



UNIVERSIDADE
LUSÓFONA

Lusófona University of Lisbon
School of Psychology and Sciences of Life
Master in Clinical and Health Psychology

**PARTNER'S SUPPORT DURING CHILDBIRTH AND
WOMEN'S MENTAL HEALTH PROBLEMS DURING THE
POSTPARTUM PERIOD**

Master's dissertation submitted for public examination to obtain a Master's degree in
Clinical and Health Psychology, supervised by PhD Tiago Pinto, PhD Stephanie Alves
and PhD Raquel Costa

DANIELA SOFIA MENDES TAVARES

Lisbon
2024



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Lisbon

2024

Daniela Sofia Mendes Tavares and Partner's support during childbirth and women's mental health problems during the postpartum period

I'll be there to comfort you
Build my world of dreams around you
I'm so glad that I found you
I'll be there with a love that's strong
I'll be your strength.

(I'll Be There, by The Jackson 5)

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Resumo

A depressão pós-parto (DPP), a ansiedade pós-parto (APP) e a perturbação de stress pós-traumático relacionada com o parto (PSPT-RP) são problemas de saúde mental comuns no período perinatal. O apoio do parceiro durante o parto tem sido identificado como fator protetor, mas existem poucos estudos que analisem a sua associação com estes problemas de saúde mental, o que constitui o objetivo deste estudo. Dois meses após o parto, 179 mães preencheram um questionário sociodemográfico, a Edinburgh Postnatal Depression Scale, o State Anxiety Inventory e a City Birth Trauma Scale para avaliar os sintomas de DPP, APP e PSPT-RP. Maior apoio do parceiro durante o parto foi associado a menos sintomas de DPP, APP e PSPT-RP, enquanto um diagnóstico anterior de problemas de saúde mental foi associado a mais sintomas. A interação entre o apoio do parceiro durante o parto e o diagnóstico prévio de problemas de saúde mental não estava associada a estes sintomas. Os resultados destacam a importância do apoio do parceiro durante o parto para a saúde mental das mulheres. Os problemas de saúde mental anteriores desempenham um papel crucial. É essencial rastrear e oferecer apoio psicológico especializado, especialmente às mulheres com este diagnóstico prévio.

Palavras-chave: apoio do parceiro durante o parto; depressão pós-parto; ansiedade pós-parto; perturbação de stress pós-traumático relacionado com o parto; diagnóstico prévio de problemas de saúde mental

Abstract

Postpartum depression (PPD), postpartum anxiety (PPA) and childbirth-related post-traumatic stress disorder (CB-PTSD) are common mental health problems in the perinatal period. Partner's support during childbirth has been identified as a protective factor, but there are few studies analyzing its association with these mental health problems, which is the aim of this study. At two months postpartum, 179 mothers completed a sociodemographic questionnaire, the Edinburgh Postnatal Depression Scale, the State Anxiety Inventory and the City Birth Trauma Scale to assess PPD, PPA and CB-PTSD symptoms. More partner's support during childbirth was associated with fewer PPD, PPA and CB-PTSD symptoms, while a previous diagnosis of mental health problems was associated with more PPD, PPA and CB-PTSD symptoms. The interaction between partner's support during childbirth and previous diagnosis of mental health problems was not associated with these symptoms. Findings highlights the importance of partner's support during childbirth for women's mental health. Previous mental health problems play a crucial role. It is essential to screen and offer specialized psychological support, especially to women with this previous diagnosis.

Keywords: partner's support during childbirth; postpartum depression; postpartum anxiety; childbirth-related post-traumatic stress disorder; previous diagnosis of mental health problems

List of Abbreviations

ACOG - American College of Obstetricians and Gynecologists

APA - American Psychiatric Association

APP - Ansiedade pós-parto

CB-PTSD - Childbirth-related post-traumatic stress disorder

CityBiTS - City Birth Trauma Scale

DPP - Depressão pós-parto

DSM-5 - Diagnostic and Statistical Manual of Mental Disorders

EPDS - Edinburgh Postnatal Depression Scale

FCT - Foundation for Science and Technology

PPA - Postpartum anxiety

PPD - Postpartum depression

PSPT-RP - Perturbação de stress pós-traumático relacionada com o parto

PTSD - Post-traumatic stress disorder

STAI-S - State Anxiety Inventory

WHO - World Health Organization

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Introduction

Postpartum Mental Health

Giving birth is a complex and challenging process that can have both positive and negative consequences for women's physical and mental health (World Health Organization [WHO], 2018). These consequences can increase the risk of mental health problems (Howard et al., 2014; Jones et al., 2014). Postpartum mental health problems are a public health issue, affecting 1 in 5 women worldwide (WHO, 2022).

Postpartum depression (PPD), postpartum anxiety (PPA) and childbirth-related post-traumatic stress disorder (CB-PTSD) are some of the most prevalent perinatal mental health problems. These mental health problems have been the subject of extensive research (e.g., Ayers et al., 2016a; Fisher et al., 2012; Maria et al., 2021; O'Hara et al., 2014), highlighting the need for a better understanding of factors that may play a protective role for maternal health and well-being (Arnold & Kalibatseva, 2021; Fan et al., 2020; Gheorghe et al., 2021; Hernández-Martínez et al., 2020; Lin et al., 2022; Liu et al., 2020; Paul et al., 2013; Pilkington et al., 2015; Sadat et al., 2014; Vaezi et al., 2019).

Postpartum depression symptoms

PPD is a mental health problem that affects 10-30% of women within the first year postpartum (Darcy et al., 2011; Gavin et al., 2005; WHO, 2019). PPD is characterized by symptoms such as persistent sadness, loss of interest or pleasure, changes in appetite or sleep patterns, feelings of worthlessness, difficulty concentrating, and thoughts of self-harm or suicide (APA, 2013; Pope et al., 2013). These symptoms can have negative consequences for both the mother and infant. Regarding the mother, PPD is associated with mother's mental and physical health problems, where women who experience postpartum depression have an increased risk of experiencing physical health problems, such as chronic diseases, and developing depression at other times in their lives (Abdollahi & Zarghami, 2018; Netsi et al., 2018); negative relationships, since PPD is associated with an increased likelihood of sexual life decline, and lower quality in the relationship with the partner (Faisal-Cury et al., 2013; Letourneau et al., 2012; Lilja et al., 2012); and difficulties in parenting, where PPD is associated with difficulties in responding to the children's emotional and physical needs, failure to interact sensitively and responsively with the babies, further difficulties in establishing and maintaining breastfeeding, and can negatively affect the establishment of a

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secure attachment between the mother and her infant (Dennis & McQueen, 2009; Giallo et al., 2014; Lilja et al., 2012; Murray et al., 2011).

PPD can have negative consequences for child's health and development. Children of depressed mothers are more vulnerable to childhood gastrointestinal infections and lower respiratory tract infections (Ban et al., 2010). These children may be more likely to exhibit altered responses to stress and less ability to deal with it, difficulties with emotional self-regulation and higher risk of future mental health problems such as depression and anxiety (Closa-Monasterolo et al., 2017; Essex et al., 2002; Goodman et al., 2011; Halligan et al., 2007; Hammen & Brennan, 2003; Kersten-Alvarez et al., 2010; Netsi et al., 2018; Verkuil et al., 2014). Maternal depression can negatively influence infants' sleep patterns, affecting their development and well-being (Gress-Smith et al., 2012; Pine et al., 2022; Pinheiro et al., 2011). It is also related to infant's underweight, behavioral problems, decrease in cognitive and fine motor development, and delays in language and non-verbal development (Gress-Smith et al., 2012; Kawai et al., 2017; Korhonen et al., 2012; Koutra et al., 2013; Murray et al., 2011; Nasreen et al., 2013; Netsi et al., 2018; Quevedo et al., 2012).

Postpartum anxiety symptoms

PPA is a mental health problem that affects 15 - 35% of postpartum women (Cena et al., 2021; Fawcett et al., 2019; Liu et al., 2020; Suto et al., 2014). PPA includes symptoms such as excessive worry, fear, and nervousness that can interfere with women's daily lives and the ability to care for themselves and their infants (American College of Obstetricians and Gynecologists [ACOG], 2018). Symptoms of PPA may also include difficulty sleeping or staying asleep, even when the infant is sleeping; constantly checking on the infant or seeking reassurance from others; poor concentration; inability to make decisions; self-blame; physical symptoms such as palpitations, body aches, fatigue, numbness, and tingling, shortness of breath, as well as panic attacks or feelings of being out of control (ACOG, 2018; Clark et al., 2014).

PPA can have adverse consequences for both mothers and their infants. Mothers with anxiety after childbirth showed lower sensitive responsiveness towards their infants and reported significantly less attachment than healthy mothers (Edhborg et al., 2011; Nicol-Harper et al., 2007; Tietz et al., 2014). PPA is related to maternal reports of worse behavior and emotional negativity in their children and predicts less adequate styles of mother-baby

emotional regulation (Lefkovich et al., 2018; Prenoveau et al., 2017). It has a negative impact on breastfeeding practices, such as the duration and secretion of immunoglobulin in milk (Adedinsewo et al., 2014; Coe et al., 2020; Kawano & Emori, 2015; Paul et al., 2013). PPA symptoms can also affect the family environment, causing tensions in marital relationships, such as a decline in sex life (Faisal-Cury et al., 2013) and is also associated with increased use of health care (Paul et al., 2013).

In addition, untreated PPA is associated to cognitive and emotional development problems in children, as well as behavioral difficulties. PPA is associated with infants' difficult temperament and difficulties sleeping (Britton, 2011; Garthus-Niegel et al 2017; Jover et al., 2014). PPA is also associated with adverse outcomes in children's mental development, such as socio-emotional, language, cognitive, and motor development (Ali et al., 2013) and with the risk of conduct disorder among children (Glasheen et al., 2013).

Childbirth-related post-traumatic stress disorder symptoms

Post-traumatic stress disorder (PTSD) is a mental health problem that can be developed following exposure to a traumatic event. Women who experience traumatic childbirth can develop symptoms of childbirth-related PTSD (CB-PTSD; Ayers et al., 2016b; Olde et al., 2006).

Around 20 to 30% of women experience childbirth as traumatic (Ayers, 2004; Soet et al., 2003). Of those women, 10% can have a severe post-traumatic stress response in the weeks following the birth of their infant, and between 0.8 to 6.9% of women can develop CB-PTSD (Ayers, 2004; Yildiz et al., 2017).

Symptoms of CB-PTSD include persistent thoughts and memories of childbirth, through flashbacks and/or nightmares; disconnection from their infants, which may appear immediately after birth; isolation; avoidance of triggers related to the traumatic event; negative alterations in mood or cognition; hyperarousal; and repetitive expression of what happened during childbirth (American Psychiatric Association [APA], 2013; Ayers, 2004; Beck et al., 2011; Fernández, 2013; Khsim et al., 2022). These symptoms may increase during the first four to six weeks after birth (Khsim et al., 2022).

CB-PTSD can have negative consequences for the mother's mental health (i.e. postpartum depression), bonding with the baby, couple relationship satisfaction, and quality of life (Garthus-Niegel et al., 2018; Grekin & O'Hara, 2014; Liu et al., 2021; Stuifzand et al.,

2020; Vignato et al., 2017). Moreover, it may affect the mother's ability to care for the newborn (Seng et al., 2011), a decreased maternal sensitivity, less positive maternal behaviors, and an increased likelihood of insecure attachment in the child (Halligan et al., 2004; Murray et al., 2003). Additionally, CB-PTSD can increase the risk of subsequent pregnancies being complicated by preterm birth and low birth weight (Seng et al., 2011; Vignato et al., 2017).

CB-PTSD has a negative impact on the emotional, motor, communication, and cognitive development of the infant (Garthus-Niegel et al., 2017; Huth-Bocks et al., 2001; Schechter et al., 2008; Seng et al., 2013) and is associated with infant difficult temperament (Garthus-Niegel et al., 2017).

Several risk factors of postpartum mental health problems have been identified.

In relation to PPD, a significant risk factor involves a previous history of mental health problems (Chojenta et al., 2012; Davey et al., 2011; Dennis et al., 2012; Guintivano et al., 2018; Hawes et al., 2016; Johansen et al., 2020; Nagy et al., 2011; Saleh et al., 2012). The presence of depression and other mental health problems in the family also increases the risk of PPD (Fiala et al., 2017; Mandelli et al., 2016; Nagy et al., 2011). Anxiety and depressive symptoms during pregnancy, CB-PTSD, and lack of social support, were also consistently identified as significant risk factors for PPD (Chojenta et al., 2012; Davey et al., 2011; Dennis et al., 2012; Hutto et al., 2011; Liu et al., 2021; Nagy et al., 2011; Saleh et al., 2012). Smoking and excessive alcohol consumption during pregnancy significantly increase the risk of PPD (Liu et al., 2020; Qiu et al., 2022; Yook et al., 2022). Stressful events, such as marital conflicts, financial problems or problems at work, and physical health problems during pregnancy, such as pre-eclampsia, premature birth or health complications of the baby, are linked to a higher risk of PPD (Chen et al., 2019; Chojenta et al., 2012; Dennis et al., 2012; Guintivano et al., 2018; Hawes et al., 2016; Liu et al., 2021; Trumello et al., 2018). Non-breastfeeding mothers and mothers with breastfeeding problems have an increased risk of developing PPD (Jobst et al., 2016; Mikšić et al., 2020; Liu et al., 2020). Poor social support, lower education and low socioeconomic status are also associated with PPD symptoms (Alzahrani et al., 2022; Dennis et al., 2018b; Saleh et al., 2012).

There are also protective factors that can help mitigate the risk of PPD. A strong social support system during pregnancy and in the postpartum period, including support from a partner, family, and friends, has been shown to be a significant protective factor (Arnold &

Kalibatseva, 2021; Pao et al., 2019; Reid & Taylor, 2015; Vaezi et al., 2019). Financial stability also plays an important role, reducing the stress associated with motherhood and thus decreasing the risk of PPD (Fiala et al., 2017). Emotional support during pregnancy, such as attending support groups for pregnant women or receiving counseling, can help prepare women emotionally for postpartum changes, acting as a protective factor (Fan et al., 2020; Milgrom et al., 2011). Other significant protective factors include planned pregnancy, partner accompanying the mother in the labor ward, early mother and newborn skin-to-skin contact, and exclusive breastfeeding (Lin et al., 2022).

PPA can be influenced by several risk and protective factors. Women who have a personal or family history of depression and anxiety disorders have a higher risk of developing PPA (Ahmed et al., 2018; Ahmed et al., 2019; Dennis et al., 2016; Gheorghe et al., 2021). The presence of fatigue and depressive symptoms, stressful situations, such as financial problems, family conflicts, or pregnancy complications, can also increase the likelihood of PPA (Ahmed et al., 2018; Ahmed et al., 2019; Liu et al., 2020). An unsatisfactory relationship with a partner, multiparity, childcare stress, preterm birth, negative experience of delivery, and excessive infant crying were also associated with a higher risk of anxiety symptoms (Ahmed et al., 2018; Dennis et al., 2016; van der Zee-van den Berg et al., 2021). In addition, a lack of social support during the postpartum period can contribute to anxiety, making women who feel isolated or deprived of help more likely to develop this condition (van der Zee-van den Berg et al., 2021).

On the other hand, there are protective factors that can help reduce the risk of PPA. Emotional and practical support and a sense of community belonging were associated with lower PPA symptoms (Gheorghe et al., 2021; Hijazi et al., 2021; Liu et al., 2020). Being satisfied with the labor experience is also a protective factor for PPA symptoms in the period after childbirth (Liu et al., 2020).

Several risk factors have been associated with the development of CB-PTSD. Women with a history of trauma, such as sexual abuse or violence, have an increased risk of developing CB-PTSD (Bingol & Demirgoz, 2020; Chan et al., 2020; Verreault et al., 2012; Vogel & Homitsky, 2020). Fear of childbirth, low satisfaction with the medical staff during delivery, obstetric mistreatment, disrespectful attitudes from the medical staff, perceived negative birth experience, traumatic birth experience, PPA and symptoms of acute stress reactions in maternity wards significantly predict the development of CB-PTSD symptomatology (Bingol & Demirgoz, 2020; Çapik & Durmaz, 2018; Imširagić, Šimičević, & Bajić, 2017; İsbîr et al.,

2016; Martinez-Vázquez et al., 2021b; De Schepper et al., 2016; Vogel & Homitsky, 2020). Anxiety and depression symptoms and health problems during pregnancy, emergency cesarean section, obstetric complications (such as suffering a third/fourth-degree perineal laceration), and anesthesia-related issues are risk factors for CB-PTSD (Bingol & Demirgoz, 2020; Chan et al., 2020; Furuta et al., 2016; Haagen et al., 2015; Hernández-Martínez et al., 2020; Imširagić, Šimičević, & Bajić, 2017; Liu et al., 2021; Martinez-Vázquez et al., 2021b; Vogel & Homitsky, 2020). Women who are younger, less educated, have a history of mental illness, low income, a history of miscarriage, an unplanned pregnancy, or a birth plan that was not respected also have an increased risk of developing CB-PTSD (Badaoui, Kassm & Naja, 2019; Bingol & Demirgoz, 2020; Chan et al., 2020; Furuta et al., 2016; Martinez-Vázquez et al., 2021a; Vogel & Homitsky, 2020; Zambaldi, Cantilino & Sougey, 2011). Health problems in the newborn and neonatal intensive care unit admissions, can be risk factors for CB-PTSD in mothers (Martinez-Vázquez et al., 2021b; Zambaldi, Cantilino & Sougey, 2011)

Protective factors of CB-PTSD include perceived control during labor and birth and social support from friends, family, and healthcare professionals (Furuta et al., 2016; Martinez-Vázquez et al., 2021b; Liu et al., 2021). Other protective factors include having a respected birth plan, early exclusive breastfeeding, using epidural analgesia, and engaging in skin-to-skin contact with the baby (Furuta et al., 2016; Hernández-Martínez et al., 2019; Martinez-Vázquez et al., 2021b; Liu et al., 2021).

A protective factor common to all three mental health problems is social support during pregnancy, childbirth and in the postpartum period, providing not only positive experiences, but also contributing to the prevention and mitigation of these problems. Recognizing this factor is important for a healthier transition to motherhood.

Partner's Support During Childbirth

Partner's support during childbirth plays a significant role on women's perinatal mental health problems. Several studies have explored the relationship between these variables and emphasized the importance of emotional and practical support from partners (Dennis & Ross, 2006; Denis et al., 2017; Iles et al., 2011; Martinez-Vázquez et al., 2021b; Misri et al., 2000; Pilkington et al., 2016).

Partner's support during childbirth is an important protective factor for women's

postpartum mental health. Partners can provide emotional and instrumental support, act as advocates for the women's wishes and preferences, and help the women feel safe and in control during childbirth (Beake et al., 2018; Maqbool et al., 2017; Olza et al., 2020; Sapkota et al., 2012; Salehi et al., 2016). These may lead to positive birth experiences and improved maternal mental health, such as a reduction in depression, anxiety, and traumatic symptoms (Czarnocka & Slade, 2000; Bryanton, 2008; Emelonye et al., 2015; Hardin & Buckner, 2004; Hoffmann et al., 2023; Martinez-Vázquez et al., 2021b; Sapkota et al., 2013; Tabaghdehi et al., 2020; Yakupova & Suarez, 2022).

This study adopts the diathesis-stress model (Ingram & Luxton, 2005) to understand the relationship between partner's support during childbirth and PPD, PPA and CB-PTSD symptoms. The model states that the appearance of psychopathological symptoms is the result of the interaction between vulnerability factors (diathesis) and environmental factors to which the individual is exposed. In the postpartum period, the childbirth process serves as a significant environmental stressor. Partner's support during childbirth may act as a protective factor, buffering the impact of this stressor on maternal mental health. However, inadequate support during childbirth may exacerbate the effects of the stressor, increasing the risk of developing symptoms of PPD, PPA, and CB-PTSD, particularly among women with pre-existing vulnerability factors such as a history of mental health problems.

In addition to the diathesis-stress model, there is a specific conceptual model that has stood out in the understanding and treatment of CB-PTSD (Ayers et al., 2016a). This model presents history of psychological problems as a vulnerability factor for the development of CB-PTSD symptoms, and the role of support during birth as an important protective factor.

Current Study

Perinatal mental health problems are a relevant public health issue (National Institute for Health and Care Excellence, 2014), due to the negative impact on women's health, their ability to care of the infant, and on infant health and development (Abdollahi & Zarghami, 2018; Closa-Monasterolo et al., 2017; Grekin & O'Hara, 2014; Kawai et al 2017; Seng et al., 2013). The development of early screening strategies can increase the effectiveness of different health treatments, taking action long before health problems worsen or preventing the onset of the first symptoms (Marmot et al., 2008). There are many studies that associate social support

with mental problems in the perinatal period, but they analyze different sources of support, such as support from the midwife or the health team, and focus on pregnancy or the postpartum period (Arnold & Kalibatseva, 2021; Asselmann et al, 2020; Cho et al., 2022; Ford & Ayers, 2011; Hetherington et al., 2018; Hijazi et al., 2021; Liu et al., 2021; Pao et al., 2019; Vaezi et al., 2019; van Heumen et al., 2018). However, there are few studies that examine the specifically support of the partner in such a specific context and at a single time point. By exploring the precise relationships between partner's support during childbirth and these mental health problems, this study has the potential to provide valuable insights that can inform healthcare practices and interventions, ultimately leading to improved support for women during the postpartum period.

Another important point is that women who face postpartum mental health problems are typically those who have previous diagnosis of mental health problems (Ahmed et al., 2018; Ahmed et al., 2019; Dennis et al., 2016; Bayrampour et al., 2016; Chan et al., 2020; Chojenta et al., 2016; Furuta et al., 2016; Guintivano et al., 2018; Johansen et al., 2020). Considering that it can act as a vulnerability factor for the onset of depression, anxiety, and PTSD symptoms, the protective effect of support on these mental health problems may vary among women with or without prior mental health problems.

This study aimed to analyze (1) the association between partner's support during childbirth and women's postpartum mental health problems (depression, anxiety and CB-PTSD symptoms); and (2) the moderator role of previous diagnosis of mental health problems in the association between partner's support during childbirth and women's postpartum mental health problems.

The hypotheses of this study are 1) partner's support during childbirth is negatively associated with postpartum mental health problems (PPD, PPA and CB-PTSD symptoms), where higher levels of partner's support will be associated with lower levels of postpartum mental health problems; 2) previous diagnosis of mental health problems will moderate the relationship between partner's support during childbirth and postpartum mental health problems, where the protective effect of partner's support on postpartum mental health will be stronger among women without previous diagnoses compared to women with previous diagnoses.

Methods

Procedures

The research protocol was approved by the Commission on Ethics and Deontology in Scientific Research of the School of Psychology, Education, and Sports of Lusófona University (Ref. RC000121); Ethical Committee of Centro Hospitalar de São João, Porto (Ref. CES CHUSJ: 279 / 2022); Ethical Committee of Maternidade Alfredo da Costa (Ref. 1317/2022).

This study is part of a larger longitudinal study (Pinto et al., 2023; Ref. 2022.01825.PTDC) within a cross-sectional and international study (INTERSECT - International Survey of Childbirth-Related Trauma; full details about the international study are available elsewhere - <https://blogs.city.ac.uk/intersect/>). Women were systematically contacted at the obstetric outpatient and childbirth hospitalization units of health facilities in Lisbon and Porto, informed about the aims and procedures of the study, and invited to participate (N = 704). Inclusion criteria are pregnant women (3rd trimester of pregnancy) or those within 12 weeks of giving birth, aged at least 18, living in Portugal and able to read and understand Portuguese. The longitudinal study has four assessment waves: (1) 3rd trimester of pregnancy (minimum 27 weeks gestational age), (2) 2 months postpartum (6-12 weeks postpartum), (3) 5 months postpartum (20-24 weeks postpartum), and 12 months postpartum (48-52 weeks postpartum).

The data from the assessment at 2 months postpartum (M= 8 weeks, with SD= 4.7) were used to address the aims of the present study. Participants were included in the current study if they (1) reported that their partner was present in childbirth, (2) completed a sociodemographic questionnaire to collect sociodemographic and obstetric data, to assess the intensity of the support given by the partner, and the previous diagnosis of mental health problems, (3) completed the Edinburgh Postnatal Depression Scale (EPDS - Cox et al., 1987) to assess symptoms of depression, (4) the State Anxiety Inventory (STAI-S - Spielberger et al., 1983) to assess anxiety symptoms, and (5) the City Birth Trauma Scale (CityBiTS - Ayer et al., 2018) to assess symptoms of CB-PTSD.

Participants

The sample comprised 179 mothers. The mean age was 33.35 years (SD = 5.46), 83.8% were born in Portugal, 98.1% were from a majority ethnic group, 64% had higher education, 70.5% had an average income and 77.7% were married. Regarding obstetric

characteristics, 7.3% had a premature birth, 97.8% had one baby, 43.3% had a vaginal delivery, 43.4% reported having obstetric complications, 18.5% reported neonatal complications, 52.5% were primiparous and 56.7% were exclusively breastfeeding. Regarding previous history, 41.6% reported having previous traumas and 21.5% reported having a previous diagnosis of mental health problems (see Table 1).

Table 1

Mothers sociodemographic and obstetric characteristics

	%, Total N = 179	M (SD)	Missings
Sociodemographic characteristics			
Age		33.35 (5.46)	-
Born in Portugal			-
No	16.2		
Yes	83.8		
Ethnicity			22
Majority	98.1		
Minority	1.9		
Education			1
High School	36		
Higher Education	64		
Income perception			3
Below average	5.7		
At average	70.5		
Above average	23.9		
Marital status			-
Married/common-law	77.7		
Lives with a partner	20.1		
Has a partner, but they don't live together	2.2		
Obstetric characteristics			
Prematurity			-

No	92.7	
Yes	7.3	
Number of babies		-
One	97.8	
Twins	2.2	
Delivery mode		1
Vaginal	43.3	
Instrumental vaginal	22.5	
Emergency cesarean section	14	
Elective cesarean section	20.2	
Obstetric complications		4
No	56.6	
Yes, mild	35.4	
Yes, severe	8	
Neonatal complications		
No	81.6	
Yes, mild	14	
Yes, severe	4.5	
Parity		-
Primiparous	52.5	
Multiparous	47.5	
Exclusive breastfeeding		1
No	43.3	
Yes	56.7	
Previous history		
Previous traumas		-
No	58.4	
Yes	41.6	
Previous diagnosis of mental health problems		2

No	78,5
Yes	21,5

Instruments

Sociodemographic and obstetric characteristics

A self-report sociodemographic questionnaire was used to assess women's sociodemographic (age, born in Portugal, ethnicity, marital status, education and income) and obstetric characteristics (prematurity, number of children, delivery mode, obstetric and neonatal complications, exclusively breastfeeding and parity), and to collect information about the existence of previous traumas.

Perception of partner's support during labor

One item from the sociodemographic questionnaire was used to assess women's perception of partner's support during labor "Quantify the support you received from your partner during labor", rated on a 4-point scale ranging from none (0) to total support (4).

Previous diagnosis of mental health problems

One item from the sociodemographic questionnaire was used to assess the presence of previous diagnosis of mental health problems "Have you ever been diagnosed with a psychological or mental health problem?", with the option to choose between yes or no.

Depression symptoms

The EPDS (Cox et al., 1987) was used to evaluate the PPD symptoms. The scale consists of 10 items, answered on a 4-point scale ranging from 0 to 3, depending on the frequency of occurrence of each symptom of depression in the last seven days. The total score can range from 0 to 30, with higher scores indicating more depressive symptoms. The Cronbach's alpha of the EPDS suggests a high degree of internal consistency (Cronbach's $\alpha = 0.914$; Alvarado et al., 2015). Examples of items include "I have been feeling sad and miserable" and "I have been able to laugh and see the funny side of things". The EPDS Portuguese version showed good internal consistency during the postpartum period (Cronbach's $\alpha = .88$; Tendais et al., 2014). In the present sample, this instrument showed good internal consistency (Cronbach's $\alpha = .87$).

Anxiety symptoms

The STAI-S (Spielberg et al., 1983) was used to assess the PPA symptoms. The STAI-S consists of 20 items, answered on a 4-point Likert-type scale ranging from 'almost never' to 'almost always' according to the intensity with which the individual experienced a certain feeling of anxiety at the present moment. The Cronbach's alpha coefficient of the STAI-S is considered excellent, with values ranging from 0.86 to 0.95, suggesting good internal consistency (Spielberger et al., 1983). The scale total score can range from 20 to 80, with higher scores indicating a higher level of anxiety. STAI-S Portuguese version has shown good internal consistency - Cronbach's $\alpha = .88$ (Biaggio, Natalicio, & Spielberger, 1976). Recently, Tendais et al., (2014) found excellent internal consistency for STAI-S in postpartum (Cronbach's $\alpha = .92$). In the present sample, this instrument showed excellent internal consistency (Cronbach's $\alpha = .95$).

Childbirth-related PTSD symptoms

The City BiTS Scale (Ayers et al., 2018) was used to assess CB-PTSD symptoms. It is a 29-item self-report questionnaire that was developed based on the criteria of Diagnostic and statistical manual of mental disorders (DSM-5; American Psychiatric Association, 2013) for the purpose of assessing CB-PTSD symptoms in women. Two dichotomous items (yes/no) assess the stress criteria (threat of death or serious injury to mother or baby during childbirth). The frequency of intrusion, avoidance, negative cognitions, and hyperstimulation symptoms in the week before the assessment is measured with 20 items. Items are rated on a 4-point Likert scale from 0 (never) to 3 (5 or more times), and total scores range from 0 to 60, with higher scores indicating high levels of CB-PTSD symptoms. Two additional items allow for the selection of a dissociative subtype of PTSD. Five other items assess symptom onset (from before birth to more than 6 months after birth), symptom duration (from <1 month to >3 months), distress (yes/no), as well as disability (yes/no), and exclusion criteria (symptoms due to medication, alcohol, drugs, or physical illness; yes/no). The findings indicated that it exhibited outstanding reliability, with a Cronbach's α coefficient of 0.92. (Ayers et al., 2018). In the present sample, this instrument showed good internal consistency (Cronbach's $\alpha = .88$).

Statistical analysis

Descriptive statistics (means and standard deviations) were computed for all study variables (partner's support during childbirth, PPD, PPA and CB-PTSD symptoms), as well as Lusófona University of Lisbon, School of Psychology and Sciences of Life

sociodemographic and obstetric data to characterize the sample, at an assessment point between 6 and 12 weeks postpartum (see Table 2). To identify potential covariates, correlation analyses were carried out between the variables partner's support during childbirth, symptoms of PPD, PPA and CB-PTSD, and the sociodemographic and obstetric variables. To answer Aim 1, consequently, to analyze the association between partner's support during childbirth and women's mental health problems in the postpartum period (depression, anxiety and CB-PTSD symptoms), and to answer Aim 2, consequently, to analyze the moderating role of previous diagnosis of mental health problems in the association between partner's support during childbirth and women's mental health problems in the postpartum period, moderation models were tested using the PROCESS macro (Model 1; Hayes, 2017). Three models were implemented to explore the moderating effect of a previous diagnosis of mental health problems on the relationship between partner's support during childbirth and postpartum mental health problems. The independent variable of interest is partner's support during childbirth. The dependent variables are PPD symptoms, PPA symptoms and CB-PTSD symptoms. The moderating variable is previous diagnosis of mental health problems. Additionally, covariates were included in each model to control for potential confounding variables. For the models predicting PPD and PPA symptoms, covariates included education level and income perception. For the model predicting CB-PTSD symptoms, covariates included education level, obstetric complications, and the type of birth. The statistical analysis was carried out using the Statistical Package for the Social Sciences (SPSS, IBM Corp., v.26.0, 2022) and the PROCESS computation macro (v.3.5; Model 1; Hayes, 2017). The level of statistical significance was set at $p < 0.05$.

Results

Preliminary analyses

Descriptive statistics of the study variables are presented in Table 2. Significant differences were found on partner's support during childbirth according to women's education ($F(1, 176) = 4.11, p = 0.044$), indicating that this variable may have some impact on the perceived support during childbirth, where high educated women reported a slightly lower partner's support during childbirth compared to less educated women. Thus, women's level of education was included as a covariate in the analysis. Significant differences were found on postpartum depression according to women's perception of income ($F(2, 172) = 3.47, p = 0.033$), indicating

that income may influence the occurrence of postpartum depression, where women with lower income were associated with higher levels of PPD symptoms. Income perception was included as a covariate in the analysis. Regarding postpartum anxiety, a significant relationship was found between PPA symptoms and the participants' perception of income ($F(2, 162) = 4.45, p = 0.013$), suggesting that income may play a role in the development of PPA symptoms, where women with lower income were associated with higher levels of PPA symptoms. Income perception was included as a covariate in the analysis. Regarding CB-PTSD symptoms, a significant relationship between CB-PTSD symptoms and obstetric complications was observed ($F(1, 173) = 4.26, p = 0.041$), suggesting that women who faced these complications are significantly more likely to develop CB-PTSD symptoms compared to those who did not face them. A significant relationship was also identified between CB-PTSD symptoms and the vaginal delivery ($F(1, 176) = 9.05, p = 0.003$), indicating that this type of delivery is associated with less occurrence of CB-PTSD symptoms.

Table 2

Descriptive statistics of the study's variables

	<i>N</i>	<i>M</i>	<i>SD</i>
Partner's support during childbirth	179	3.71	0.67
PPD symptoms	178	6.65	4.88
PPA symptoms	168	34.61	11.28
CB-PTSD symptoms	179	2.94	4.87

M = Mean; *SD* = Standard deviation

Partner's support during childbirth, postpartum mental health problems and the moderator role of previous diagnosis of mental health problems

Postpartum depression symptoms

The moderation model explained approximately 17.3% of the variance in the PPD symptoms. More partner's support during childbirth was associated with less PPD symptoms ($\beta = -1.36, p = 0.026$). Previous diagnosis of mental health problems was associated with more PPD symptoms ($\beta = 4.13, p < 0.001$). The interaction between partner's support during childbirth and previous diagnosis of mental health problems was not associated with PPD symptoms (see Table 3).

Table 3

The moderator role of previous diagnosis of mental health problems in the association between partner's support during childbirth and PPD symptoms

	R (R ²)	F	β	p	CI 95%
PPD symptoms	.42 (.17)	6.96		< .001	
Partner's support during childbirth			-1.36	.026	-2.55 - -0.16
Previous diagnosis of mental health problems			4.13	< .001	2.46 - 5.79
Partner's support during childbirth x Previous diagnosis of mental health problems			1.55	.166	-0.65 - 3.76
Income perception			-1.38	.054	-2.79 - 0.03
Education			-0.40	.605	-1.94 - 1.13

Postpartum anxiety symptoms

The moderation model explained approximately 12.9% of the variance in the PPA symptoms. More partner's support during childbirth was associated with less PPA symptoms ($\beta = -2.97$, $p = 0.038$). Previous diagnosis of mental health problems was associated with more PPA symptoms ($\beta = 6.79$, $p = 0.01$). Perceived lower income was associated with more PPA symptoms ($\beta = -4.40$, $p = 0.011$). The interaction between partner's support during childbirth and previous diagnosis of mental health problems was not associated with PPA symptoms (see Table 4).

Table 4

The moderator role of previous diagnosis of mental health problems in the association between partner's support during childbirth and PPA symptoms

	R (R ²)	F	β	p	CI 95%
PPA symptoms	.36 (.13)	4.67		< .001	

Partner's support during childbirth	-2.97	.038	-5.78 - -0.17
Previous diagnosis of mental health problems	6.79	.010	2.79 - 10.79
Partner's support during childbirth x Previous diagnosis of mental health problems	3.48	.186	-1.69 - 8.64
Income perception	-4.40	.011	-7.77 - -1.03
Education	-0.02	.992	-3.75 - 3.71

Childbirth-related post-traumatic stress disorder symptoms

The moderation model explained approximately 12.4% of the variance in the CB-PTSD symptoms. More partner's support during childbirth was associated with less CB-PTSD symptoms ($\beta = -1.36$, $p = 0.032$). Previous diagnosis of mental health problems was associated with more CB-PTSD symptoms ($\beta = 2.17$, $p = 0.013$). Vaginal delivery was associated with less CB-PTSD symptoms ($\beta = -1.89$, $p = 0.011$). The interaction between partner's support during childbirth and previous diagnosis of mental health problems was not associated with CB-PTSD symptoms (see Table 5).

Table 5

The moderator role of previous diagnosis of mental health problems in the association between partner's support during childbirth and CB-PTSD symptoms

	R (R ²)	F	β	p	CI 95%
CB-PTSD symptoms	.35 (.12)	3.89		< .001	
Partner's support during childbirth			-1.36	.032	-2.61 - -0.12
Previous diagnosis of mental health problems			2.17	.013	0.47 - 3.87
Partner's support during childbirth x Previous diagnosis of mental health			1.80	.119	-0.47 - 4.06

problems

Vaginal delivery	-1.89	.011	-3.34 - -0.44
Obstetric complications	1.25	.090	-0.20 - 2.70
Education	-.74	.329	-2.23 - 0.75

Discussion

This study analyzed the relationship between partner's support during childbirth and depression, anxiety and CB-PTSD symptoms. In addition, it was analyzed the moderator role of previous diagnosis of mental health problems in the association between partner's support during childbirth and these postpartum mental health problems.

Partner's support during childbirth: association with postpartum depression, postpartum anxiety and childbirth-related post-traumatic stress disorder symptoms

The results of this study confirmed that more partner's support during childbirth was associated with fewer symptoms of PPD, PPA and CB-PTSD. These results are in line with previous literature. Regarding PPD and PPA symptoms, in the study by Sapkota and colleagues (2013), it was suggested that continuous support from husbands during labor has a direct impact on perceived postnatal support and an indirect effect on anxiety and depression in new mothers in Nepal. In one of the few studies that associates partner's support during childbirth and CB-PTSD symptoms, Czarnocka & Slade (2000) found that the perception of low levels of support from partner during birth were found to be particularly related to experience of CB-PTSD symptoms. The authors also found that when the perception of support from partner and staff, perceptions of control and patterns of blaming, were put together with other factors like trait anxiety and past mental health problems, they seem to act as predictors. King and colleagues (2017) also point to low satisfaction with partner's support during delivery as one of the predictors of CB-PTSD symptoms. Additionally, Martinez-Vázquez and his team (2021b) also add that partner's support during childbirth emerges as a protective factor in the development of CB-PTSD.

This association between less partner's support during childbirth and more symptoms of PPD, PPA and CB-PTSD may be due to different reasons. The literature shows that less

partner's support during childbirth is generally associated with factors that make women more vulnerable to developing these mental health problems, such as a negative or traumatic perception of childbirth, a lack of control during childbirth and a perception of low self-efficacy during childbirth (Ahmadpour et al., 2023; Attanasio et al., 2014; Bell et al., 2016; Sapkota et al., 2012; Schwartz et al., 2015; Türkmen et al., 2020; Wilson & Simpson, 2016; Yakupova & Suarez, 2022). Looking at Lazarus and Folkman's (1984) Stress and Coping Model, which proposes that stress occurs when there is an imbalance between the demands of a situation (in this case, childbirth) and the resources available to deal with these demands, social support, including partner's support, can be a crucial resource in this context, where partner's support during childbirth can be seen as a coping resource for the woman, helping her to deal with the physical and emotional demands of childbirth. The presence and active support of the partner can also reduce the woman's perceived stress and, furthermore, can decrease the activation of the woman's stress system, creating a safer and more reassuring environment, which can decrease anxiety levels and the sense of threat associated with childbirth. This has significant implications, highlighting that promoting partner's support during childbirth can have a far-reaching impact on women's mental health in several dimensions.

Furthermore, the adjusted models showed that a previous diagnosis of mental health problems emerged as a positive predictor of PPD, PPA and CB-PTSD symptoms. This means that women who have a previous diagnosis of mental health problems are more likely to develop these symptoms, regardless of their partner's support during childbirth. These results are in line with other studies done in the area (Ahmed et al., 2019; Alzahrani et al., 2022; Chan et al., 2020; Davey et al., 2011; Dekel et al., 2017; Dennis et al., 2012; Dennis et al., 2016; Desta et al., 2021; Furuta et al., 2016; Gheorghe et al., 2021; Guintivano et al., 2018; Johansen et al., 2020; Silverman et al., 2017; Zambaldi et al., 2011).

The moderator role of previous diagnosis of mental health problems in the association between partner's support during childbirth and postpartum mental health problems

Results suggested that previous diagnosis of mental health problem does not moderate the association between partner's support during childbirth and PPD, PPA and CB-PTSD symptoms.

These findings can have different explanations. Firstly, there is the possibility that partner's support during childbirth can have a universal and consistent impact on women's postpartum mental health, regardless of their mental health history, meaning that partner's support can be beneficial for women. Secondly, the complexity of mental health, as it is influenced by a wide variety of factors including genetics, life experiences, stress and individual resilience (Ayers et al., 2016a; Chan et al., 2020; Field, 2018; Ghaedrahmati et al., 2017; Meltzer-Brody et al., 2018), where this lack of moderation may suggest that previous diagnosis of mental health problems is not a key factor that directly interacts with partner's support to influence postpartum mental health problems. Thirdly, another explanation may be the existence of variables not considered in this study, which may be influencing the results. For example, the quality of the couple's relationship, social support from other sources, women's personality traits and general stress levels may play important roles in the relationship between partner's support and postpartum mental health. Fourthly, the complexity of the mental health diagnosis. In this study the binary categorization of previous diagnosis of mental health problems (with previous diagnosis or not) may not fully capture the complexity of the participants' mental health spectrum, such as the severity, duration and specific nature of mental health diagnoses.

The results of this study may have important implications for understanding the impact of partner's support on postpartum well-being and suggest that such support may be beneficial regardless of mothers' mental health history. Further research is advised.

Analyzing these results through the lens of the diathesis-stress model (Ingram & Luxton, 2005) provides valuable information. Although the model suggests that individuals with pre-existing vulnerabilities are more susceptible to adverse outcomes under stress, the absence of moderation in this study suggests a direct protective effect of partner's support during childbirth on postpartum mental health symptoms. In other words, regardless of pre-existing vulnerabilities, partner's support plays a significant role in protecting against the development of mental health problems in the postpartum period.

Postpartum mental health problems: associations with sociodemographic and obstetric factors

In the preliminary statistical analyses carried out in this study, several significant

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relationships were identified between postpartum mental health problems and other sociodemographic and obstetric variables. These findings provide important insights that can help to better understand the factors associated with different aspects of women's mental health during the postpartum period.

Women's perception of lower income was associated with more levels of PPD and PPA symptoms. Women's who perceive their income as low, may face greater difficulties, which can increase their stress levels and decrease their resources for dealing with adverse situations. This result is congruent with previous studies that show income as one of the sociodemographic factors associated with PPD and PPA (Ahmed et al., 2018; Ahmed et al., 2019; Asaye et al., 2020; Dennis et al., 2012; Dennis et al., 2016; Fonseca et al., 2018; Ghosh & Goswami, 2011; Lanes et al., 2011; Liu et al., 2020; Marques et al., 2018; Mukherjee et al., 2017; Nasr et al., 2020; Ramakrishna et al., 2019). This can be interpreted in the light of stress theory (Antonovsky, 1979; Lazarus, 1966; Selye, 1956), a conceptual model that describes how people respond to challenging or stressful situations in their lives and which, adapted to our study, can help us understand that socioeconomic factors can be sources of stress for women in the postpartum period and can affect their mental health. Contrary to these findings, there are studies that have found no association between PPD and PPA symptoms, and women's income (Bloch et al., 2006; Chojenta et al., 2016; Clout & Brown, 2015; Kosińska-Kaczyńska et al., 2008; Lewis et al., 2017), which may be due to the characteristics of their samples or differences in the statistical procedures used.

Regarding obstetric factors, obstetric complications were associated with CB-PTSD symptoms. Women who experienced complications during pregnancy or childbirth were associated with higher levels of CB-PTSD symptoms compared to those who did not experience complications. Our results are in line with a number of previous studies that have investigated the relationship between complications during pregnancy and childbirth and the development of CB-PTSD symptoms (Ayers et al., 2016a; Bayri Bingol & Demirgoz Bal, 2020; King et al., 2017; Kjerulff et al., 2021; Lopez et al., 2017; Polachek et al., 2016; Price & Slade, 2020; Shaban et al., 2013; Verreault et al., 2012). This suggests that adverse experiences may contribute for the development of this symptoms. Complications during pregnancy and childbirth can be highly stressful and traumatic experiences for women (Simpson & Catling, 2016). The uncertainty, fear and pain associated with these complications can trigger negative psychological reactions, contributing to the development of CB-PTSD symptoms (Ghanbari-

Homayi et al., 2019; Hollander et al., 2017). However, in a study by Gankanda and colleagues (2021), no direct association was found between these complications and CB-PTSD symptoms, which highlights the need for a more comprehensive approach to fully understand the mechanisms underlying the relationship between obstetric complications and CB-PTSD symptoms. The definition and assessment of obstetric complications varies between these studies, which can influence the results and the interpretation of the findings.

Still on obstetric factors, the results of this study point to vaginal delivery as a negative predictor of CB-PTSD symptoms, where its absence, i.e. the presence of instrumented vaginal delivery, elective caesarean section or emergency caesarean section, presents an increased risk of CB-PTSD symptoms. The relationship between the delivery mode and the development of CB-PTSD is an area of research that has been widely explored in the literature. Many studies have explored the link between caesarean sections and instrumented vaginal delivery and the development of CB-PTSD, and most of them highlight the increased risk associated with these delivery modes (Ertan et al., 2021; Hernández- Martínez et al., 2019; Kjerulff et al., 2021; Martinez-Vázquez et al., 2021b; Price & Slade, 2020; Schepper et al., 2015). These results may be due to the invasive surgical procedures used in caesarean deliveries, whether elective or emergency. These procedures can generate feelings of disappointment, failure, lack of control and vulnerability in mothers (Kjerulff & Brubaker, 2018; Konheim-Kalkstein & Miron-Shatz, 2021; Zanardo et al., 2016). In addition, instrumented deliveries, such as the use of forceps or vacuum extractors, are also associated with a higher risk of physical and emotional trauma for the mother (Burande et al., 2023; Caudwell-Hall et al., 2020; Muraca et al., 2018; Volløyhaug et al., 2015), which can trigger CB-PTSD symptoms. Contrary to these results, there are studies that do not find a significant relationship between the delivery mode and CB-PTSD symptoms (Gankanda et al., 2021; Heumen et al., 2018; Isbir et al., 2016; Mahmoodi et al., 2016; Shaban et al., 2013; Srkalović Imširagić; Verreault et al., 2012). This variability in the results of the literature can be attributed, in part, to differences in the characteristics of the populations studied, the methods of assessment or the categorization. It is important to note that the presence of vaginal delivery is not a guarantee against CB-PTSD symptoms, since vaginal deliveries can also be traumatic (Mora-Hervás et al., 2015; Rodrigues et al., 2019).

Limitations

This study has some limitations that should be considered when interpreting the results. The study was conducted at Lusófona University of Lisbon, School of Psychology and Sciences of Life

results. Firstly, this is a cross-sectional study which does not allow causal relationships to be established between the study variables. Secondly, the sample size was made up mostly of women with low sociodemographic risk, composed predominantly of white, married women with a higher level of education, not allowing generalization to higher risk samples. Finally, it is important to note that the assessment of women's mental health in the postpartum period was not carried out by means of a gold-standard clinical interview; however, the instruments used are widely recognized in scientific literature.

Implications for practice and research

The results of this study have significant practical implications. Firstly, they suggest that partner's support during childbirth is important, but may not be enough to prevent or reduce mental health symptoms in the postpartum period. It is important to pay attention to other factors that can influence women's mental health during this period, such as social support, marital satisfaction, self-esteem and self-efficacy. A deeper analysis of these factors could contribute to a more comprehensive and effective approach to promoting mental health in the postpartum period. Secondly, they indicate the need to screen, monitor and offer support to all women during and after pregnancy, in order to detect symptoms early and provide appropriate psychological support, with special attention to women with a previous diagnosis of mental health problems. Thirdly, the associations between postpartum mental health symptoms and sociodemographic and obstetric variables should guide the implementation of more personalized and effective health care policies and practices for pregnant and postpartum women.

For future research, it is recommended to conduct longitudinal studies that allow tracking changes and associations over time, providing a clearer understanding of the relationships between partner's support during childbirth and postpartum mental health outcomes. It would also be relevant to assess the symptoms at a different time from the support assessment, since the symptoms presented by the woman at the time of the assessment could potentially interfere with her perception of the support received. Additionally, increasing the diversity of participants is advised, as well as using more comprehensive and multidimensional measures of partner's support and mental health. Conducting studies with more diverse samples of the general population, including women from different ethnicities and socioeconomic

levels, is also recommended. This could help to obtain representative and equitable results, identify health inequalities and develop culturally sensitive interventions. Qualitative studies should also be conducted to explore women's perceptions and experiences of partner's support during childbirth and postpartum mental health problems, using methods such as interviews or focus groups. It would also be pertinent to investigate other factors that may moderate or mediate the relationship between partner's support during childbirth and postpartum women's mental health, such as women's expectations regarding childbirth and partner's support, marital satisfaction, gender role expectations and cultural and religious beliefs. Finally, the incorporation of more comprehensive and multidimensional measures of partner's support during childbirth, considering not only the subjective perspective of women, but also the evaluation of partners' perceptions and the objective observation of their behaviors, could enable a more complete and accurate understanding of the impact of partner's support during childbirth on women's postpartum mental health.

Conclusion

The findings of this study can provide valuable insights into the complex relationship between partner's support during childbirth and women's postpartum mental health problems. Regardless of women's history of mental health problems, partner's support during childbirth is important to postpartum mental health outcomes and it is crucial to consider other factors. In addition, screening and psychological support should be offered to all women during and after pregnancy, with special attention to those with a previous diagnosis of mental health problems. The results highlight the importance of health policies tailored to the individual needs of pregnant and postpartum women. Ensuring that women have access to a companion of their choice during childbirth, as recommended by the WHO (2016), is fundamental to promote women's mental health and well-being.

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