

MATERNAL CONTROL AND PERCEIVED SUPPORT IN CHILDBIRTH: PERINATAL MENTAL HEALTH IN NURSING DEGREE IS MANDATORY

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Abstract

Background: The perinatal period is a time of high vulnerability for maternal mental health, during which mental health disorders such as anxiety, postpartum depression (PPD), postpartum post-traumatic stress disorder (PTSD), and suicide risk may appear. The perception of maternal control and support during childbirth significantly influences the maternal birth experience and the risk of developing these conditions. Considering the high prevalence and impact of these issues, it is crucial that future healthcare professionals, receive specialized training. The integration of a module on Perinatal Mental Health in the Nursing curriculum is paramount to ensure comprehensive care and early detection of these risks. **Objective:** To analyze the influence of perceived control and support during childbirth on maternal perinatal mental health establishing the need and justification for incorporating a mandatory Perinatal Mental Health module in the University Degree in Nursing to optimize early detection and intervention. **Method:** A cross-sectional study was conducted with 302 postpartum women in Spain. Support and Control in Birth Scale (SCIB) assessed the degree of support and control; Perinatal Post-traumatic Stress Disorder Questionnaire (PPQ) measured PTSD; Edinburgh Postnatal Depression Scale (EPDS) identified PPD; Generalized Anxiety Disorder (GAD-7) assessed anxiety; and Paykel scale estimated suicide risk. Bivariate and multivariate analyses were performed using logistic regression, estimating odds ratios (OR) and adjusted odds ratios (aOR) and 95% confidence intervals. **Results:** High scores on the SCIB were a significant protective factor against PTSD (aOR=0.97; 95% CI: 0.96–0.99). Failure to adhere to the birth plan increased the risk (aOR=3.11; 95% CI: 1.23–7.89). Multiparity acted as a protective factor (aOR=0.32; 95% CI: 0.13–0.80), while early initiation of breastfeeding also reduced the risk (aOR=0.37; 95% CI: 0.18–0.78). Conversely, health problems during pregnancy increased the likelihood of developing PTSD symptoms (aOR=2.03; 95% CI: 1.00–4.12). No significant associations were found between SCIB scores and the risk of suicide, PPD, or anxiety. **Conclusions:** Maternal perceived control and support during childbirth are key determinants in the development of PTSD, showing a protective effect. Promoting respectful birth experiences, centered on maternal autonomy, communication, and emotional support, is vital for public health. Given these findings, it is absolutely necessary to strengthen the academic preparation of future nursing professionals. The implementation of a Perinatal Mental Health module in the Nursing University Degree is justified to equip nurses with the essential skills for early detection, comprehensive management, and promotion of psychologically safe birth environments.

Keywords: Perinatal mental health, birth control and support, Postpartum Posttraumatic Stress Disorder (PTSD), birth experience, Spanish postpartum women.

1. Introduction

The perinatal period, which spans from conception to the first year after birth, constitutes one of the most critical "windows of vulnerability" in the female life cycle (World Health Organization (WHO), 2022). It is not merely a physiological or hormonal transition; it is a process of identity and social restructuring that the World Health Organization (2022) defines as a stage of high biopsychosocial sensitivity. Current literature is unequivocal regarding the dimensions of the problem. While in developed

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societies attention has historically focused on physical safety, prevalence data compel us to turn our gaze toward the maternal psyche:

- Depression and Anxiety: These affect approximately 1 in 10 women (Dennis et al., 2017; Woody et al., 2017).
- Postpartum Depression (PPD): Post-traumatic stress related to birth ranges between 11% and 13%, an alarming figure that suggests the birth experience is being coded as a violent event by a significant portion of the population (Hernández-Martínez et al., 2021; Martínez-Vázquez et al., 2021).
- Suicidal Risk: With suicide ideation rates in Spain reaching 19.3%, suicide is consolidating its position as one of the main causes of indirect maternal mortality, a growing phenomenon that reflects a systemic failure in early detection (Martínez-Galiano et al., 2024; Martínez-Vázquez et al., 2024).

This vulnerability does not end with the woman. Perinatal psychopathology acts as a determinant of health for the next generation. An altered maternal mental state increases the risk of direct obstetric complications (preeclampsia, premature births) and affects the development of children's neurodevelopment, impacting everything from birth weight to the establishment of secure attachment, the foundation of the individual's future mental health (Alder et al., 2007; Barker et al., 2012; Dunkel Schetter & Tanner, 2012; Field et al., 2010; Howard & Khalifeh, 2020).

Support and Control in Birth: The Pillars of Subjective Experience

Birth is an emotionally charged event that can lead to empowerment or trauma. This research underscores that the difference between these two outcomes lies not necessarily in the technical complexity of childbirth, but in two psychological constructs: Perceived Control and Perceived Support (Ford et al., 2009).

The Internal Locus of Control: Control during childbirth should not be understood as a woman's ability to predict medical events, but rather as a sense of self-efficacy and the power to make informed decisions about her own body. The loss of this internal control is the variable that most impacts maternal self-esteem. When the clinical environment negates a woman's agency, childbirth ceases to be a physiological process and becomes a "suffered" event, laying the groundwork for post-traumatic stress disorder.

Support as a Stress Modulator: On the other hand, perceived support acts as a buffer. The presence of security and respect from healthcare professionals allows even births with clinical complications to be positively integrated by the mother. The SCIB scale quantifies this perception, demonstrating that high levels of support and control are critical protective factors.

2. Objectives

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3. Methods / results

The study, conducted with 302 women in Spain, provides valuable quantitative data for clinical management:

- Design and Population: This analytical cross-sectional study was conducted in Spain with 302 women (less than 6 months postpartum). Minors and women with language barriers were excluded.
- Sampling: Sample size was calculated according to the criteria of Peduzzi et al. (Peduzzi et al., 1996) (10 events per variable), ensuring statistical power for a multivariate model of up to 7 independent variables, based on a postpartum trauma prevalence of 23.5%.

Instruments (Validated Battery):

Childbirth (SCIB): Assessment of support and control (internal/external) (Ford et al., 2009).	Trauma (PPQ): Perinatal posttraumatic stress symptoms (Hernández-Martínez et al., 2021).
Depression and Anxiety: Edinburgh Postnatal Depression Scale (EPDS) (Cox et al., 1987) and GAD-7 (Gómez-Gómez et al., 2024).	Suicide Risk: Paykel Scale (Martínez-Galiano et al., 2024).

- Data Collection: Hybrid format (medical records and piloted ad hoc questionnaire). Multicenter distribution in delivery rooms and midwifery clinics, with a dual support system (in-person and via WhatsApp).

- Statistical Analysis: Performed using SPSS v.29.0. Descriptive statistics followed by binary logistic regression were used to obtain adjusted odds ratios (aOR) with 95% confidence intervals, isolating the effect of birth experience on mental health.

As results, each percentage point increase in perceived support and control reduces the likelihood of developing postpartum trauma (PTSD) (aOR: 0.97). This confirms that respectful treatment is a first-rate preventive intervention. In addition, the Birth Plan as a Safety Contract: Failure to adhere to the birth plan triples the risk of trauma (aOR: 3.11). The birth plan is not a "wish list"; it is a legal and clinical instrument that guarantees autonomy. Its violation is interpreted by the maternal psyche as a total loss of external control. Furthermore, having previously experienced childbirth and the early initiation of bonding through breastfeeding act as resilience factors (aOR: 0.32 and 0.37, respectively). Previous complications during pregnancy double the risk of a post-traumatic outcome, suggesting that these women require much closer psychological follow-up. It is striking that, although the SCIB protects against post-traumatic stress disorder (PTSD), it did not show significant associations with anxiety or depression in this sample. This suggests that PTSD is more closely linked to the mechanical and relational experience of childbirth, while depression and anxiety may be mediated by broader biological or social factors prior to birth.

4. Discussion

Educational Proposal: Integrating Perinatal Mental Health into the Nursing Core Curriculum

The Paradigm Shift: from technical competence to holistic excellence. The most transformative conclusion of this analysis is the undeniable disparity between clinical reality and academic preparation. While nursing and midwifery professionals serve as the frontline guardians of the perinatal process, their current educational trajectory remains disproportionately focused on physiological outcomes. To truly safeguard the transition to motherhood, the nursing curriculum must evolve to recognize that mental well-being is not a secondary byproduct of a healthy birth, but its very foundation (ANECA, 2004; Consejo General de Enfermería de España, 1998).

Justification for Curriculum Reform and Addressing the "Invisible" Morbidity: The traditional undergraduate nursing model is highly efficient at producing technically proficient practitioners capable of managing obstetric emergencies. However, the absence of a mandatory, robust module on Perinatal Mental Health (PMH) creates a "clinical blindness" that carries grave risks for the maternal-infant dyad.

Without specialized training, nurses lack the diagnostic sensitivity to identify subtle but lethal indicators, such as suicidal ideation, postpartum psychosis, or the early intrusive thoughts characteristic of postpartum depression. Early detection is the only barrier against the escalation of maternal mortality due to psychological causes. Many practices categorized as Obstetric Violence—including infantilization, lack of informed consent, and the disregard for maternal autonomy—are often reproduced unintentionally. These are not always malicious acts but are frequently the result of a "shadow curriculum" where students learn to prioritize hospital efficiency over the psychological safety of the patient. A nurse trained in PMH understands that the birthing environment is a pharmacological modulator. By providing emotional support and maintaining a calm atmosphere, the nurse actively facilitates the endogenous release of oxytocin, which is as clinically significant as any administered uterotonic (Ministerio de Ciencia e Innovación, 2008).

The implementation of a mandatory Perinatal Mental Health module is designed to transition the student from a passive observer of birth to an active protector of the maternal psyche. This module would be built upon three critical competencies:

1. Advanced Screening and Psychometric Literacy

Students will be trained in the systematic application of validated tools, moving beyond the "intuition-based" assessment: The EPDS (Edinburgh Postnatal Depression Scale): To identify affective disorders; The SCIB (Support and Control in Birth Scale): To evaluate the quality of the birth experience in real-time; The PPQ (Perinatal Post-traumatic Stress Disorder Questionnaire): To assess for birth-related trauma before discharge (Royal College of Nursing, 2021).

2. Woman-Centered Care and Ethical Agency

Training must emphasize the nurse's role as an advocate for maternal autonomy. Understanding the Birth Plan not as a set of demands, but as a clinical roadmap to prevent PTSD. Moreover, developing the "soft skills" required to discuss mental health without stigma, ensuring that the mother feels heard, validated, and empowered (Royal College of Nursing, 2021).

3. Neuro-Bio-Psychological Integration

Future nurses must master the "Neurobiology of Trust." This involves understanding how the inhibition of oxytocin by high levels of cortisol (induced by stress, fear, or lack of support) can lead to labor dystocia and psychological scarring. By mastering this link, the nurse ensures both the clinical safety (preventing hemorrhage and fetal distress) and emotional safety (preventing trauma) of the birth. Perinatal mental health is not an optional subspecialty or a niche area of interest; it is the cornerstone of public health and the primary determinant of a healthy start for the next generation. A healthcare system that neglects the mother's mental well-being during the vulnerable window of childbirth is a system that inadvertently jeopardizes the long-term health of families and society at large. Therefore, the incorporation of this training into the Nursing Degree is more than a curriculum update—it is an urgent ethical and healthcare imperative. By equipping nurses with these essential skills, we ensure they are not just witnessing to birth, but architects of a psychologically safe and dignified maternal experience (Ministerio de Sanidad y Política Social, 2009).

5. Conclusions

The findings of this study confirm that the psychological landscape of childbirth—specifically the mother's sense of agency and the quality of support received—serves as a primary defense against the onset of Post-Traumatic Stress Disorder (PTSD). By demonstrating a robust protective effect, perceived control and emotional support emerge not merely as "preferences" but as essential clinical variables that dictate long-term maternal recovery. Consequently, fostering a culture of respectful maternity care—rooted in a commitment to maternal autonomy and transparent communication—must be viewed as a mandatory public health strategy to break the cycle of birth-related trauma. To bridge the gap between clinical evidence and bedside practice, we must overhaul the educational framework for future nursing professionals. There is an urgent, evidence-based justification for integrating a specialized Perinatal Mental Health module into the University Nursing curriculum. Such a program would transition nursing care from a purely technical approach to a comprehensive model, empowering graduates with the diagnostic tools for early risk detection and the interpersonal skills necessary to cultivate psychologically safe birthing environments. Ultimately, investing in the specialized training of nurses is the most effective path toward ensuring that the transition to motherhood is defined by empowerment rather than psychopathology.

References

- Agencia Nacional de Evaluación de la Calidad y Acreditación. (2004). *Libro Blanco del Título de Grado en Enfermería*. ANECA.
- Alder, J., Fink, N., Bitzer, J., Hösl, I., & Holzgreve, W. (2007). Depression and anxiety during pregnancy: A risk factor for obstetric, fetal and neonatal outcome? A critical review of the literature. *The Journal of Maternal-Fetal & Neonatal Medicine*, 20(3), 189–209. <https://doi.org/10.1080/14767050701209560>
- Barker, E. D., Copeland, W., Maughan, B., Jaffee, S. R., & Uher, R. (2012). Relative impact of maternal depression and associated risk factors on offspring psychopathology. *British Journal of Psychiatry*, 200(2), 124–129. <https://doi.org/10.1192/bjp.bp.111.092346>
- Consejo General de Enfermería de España. (1998). *Código Deontológico de la Enfermería Española*. CGE.
- Dennis, C.-L., Falah-Hassani, K., & Shiri, R. (2017). Prevalence of antenatal and postnatal anxiety: Systematic review and meta-analysis. *British Journal of Psychiatry*, 210(5), 315–323. <https://doi.org/10.1192/bjp.bp.116.187179>
- Dunkel Schetter, C., & Tanner, L. (2012). Anxiety, depression and stress in pregnancy. *Current Opinion in Psychiatry*, 25(2), 141–148. <https://doi.org/10.1097/YCO.0b013e3283503680>
- Field, T., Diego, M., & Hernandez-Reif, M. (2010). Prenatal depression effects and interventions: A review. *Infant Behavior and Development*, 33(4), 409–418. <https://doi.org/10.1016/j.infbeh.2010.04.005>
- Ford, E., Ayers, S., & Wright, D. B. (2009). Measurement of Maternal Perceptions of Support and Control in Birth (SCIB). *Journal of Women's Health*, 18(2), 245–252. <https://doi.org/10.1089/jwh.2008.0882>
- Howard, L. M., & Khalifeh, H. (2020). Perinatal mental health: a review of progress and challenges. *World Psychiatry*, 19(3), 313–327. <https://doi.org/10.1002/wps.20769>
- Hernández-Martínez, A., Martínez-Vázquez, S., Rodríguez-Almagro, J., Khan, K. S., Delgado-Rodríguez, M., & Martínez-Galiano, J. M. (2021). Validation of perinatal post-traumatic stress disorder questionnaire for Spanish women during the postpartum period. *Scientific Reports*, 11(1), 5567. <https://doi.org/10.1038/s41598-021-85144-2>

- Martínez-Galiano, J. M., Martínez-Vázquez, S., Peinado-Molina, R. A., & Hernández-Martínez, A. (2024). Validation of the Paykel Suicide Scale and the Plutchik Suicide Risk Scale in Spanish Women during the Perinatal Period. *Depression and Anxiety*, 2024(1). <https://doi.org/10.1155/2024/3741489>
- Martínez-Vázquez, S., Peinado-Molina, R. A., Hernández-Martínez, A., & Martínez-Galiano, J. M. (2024). Prevalence and Associated Factors of Perinatal Suicide Risk in Spanish Women. *Archives of Suicide Research*, 1–16. <https://doi.org/10.1080/13811118.2024.2353175>
- Martínez-Vázquez, S., Rodríguez-Almagro, J., Hernández-Martínez, A., & Martínez-Galiano, J. M. (2021). Factors Associated with Postpartum Post-Traumatic Stress Disorder (PTSD) Following Obstetric Violence: A Cross-Sectional Study. *Journal of Personalized Medicine*, 11(5), 338. <https://doi.org/10.3390/jpm11050338>
- Ministerio de Ciencia e Innovación. (2008, July 19). Orden CIN/2134/2008, de 3 de julio, por la que se establecen los requisitos para la verificación de los títulos universitarios oficiales que habiliten para el ejercicio de la profesión de Enfermero. *Boletín Oficial del Estado*, (173), 31520-31528.
- Ministerio de Sanidad y Política Social. (2009, May 21). Orden SAS/1349/2009, de 6 de mayo, por la que se aprueba y publica el programa formativo de la especialidad de Enfermería Obstétrica-Ginecológica (Matrona). *Boletín Oficial del Estado*, (129), 44434-44465.
- Peduzzi, P., Concato, J., Kemper, E., Holford, T. R., & Feinstein, A. R. (1996). A simulation study of the number of events per variable in logistic regression analysis. *Journal of Clinical Epidemiology*, 49(12), 1373–1379. [https://doi.org/10.1016/S0895-4356\(96\)00236-3](https://doi.org/10.1016/S0895-4356(96)00236-3)
- Royal College of Nursing. (2021). Perinatal mental health: RCN guidance for nurses and midwives. RCN.
- World Health Organization (WHO). (2022). *Guía para la integración de la salud mental perinatal en los servicios de salud materno-infantil*. Retrieved from <https://saludmentalperinatal.es/wp-content/uploads/2025/06/guia-para-la-integracion-de-la-salud-mental-perinatal-en-los-servicios-de-salud-materno-infantil.pdf>
- Woody, C. A., Ferrari, A. J., Siskind, D. J., Whiteford, H. A., & Harris, M. G. (2017). A systematic review and meta-regression of the prevalence and incidence of perinatal depression. *Journal of Affective Disorders*, 219, 86–92. <https://doi.org/10.1016/j.jad.2017.05.003>