

Physiotherapy in obstetrics through the eyes of pregnant women: a qualitative study

Fisioterapia em obstetrícia pelos olhos das gestantes: um estudo qualitativo

Marina Joice Keil ^{1*}

Alexandre Magno Delgado ²

Mikaela Aparecida de Oliveira Xavier ³

Cassiane Merigo do Nascimento ⁴

¹ Universidade Estadual do Centro-Oeste (UNICENTRO), Guarapuava, PR, Brazil

² Instituto de Medicina Integral Professor Fernando Figueira (IMIP), Recife, PE, Brazil

³ Universidade Federal de Pernambuco (UFPE), Recife, PE, Brazil

⁴ União de Ensino do Sudoeste do Paraná (UNISEP), Francisco Beltrão, PR, Brazil

Date of first submission: March 2, 2021

Last received: August 21, 2022

Accepted: August 24, 2022

Associate editor: Maria Augusta Heim

***Correspondence:** marinajkeil@gmail.com

Abstract

Introduction: Physiotherapy in women's health emerged with the aim of promoting and maintaining physical and emotional health from the beginning to the end of pregnancy, through preventive measures against possible injuries that may occur during pregnancy, childbirth and the postpartum. Access to knowledge about obstetric physiotherapy among pregnant women is increasing, which may contribute to a search for trained professionals.

Objective: To analyze the perception of pregnant women about obstetric physiotherapy. **Methods:** This is a qualitative study carried out at the Materno Infantil Center, in Capanema, Parana state (PR), using a semistructured interview. Content analysis used the Bardin method to categorize the thematic axes. **Results:** Seven pregnant women aged between 18-24 years (57%), 23-32 weeks of gestation (42%), multiparous (71%), with secondary education (42%) and income between 1-3 monthly minimum wages (86 %) were included in the study. It was found that participants' perception of physiotherapy was inaccurate, because none of the women had accessed this treatment. The women stated that physiotherapists reduce labor pain, but they have no knowledge of how these professionals work in the postpartum. **Conclusion:** It is concluded that it is necessary to increase information on the contribution of physiotherapists during prenatal care, delivery and postpartum.

Keywords: Childbirth. Obstetrics. Physical therapy. Postpartum period. Prenatal.

Resumo

Introdução: A fisioterapia em saúde da mulher é uma área que surgiu com o objetivo de promover e manter a saúde física e emocional do início ao final da gestação, exercendo um trabalho preventivo para os possíveis agravos que venham a ocorrer durante a gestação, parto e puerpério. O acesso ao conhecimento das gestantes sobre a atuação do fisioterapeuta na área de obstetrícia vem aumentando a cada dia e isso pode contribuir para uma procura por profissionais capacitados.

Objetivo: Analisar a percepção das gestantes sobre a atuação da fisioterapia em obstetrícia. **Métodos:** Trata-se de um estudo com abordagem qualitativa, realizado no centro Materno Infantil, em Capanema, PR, configurado na forma de entrevista semiestruturada. Utilizou-se análise do conteúdo por meio do método de Bardin para categorizar os eixos temáticos.

Resultados: Foram incluídas sete gestantes com idade entre 18 e 24 anos (57%), 23-32 semanas de gestação (42%), multigestas (71%), com ensino médio (42%) e renda de 1 a 3 salários mínimos (86%). Verificou-se que o contato com a fisioterapia é somente imaginável, porque nenhuma das participantes do estudo acessou esse desdobramento das políticas de saúde da mulher gestante. As gestantes afirmaram que o profissional de fisioterapia atua promovendo a diminuição da dor durante o trabalho de parto, porém não possuem conhecimento sobre como o fisioterapeuta atua no puerpério. **Conclusão:** Conclui-se que é necessário ampliar a informação sobre a atuação do fisioterapeuta durante o pré-natal, parto e pós-parto.

Palavras-chave: Parto. Obstetrícia. Fisioterapia. Período pós-parto. Pré-natal.

Introduction

Obstetric physiotherapy is an area of women's health that emerged to promote and maintain physical and emotional health throughout pregnancy, through preventive measures against possible complications that may occur during pregnancy and after delivery.¹ This specialty was recognized in 2009 and regulated by the Federal Council of Physiotherapy and Occupational Therapy (COFFITO) in 2011.²

Physiotherapists have specific in-depth technical and scientific knowledge about women's health care that goes beyond merely reproductive issues, seeking to promote integrality and sociocultural aspects as a

member of the health team.³ In order to provide good care during all the phases of the pregnancy-puerperal cycle, physiotherapists require extensive scientific knowledge and health education, with an emphasis on health promotion.⁴

Prenatal, delivery and postpartum care is seen in a new light. Multidisciplinary childbirth preparation is characterized by psychosocial approaches to the couple. These procedures are becoming increasingly sought by women seeking a healthy pregnancy.⁵ There is important scientific evidence.^{1,3,6,7}

Despite all the evidence available in the literature, and although a few national studies have investigated this issue, women's knowledge about obstetric physiotherapy remains limited. Determining their knowledge about physiotherapy during pregnancy, delivery and the postpartum will prompt new health policies and demands that will help implement new behaviors, in addition to including more physiotherapists on maternity wards. Thus, the aim of the present study was to analyze pregnant women's perception of obstetric physiotherapy.

Methods

This is a qualitative study applying a semistructured interview about pregnant women's knowledge of obstetric physiotherapy. The study was approved by the Research Ethics Committee of União de Ensino do Sudoeste do Paraná (CAAE: 2991590618.1.00005230). Data were collected between August and September 2018. The following eligibility criteria were established: being pregnant, aged between 18 and 45 years and treated at the Child Maternal Center (Centro Materno Infantil - CMI) of Caranema, PR, which specializes in treating women, pregnant women and children.

The population consisted of seven pregnant women, obtained by the data saturation method. According to Fontanella et al.,⁸ this method is used when the information provided by new participants adds little to the material already obtained, not contributing significantly to improving the theoretical framework based on the data being collected.

Initially, the pregnant women in the CMI were invited to participate in the study, followed by their providing informed consent. All the procedures were described, as well as the risks and discomforts, benefits and reliability

of the data. All the pregnant women that agreed to participate in the study met the eligibility criteria. The other women in the waiting room declined to take part. Next, socioeconomic, sociodemographic and clinical data were collected, as well as pregnancy characteristics.

The semistructured interview of the pregnant women was conducted using a voice recorder, asking the following questions: "do you have any knowledge of physiotherapy for pregnant women? Do you know what the physiotherapist does during the prenatal, delivery and postpartum?" The script for this type of interview aims at guiding the dialog and should be created to allow flexible conversations and absorb new topics and questions posed by the interviewer, providing a relevant framework during the interview. Thus, the language of the script should provoke several narratives of women's experiences to allow the interviewer to analyze and interpret the individuals' statements regarding their opinions and social relationships.⁹

After the interviews, the women were provided with guidelines and information on obstetric physiotherapy, in order to improve the quality of information, thereby broadening their knowledge.

Analysis and discussion of the data collected were carried out using the Bardin method,⁹ a set of communication analysis techniques that uses systematic procedures and describes message content, where analysis of results is based on word association tests. The subjects' statements were then transcribed.

Results

The population consisted of seven pregnant women. To facilitate reading, a table was constructed to characterize the sample data (Table 1).

The guiding thematic area for the interviews was "physiotherapy through the eyes of pregnant women", identified in the key expressions contained in the main ideas of each statement. Next, equivalent, similar or complementary central ideas were included in a same category, sequentially organizing the content from more general to more specific ideas, using similar themes to determine the coherence between the parties and eliminate repetitive ideas. Each interview forms a singular unique but comparable whole, consisting of a dynamic, non-static discourse.

Table 1 - Personal and obstetric data of the pregnant women (n = 7)

Characteristics	%
Age (years)	
18 - 24	57
25 - 29	28
30 - 34	15
Pregnancy duration (weeks)	
3 - 12	28
13 - 22	-
23 - 32	42
33 - 42	30
Maternity class	
Primiparous	29
Multiparous	71
Schooling	
Secondary	42
Technical	28
Incomplete university	14
University graduate	14
Postgraduate	-
Income (minimum monthly wage)	
1 - 3	86
4 - 6	-
7 - 9	14

Physiotherapy through the eyes of the pregnant women

All the women reported never being treated by a physiotherapist. Affinities and anxieties were fractioned and synthesized by axes secondary to the principal axis, and fragmented based on the gestational cycle. When asked about their physiotherapy experiences in the prenatal, the pregnant women stated the following:

I believe that some types of physiotherapy exercises stimulate labor. (Pregnant woman 5)

I don't know if it has anything to do with it... Pilates, things like that... (Pregnant woman 7)

Well, I think it actually prepares the body, right? (Pregnant woman 1)

I'm not sure what the physiotherapist does, but I think they teach about a normal delivery to encourage us to select it... (Pregnant woman 2)

Ah, I think it helps... those who have a normal delivery... (Pregnant woman 4)

Ah, I think that... how should I say... it helps prepare us for labor and delivery... from feeling pain... to how to walk... relieving this pain... things like that... (Pregnant woman 6)

The pregnant women's experiences revealed that their perception of physiotherapy is inaccurate, because none of them has access to this health policy. In addition, there is a vague idea that physiotherapy would relieve pain, as will be discussed later.

With respect to the delivery process, the subjects were concerned about what to do to make it less painful. In terms of the role of physiotherapy, the women believe that physiotherapists act directly in diminishing pain during delivery.

(...) You should help, you should know positions, something to help during the delivery, because... we know we will feel a lot of pain, but we don't know what to do, you don't know if you should crouch, walk or run, you have no idea (...) so this part is more concerning. That's my biggest concern. I know I'm going to feel a lot of pain, but I don't know what position to adopt during labor or what to do for relief when I'm having a lot of contractions? I have no idea because we just don't know what to expect, understand? (Pregnant woman 1)

I think it could help us in a normal delivery, doing some kind of exercise that encourages the baby to come out faster... (Pregnant woman 5)

Look, I've never had physiotherapy... But I think breathing, preparing, ... and the position... I think all of this helps... I imagine that's it (...), I think that some exercises, dancing to relax ... some of us dance to relax... exercises help... we see that on Facebook... (Pregnant woman 6)

The interview ended in the postpartum, with the following recollections:

(...) Actually, I think that if you prepare before, the recovery will be faster, but exactly what to do, I don't know. (Pregnant woman 1)

In the postpartum... I don't know... I think with a normal delivery it's more like, how should I say... after the baby is born, you're already more relieved... I don't know... actually, I have no idea... (Pregnant woman 2)

Ah, I don't think so... I don't know, I have no knowledge... I have no idea. (Pregnant woman 7)

Discussion

Participants' perceptions were analytically distributed by highlighting the cognitive elements expressed in the statements, starting with the first question: access to physiotherapy, where all the women claim never to have undergone this treatment. In relation to obstetric physiotherapy, based on analysis of the women's statements, educational measures are recommended that focus on health promotion and prevention in the prenatal period, prescribing and applying analgesic physiotherapy resources and techniques during delivery, and implementing measures in the pre-delivery room, labor room, obstetric and postpartum ward, and providing help with breastfeeding.²

Analysis of the women's statements reveals their notion of the association between physiotherapy and physical exercises. Engaging in physical exercise during pregnancy is extremely important in promoting health, preventing complications and treating possible disorders caused by gestational adaptation.¹⁰

Obstetric physiotherapy is an incentive to active movement of a woman's body, which results in different positive effects for the mother and baby. Some of the benefits of physiotherapy during pregnancy are reduced lumbar pain, improved strength and muscle flexibility, less cardiovascular stress, assistance in weight control, lower risk of gestational diabetes, prevention of pelvic floor disorders, decline in urinary incontinence during pregnancy and postpartum, decreased perception of delivery pain, reduced swelling and cramps; and for the fetus, help in decreasing adiposity, increased tolerance to stress and exertion and help in advanced neurobehavioral maturation.^{7,11-13}

Analysis of the statements shows that the women associated physiotherapy care with a vaginal delivery. During the prenatal, one of the physiotherapy's objectives is to prepare the woman's body for the delivery.^{1,3} Preparation includes specific physical exercises for each gestational period, breathing and relaxation exercises and pelvic floor muscle training, in addition to orientation and postures to prevent and treat the possible pain and dysfunction caused by musculoskeletal, biomechanical, genitourinary, respiratory and cardiovascular adaptations. It is important to note that irrespective of the delivery type selected, physiotherapy plays an important role during the prenatal.¹⁴⁻¹⁶

The women's concern about labor pain (LP) and how to deal with this situation is quite relevant. It is

known that LP is a complex subjective physiological response to uterine contractions, that is, each woman in labor feels differently. It is also multifactorial, related to biopsychosocial factors. The physiotherapist is one of the professionals best equipped to treat women in labor, since they specialize in joint, muscle and biomechanical movements and study non-pharmacological methods to relieve delivery pain.^{7,17-21}

The non-pharmacological methods with the best scientific evidence of pain relief are massages, transcutaneous electrical nerve stimulation (TENS), acupuncture, thermotherapy, continuous support during LP, breathing exercises and kinesiotherapy with postures and pelvic movements that help the baby drop.^{7,13,20-22}

The lack of knowledge about which postures to use during labor highlights the importance of physiotherapy during the prenatal. By demonstrating and explaining the benefit of each posture and exercise and how they function, pregnant women can select them according to their needs and the physiotherapist's assessment of their obstetric condition.^{1,3}

In the postpartum, physiotherapy acts in the recovery, prevention and treatment of pregnancy-related changes, in addition to providing orientation regarding adequate breastfeeding positions, reeducating the respiratory function, encouraging postural alignment, stimulating the circulatory and intestinal systems, thereby relieving the discomforts caused by the delivery, reeducating pelvic floor muscles, promoting early walking, treating abdominal diastasis and other musculoskeletal changes that women experience.^{1,3,23,24}

In Brazil, obstetric physiotherapy has gained increasing prominence. The Brazilian Association of Physiotherapy in Women's Health (ABRAFISM) held a campaign called "For More Physiotherapists in Maternity Wards", aimed at providing physiotherapists, professional boards and associations, and health administrators with information related to the campaign, by disseminating the role of physiotherapy in maternity wards, and contributing to expanding it in high-quality obstetric physiotherapy facilities, in line with the precepts of obstetric humanization and teamwork, in order to provide excellent obstetric care in pregnancy, delivery and the postpartum. Piauí state instituted the first law that made physiotherapists mandatory in public and private maternity wards, a significant achievement that guarantees quality care for pregnant women, those in labor and in the postpartum.²⁵

For these reasons, the experiences described in the study are likely responsible for the inaccurate perception of physiotherapy as being solely associated with physical exercises, while in fact it can provide benefits during pregnancy, delivery and postpartum.

Conclusion

It was concluded that the women's statements demonstrate the need to provide more information on physiotherapy during the prenatal, delivery and postpartum. Understanding the knowledge of pregnant women about obstetric physiotherapy allows reflection on the current physiotherapy conduct and protocols, in addition to favoring the development of public policies based on good scientific evidence, with a positive impact on public health.

Authors' contributions

MJK, CMN and AMD designed the study. MJK recruited and interviewed the participants. MAOX reviewed the manuscript, and all the authors approved the final version.

References

1. Lemos A. Fisioterapia obstétrica baseada em evidências. Rio de Janeiro: MedBook; 2014. 452 p.
2. COFFITO. Resolução n°. 401/2011 de 18 de agosto de 2011. Disciplina a Especialidade Profissional de Fisioterapia na Saúde da Mulher e dá outras providências. Brasília: Diário Oficial da União; 24 nov 2011. [Full text link](#)
3. Baracho E. Fisioterapia aplicada à saúde da mulher. 5 ed. Rio de Janeiro: Guanabara Koogan; 2012. 464 p.
4. Logsdon NT. Uma visão diferenciada da fisioterapia obstétrica através da elaboração de um novo plano de ensino [master's thesis]. Volta Redonda: UniFOA; 2010.
5. WHO recommendations: intrapartum care for a positive childbirth experience. Geneva: World Health Organization; 2018. 200 p. [Full text link](#)

6. Polden M, Mantle J. *Fisioterapia em ginecologia e obstetrícia*. São Paulo: Santos; 1993. 422 p.
7. Lawrence A, Lewis L, Hofmeyr GJ, Styles C. Maternal positions and mobility during first stage labour. *Cochrane Database Syst Rev*. 2013;(10):CD003934. [DOI](#)
8. Fontanella BJB, Ricas J, Turato ER. Amostragem por saturação em pesquisas qualitativas em saúde: contribuições teóricas. *Cad. Saúde Pública*. 2008; 24(1):17-27 [DOI](#)
9. Bardin L. *Análise de conteúdo*. Lisboa: Edições 70; 2009.
10. ACOG Committee Opinion No. 650: Physical activity and exercise during pregnancy and postpartum period. *Obstet Gynecol*. 2015;126(6):e135-42. [DOI](#)
11. Mazzoni A, Alhabe F, Liu NH, Bonotti AM, Gibbons L, Sánchez AJ, et al. Women's preference for caesarean section: a systematic review and meta-analysis of observational studies. *BJOG*. 2011;118(4):391-9. [DOI](#)
12. Sartori AL, Vieira F, Almeida NAM, Bezerra ALQ, Martins CA. Estratégias farmacológicas para aliviar el dolor durante el proceso del parto. *Enferm Glob*. 2011;10(21):1-9. [Full text link](#)
13. Delgado A, Maia T, Melo RS, Lemos A. Birth ball use for women in labor: A systematic review and meta-analysis. *Complement Ther Clin Pract*. 2019;35:92-101. [DOI](#)
14. Mørkved S, Bø K, Schei B, Salvesen KA. Pelvic floor muscle training during pregnancy to prevent urinary incontinence: a single-blind randomized controlled trial. *Obstet Gynecol*. 2003;101(2):313-9. [DOI](#)
15. Bø K, Haakstad LA. Is pelvic floor muscle training effective when taught in a general fitness class in pregnancy? A randomised controlled trial. *Physiotherapy*. 2011;97(3):190-5. [DOI](#)
16. Boyle R, Hay-Smith EJ, Cody JD, Mørkved S. Pelvic floor muscle training for prevention and treatment of urinary and faecal incontinence in antenatal and postnatal women. *Cochrane Database Syst Rev*. 2012;10:CD007471. [DOI](#)
17. Delgado A, Oliveira PDNF, Góes PSA, Lemos A. Development and analysis of measurement properties of the "maternal perception of childbirth fatigue questionnaire" (MCFQ). *Braz J Phys Ther*. 2019;23(2):125-31. [DOI](#)
18. Delgado AM, Freire AB, Wanderley ELS, Lemos A. Analysis of the Construct Validity and Internal Consistency of the State-Trait Anxiety Inventory (STAI) State-Anxiety (S-Anxiety) Scale for pregnant women during labor. *Rev Bras Ginecol Obstet*. 2016;38(11):531-7. [DOI](#)
19. Bio E, Bittar RE, Zugaib M. Influência da mobilidade materna na duração da fase ativa do trabalho de parto. *Rev Bras Ginecol Obstet*. 2006;28(11):671-9. [DOI](#)
20. Canesin KF, Amaral WN. Atuação fisioterapêutica para diminuição da dor do trabalho de parto: revisão de literatura. *Femina*. 2010;38(8):429-33. [Full text link](#)
21. Gallo RBS, Santana LS, Marcolin AC, Duarte G, Quintana SM. Sequential application of non-pharmacological interventions reduces the severity of labour pain, delays use of pharmacological analgesia, and improves some obstetric outcomes: a randomised trial. *J Physiother*. 2018;64(1):33-40. [DOI](#)
22. Santana LS, Gallo RBS, Ferreira CHJ, Duarte G, Quintana SM, Marcolin AC. Transcutaneous electrical nerve stimulation (TENS) reduces pain and postpones the need for pharmacological analgesia during labour: a randomised trial. *J Physiother*. 2016; 62(1):29-34. [DOI](#)
23. Beleza ACS, Carvalho GP. Atuação fisioterapêutica no puerpério. *Rev Hispeci Lema On-Line*. 2016;7(1). [Full text link](#)
24. Silva JB, Doi GE, Silva LC, Feltrin MI, Zotz TGG, Korelo RIG, et al. Satisfação de puérperas após intervenção fisioterapêutica em educação em saúde. *Saude e Pesqui*. 2019;12(1):141-50. [DOI](#)
25. Brasil. Lei nº 7.723 de 6 de janeiro de 2022. Dispõe/regulamenta sobre a permanência do profissional Fisioterapeuta nas maternidades públicas e privadas. Teresina: Governo do Estado do Piauí; 2022. [Full text link](#)