

The University of San Francisco

USF Scholarship: a digital repository @ Gleeson Library | Geschke Center

Master's Projects and Capstones

All Theses, Dissertations, Capstones and
Projects

Winter 12-13-2024

Interventions in Treating PTSD as a Result of Birth Trauma

Christine Marie Samatra-Montalvo

University of San Francisco, christinemontalvo22@gmail.com

Follow this and additional works at: <https://repository.usfca.edu/capstone>



Part of the [Public Health Commons](#)

Recommended Citation

Samatra-Montalvo, Christine Marie, "Interventions in Treating PTSD as a Result of Birth Trauma" (2024).
Master's Projects and Capstones. 1752.

<https://repository.usfca.edu/capstone/1752>

This Project/Capstone - Global access is brought to you for free and open access by the All Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Master's Projects and Capstones by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact repository@usfca.edu.

Interventions in Treating PTSD as a Result of Birth Trauma

Christine Samatra-Montalvo

School of Nursing and Health Professions, University of San Francisco

MPH 683-H2 Integrated Learning Experience

Courtney Keeler, PhD

August 2024

Table of Contents

Abstract.....3

Introduction.....4

Methods.....6

Key Findings.....7

Implications.....9

Discussion.....10

Conclusion.....11

Appendix.....12

References.....13

Abstract

This paper explores the prevalence, causes, and consequences of PTSD resulting from childbirth, highlighting the need for effective intervention strategies. A systematic review of 25 studies encompassing cognitive-behavioral therapy (CBT), eye movement desensitization and reprocessing (EMDR), pharmacotherapy, and support groups was conducted to evaluate their effectiveness. Findings indicate that CBT and EMDR are the most promising treatments, with pharmacotherapy and support groups also providing substantial benefits. However, access to these interventions remains a challenge for certain populations. This paper underscores the importance of tailored, trauma-informed care and suggests that comprehensive maternal mental health programs can significantly improve outcomes for mothers and their families.

Introduction

While childbirth is often celebrated as a joyful occasion, it can also be a source of significant psychological distress. Post-traumatic stress disorder (PTSD) can develop before pregnancy or during the perinatal period (Howard et al., 2014). PTSD is a disorder in which a person has difficulty recovering after experiencing or witnessing a traumatic event, which may last months or years, with triggers that can bring back memories of the trauma accompanied by intense emotional and physical reactions (Williams et al., 2023).

In a recent meta-analysis, PTSD in normal pregnancies ranges from 3-4%; in high-risk pregnancies, the rates are significantly higher, ranging from 18-19% before and after birth (Yildiz et al., 2017). For some women, PTSD results from a major or even minor event during childbirth. Such negative experiences include previous traumatic birth experiences, high-risk pregnancies or violence/abuse, either during pregnancy or in the past (Suarez et al., 2023). In

other circumstances the intensity of childbirth experience itself, including difficult labor, emergency intervention or complications could be traumatic for both the mother and child (*Maternal Mental Health, 2023*).

Women who experience PTSD following childbirth might feel various emotions such as feelings of abandonment, helplessness and loss of control; these could negatively affect the mother's overall mental health as well as their well-being (James et al., 2015). Untreated PTSD could have a wide range of consequences, affecting not only the mother's mental health but her overall ability to bond with the newborn and later have more severe consequences for the child (Vignato, 2017).

Currently, the most commonly recommended treatments for PTSD is a trauma-focused cognitive behavior therapy (TF-CBT) and eye movement desensitization and reprocessing (EMDR), and medications such as selective serotonin reuptake inhibitors (SSRIs) (Dekel et al., 2023). There are additional interventions that include, but are not limited to, internet-based cognitive behavior therapy (iCBT), prenatal care-based psychosocial interventions and expressive writing interventions (Bastos et al., 2015).

Cognitive behavior therapy (CBT) is a psychotherapeutic treatment which helps individuals understand their thoughts and feelings by using a goal-oriented structure. Eye movement desensitization and reprocessing (EMDR) is a psychotherapy approach that is designed to alleviate the distress associated with traumatic memories. EMDR uses an adaptive information processing model that helps reprocess the traumatic memory, allowing it to be stored in a way that is no longer distressing for the individual (Hendrix et al., 2021). Internet-based cognitive behavior therapy (iCBT) takes the same approach as (TF-CBT) but it is delivered differently. iCBT is delivered through the internet/computer based, which is beneficial because it

is more convenient, flexible in terms of scheduling and cost effective (Sjömark et al., 2022). Prenatal care-based psychosocial interventions take a different approach than the traditional cognitive behavioral approach because this approach has a broader scope and aims to address the social, environmental and psychological factors.

While these treatments are efficacious in moderating symptoms, the current interventions leave certain groups of women at a disadvantage, such as those who do not have access to healthcare services, belong to low-socioeconomic status, or face cultural stigma. (Ralli et al., 2021). Women in rural areas, for example, may lack nearby healthcare facilities and resources, leading to delays or gaps in receiving appropriate treatment. Additionally, women from low-socioeconomic backgrounds often struggle to afford medical care, even when it is available. Cultural stigma surrounding mental health issues can further prevent women from seeking help, as they may fear judgment or ostracization from their communities (Ralli et al., 2021). These barriers create significant disparities in the effectiveness and accessibility of treatments for certain populations.

This paper explores the effectiveness of various interventions specifically designed to treat PTSD resulting from birth trauma. By understanding all the psychological therapies, pharmacological treatments and support interventions, this paper will identify the most effective strategy for addressing PTSD in new mothers, ultimately contributing maternal mental health care.

Methods

I conducted a systematic review to better understand how PTSD affects both the mother and the child. In this review, I considered the various intervention strategies that are available for

women who experience PTSD as a result of a traumatic birth experience (Dekel et al., 2023). I utilized multiple databases in my search, including Google Scholar, Pubmed and CINAHL. My keywords included “birth trauma”, “PTSD”, “interventions”, “treatments”, “programs”, “therapy”, “clinical studies”, “maternal outcomes”, “birth”, and “childbirth”. All articles were published between 2013 and 2023. My initial search resulted in 115 articles. After excluding articles that were not clinically tested, had insufficient sample sizes or did not focus on maternal health outcomes. I refined my review to include a total of 25 studies, comprising randomized control trials (RCTs), cohort studies, and qualitative research.

Key Findings

Interventions explored

My sample of articles included five types of interventions CBT, EMDR, pharmacotherapy, and different support groups.

Cognitive-Behavioral Therapy (CBT):

CBT was found to be highly effective in reducing PTSD symptoms, with specific techniques like exposure therapy and cognitive restructuring showing significant benefits. Exposure therapy helped individuals confront and process traumatic memories, while cognitive restructuring assisted in altering negative thought patterns. These techniques were instrumental in improving patients' coping mechanisms and reducing PTSD severity (Sjömark et al., 2018; James, 2015).

Eye Movement Desensitization and Reprocessing (EMDR):

EMDR studies demonstrated positive outcomes, particularly in processing traumatic memories and reducing PTSD symptoms. A unique benefit of EMDR was its structured approach, which helped patients integrate traumatic experiences more effectively. However, some challenges included variability in therapist expertise and the need for multiple sessions to achieve significant results (Chiorino et al., 2020; Wright et al., 2024).

Pharmacotherapy:

The review found that medications such as SSRIs and benzodiazepines were effective in treating PTSD symptoms. SSRIs helped alleviate depression and anxiety, while benzodiazepines were useful for short-term anxiety relief. However, side effects like weight gain, insomnia, and potential dependence on benzodiazepines were noted, necessitating careful consideration in treatment planning (Thakur et al., 2022; Fluyau et al., 2022).

Support Groups and Peer Support

Support groups played a crucial role in providing emotional support and reducing feelings of isolation among individuals with birth trauma-related PTSD. Qualitative findings highlighted the perceived benefits of peer support, including shared experiences and mutual understanding, which contributed to improved emotional well-being and resilience (Shorey et al.,

Other Interventions:

Additional interventions such as mindfulness and psychoeducation were also examined. Mindfulness practices helped reduce stress and increase emotional regulation, while

psychoeducation provided individuals with valuable information about PTSD and coping strategies.

Comparison of Relative Effectiveness of Interventions:

When comparing the relative effectiveness of different interventions, CBT and EMDR emerged as the most effective in reducing PTSD symptoms. Combined approaches, such as CBT with pharmacotherapy, showed enhanced outcomes, indicating the potential benefits of multimodal treatment strategies. Each intervention had unique strengths, and the choice of treatment often depended on individual patient needs and preferences (Galvan et al., 2014).

In conclusion, this review highlighted the effectiveness of various interventions for birth trauma-related PTSD, with CBT and EMDR showing the most promise. Pharmacotherapy and support groups also provided significant benefits, although considerations around side effects and individual variability were important. The findings underscore the importance of tailored treatment approaches to address the complex needs of individuals experiencing PTSD due to birth trauma.

Implications

My review identified many different interventions that are recommended for treating PTSD as a result of birth trauma. The intervention strategies consist of many different approaches: cognitive-behavioral therapies (CBT), eye movement desensitization and reprocessing (EMDR), pharmacotherapy, and different support groups. Integrating trauma-informed care, specialized mental health support, and comprehensive postpartum follow-up into standard maternal healthcare, can significantly improve maternal mental health

outcomes (Dekel et al., 2023). This holistic approach can reduce the prevalence and severity of PTSD symptoms in postpartum women, leading to better overall mental health for mothers and enhancing the overall family well-being.

Several key recommendations emerge from this work. Firstly, improving maternal mental health will reduce the long-term psychological burden on mothers, leading to healthier family dynamics and more positive maternal-infant bonding. Such interventions would have additional benefits for the child's cognitive and emotional development (Slomian et al., 2019). By addressing PTSD early, interventions can facilitate healthier maternal-infant bonding, which is crucial for the child's development and emotional health. The bonding is essential for the child's cognitive and social development, laying a foundation for long-term positive health outcomes (Borghini et al., 2014). Secondly, the current interventions leave certain groups at a disadvantage, such as those who do not have access to health services, such as low socio-economic status or individuals who face cultural stigma (Dagher et al., 2021). Lastly, raising awareness and educating healthcare providers and the public about birth trauma and its mental health implications can help destigmatize these issues and encourage more women to seek necessary help.

Implementing comprehensive mental health interventions requires significant resources, including trained professionals, funding, and time. Many healthcare systems, particularly in low-resource settings, may struggle to allocate sufficient resources to these initiatives (Dagher et al., 2021). Mental health stigma can deter women from seeking help. Cultural attitudes toward childbirth and mental health can also influence the effectiveness of interventions (Ahad et al., 2014). Overcoming these barriers requires targeted education and outreach efforts. Finally, there may be variability in the quality and availability of trauma-informed care across different

healthcare settings. Standardizing care practices and ensuring equitable access to services is a challenging yet necessary goal.

Discussion

These interventions target a critical public health issue: the mental health of postpartum women. By addressing PTSD resulting from birth trauma, we can improve maternal mental health outcomes on a larger scale. This, in turn, has a ripple effect, benefiting children's development, family dynamics, and overall community health.

Further research is needed to refine and validate the proposed interventions. Longitudinal studies can help assess the long-term efficacy and cost-effectiveness of these approaches. Research should also explore the specific needs of diverse populations to ensure interventions are culturally sensitive and inclusive (Sjömark et al., 2018). Policies should be developed to mandate the integration of mental health screenings and trauma-informed care into standard prenatal and postnatal care. This includes training healthcare providers and ensuring adequate funding for mental health services within maternal healthcare programs. Programs should be established to provide continuous support to mothers, including peer support groups, counseling services, and educational workshops. These programs can be integrated into existing maternal and child health services to maximize reach and impact.

Potential funding sources include government grants, partnerships with non-profit organizations, and private sector sponsorships. Leveraging community resources and volunteer networks can also reduce costs.

The implementation of targeted interventions for PTSD resulting from birth trauma presents a significant opportunity to enhance public health. By improving maternal mental

health, fostering better maternal-infant bonding, and reducing healthcare costs, these interventions address a critical need in maternal and child health. Through research, policy changes, and programmatic initiatives, we can create a supportive environment for postpartum women, ensuring they receive the care and support necessary to thrive (Figure 1A).

Conclusion

A comprehensive postpartum mental health program is justified by the high prevalence of PTSD among postpartum women and the significant impact of untreated PTSD on families and communities. This program, compared to alternatives, offers a holistic approach by integrating mental health services into standard postpartum care, ensuring that all women have access to necessary support. Raising awareness about birth trauma and PTSD can lead to a cultural shift in how childbirth is perceived and managed. Educating healthcare providers and the public about the importance of mental health support during and after childbirth can destigmatize mental health issues and encourage more women to seek help.

Appendix

Inputs	Activities	Outputs	Outcomes
Trained healthcare providers	Trauma-informed care training; mental health screenings	Increased identification of PTSD	Improved maternal mental health
Funding and resources	Establishing mental health support services	Access to counseling and support	Enhanced maternal-infant bonding
Public awareness campaigns	Educational workshops and materials	Increased awareness and reduced stigma	Reduced healthcare costs and improved family well-being

Figure 1A: Logic Model

References

- Ahad, A. A., Sanchez-Gonzalez, M., & Junquera, P. (2023). Understanding and Addressing Mental Health Stigma Across Cultures for Improving Psychiatric Care: A Narrative Review. *Cureus*, *15*(5), e39549. <https://doi.org/10.7759/cureus.39549>
- Bastos MH, Furuta M, Small R, McKenzie-McHarg K, Bick D, Bastos, M. H., Furuta, M., Small, R., McKenzie-McHarg, K., & Bick, D. (2015). Debriefing interventions for the prevention of psychological trauma in women following childbirth. *Cochrane Database of Systematic Reviews*, *4*, N.PAG. <https://doi.org/10.1002/14651858.CD007194.pub2>
- Borghini, A., Habersaat, S., Forcada-Guex, M., Nessi, J., Pierrehumbert, B., Ansermet, F., & Müller-Nix, C. (2014). Effects of an early intervention on maternal post-traumatic stress symptoms and the quality of mother-infant interaction: the case of preterm birth. *Infant behavior & development*, *37*(4), 624–631. <https://doi.org/10.1016/j.infbeh.2014.08.003>
- Bahari, S., Nourizadeh, R., Esmailpour, K., & Hakimi, S. (2022). The Effect of Supportive Counseling on Mother Psychological Reactions and Mother-Infant Bonding Following Traumatic Childbirth. *Issues in mental health nursing*, *43*(5), 447–454. <https://doi.org/10.1080/01612840.2021.1993388>
- Chiorino, V., Cattaneo, M. C., Macchi, E. A., Salerno, R., Roveraro, S., Bertolucci, G. G., Mosca, F., Fumagalli, M., Cortinovis, I., Carletto, S., & Fernandez, I. (2020). The EMDR Recent Birth Trauma Protocol: a pilot randomised clinical trial after traumatic childbirth. *Psychology & health*, *35*(7), 795–810. <https://doi.org/10.1080/08870446.2019.1699088>

- Dagher, R. K., Pérez-Stable, E. J., & James, R. S. (2021). Socioeconomic and racial/ethnic disparities in postpartum consultation for mental health concerns among US mothers. *Archives of women's mental health*, 24(5), 781–791.
<https://doi.org/10.1007/s00737-021-01132-5>
- Dekel, S., Papadakis, J. E., Quagliarini, B., Jagodnik, K. M., & Nandru, R. (2023). A Systematic Review of Interventions for Prevention and Treatment of Post-Traumatic Stress Disorder Following Childbirth. *medRxiv : the preprint server for health sciences*, 2023.08.17.23294230. <https://doi.org/10.1101/2023.08.17.23294230>
- Fluyau, D., Mitra, P., Jain, A., Kailasam, V. K., & Pierre, C. G. (2022). Selective serotonin reuptake inhibitors in the treatment of depression, anxiety, and post-traumatic stress disorder in substance use disorders: a Bayesian meta-analysis. *European Journal of Clinical Pharmacology*, 78(6), 931–942.
<https://doi.org/10.1007/s00228-022-03303-4>
- Galvan, M. S., Lueke, A. E., Mansfield, L.-T. E., & Smith, C. A. (2021). A systematic research review: How to best treat post-traumatic stress disorder in children post-natural disaster. *Journal of Human Behavior in the Social Environment*, 31(6), 701–715.
<https://doi.org/10.1080/10911359.2020.1804513>
- James, S. (2015). Women's experiences of symptoms of posttraumatic stress disorder (PTSD) after traumatic childbirth: a review and critical appraisal. *Archives of Women's Mental Health*, 18(6), 761–771. <https://doi.org/10.1007/s00737-015-0560-x>
- Hendrix, Y. M. G. A., van Dongen, K. S. M., de Jongh, A., & van Pampus, M. G. (2021). Postpartum Early EMDR therapy Intervention (PERCEIVE) study for women

after a traumatic birth experience: study protocol for a randomized controlled trial. *Trials*, 22(1), 599. <https://doi.org/10.1186/s13063-021-05545-6>

Howard, L. M., Molyneaux, E., Dennis, C. L., Rochat, T., Stein, A., & Milgrom, J. (2014). Non-psychotic mental disorders in the perinatal period. *The Lancet*, 384(9956), 1775-1788

Maternal mental health: A brief look at the impact of birth trauma. Psychiatry.org - Maternal Mental Health: A Brief Look at the Impact of Birth Trauma. (2023, May 24). <https://www.psychiatry.org/news-room/apa-blogs/maternal-mental-health-and-birth-trauma>

Ralli, M., Urbano, S., Gobbi, E., Shkodina, N., Mariani, S., Morrone, A., Arcangeli, A., & Ercoli, L. (2021). Health and Social Inequalities in Women Living in Disadvantaged Conditions: A Focus on Gynecologic and Obstetric Health and Intimate Partner Violence. *Health equity*, 5(1), 408–413. <https://doi.org/10.1089/hec.2020.0133>

Shorey, S., Downe, S., Chua, J. Y. X., Byrne, S. O., Fobelets, M., & Lalor, J. G. (2023). Effectiveness of Psychological Interventions to Improve the Mental Well-Being of Parents Who Have Experienced Traumatic Childbirth: A Systematic Review and Meta-Analysis. *Trauma, Violence & Abuse*, 24(3), 1238–1253. <https://doi.org/10.1177/15248380211060808>

Sjömark, J., Svanberg, A., Viirman, F., Larsson, M., Poromaa, I., Skalkidou, A., Jonsson, M., & Parling, T. (2022). Antepartum and labour-related single predictors of non-participation, dropout and lost to follow up in a randomised controlled trial comparing internet-based cognitive-behaviour therapy with treatment as usual for

women with negative birth experiences and/or post-traumatic stress following childbirth. *BMJ open*, 12(11), e063214.

<https://doi.org/10.1136/bmjopen-2022-063214>

Slomian, J., Honvo, G., Emonts, P., Reginster, J. Y., & Bruyère, O. (2019). Consequences of maternal postpartum depression: A systematic review of maternal and infant outcomes. *Women's health (London, England)*, 15, 1745506519844044.

<https://doi.org/10.1177/1745506519844044>

Suarez, A., & Yakupova, V. (2023). Past Traumatic Life Events, Postpartum PTSD, and the Role of Labor Support. *International journal of environmental research and public health*, 20(11), 6048. <https://doi.org/10.3390/ijerph20116048>

Thakur, A., Choudhary, D., Kumar, B., & Chaudhary, A. (2022). A Review on Post-traumatic Stress Disorder (PTSD): Symptoms, Therapies and Recent Case Studies. *Current molecular pharmacology*, 15(3), 502–516.

<https://doi.org/10.2174/1874467214666210525160944>

Vignato, J., Georges, J. M., Bush, R. A., & Connelly, C. D. (2017). Post-traumatic stress disorder in the perinatal period: A concept analysis. *Journal of clinical nursing*, 26(23-24), 3859–3868. <https://doi.org/10.1111/jocn.13800>

Williams, M. E., Strobino, D. M., & Holliday, C. N. (2023). Measuring post-traumatic stress after childbirth: a review and critical appraisal of instruments. *Journal of Reproductive & Infant Psychology*, 41(5), 599–613.

<https://doi.org/10.1080/02646838.2022.2030052>

Wright, S. L., Karyotaki, E., Cuijpers, P., Bisson, J., Papola, D., Witteveen, A., Suliman, S., Spies, G., Ahmadi, K., Capezzani, L., Carletto, S., Karatzias, T., Kullack, C.,

Laugharne, J., Lee, C. W., Nijdam, M. J., Olf, M., Ostacoli, L., Seedat, S., & Sijbrandij, M. (2024). EMDR v. other psychological therapies for PTSD: a systematic review and individual participant data meta-analysis. *Psychological Medicine*, 54(8), 1580–1588. <https://doi.org/10.1017/S0033291723003446>

Yildiz, P. D., Ayers, S., & Phillips, L. (2017a). The prevalence of posttraumatic stress disorder in pregnancy and after birth: A systematic review and meta-analysis. *Journal of Affective Disorders*, 208, 634–645. <https://doi.org/10.1016/j.jad.2016.10.009>