Available online at: http://e-jurnal.lppmunsera.org/index.php/parahita
Wikrama Parahita: Jurnal Pengabdian Masyarakat
p-ISSN 2599-0020, e-ISSN 2599-0012

Stress and Anxiety Management in a Mother with High-Risk Pregnancy through Benson Relaxation

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Article Information

Article history

Received: December 9, 2025
Revised: June 30, 2026
Accepted: July 26, 2026

Keywords: Anxiety; Benson Relaxation; Depression; High-Risk Pregnancy; Stress

Abstract

This case was conducted to address the stress and anxiety experienced by a mother with a high-risk pregnancy who presented with recurrent bleeding, a history of multiple miscarriages, diabetes mellitus, obesity, and significant psychosocial burdens. The primary objective of the program was to reduce psychological distress and enhance emotional regulation through the application of Benson Relaxation combined with psychoeducation for both the mother and her immediate family. The procedures included an initial psychological assessment using interviews, observations, and the Depression Anxiety Stress Scale (DASS-21), followed by three consecutive sessions of Benson Relaxation and a psychoeducation session for the mother and her husband. The intervention resulted in a notable decrease in anxiety (from 14 to 4) and stress (from 20 to 4), while depressive symptoms also improved (from 6 to 4). These reductions indicate a clinically meaningful effect size at the individual level, demonstrating the effectiveness of relaxation-based mind–body techniques for pregnant women experiencing psychosocial distress.

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INTRODUCTION

High-risk pregnancies often place women in a vulnerable psychological state, particularly when medical complications coexist with unresolved emotional stressors. Maternal stress and anxiety have been consistently linked to adverse health outcomes, heightened physiological arousal, and reduced adherence to recommended health behaviors during pregnancy (Sarafino & Smith, 2014). Women with a history of recurrent miscarriage or comorbid medical conditions such as diabetes mellitus and obesity commonly report elevated emotional distress, which may influence their sense of control and undermine their ability to effectively engage in self-care. These challenges can be further intensified by limited social support, economic pressures, and unresolved personal or familial conflicts, all of which can contribute to heightened anxiety and psychological instability throughout pregnancy (Ajzen, 1991; Bronfenbrenner, 1979)

The partner in this community service activity was a 15-week pregnant woman undergoing inpatient care for high-risk pregnancy conditions, including recurrent bleeding, history of miscarriage, diabetes mellitus, and obesity. Psychologically, the partner had experienced significant anxiety, sleep disturbances, fear of pregnancy loss, and emotional instability. These conditions interfered with her ability to regulate emotions and adhere to medical recommendations, highlighting the urgency of psychological interventions.

This activity focused on a single partner because of the clinical urgency and vulnerability of the case, which required intensive and individualized psychological support. In community service practices within healthcare settings, single-case interventions are considered appropriate when addressing high-risk individuals who require immediate psychosocial care and close monitoring (Dunkel Schetter, 2011; Guardino & Dunkel Schetter, 2014; Lobel, 1994).

The problem addressed in this study focuses on a pregnant mother experiencing significant stress and anxiety triggered by recurrent pregnancy loss, ongoing bleeding, metabolic dysregulation, and complex psychosocial pressures. Prior studies have demonstrated that relaxation-based mind–body interventions can effectively reduce psychological symptoms among pregnant women, including those with high-risk conditions. Benson Relaxation, in

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DOI: https://dx.doi.org/10.30656/jpmwp.v10i2.11605

particular, has been shown to significantly decrease levels of stress, anxiety, and depression in pregnant populations (Zenouzi et al., 2024). Similar findings indicate that relaxation techniques can lessen depressive symptoms in women with high-risk pregnancies (Araújo et al., 2016), whereas the combination of relaxation and psychoeducation has been found to improve emotional well-being and reduce multidimensional pain (Mohammadi & Parandin, 2019). These findings highlight the relevance of integrating accessible relaxation strategies into supportive care for pregnant women experiencing psychological distress (Beddoe & Lee, 2008). Furthermore, prenatal anxiety has been widely associated with adverse maternal and fetal outcomes, emphasizing the importance of early psychological interventions (Alder et al., 2007; Dennis et al., 2017).

In response to these needs, the present approach employs Benson Relaxation together with psychoeducation to enhance emotional regulation, reduce psychological distress, and strengthen perceived control during a high-risk pregnancy. This work contributes to the existing literature by illustrating how a structured relaxation technique can be applied within a clinical maternity context to address emotional difficulties associated with medical and psychosocial risk factors. Therefore, the purpose of this community service activity is to reduce stress and anxiety and improve emotional regulation in high-risk pregnant women through Benson Relaxation combined with psychoeducation.

MATERIALS AND METHODS

Materials

The materials used in this study primarily consisted of psychological assessment tools and relaxation resources. The main instrument employed was the Depression Anxiety Stress Scale–21 (DASS–21), a standardized self-report measure used to assess emotional symptoms. The tools used for relaxation included speakers and laptops.

Methods

The procedural flow consisted of four interconnected phases: assessment, psycho-education, Benson Relaxation training, and follow-up evaluation. In the initial phase, the mother underwent psychological assessment through clinical interviews, behavioral observations, and administration of DASS–21 to establish baseline levels of emotional distress. This was followed by a structured psychoeducation session for the mother and her husband, focusing on stress during high-risk pregnancy, the impact of physiological arousal on anxiety, and the conceptual basis of relaxation methods. The psychoeducation component aimed to strengthen understanding, readiness, and engagement with the intervention.

The intervention phase consisted of three consecutive days of Benson Relaxation training. Each session followed the standardized steps originally described by Benson (1976), including diaphragmatic breathing, repetition of a meaningful phrase, passive disregard for intrusive thoughts, and the induction of a relaxation response. Sessions were conducted in a calm inpatient environment and lasted approximately 10–15 minutes. Throughout this process, observational data were collected to record behavioral indicators of relaxation, emotional shifts, and responsiveness to the technique.

The final phase involved a follow-up evaluation, during which the DASS–21 was re-administered, and qualitative reflections were obtained through interviews. These data were analyzed descriptively by comparing pre-test and post-test scores to determine changes in emotional symptom levels. Qualitative responses were reviewed thematically to identify perceived benefits, emotional improvements, and subjective experiences related to relaxation practice. This combination of quantitative and qualitative analysis provided a triangulated understanding of the intervention's impact, consistent with single-case research standards in psychological practice.

This community service activity used a case-based intervention approach consisting of four stages: (1) assessment, (2) psychoeducation, (3) Benson Relaxation training, and (4) evaluation (Table 1).

Table 1. Solution of dedication

Problem Identified	Proposed Solution	Method	Expected Outcome
High anxiety & stress	Psycho-education	Educational session	Increased understanding of stress
Emotional instability	Benson Relaxation	Guided sessions	Reduced anxiety and stress

In the assessment phase, psychological evaluation was conducted using interviews, observations, and the DASS-21 to determine baseline emotional conditions. In the psychoeducation phase, the participant and her husband received education on stress in high-risk pregnancies, physiological responses to anxiety, and the importance of relaxation techniques. The intervention phase consisted of three consecutive days of Benson Relaxation training following Benson (1976), including breathing regulation, repetition of calming words, and passive awareness of intrusive thoughts. The evaluation phase involved re-administering DASS-21 and conducting interviews to assess changes in emotional condition. Data were analyzed

DOI: https://dx.doi.org/10.30656/jpmwp.v10i2.11605

descriptively by comparing pre-test and post-test scores.

RESULTS AND DISCUSSION

The results of this study demonstrated measurable improvements in the emotional functioning of a mother with high-risk pregnancy following the implementation of Benson Relaxation and psychoeducation. Pre-test scores on the DASS–21 indicated depression at a mild level (score 6), anxiety at a moderate level (score 14), and stress at a moderate level (score 20). After three consecutive days of guided Benson Relaxation, post-test scores showed a notable reduction across all domains, with depression decreasing to a normal level (score 4), anxiety to a normal level (score 4), and stress to a normal level (score 4. These findings reflect significant shifts in emotional stability, particularly anxiety and stress, which shifted from clinically meaningful levels to the normal range (Fig. 1).

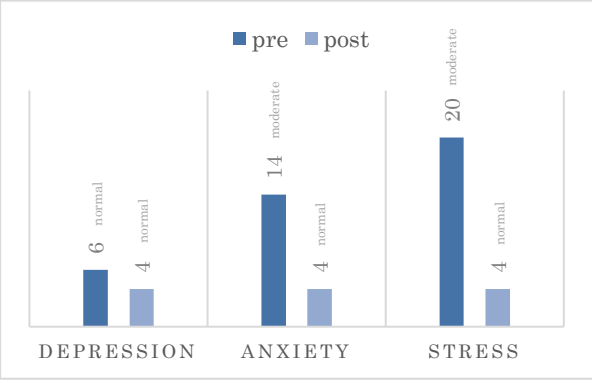


Fig 1. Results of the evaluation of depression, anxiety, and stress levels before and after the Benson relaxation intervention

The observational data collected during the intervention further supported the quantitative findings. The participant displayed a calmer affect. Qualitatively, she reported greater clarity of thought, reduced worry about pregnancy risks, improved sleep, and increased confidence in managing daily stressors. The discussion of these findings centers on the alignment between the participant's improvements and prior literature on mind–body interventions in pregnancy. Benson Relaxation has been widely recognized for its ability to activate the relaxation response, a physiological state characterized by parasympathetic dominance that counters stress-induced activation of the sympathetic nervous system (Benson, 1976). This mechanism provides a plausible explanation for the reduction in anxiety and stress scores observed in this study. Previous research has similarly reported significant reductions in stress, anxiety, and depression among pregnant women who participated in Benson Relaxation programs, supporting the current findings (Zenouzi et al., 2024). Additional studies have shown that relaxation-based interventions produce meaningful improvements in mood and emotional functioning in women with high-risk pregnancies (Araújo et al., 2016), suggesting that such techniques may be particularly beneficial in involving medical complications and heightened vulnerability (Field, 2017).

The qualitative accounts provided by the participants strengthened the interpretation of these results. Her descriptions of feeling calmer, more rested, and more emotionally grounded were consistent with the physiological effects associated with relaxation-based therapies, including reduced autonomic arousal and improved affect regulation (Sarafino & Smith, 2014). The participant also reported a stronger sense of control, which aligns with the theoretical expectations derived from Theory. Increased perceived behavioral control has been shown to reduce anxiety and promote healthier behavioral engagement, particularly in stressful health-related situations (Ajzen, 1991). In this study, enhanced control likely contributed to improved adherence to recommended dietary adjustments and better emotional coping during hospitalization. Benson relaxation can be practiced by most individuals, and typically takes 10–15 minutes per session. To perform Benson Relaxation, the individual begins by sitting or lying in a comfortable position in a quiet environment (Fig. 2).



Fig. 2 Benson relaxation video

After closing the eyes, the individual breathes slowly and naturally through the nose while focusing attention on inhalation and exhalation. During each exhale, a calming word or phrase is repeated silently, such as "peace," "relax," or a religious phrase that holds personal meaning. This repeated word serves as an anchor for maintaining focus. When distracting thoughts arise, the individual gently acknowledges them and returns attention to the breath and repeated phrases without judgment. This process continues until a sense of physical calmness, reduced muscle tension, and mental quietness begins to emerge (Benson & Klipper, 2000; Zenouzi et al., 2024).

Compared with findings from the broader literature, the results of this intervention are consistent with similar studies that report the advantages of relaxation programs in maternal health. Mohammadi & Parandin (2019) observed that combining relaxation techniques with brief psychoeducation reduced psychological symptoms and enhanced multidimensional well-being in pregnant women. The present study's results similarly highlight the added value of integrating psychoeducation with Benson Relaxation, as the participant demonstrated an improved understanding of her emotional responses and a greater willingness to actively engage in emotional regulation strategies. However, one limitation when compared to larger-scale studies is that this study involved only a single participant, which may limit its generalizability. Despite this, single-case designs remain essential in clinical contexts where individualized responses and nuanced emotional changes are central to psychological care.

From the assessment phase, the initial DASS-21 results indicated mild depression (6), moderate anxiety (14), and moderate stress (20). Participants also reported excessive worry, fear of miscarriage, and sleep disturbances. Based on the psychoeducation phase, the participants demonstrated an improved understanding of stress and its effects. She showed increased readiness and engagement in the intervention process.

In the Benson relaxation phase, the intervention was conducted over three sessions. The participants showed progressively calmer affect, reduced restlessness, and improved focus during the sessions. Overall, the findings indicate that Benson Relaxation is a practical, low-cost, and effective intervention for reducing stress and anxiety in high-risk pregnancies, complementing existing medical care. The observed changes are consistent with physiological and psychological theories of stress reduction and contribute to growing evidence supporting relaxation-based interventions for maternal mental health. These findings strengthen the argument that integrating mind–body techniques into prenatal care may provide significant benefits, particularly for women facing complex medical and psychosocial challenges.

CONCLUSION

This community service activity was successful in reducing psychological distress in a high-risk pregnant woman. Measurable improvements were observed in DASS-21 scores, with anxiety decreasing from 14 to 4, stress from 20 to 4, and depression from 6 to 4. These changes indicate a shift from clinically significant levels to normal levels. This study implemented a structured series of steps beginning with interviews, behavioral observation, and DASS-21 assessment, followed by psychoeducation and three consecutive sessions of Benson Relaxation, and concluded with post-intervention evaluation to determine changes in emotional functioning. The intervention contributed meaningfully to psychological improvement, as indicated by measurable reductions in depression, anxiety, and stress scores and strengthened emotional regulation in a mother with a high-risk pregnancy. These gains demonstrate that Benson Relaxation can effectively reduce psychological distress and enhance perceived control when medical complications and psychosocial pressures coexist. Nevertheless, the results are limited by the single-case nature of the study, the brief duration of intervention, and the absence of long-term follow-up, thereby restricting generalizability. Future work should include broader samples, extended intervention periods, and longitudinal monitoring to evaluate sustained effects, as well as integrating complementary mind–body techniques to optimize emotional support in high-risk pregnancy.

ACKNOWLEDGEMENTS

The author expresses sincere gratitude to the Faculty of Psychology, Universitas Sumatera Utara, for academic guidance and institutional support during the implementation of this study. Appreciation is also extended to Universitas Sumatera Utara hospital team and the patient who participated with openness and cooperation throughout the assessment and intervention process.

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