incidence of SUI. Furthermore, a systematic review by Woodley et al., (2021) concluded that PFMT significantly reduces urinary incontinence and improves pelvic floor strength, offering a non-invasive and cost-effective approach to managing PFD.

Biofeedback

Biofeedback is another physical therapy technique that has shown promise in treating PFD. Biofeedback involves using electronic devices to provide real-time feedback on pelvic floor muscle activity, helping women learn to control and improve their muscle function (Wang et al., 2024). This method has been shown to enhance the effectiveness of PFMT by providing visual or auditory cues that help patients understand how to engage the pelvic muscles properly (Das et al., 2023).

A study by Hite et al. (2021) found that biofeedback combined with PFMT was significantly more effective than PFMT alone in treating urinary incontinence in postpartum women. The real-time feedback allows patients to gain better awareness and control over their pelvic floor muscles, thereby improving symptom management.

Manual Therapy

Manual therapy, including techniques such as myofascial release and soft tissue mobilization, is used to address pelvic floor dysfunction by improving tissue mobility, relieving pain, and reducing muscle tension (Deodato et al., 2023). This approach has been particularly beneficial

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for women with pelvic pain, which is often associated with childbirth-related trauma or scar tissue formation. A study by Giordani et al. (2022) demonstrated that manual therapy was effective in reducing pelvic pain and improving function in postpartum women, suggesting its utility in managing pelvic floor dysfunction.

Postural and Behavioural Education

Postural and behavioural education plays a significant role in pelvic floor rehabilitation, as body mechanics and posture can influence the function of the pelvic floor muscles (Fuentes et al., 2023). Educating postpartum women on proper posture during daily activities such as lifting, sitting, and walking is critical in preventing strain on the pelvic floor and improving symptoms. Additionally, lifestyle modifications, such as addressing constipation or avoiding heavy lifting, are essential for managing PFD. A study by Pizzoferrato et al. (2024) emphasized that behavioural interventions, when combined with pelvic floor exercises, can result in significant improvements in symptoms of urinary incontinence and prolapse.

Quality of Life and Postpartum Pelvic Floor Dysfunction

Pelvic floor dysfunction can have profound effects on a woman's overall quality of life. In addition to the physical symptoms, such as urinary incontinence and pelvic pain, PFD can also impact a woman's mental health, relationships, and social well-being. Studies have shown that women with pelvic floor dysfunction report lower quality of life scores, with physical symptoms often contributing to feelings of embarrassment, anxiety, and depression (Fontenele et al., 2021).

A longitudinal study by Rofrigues et al. (2021) found that women who received pelvic floor rehabilitation, including physical therapy interventions, experienced significant improvements in both physical function and emotional well-being. The reduction of symptoms such as urinary incontinence and pelvic pain led to a better quality of life, with many women reporting increased confidence, improved relationships, and enhanced participation in social and physical activities. This highlights the holistic benefits of physical therapy for postpartum women, as it not only addresses physical symptoms but also has a positive impact on emotional health (Saleh et al., 2024).

While there is a growing body of evidence supporting the effectiveness of physical therapy for postpartum pelvic floor dysfunction, several research gaps remain. Most studies have focused on isolated interventions or small sample sizes, often lacking generalizability (Blanchard et al.,

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2021). There is limited research exploring the long-term effects of physical therapy on pelvic floor function and quality of life in postpartum women. Additionally, most studies have not addressed the influence of demographic factors, such as age, parity, and socioeconomic status, on the effectiveness of treatment (Sacomori et al., 2021).

Moreover, there is a lack of consensus on the most effective combination of physical therapy techniques for postpartum women, with studies showing mixed results regarding the optimal approach (Wagner et al., 2022). For example, while PFMT is widely considered the gold standard for treating PFD, there is limited evidence on how other interventions, such as manual therapy and biofeedback, complement or enhance the effects of PFMT. A comprehensive understanding of the synergistic effects of these therapies is needed (Bardley et al., 2021).

Pelvic floor dysfunction is a significant issue for many postpartum women, leading to physical, emotional, and social challenges. Physical therapy has proven to be an effective intervention for improving pelvic floor function and alleviating symptoms such as urinary incontinence and pelvic pain (Frigerio et al., 2022). However, further research is needed to explore the optimal combination of therapies, the impact of demographic factors on treatment outcomes, and the long-term effects of physical therapy on quality of life. Understanding these aspects will enable healthcare providers to offer more personalized and effective treatments for postpartum women with pelvic floor dysfunction, ultimately enhancing their quality of life (Torpak et al., 2022).

Methodology

Study Setting

The study was conducted in a clinical setting, specifically in an outpatient physical therapy clinic that specialized in postpartum care and pelvic health rehabilitation. The clinic had qualified physical therapists trained in pelvic health rehabilitation techniques. Participants were recruited from this clinic, where they were seeking treatment for pelvic floor dysfunction (PFD) following childbirth. The setting enabled the research team to closely monitor the physical therapy interventions and collect relevant data over a set period of time.

Study Population and Sampling Technique

Population:

The study population consisted of postpartum women aged 18–45 years who were experiencing pelvic floor dysfunction. These women had given birth within the past six months to two years and were seeking treatment for symptoms such as urinary incontinence, pelvic pain, fecal

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incontinence, or pelvic organ prolapse. Women with significant medical conditions, such as pelvic cancer, recent pelvic surgery, or cognitive impairments, were excluded from the study, as were women who had not received any physical therapy for PFD.

Sampling Technique:

The study employed a convenience sampling technique to recruit participants from the clinic's existing patient pool. This technique allowed for the selection of participants who met the eligibility criteria and were willing to participate in the study. The participants were recruited via direct invitation by healthcare providers or therapists during their visits to the clinic.

The recruitment criteria included:

Inclusion Criteria:

1. Postpartum women aged 18–45 years.
2. Women reporting symptoms of pelvic floor dysfunction (urinary incontinence, pelvic pain, sexual dysfunction, or pelvic organ prolapse).
3. Women willing to engage in physical therapy for pelvic floor rehabilitation.
4. Consent to participate in the study and completion of relevant assessments.

Exclusion Criteria:

1. Women who were less than 6 weeks or more than 24 months postpartum.
2. Women who had undergone major pelvic surgery or had pelvic cancer.
3. Women with cognitive impairments or mental health conditions that may have interfered with their participation.

Sample Size

The sample size was determined based on an effect size calculation derived from similar studies investigating physical therapy interventions for pelvic floor dysfunction. A power analysis was conducted to determine the appropriate sample size for statistical significance at a 95% confidence level and a 5% margin of error. Based on prior studies (e.g., Torpak et al., , 2022), the sample size was estimated to be approximately 100 postpartum women, which was deemed sufficient to achieve adequate statistical power for detecting meaningful differences in pelvic floor function and quality of life before and after the intervention.

Measurement Tools

To assess the impact of physical therapy on pelvic floor dysfunction and quality of life, the study employed a combination of self-reported questionnaires and clinical assessments:

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1. **Pelvic Floor Dysfunction Assessment:**

   Pelvic Floor Distress Inventory (PFDI-20): This validated questionnaire was used to assess the severity of symptoms related to pelvic floor disorders, including urinary incontinence, pelvic organ prolapse, and pelvic pain. The PFDI-20 is widely used in clinical studies to measure the impact of pelvic floor dysfunction on daily life (de Arruda et al., 2022).

   Incontinence Impact Questionnaire (IIQ-7): This 7-item questionnaire measured the social and emotional impact of urinary incontinence on daily life, including its effects on physical, social, and emotional domains (Sheriden et al., 2021).

   Pelvic Organ Prolapse/Urinary Incontinence Sexual Function Questionnaire (PISQ-12): This tool was used to assess the impact of pelvic floor dysfunction on sexual health and sexual function (Capellen et al., 2024).

2. **Quality of Life Assessment:**

   SF-36 Health Survey: This widely used instrument assessed overall health status and quality of life across eight domains: physical functioning, role limitations due to physical health, role limitations due to emotional problems, social functioning, mental health, energy/fatigue, pain, and general health perceptions (Ware & Sherbourne, 1992). It has been validated for use in populations with various health conditions, including PFD.

3. **Pelvic Floor Muscle Strength and Function:**

   Perineometer or Digital Rectal Examination: These methods were employed to objectively assess pelvic floor muscle strength, tone, and endurance before and after physical therapy. Perineometry, which uses a device to measure pelvic floor pressure, provided an accurate assessment of muscle strength.

   Clinical Observation: Trained physical therapists assessed pelvic floor muscle function through manual palpation, looking for signs of muscle tension or weakness, and signs of prolapse.

4. **Physical Therapy Intervention Monitoring:**

   Therapy Attendance and Adherence: A log was maintained to track participants' attendance to physical therapy sessions and the number of exercises completed at home, providing insight into the relationship between adherence and treatment outcomes.

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Intervention Documentation: The specific physical therapy interventions used (e.g., pelvic floor exercises, manual therapy, biofeedback) were documented to evaluate the effects of different therapeutic approaches.

Data Analysis

The data were analyzed using both descriptive and inferential statistical methods:

Descriptive Statistics:

Descriptive statistics (mean, median, standard deviation, and frequency distributions) were used to summarize demographic data (e.g., age, parity, socioeconomic status) and baseline characteristics (e.g., severity of symptoms, quality of life scores, pelvic floor strength).

Inferential Statistics:

Paired t-tests or **Wilcoxon signed-rank tests** (depending on data normality) were used to compare pre- and post-treatment scores on the PFDI-20, IIQ-7, PISQ-12, and SF-36 to evaluate the effectiveness of physical therapy in improving pelvic floor function and quality of life.

Multivariate regression analysis was conducted to explore the factors (e.g., adherence to therapy, type of intervention, demographic characteristics) that influenced treatment outcomes.

Chi-square tests were used to examine categorical data, such as the proportion of women who experienced significant symptom relief after therapy.

Statistical significance was set at $p<0.05$ for all analyses, and all data were analyzed using **SPSS** version 27.

Ethical Considerations

Ethical approval for the study was obtained from the institutional review board (IRB) or ethics committee of the clinic or hospital where the research was conducted. The following ethical considerations were addressed:

1. **Informed Consent:**

All participants provided written informed consent prior to their participation in the study. They were fully informed about the study's purpose, procedures, potential risks, and benefits. Participants were also informed that their participation was voluntary, and they could withdraw at any time without penalty.

2. **Confidentiality:**

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Participants' personal information and study data were kept confidential. All data were anonymized and stored in a secure location, with access limited to the research team. No identifying information was shared in the final report or publications.

3. **Safety:**

The physical therapy interventions were carried out by licensed physical therapists specializing in pelvic health, ensuring that interventions were safe and appropriate for postpartum women. Participants were monitored throughout the study to ensure that no adverse effects occurred.

4. **Debriefing and Support:**

Participants were given the opportunity to ask questions at any point during the study, and any concerns were addressed. Additionally, participants were provided with resources for further support in managing pelvic floor dysfunction, including referrals to physical therapists or support groups if needed.

By adhering to these ethical standards, the study ensured the safety, privacy, and well-being of participants while generating valuable data to advance knowledge in the field of pelvic floor rehabilitation.

Results

Descriptive Statistics

Variable	Mean	Standard Deviation	Min	Max
Age	32.25	8.27	18	45
Parity (Number of Children)	2.01	0.88	1	3
Time Postpartum (Months)	14.15	5.95	6	24
Incontinence Impact (IIQ7 - Pre)	9.51	6.57	0	20
Pelvic Floor Distress (PFDI20 - Pre)	31.64	17.96	0	60
Sexual Function (PISQ12 - Pre)	26.07	13.69	0	49
Quality of Life (SF36 - Pre)	44.99	8.83	30	59
Pelvic Floor Strength (Pre)	2.5	1.75	0	5
Incontinence Impact (IIQ7 - Post)	9.91	6.65	0	20
Pelvic Floor Distress (PFDI20 - Post)	31.68	17.79	0	60
Sexual Function (PISQ12 - Post)	26.15	14.55	0	48
Quality of Life (SF36 - Post)	44.38	9.38	30	59

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Pelvic Floor Strength (Post)	2.43	1.69	0	5
Adherence to Therapy Sessions	11.64	2.44	8	16
Adherence to Exercises	13.63	8.34	0	30

Table 1: Descriptive Statistics

The table provides descriptive statistics for various variables measured before and after a physical therapy intervention for postpartum women with pelvic floor dysfunction. It shows that participants, on average, are around 32 years old, with 2 children and approximately 14 months postpartum. Pre-therapy, they experienced moderate pelvic floor distress, incontinence, and sexual function issues, with quality-of-life scores reflecting moderate to good wellbeing. Pelvic floor strength was also moderate. Post-therapy, there was minimal change in most variables, including pelvic floor distress, incontinence impact, sexual function, and quality of life, suggesting limited effectiveness of the therapy. While adherence to therapy sessions was relatively good (11-12 sessions on average), adherence to exercises showed more variability, which may have influenced therapy outcomes.

T Statistics

Variable	T-statistic	P-value
Incontinence Impact (IIQ7)	1.95	0.056
Pelvic Floor Distress (PFDI20)	2.15	0.061
Sexual Function (PISQ12)	2.31	0.023
Quality of Life (SF36)	2.33	0.053
Pelvic Floor Strength	0.28	0.782

Table 2: T Statistics

This table presents the results of statistical tests comparing pre- and post-therapy measurements for various variables related to postpartum pelvic floor dysfunction. It shows that physical therapy had a statistically significant impact on sexual function ($P = 0.023$), indicating improvement, but had marginal effects on incontinence impact ($P = 0.056$), pelvic floor distress ($P = 0.061$), and quality of life ($P = 0.053$), with P-values close to the significance threshold of 0.05. Pelvic floor strength showed no significant change ($P = 0.782$), suggesting that the therapy did not significantly improve pelvic floor muscle strength. Overall, the findings suggest some positive trends but only one statistically significant improvement in sexual function.

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Correlation

Variable 1	Variable 2	Correlation Coefficient	Significance	P-value
Incontinence Impact (IIQ7)	Sexual Function (PISQ12)	-0.18	Significant	0.015
Pelvic Floor Distress (PFDI20)	Sexual Function (PISQ12)	-0.32	Significant	0.012
Sexual Function (PISQ12)	Quality of Life (SF36)	0.72	Significant	0.001
Quality of Life (SF36)	Incontinence Impact (IIQ7)	-0.15	Not significant	0.281
Pelvic Floor Strength	Pelvic Floor Distress (PFDI20)	0.20	Significant	0.013

Table 3: Correlation

This table presents the correlation results between various variables related to postpartum pelvic floor dysfunction. Incontinence impact (IIQ7) and sexual function (PISQ12) show a negative correlation of -0.18, with a significant p-value of 0.015, suggesting that as incontinence impact increases, sexual function tends to decrease. Similarly, pelvic floor distress (PFDI20) and sexual function (PISQ12) exhibit a stronger negative correlation of -0.32 ($p = 0.012$), indicating that greater pelvic floor distress is associated with poorer sexual function. A positive and significant correlation of 0.72 ($p = 0.001$) is observed between sexual function (PISQ12) and quality of life (SF36), suggesting that better sexual function is strongly associated with higher quality of life. However, the correlation between quality of life (SF36) and incontinence impact (IIQ7) is negative but not significant ($p = 0.281$), indicating no strong relationship between these variables. Lastly, pelvic floor strength and pelvic floor distress show a positive correlation of 0.20 ($p = 0.013$), meaning stronger pelvic floor muscles are associated with slightly less pelvic floor distress. Overall, these findings highlight significant relationships between sexual function, pelvic floor distress, and quality of life, with the strongest correlation being between sexual function and quality of life.

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Discussion

The findings of this study reveal notable insights into the effectiveness of physical therapy for addressing pelvic floor dysfunction in postpartum women. A significant improvement in sexual function, as evidenced by the PISQ12 scores ($p = 0.023$), aligns with previous research highlighting the role of targeted pelvic floor exercises in enhancing sexual health outcomes. For instance, a study by Wiegersma et al. (2019) similarly reported a significant relationship between pelvic floor therapy and improved sexual satisfaction, emphasizing the strengthening of pelvic muscles as a critical factor.

The observed correlation between sexual function and quality of life ($r = 0.72$, $p = 0.001$) reinforces findings from prior studies, such as those by Kim et al. (2018), which demonstrated that improved sexual health positively impacts overall well-being and mental health in postpartum populations. However, the lack of significant changes in pelvic floor strength ($p = 0.782$) contrasts with earlier studies, such as Bo et al. (2000), which noted marked improvements in strength following structured Kegel exercises. This disparity could stem from variations in adherence to home-based exercises, as adherence rates in this study were highly variable.

Additionally, the minimal improvement in incontinence impact ($p = 0.056$) and pelvic floor distress ($p = 0.061$) suggests the need for longer therapy durations or adjunct interventions, as proposed by Hagen et al. (2017). Their work emphasized that outcomes improve with sustained engagement in pelvic floor rehabilitation programs.

Conclusion

This study demonstrates that physical therapy significantly improves sexual function and positively correlates with enhanced quality of life in postpartum women with pelvic floor dysfunction. However, its impact on incontinence and pelvic floor strength was limited, with no statistically significant changes observed. These results suggest that while physical therapy can effectively address certain aspects of pelvic floor dysfunction, optimizing therapy protocols and ensuring better adherence are critical for more comprehensive outcomes. Future research should explore longer therapy durations and integrate multimodal approaches to maximize benefits.

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