

## Case Report

# Exploring the role of social work in perinatal mental health: a case study of postpartum depression intervention in Belize

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## ABSTRACT

Social workers play a vital role in addressing the mental health and social needs of perinatal women, often as key members of multidisciplinary teams. Postpartum depression (PPD) affects 10–20% of new mothers globally, posing risks to maternal well-being and infant development. Despite their importance, limited literature reviews the specific interventions social workers provide in PPD care. This study assesses the effectiveness of social work interventions for a first-time mother in Belize. This single-case intervention study employed a mixed-methods approach. MG, a 31-year-old first-time mother diagnosed with PPD, received eight biweekly online psychoeducational sessions (2–3 hours each) delivered by a licensed social worker between February and June 2025. Quantitative data were collected using the Edinburgh Postnatal Depression Scale (EPDS) and the Multidimensional Scale of Perceived Social Support (MSPSS) at baseline and post-intervention. Qualitative data were gathered through journaling and semi-structured interviews. Informed consent and confidentiality were maintained. MG's EPDS score dropped from 15 to 2 post-intervention, an 87% reduction, moving from clinically significant to subclinical symptoms. MSPSS scores for family and significant others remained high (6), reflecting stable informal support. Qualitative findings showed improved emotional regulation, coping, and maternal confidence. Symptom reduction appears primarily linked to formal support via social work intervention. This study highlights the pivotal role of social workers in supporting women with PPD. Findings suggest that brief, low-cost, remotely delivered psychoeducational interventions can significantly improve maternal emotional health. Future research should explore scalability and integration into routine perinatal care in resource-limited settings.

**Keywords:** Postpartum depression, Social worker, First time mother, Intervention, Psychoeducation

## INTRODUCTION

The perinatal period, which includes pregnancy and the first year after childbirth, is a time of significant emotional and psychological change for women. Poor mental health during this period can have serious consequences for the mother, her baby, and the wider family.<sup>1</sup> Common perinatal mental health disorders—such as prenatal and postpartum depression, anxiety, and somatic symptoms—are among the most frequent

complications associated with pregnancy and childbirth globally.<sup>2</sup>

A recent landscape analysis revealed that women with a history of postpartum depression face a 25% risk of recurrence in future pregnancies. Alarming, postpartum depression is a major risk factor for maternal suicide. These mental health conditions can also negatively affect newborns, impacting their physical, emotional, and neurological development, and contributing to obstetric complications.<sup>3</sup>

PPD is a mood disorder linked to childbirth, typically emerging within weeks or months after delivery. The World Health Organization defines PPD as a non-psychotic depressive episode occurring during or after the postpartum period, characterized by persistent sadness, anxiety, irritability, disrupted sleep or appetite, and difficulty bonding with the baby.<sup>3</sup> Globally, 10–20% of women experience PPD, with rates reaching up to 30% in developing countries due to systemic inequalities, limited healthcare access, and cultural stigma.<sup>3</sup> In Belize, formal research and published data on PPD and its effects on mothers remain scarce.

Despite the distressing nature of these symptoms, approximately 50% of mothers with PPD do not seek treatment or fail to recognize their symptoms as problematic.<sup>4</sup> Others may avoid treatment or refrain from disclosing their symptoms to healthcare providers due to fear of judgment or being perceived as unfit mothers.<sup>5</sup>

In many low- and middle-income countries, the lack of mental health professionals and limited capacity among healthcare providers contribute to the underdiagnosis and undertreatment of perinatal mental health conditions. A key barrier is the lack of integration between maternal and child health services and mental health care at the primary level.<sup>6</sup> To address this gap, the World Health Organization advocates for cost-effective, evidence-based strategies to integrate perinatal mental health into maternal and newborn care, particularly within primary healthcare settings.

Belize's mental health program is predominantly community-based and operates through mental health clinics within the network of primary healthcare facilities and hospitals. There are eight primary healthcare (PHC) centers with mental health clinics—at least one in each of the six districts, with two districts having two clinics each. Each mental health clinic is staffed with at least two Psychiatric Nurse Practitioners (PNPs), who also provide mobile outreach services.<sup>7</sup>

With technical support from UNICEF, the Ministry of Health and Wellness began integrating perinatal mental health services into maternal healthcare across primary health facilities in 2024, with plans for nationwide scale-up.

However, a previous study among pregnant and postpartum women in Belize highlighted persistent barriers such as limited access to mental health services, insufficient human resources, long wait times, financial constraints, and stigma.<sup>8</sup> On the other hand, social support—especially from family and peer groups—was identified as a key facilitator for seeking help.<sup>8</sup>

Social workers in Belize serve diverse roles across public service and non-profit sectors, assisting individuals, families, and communities with issues ranging from financial and employment challenges to mental health

support and child welfare. Within the Belizean health system, they act as key links between patients and healthcare services, providing counseling, patient navigation, and access to resources—particularly for vulnerable populations. Their roles include supporting mental health services, HIV/STI management, and palliative care. However, there is no evidence of their involvement in perinatal mental health in Belize.

Globally, social workers play a vital role in addressing both the mental health and social needs of perinatal women and are often integral members of multidisciplinary health teams. Yet, there is limited literature reviewing the interventions that social workers provide in perinatal mental health care.<sup>9,10</sup>

This study aims to assess the effectiveness of social work interventions in addressing postpartum depression experienced by a first-time mother in Belize.

## CASE REPORT

### *Background*

MG is a 31-year-old married woman and first-time mother residing in Santa Elena, Cayo District, Belize. She was referred to the national referral hospital due to pregnancy complications, resulting in premature delivery. Her newborn required four weeks of care in the Neonatal Intensive Care Unit (NICU) before discharge.

### *Psychosocial concerns*

MG described her birthing experience as traumatic, compounded by the absence of mental health education, support, or assessments from healthcare providers during pregnancy and delivery. Approximately two weeks postpartum, she began experiencing symptoms consistent with postpartum depression, including persistent sadness, insomnia, frequent crying, and feelings of inadequacy. Her primary sources of emotional support were her husband and her mother, who resides in another district.

### *Study enrollment*

MG voluntarily enrolled in the study after a neighbor, noticing signs of emotional distress, encouraged her to seek help. At enrollment, she was four months postpartum and had recently returned to work following a three-month maternity leave. She reported ongoing emotional challenges and difficulty adjusting to motherhood.

### *Social work intervention*

#### *Approach*

The intervention consisted of eight biweekly online psychoeducational sessions, each lasting 2–3 hours, conducted between February and June 2025. This format

was chosen in mutual agreement with MG to accommodate her work schedule and allow participation from home while caring for her infant.

### Components

**Psychoeducation:** Understanding postpartum emotional challenges.

**Emotional support:** Guided discussions and empathetic engagement.

**Self-reflection:** Structured journaling exercises.

**Monitoring:** Regular mental health assessments using the Edinburgh Postnatal Depression Scale (EPDS) at baseline and before each session. Perceived social support was assessed using the Multidimensional Scale of Perceived Social Support (MSPSS) at pre-, mid-, and post-intervention.

### Delivery mode

Sessions were conducted online to ensure flexibility and comfort, aligning with MG's preference to limit in-person interactions during postpartum recovery.

The intervention outcomes were assessed using both quantitative and qualitative data: Quantitative data were derived from scores on the EPDS and MSPSS, assessed at baseline and post-intervention.<sup>11,12</sup> Qualitative insights were gathered from the participant's journal, which documented reflections on emotional well-being and the perceived impact of the intervention sessions.

Figure 1 shows a substantial decrease in EPDS scores—from 15 at baseline to 2 post-intervention—indicating a transition from clinically significant depressive symptoms to a subclinical range, reflecting marked improvement in emotional well-being. The most notable reduction occurred between weeks 3 and 5, suggesting that the participant began responding positively to the intervention during this period.

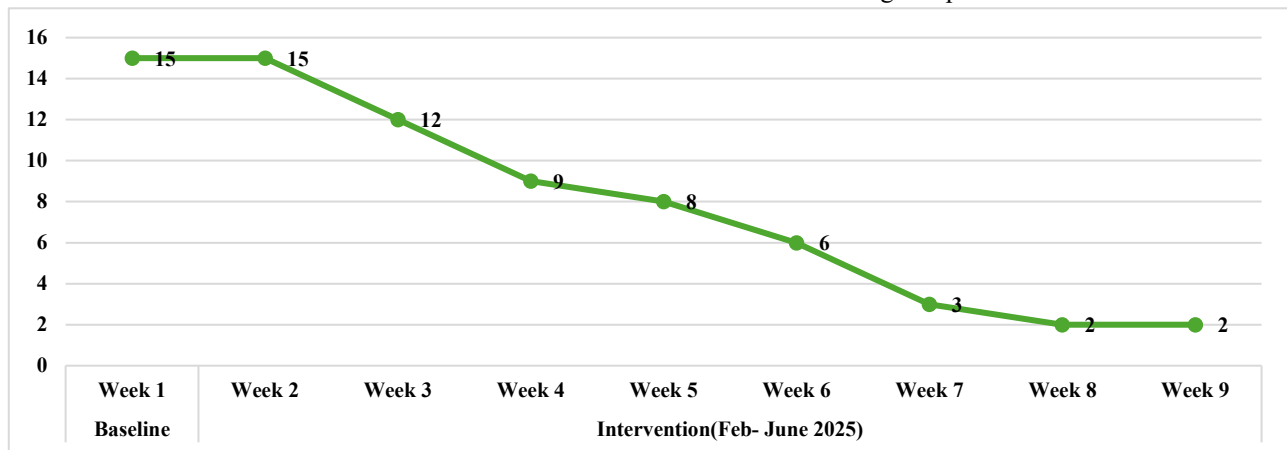


Figure 1: EPDS.

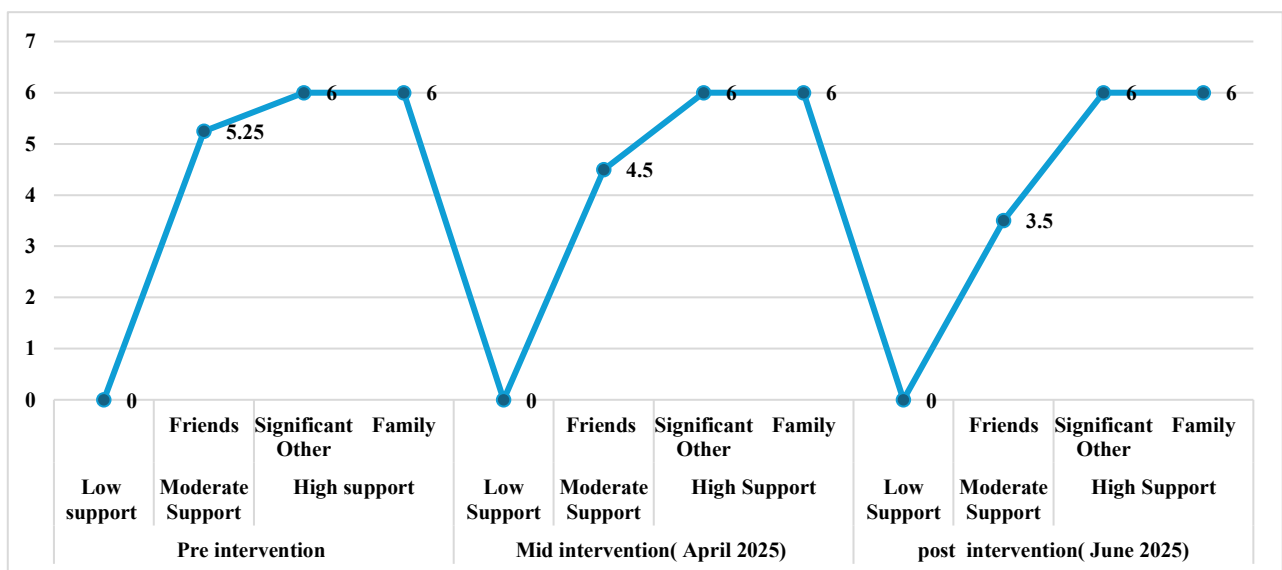


Figure 2: MSPSS.

Figure 2 illustrates the results of the MSPSS assessment conducted at three time points: baseline, mid-intervention, and post-intervention. The MSPSS measures perceived social support across three domains—friends, family, and significant others. At baseline, the participant reported high levels of support from both her significant other and family (each scoring 6), while support from friends was moderately high (5.25). These initial scores suggest strong emotional backing from her intimate partner and family, with comparatively less robust connections to friends.

Throughout the intervention, support from the significant other and family remained consistently high at 6, indicating stable and dependable relationships. In contrast, perceived support from friends declined steadily—from 5.25 at baseline to 4.5 mid-intervention, and further to 3.5 post-intervention. This downward trend may reflect weakening peer connections or reduced engagement with her social circle during the intervention period.

Journaling revealed themes of improved coping, increased confidence in maternal role, and reduced feelings of isolation. MG reported that psychoeducation and emotional support were particularly helpful in normalizing her experiences and fostering resilience.

She described a significant emotional uplift after witnessing a developmental milestone in her baby's life:

*“My baby has started to giggle; hearing and seeing her happy means everything to me.”*

Reaching the six-month mark brought a sense of pride and reassurance:

*“Watching her grow each day reminds me that, even though this is challenging, we’re doing a great job as first-time parents.”*

She noted positive changes since participating in the intervention, expressing a renewed sense of self:

*“I’ve started to feel like myself again.”*

Her evolving maternal identity is also shaping her life choices, as she considers adjusting her career to spend more time with her child.

Despite ongoing physical exhaustion, she reported emotional steadiness and improved coping skills:

*“I’m definitely less emotional and better able to handle motherhood.”*

This suggests that tools like journaling from earlier sessions may have helped her reframe her role and strengthen emotional regulation.

In her final check-in, she expressed pride in managing the demands of parenting alongside professional responsibilities:

*“We’ve made it through some of the toughest moments... Our baby smiles and laughs every day, which reassures us that we’re doing okay.”*

She concluded with a message of resilience and encouragement:

*“We were built for this! You’ll find your way to adjust to your new role.”*

## DISCUSSION

This case highlights the effectiveness of structured psychoeducational interventions delivered online in addressing postpartum depression. The combination of education, emotional support, and self-reflection contributed to significant improvements in emotional well-being and perceived social support.

Prior research has emphasized that social support is essential for promoting well-being during the postnatal period.<sup>13</sup> Two key types of support—formal (from healthcare professionals) and informal (from family and friends)—have been identified as protective factors for women with PPD.<sup>14-16</sup> However, due to the shortage of healthcare providers, delivering adequate formal support can be challenging.

Despite the recognized importance of social support, there is a scarcity of research specifically examining social work interventions in the context of PPD.<sup>10</sup> This study contributes to addressing that gap. The EPDS scores showed a significant reduction from 15 to 2, moving from a clinically concerning level to a subclinical range, indicating improved emotional health.

Meanwhile, the Multidimensional Scale of Perceived Social Support (MSPSS) scores for support from significant others and family remained consistently high at 6 throughout the intervention. This suggests a stable perception of strong emotional support. The inverse relationship between EPDS and MSPSS scores—where lower perceived support correlates with higher depression levels—is well documented.<sup>17,18</sup>

In the study, the perceived support remained stable throughout the study period, suggesting that the reductions in EPDS scores may be attributed to the formal support introduced through the social work intervention. The intervention's effectiveness may be attributed to its personalized nature, including tailored assessments and one-on-one psychoeducation sessions. Research indicates that for social support to be truly beneficial, it must be customized to meet the individual's specific needs.<sup>19</sup> Although many women identify family and friends as important sources of emotional support, these informal

networks often lack an adequate understanding of PPD.<sup>20-22</sup> This gap underscores the need for professional support, such as that provided by social workers, who are equipped to offer informed and empathetic care.<sup>20-22</sup>

In Belize, where resources for maternal mental health are limited, social workers play a crucial role in providing comprehensive support to women experiencing PPD. Their responsibilities include identifying at-risk individuals, offering counseling and therapy, connecting families with essential services, and advocating for systemic improvements in maternal mental health care.

Despite their importance, formal training in perinatal mental health is currently absent from social work education programs in Belize. In this study, the social worker did not receive any academic instruction on PPD during her training. Instead, she pursued knowledge independently, driven by personal interest and passion, through reading academic journals and consulting with experienced practitioners.

This situation mirrors findings from a national study in the United States involving 261 perinatal social workers. The study revealed that social workers are often preferred providers for PPD treatment due to their focus on emotional and social support, which aligns well with the needs of postpartum women.<sup>10</sup> However, more than half (57.1%) of the respondents reported not learning how to screen or diagnose PPD during their undergraduate or graduate education. Only 25% had used any screening tools, despite the availability of simple instruments. 10Another study found that just 15% of clinical social workers felt adequately prepared by their education to treat perinatal mental health disorders.<sup>23</sup>

Most social workers in these studies acquired their knowledge on the job, through continuing education, professional conferences, or by engaging with empirical literature, including social work journals—similar to the Belizean case.<sup>10,23</sup>

Studies have consistently recommended that practicing social workers integrate evidence-based findings on PPD into their work and also emphasized the need for BSW and MSW programs to include perinatal mental health content and for ongoing professional development opportunities to train social workers in supporting mothers with PPD.<sup>10,24</sup>

In response to mental health workforce gaps, the Government of Belize has included the training of more social workers in its National Health Policy (2023–2028).<sup>25</sup> However, there remains a pressing need to incorporate perinatal mental health training into social work education programs. Doing so would enable newly graduated social workers to effectively support postpartum mothers—especially those unable to access health facilities—alongside other healthcare professionals.

The study highlighted innovative approaches to delivering psychoeducation, particularly for patients unable to visit health facilities due to work commitments, financial limitations, or other barriers. Similar to previous research utilizing telehealth for psychoeducation, various studies have recognized telehealth and online social work interventions as effective, accessible, and flexible methods for supporting the mental health of new mothers—especially those with limited mobility or social connections.<sup>26-28</sup>

Mobile health (mHealth) interventions, such as phone-based psychoeducation and cognitive behavioral therapy (CBT), have demonstrated significant reductions in postpartum depression and anxiety and enhance maternal confidence and coping skills.<sup>26-28</sup> These approaches also enhance maternal confidence and coping skills. Additionally, phone calls have been identified by women as a valuable tool for reducing feelings of shame and stigma, while offering privacy and convenience.<sup>29</sup>

Another innovative element of the study was the use of voice-recorded journaling as a therapeutic complement to counseling. This method provides a structured outlet for self-expression and helps track emotional progress over time. Journaling has been associated with improved emotional regulation and reduced stress among postpartum mothers.<sup>30,31</sup> Voice recordings, in particular, allow for spontaneous and unfiltered emotional processing, which fosters empowerment and self-awareness and is found to be effective in alleviating symptoms of depression and anxiety in postpartum women.<sup>32</sup> Voice-recorded journaling is especially beneficial for mothers who find writing challenging or prefer verbal expression.<sup>32</sup> Studies show that such practices can significantly reduce stress and emotional distress, offering a low-cost, non-pharmacological option to support maternal mental health and well-being—for both mother and child.<sup>30-33</sup>

### **Limitations and strengths**

This study is limited by its focus on a single participant, which constrains the ability to generalize the findings to a broader population. Additionally, the use of self-reported data may introduce bias, as responses are subject to personal interpretation and memory. Nonetheless, this is the first known effort to examine the role of social workers in Belize in screening mothers for postpartum depression and providing emotional support during the postpartum period offering valuable insights into an area with limited existing research. These findings contribute meaningfully to the understanding of social work's role in maternal mental health support and recommend policy and training improvements for social workers.

### **CONCLUSION**

This study demonstrates that brief, low-cost, and remotely delivered social work interventions can significantly



improve emotional well-being among mothers with postpartum depression. The participant experienced reduced depressive symptoms, greater emotional awareness, and a stronger sense of maternal identity, underscoring the importance of integrating social support into postpartum care.

### Recommendations

To strengthen social workers' capacity in addressing maternal mental health, postpartum depression should be formally included in social work curricula and reinforced through continuing education workshops that provide practical tools, culturally sensitive approaches, and promote interdisciplinary collaboration. Additionally, scaling up remote mental health interventions, such as online psychotherapy, is essential to ensure continuity of care for mothers facing barriers to in-person services. These measures will help reduce stigma, improve maternal and child health outcomes, and ensure comprehensive, empathetic support for families in need.

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