

**MARITAL SATISFACTION AND PREMENSTRUAL SYNDROME AMONG WOMEN  
WITH POSTPARTUM DEPRESSION**

*Dissertation submitted to Kerala University*

*In partial fulfilment of the requirements for the award of the Degree of*

**M. Sc. Counselling Psychology**

By

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## CERTIFICATE



This is to certify that the Dissertation entitled “**Marital Satisfaction and Premenstrual Syndrome Among Women with Postpartum Depression**” is an authentic work carried out by Architha L Sekhar Reg no: 60422115007 under the guidance of Mrs. Jesline Maria Mamen during the fourth semester of MSc Counselling Psychology programme in the academic year 2022-2024.

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## DECLARATION

I, Architha L Sekhar, do hereby declare that the dissertation titled **“Marital Satisfaction and Premenstrual Syndrome Among Women with Postpartum Depression”** submitted to the Department of Counselling Psychology, Loyola College of Social Sciences, Sreekariyam under the supervision of Mrs. Jesline Maria Mamen, Head of the Department of Counselling Psychology, for the award of the degree of Master’s in Science of Counselling Psychology, is a bonafide work carried out by me and no part thereof has been submitted for the award of any other degree in any university.

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## ABSTRACT

This research investigates the importance of understanding the effect of marital satisfaction, premenstrual syndrome (PMS), and postpartum depression (PPD) among women in Kerala. Despite extensive research in Western countries, the intersection of these factors remains underexplored in this region, particularly given Kerala's high reported prevalence of PPD. Using a sample of 130 women within three months postpartum, data were collected to assess the impact of marital satisfaction and PMS on PPD. The findings reveal a significant difference in marital satisfaction and PMS severity between women with and without PPD, with statistical significance ( $p < .001$ ). These results suggest that both marital satisfaction and PMS may play crucial roles in the development and severity of PPD, highlighting the need for tailored interventions that address these factors to improve mental health outcomes for postpartum women. The implications of this research are particularly relevant for healthcare professionals working with this population, offering insights into effective support strategies during the postpartum period.

*Keywords: Postpartum depression, Marital satisfaction, Premenstrual syndrome*



## CHAPTER I

### INTRODUCTION

#### **Postpartum depression (PPD)**

Postpartum depression (PPD) is a prevalent and potentially severe mood disorder that affects approximately 1 in 7 women within the first year after childbirth. PPD stems from a combination of hormonal changes, genetic predisposition, and environmental factors, yet up to 50% of cases remain undiagnosed due to the stigma surrounding the condition and patients' reluctance to disclose symptoms. Unlike the transient "baby blues," PPD is more severe, often manifesting as persistent sadness, low self-esteem, sleep disturbances, anxiety, and difficulties bonding with the baby. Effective recognition and management of PPD are essential for optimizing the health outcomes of the parent and infant. Postpartum depression (PPD) is a mood disorder that manifests within one year following childbirth. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), postpartum depression is encompassed within the broader classification of perinatal depression, which includes depressive episodes that begin during pregnancy or within four weeks postpartum. The DSM-5 does not recognize PPD as a distinct diagnostic entity but rather includes it under the umbrella of peripartum depression, a term that covers both prenatal and postpartum depression. Unlike the transient "baby blues," which typically resolve within a few weeks, PPD is a more severe condition that can persist for months if left untreated.

PPD is characterized by a range of depressive symptoms, including persistent sadness, anhedonia, low self-esteem, sleep disturbances, changes in appetite, anxiety, irritability, a hostile attitude towards the infant, self-blame, and feelings of humiliation. Individuals with PPD may also experience difficulties in bonding with their infant and feelings of hopelessness or worthlessness. Recognizing and addressing PPD is critical for both the affected individual and their child, as untreated PPD can impair the caregiver's ability to care for the child and may contribute to long-term developmental issues in the child, such as emotional and behavioural

problems. Additionally, PPD can strain familial relationships and increase the risk of suicide.

Routine screening for PPD should be an integral part of postpartum care, utilizing tools such as the Edinburgh Postnatal Depression Scale (EPDS) to identify individuals at risk. Treatment typically involves a combination of psychotherapy, support groups, and pharmacotherapy, including the use of antidepressants, which can be safely administered during lactation. However, up to 50% of PPD cases remain undiagnosed due to reluctance to disclose symptoms, often driven by the stigma surrounding PPD, including fears of abandonment and lack of support. Raising awareness, reducing stigma, and ensuring access to mental health resources are essential steps in supporting new parents and promoting healthy family dynamics.

### **Biological Theories**

Beck (2002) emphasized that postpartum depression (PPD) is viewed by the medical model as a mood disorder caused by biological factors rather than social or environmental influences (Beck, 2002). Numerous theories have been suggested concerning the impact of hormonal changes on PPD, including the role of hormone withdrawal and interactions within the hypothalamic-pituitary-gonadal and hypothalamic-pituitary-adrenal systems (Young et al., 2000). These fluctuations, particularly after giving birth, are believed to be triggers for mood disorders, although some studies propose that hormonal shifts may not consistently account for PPD. Specifically, estrogen and progesterone levels, which affect neurotransmitters like serotonin, undergo significant changes during pregnancy and postpartum, impacting mood stability.

Despite recognizing hormonal fluctuations as a potential contributor to PPD, research findings are not conclusive. Some studies suggest that sudden hormonal changes, particularly

estrogen and progesterone withdrawal, could lead to depression in women predisposed to PPD. However, other studies have not consistently found a link between hormonal levels and PPD risk. Genetic factors, such as the metabolism of Cytochrome P4502D6 (CYP2D6), may also play a role in PPD susceptibility. Overall, while internal physiological responses to hormonal changes are likely involved, the exact cause of PPD remains uncertain (Hatters Friedman, 2009).

### **Psychosocial theory**

The brain undergoes specific neurophysiological and neurochemical alterations in response to psychosocial stressors and interpersonal experiences, leading to significant shifts in neurotransmitter balance. It is believed that depression is connected to psychosocial stressors, as outlined in the following description:

**Psychodynamic theory:** The psychodynamic perspective suggests that unresolved issues from a woman's childhood or family could lead to increased psychological difficulties after giving birth. Upon becoming mothers, women often tend to emulate their own mother's role, but if they struggle to accept this role, they may find it challenging to adapt to their new role of motherhood. Facing conflict in the mother's role can potentially lead to rejecting their female identity and threaten their femininity. Experts have also observed that giving birth can result in a loss of identity and a decrease in feelings of love, affection, and independence. Furthermore, a family's negative attitude can have an impact on a woman's well-being and lead to difficulties in coping mechanisms (Bina, 2008; Kaplan & Sadock, 1988)

**Cognitive psychology theory:** The cognitive approach, as opposed to the psychodynamic theory, focuses on specific personality traits that make new mothers susceptible to postpartum depression instead of internal conflicts. Unrealistic expectations

about childbirth and motherhood can lead to anxiety, need for control, perfectionism, and compulsive behaviour in mothers. According to Beck (1967), distorted thoughts lead to depressed mood. A negative outlook on oneself, the world, and the future contributes to feelings of depression. Furthermore, the absence of suitable role models can cause women to feel a loss of control and anxiety, making it difficult for them to handle the demands of caring for an infant (Abela & D'Alessandro, 2002).

**Social and interpersonal theory:** According to Egeline (2008), an individual's environment has a significant impact on their life. The theory of attachment suggests that the struggles in a person's interpersonal relationships can greatly affect their mental health. It is clear that individuals need affection, which should be fulfilled at the beginning of a relationship. Uncertainties about a relationship can lead to disappointment and contribute to feelings of depression and anxiety. Several interpersonal factors contribute to women's distress, and their sensitivity makes them susceptible to developing postpartum disorders. These factors include inadequate social support and conflicts in marriage. Giving birth is a significant life-changing event, and the support received during this time can potentially influence a woman's mental well-being after delivery. The sudden psychosocial changes during motherhood, along with its challenges and stresses, could also serve as triggers for postpartum depression (Hunker et al., 2009).

**Behavioural theory:** The behavioural theory suggests that a depressive episode can be triggered by significant life events that disrupt an individual's normal support system. Life stressors and psychological issues like parental divorce, lack of emotional support from parents, conflicts between mothers and daughters, and low self-esteem are indicators of postpartum depression.

According to the theory of operant conditioning, depression results from a reduction in positively reinforced behaviour and could serve as an evident punishment for nonconforming behaviour. It can also occur due to a decrease in the availability of reinforcement opportunities, personal capability to navigate the environment, the influence of various events, or a combination of these factors. Furthermore, a lack of social reinforcement behaviours may stem from the absence of support from family and other social networks, leading to social withdrawal. Additionally, individuals experiencing significant stress from unexpected events may encounter a low frequency of positive reinforcement for mood-improving behaviour and a high frequency of positive reinforcement for depressive behaviour (Davidson et al., 2004).

Evolutionary theory: The theory of evolution suggests that postpartum depression (PPD) could have an adaptive purpose by indicating potential challenges to the mother's well-being, such as infant health issues, marital difficulties, or lack of social support. Instead of being viewed as a malfunction, PPD is considered a mechanism that encourages the mother to reconsider her commitment to caring for the newborn. In situations with limited support or significant social challenges, PPD might cause the mother to decrease her caregiving efforts. This adaptive purpose is believed to be universal, although its occurrence may differ based on societal circumstances (Hagen, 1999).

### **Marital satisfaction**

An important component of PPD may be the relational disorder in the marriage across domains of lack of support, loss of emotional closeness and sexual dissatisfaction. For postpartum mothers who are accompanied by supportive spouses, obtaining partner ratings of symptom levels is another strategy to assess maternal depression. Understanding the role that marital satisfaction plays in adjusting to parenthood can help prevent the onset of paternal postpartum depression. As marital satisfaction may be a protective factor against fathers

developing postpartum depression, it is important for couples to increase their relationship satisfaction. Furthermore, if male postpartum depression is more widely acknowledged and accepted, both couples and individuals might be more likely to seek therapy to alleviate their symptoms. Clinicians should inquire about and normalize the impact of the postpartum transition on both mothers and fathers as part of their routine and ongoing assessment. Additionally, clinicians should ask about the couple's marital satisfaction and whether the client's partner is also experiencing depressive symptoms, regardless of the partner's participation in therapy. There may be more opportunity for systemic work between dyads as clinicians recommend couple's therapy to improve marital satisfaction and protect against the impact of postpartum depression.

### **The Dynamic Goal Theory of Marital Satisfaction**

The theory of dynamic goal for marital satisfaction proposes that there are three categories of marital goals: personal growth goals, instrumental goals, and companionship goals. The relative significance of different marital goals changes dynamically throughout adulthood. Generally, younger couples focus on personal growth goals, middle-aged couples prioritize instrumental goals, and older couples concentrate on companionship goals. The importance of marital goals is also influenced by other factors such as life transitions and cultural values. Emphasizing specific marital goals can further impact marital interaction patterns in order to enhance marital satisfaction. This theory is the first to incorporate the life span developmental perspective into the study of marital satisfaction. It offers a simple method to integrate previous research on marital satisfaction from a developmental viewpoint and contributes to the literature on both marriage and life span development. The central concept of marital goal now organizes various factors that influence marital satisfaction. The overarching theories of life span development are applied to the specific context of marriage. Additionally, the

categorization of marital goals, the evolving significance of marital goals throughout adulthood, and the correlation between marital goals and other factors influencing marital satisfaction present promising avenues for future empirical research (Li & Fung, 2011).

### **Premenstrual Syndrome**

The menstrual cycle, a universal experience for women, involves a finely tuned physiological process marked by carefully timed fluctuations in ovarian progesterone and estrogen levels. These hormones have a widespread impact on various physiological systems, including the immune, reproductive, central nervous, endocrine, and cardiovascular systems, all of which contain numerous estrogen receptors. Additionally, progesterone influences a broad range of tissues. As a result, the female body is significantly affected on a biological level by these cyclic changes in estrogen and progesterone, leading to both physical and psychological effects. Extensive research has primarily focused on individuals dealing with premenstrual syndrome (PMS) and its more severe, predominantly psychological variant, exploring how the menstrual cycle shapes shift in women's emotional well-being.

Premenstrual Syndrome (PMS) refers to a complex and often disruptive set of physical, emotional, and behavioral symptoms experienced by some individuals in the days leading up to menstruation. While PMS is considered a normal part of the menstrual cycle, its severity and impact can vary widely among individuals. PMS can significantly affect a person's quality of life, interfering with their daily activities, work, and relationships. It's important to note that not all individuals experience PMS, and the severity of symptoms can range from mild to severe. For some, PMS can escalate into a more severe form known as Premenstrual Dysphoric Disorder (PMDD), which involves intense emotional symptoms that can significantly impact functioning.

The diagnostic criteria for PMS have been coded in N94.3 in the ICD-10-CM, and it is known as Premenstrual Tension Syndrome. Physical and psychological symptoms of PMS are said to occur seven to fourteen days before the start of a woman's period. This syndrome frequently manifests as acne, bloating, fatigue, sore breasts, irritability, and mood swings. These symptoms will start to appear about six days before menstruation. And as time passes, their pattern may alter. These symptoms won't appear during the pregnancy or the subsequent menopause.

Throughout a woman's life, various reproductive transition stages occur, each marked by specific fluctuations in sex hormones. During these phases, women often report a range of physical and emotional complaints to varying degrees (Moghadam et al., 2014). Periods of hormonal fluctuation, such as the premenstrual, postpartum, and perimenopausal phases, are known to be associated with increases in depressive symptoms (Studd 2012). Some girls experience psychological challenges, including low mood, anxiety, and emotional distress, during the initial hormonal changes of puberty, which are commonly accompanied by physical changes like breast development (Kessler 1998). While the risk of mood disorders increases during a woman's reproductive years, environmental, social, and genetic factors also contribute to the higher prevalence of mood disorders in women compared to men (Rapkin et al., 2002).

The overlap in symptoms between premenstrual syndrome (PMS) and postpartum depression (PPD) suggests that these disorders may share common causes, pathologies, and susceptibility factors (Sugawara et al., 1997). The postpartum period is characterized by a rapid decline in reproductive hormones such as estrogen and progesterone, following the high levels maintained during pregnancy (Bloch et al., 2000). Similarly, in PMS, there is a sharp drop in progesterone and neurosteroid levels during the late luteal phase, which coincides with the onset of PMS symptoms (Epperson et al., 2002). Studies have shown that women who



experience both PPD and PMS tend to have normal levels of gonadal steroids but are more prone to mental health issues, potentially due to hormonal fluctuations (Rubin, 2006).

Hormonal changes associated with the menstrual cycle are often linked to physical discomfort and psychological symptoms, which typically manifest between two weeks and a few days before menstruation begins (Stute et al., 2017). Epidemiological studies estimate that 50% to 80% of women experience premenstrual symptoms, with 3% to 5% reporting symptoms severe enough to impair social and psychological functioning (Yonkers et al., 2008). PMS is characterized by physical, behavioural, and emotional symptoms occurring during the late luteal phase of the menstrual cycle (Clayton, 2017). Diagnosis requires the presence of at least one moderate to severe physical symptom and one psychological symptom up to two weeks before menstruation, with symptoms resolving by the end of menstruation over at least two consecutive cycles. These symptoms often cause functional impairment (American College of Obstetricians & Gynaecologists, 2000; American Psychiatric Association, 2013). Mood symptoms of PMS include anxiety, depression, and irritability, while somatic symptoms include bloating, increased appetite, and breast tenderness. Cognitive symptoms include confusion and poor concentration, and behavioural symptoms may involve social withdrawal and frequent arguing (Hammarbäck et al., 1989). Although the exact cause of PMS is unclear, it is thought to be related to hormonal fluctuations in progesterone and estrogen within the peripheral and central nervous systems (Clayton et al 2004).

The postpartum period, another reproductive phase, is associated with a range of somatic and emotional complaints, often linked to significant hormonal changes after childbirth (Schiller et al., 2016). Postpartum depression is a major public health concern, affecting 10% to 20% of women within the first year after giving birth (Beck, 2001). The risk of developing PPD is 25% higher in women with a history of prior depression and 50% to 62% higher in

those with a history of PPD or depressive symptoms during pregnancy (Norhayati et al., 2015). Symptoms of PPD, which typically begin within four weeks after delivery, include depressive episodes characterized by low energy, irritability, and depressed mood. PPD can lead to family distress, impaired mother-infant bonding, and negative outcomes for the child (Letourneau et al., 2012). While PPD is considered a multifactorial disorder, its exact cause remains unclear (Brummelte, 2016).

Marital satisfaction is gaining increasing attention in the modern era. Marital satisfaction depends on whether the important marital objectives are met or not. The importance of various marital goals can vary depending on a number of factors, including life transitions and cultural norms; conversely, other elements, like communication styles, problem-solving techniques, and attribution, might help the prioritized marriage goals be achieved. Many women were reluctant to speak openly about their thoughts over their spouse's choice or their dissatisfaction in their marriage because they were frightened of upsetting or offending their parents.

While extensive research has explored the relationship between postpartum depression (PPD) and premenstrual syndrome (PMS) in Western countries, in Kerala, this crucial area remains relatively understudied. This lack of local insight presents a significant knowledge gap, particularly considering the reported high prevalence of PPD in the state. This study aims to address this gap by investigating the potential connection between PMS experiences and the risk of developing PPD in Kerala. Marital satisfaction, as one of the indicators of the quality of marriage, is a genuine feeling of pleasure, satisfaction, and joyfulness experienced by the partners when they consider all aspects of their marriage.

Partner's attitude, love and attention during pregnancy and after delivery; verbal and nonverbal supporting communication reduces dilemmas. Hara et al, (1984) believe that uncomfortable relationship with husband makes women susceptible for post-partum

depression. High levels of marital satisfaction are associated with better overall mental health and well-being, while low levels can exacerbate psychological distress and contribute to a cycle of negative emotional states. This raises the question of whether marital satisfaction, could be a protective factor against postpartum depression. However, the effect of marital satisfaction and PMS among women with PPD has not been extensively studied in Kerala population. The study aims to explore the importance of marital satisfaction and the severity of PMS symptoms among women with and without postpartum depression, with the goal of identifying potential links and implications for clinical practice and can provide valuable insights into effective interventions and support for women during the postpartum period.

### **Need and Significance**

It can provide insights into the interplay between marital satisfaction, PMS, and postpartum depression, which are crucial aspects of women's mental health. Insights from this study could have practical implications for healthcare professionals working with women during the postpartum period and those experiencing PMS, helping them tailor interventions to better support mental health. Men's awareness of PMS increased marital satisfaction scores in PMS-affected women. Therefore, awareness of PMS represents a demanding scope for future research concerning women's health and marital relationships.

Provide joint psychoeducation to both partners about PPD, PMS, and their potential impact on relationships which encourages mutual understanding and support. Clinicians should inquire about and normalize the impact of the postpartum transition on both mothers and fathers as part of their routine and ongoing assessment. Additionally, clinicians should ask about the couple's marital satisfaction and whether the client's partner is also experiencing depressive symptoms. There may be more opportunity for systemic work between dyads as clinicians

recommend couple's therapy to improve marital satisfaction and protect against the impact of postpartum depression.

Studies have not been extensively conducted in Kerala population where cultural norms and traditions may differ. In Kerala, discussions about menstrual hygiene and leave allowances are prominent. Kerala in 2023 has also sanctioned menstrual leave to female students of all universities and institutions. There is no law governing menstrual leave in India and also there is no centralised direction for 'paid menstruation leave'. Parliament has seen attempts to introduce menstrual leave and menstrual health products related bills, but they have not been successful so far. (Right of Women to Menstrual Leave and Free Access to Menstrual Health Products Bill, 2022). Moreover, due to hormonal actions most menstruating girls and women are having issues worrying about their physically unfit situation and the availability of hygiene facilities. However, less attention is given to the emotional and psychological distress women experience during PMS and the challenges they face with postpartum depression.

### **Statement of the problem**

Potential consequences of postpartum depression can disturb multifaced of life in women. Though the awareness regarding premenstrual syndrome is high today but it lacks extensive studies in Kerala context. The potential benefit of understanding the role that marital satisfaction plays in adjusting to parenthood can help prevent the onset of postpartum depression. Improving marital satisfaction is particularly important among couples as marital satisfaction may be a protective factor against mothers developing postpartum depression, attempts for managing these challenges in Kerala context is limited. Hence the problem is stated as "Marital satisfaction and Premenstrual Syndrome among Women with Postpartum Depression."

## **Operational definition of key terms**

### **Marital Satisfaction**

In this study Marital satisfaction refers to the subjective attitude that individuals have towards their marital relationship, as one of the indicators of the quality of marriage. It is a genuine feeling of pleasure, satisfaction, and joyfulness experienced by the partners when they consider all aspects of their marriage.

### **Premenstrual syndrome**

In this study Premenstrual syndrome (PMS) is characterized by repetitive, cyclical, physical, behavioural and psychological symptoms occurring in the luteal phase of the normal menstrual cycle.

### **Women with postpartum depression**

In this study women with postpartum depression are a condition diagnosed after delivery as if, she experiences either a depressed mood or a loss of interest in daily activities for at least two weeks, along with some other symptoms such as changes in appetite, sleep problems, or restlessness.

## **OBJECTIVES OF THE STUDY**

- To examine the difference in marital satisfaction among women with and without postpartum depression.
- To examine the difference in premenstrual syndrome among women with and without postpartum depression.

**HYPOTHESES OF THE STUDY**

H1: There is a significant difference in marital satisfaction among women with and without postpartum depression.

H2: There is a significant difference in premenstrual syndrome among women with and without postpartum depression.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

Kang et al., (2024) conducted a study on “Effectiveness of interpersonal psychotherapy in comparison to other psychological and pharmacological interventions for reducing depressive symptoms in women diagnosed with postpartum depression in low- and middle-income countries: A systematic review” this study shows, in high-income countries has shown IPT to be effective in addressing PPD by focusing on relationship and social support issues. The study explored databases and included randomized and quasi-experimental studies from LMICs. Out of 17,588 studies screened, only four randomized trials met the criteria, with a combined sample size of 188 women diagnosed with PPD. Among these trials, three compared IPT to standard treatment, while one trial compared IPT with antidepressant medications (ADM). The result shows that, IPT significantly decreased depressive symptoms in postpartum women compared to standard treatment and ADM. Furthermore, IPT exhibited fewer adverse outcomes, with lower occurrences of suicidal thoughts and adverse drug reactions compared to ADM. The authors concluded that while IPT seems to be an effective treatment for PPD, further research is necessary to strengthen the evidence base and inform the development of cost-effective treatment approaches for postpartum women in resource-limited settings. This is crucial to ensure the scalability of IPT interventions and to enhance mental health outcomes for mothers in LMICs.

Bakthan., et al. (2023) conducted a study on “Investigating the Relationship between Self-Compassion and Body Image with Postpartum Depression in Women Referring to Health centres in Iran.” The study highlighting the non-significant overall relationship between self-compassion and PPD but emphasizing specific aspects like self-kindness and self-judgment, along with the significant effect of body image.

Venborg et al., (2023) conducted a nationwide register-based cohort study titled “The Association Between Postpartum Depression and Perimenopausal Depression” investigated the potential connection between postpartum depression and perimenopausal depression. The research included 270,613 Danish women born between 1960 and 1968 who had experienced childbirth before the age of 40, and their perimenopausal depression diagnoses were tracked using the Danish National Patient Registry. Using a Cox Proportional Hazards model, the researchers discovered that individuals with postpartum depression (PPD) were associated with a significantly higher hazard (12.82 times) of perimenopausal depression compared to those without PPD. Additionally, those with any history of depression showed an 11.91 times higher hazard of perimenopausal depression. Notably, the study found no significant difference in the risks posed by PPD and depression unrelated to hormonal changes. The study's conclusion highlighted that any history of depression, whether related to hormonal phases such as postpartum or not, results in an increased risk of depression during perimenopause. These results emphasize the importance of continuous mental health monitoring for women with a history of depression throughout their reproductive life stages (Venborg et al., 2023).

Fernandes et al., (2023) examined the role of self-compassion and mindful parenting among postpartum mothers during the COVID-19 pandemic, with a specific focus on depressive and anxious symptoms. The postpartum period during the COVID-19 pandemic posed specific difficulties for mothers, especially in terms of their mental well-being and parenting approaches. Fernandes et al. (2022) conducted a study to explore the connections between self-compassion and mindful parenting in postpartum mothers, and how postpartum depressive symptoms (PPDS) and postpartum anxious symptoms (PPAS) affected these associations. 977 Portuguese mothers with infants aged zero to six months took part in the research by completing an online survey while facing strict COVID-19 restrictions from December 2020 to January 2021. The survey collected information on several factors, including



self-compassion, mindful parenting, PPDS, and PPAS. The findings revealed that 79.5% of the mothers experienced negative emotional consequences because of the pandemic during their postpartum period. These mothers displayed lower levels of self-compassion and mindful parenting, as well as higher levels of PPDS and PPAS. Additionally, Fernandes et al. (2022) discovered a significant link between higher levels of self-compassion and increased levels of mindful parenting. Notably, the presence of PPAS played a mediating role in this relationship, suggesting that mothers with greater self-compassion were less likely to experience anxiety, which in turn contributed to more mindful parenting.

Bloch et al., (2022) conducted a study titled "Cognitive Processing of Emotional Information During Menstrual Phases in Women with and without Postpartum Depression: Differential Sensitivity to Changes in Gonadal Steroids." This study focusing on women with and without a history of postpartum depression (PPD), cognitive processing of emotional information was examined in relation to hormonal fluctuations. Cognitive tasks including dot-probe, emotional Stroop, self-referential encoding, and incidental recall were used to assess 32 women with a history of PPD and 43 without it, during their late-follicular and late-luteal menstrual phases. The results showed that women with a history of PPD displayed cognitive biases associated with depression during the late-luteal phase, specifically in self-referential encoding, incidental recall, and emotional Stroop tasks, but not in the dot-probe task. Interestingly, these biases did not correspond to changes in mood symptoms. The study suggests that women with a history of PPD may be more sensitive to gonadal steroid fluctuations, which can impact the cognitive processing of emotional information in a menstrual-phase-dependent way and potentially contribute to PPD vulnerability.

Solorzano et al., (2022) conducted a longitudinal study titled "Body Image Dissatisfaction and Interoceptive Sensibility Significantly Predict Postpartum Depressive

Symptoms”. The study aimed to investigate the influence of body image dissatisfaction and interoceptive sensibility on the development of postpartum depressive symptoms. Healthy pregnant women were recruited for the study, and changes in depressive symptoms, body image dissatisfaction, and interoceptive sensibility were monitored from the second and third trimesters of pregnancy to six weeks postpartum. The findings revealed that while depressive symptoms remained consistent throughout pregnancy and postpartum, body image dissatisfaction significantly increased after childbirth, and interoceptive sensibility progressively heightened during pregnancy. The rise in both body dissatisfaction and interoceptive sensibility levels in early pregnancy predicted postpartum depressive symptoms. The authors propose that body image concerns and increased attention to internal bodily sensations may play a role in postpartum depression, and they recommend further research on interventions to improve interoceptive sensibility as a potential preventive measure.

Rodgers et al., (2022) expanded the biopsychosocial model in their study “Partner Influences, Breastfeeding, and Body Image and Eating Concerns,” the study extended the biopsychosocial model by examining the impact of partner-related factors on postpartum body image, eating concerns, and breastfeeding behaviors. Their objective was to integrate partner appearance influences and general postpartum support into an existing model of body image and eating attitudes among mothers of infants below six months of age. Analysis of data from 156 new mothers found that postpartum partner support correlated with reduced depression and enhanced breastfeeding self-efficacy, leading to increased exclusive breastfeeding rates and decreased symptoms of disordered eating. Conversely, partner appearance pressures and internalization of the thin-ideal were associated with heightened body dissatisfaction, and the latter was also connected to decreased breastfeeding self-efficacy. This study highlights the significance of partner influences in shaping postpartum body image and eating behaviors

indicating the need for further investigation into how partners can better support mothers during the postpartum period.

Stamou et al., (2021) conducted a single-case study trial titled “The Combination of Cognitive-Behavioral Therapy with Virtual Reality for the Treatment of Postnatal Depression in a Brief Intervention Context”. A study was conducted to investigate how effective it is to use a combination of cognitive-behavioral therapy (CBT) and virtual reality (VR) to treat postnatal depression (PND). The study involved 15 participants and aimed to evaluate how well this approach worked in clinical settings. The results indicated that combining CBT with VR was successful in addressing PND and improving self-awareness, decision-making, and self-esteem. Furthermore, the study concluded that incorporating VR into therapy was viable and well-received by the participants. These findings imply that VR can supplement traditional CBT, providing practical real-world applications for managing PND symptoms.

Cao et al (2020) conducted a longitudinal study on “Does Premenstrual syndrome before pregnancy increase the risk of postpartum depression? Findings from the Australian Longitudinal Study on Women’s health” This large population-based study provides evidence of a dose-response relationship between pre-pregnancy PMS and postpartum depression (PPD), independent of history of depression. Specifically, women who reported experiencing PMS 'sometimes' or 'often' before pregnancy had a significantly increased risk of PPD compared to those who never experienced PMS. Findings suggest that pre-pregnancy PMS may be a potential risk factor for PPD and could help identify women at increased risk before pregnancy.

Ikeda et al (2020) conducted a study on “Relationship between a high Edinburgh Postnatal Depression Scale Score and premenstrual syndrome: A prospective, observational study”. This study investigated whether the Edinburgh Postnatal Depression Scale (EPDS) score can predict the occurrence of severe PMS after delivery. The study found that women

with an EPDS score  $\geq 9$  (high-EPDS group) had a higher incidence rate of severe PMS at 1 year after delivery compared to those with an EPDS score  $< 9$  (low-EPDS group). This suggests that the EPDS may be a useful tool for predicting the development of severe PMS after delivery.

Guo., et al (2020) conducted a study titled “Preventing Postpartum Depression with Mindful Self compassion Intervention: A Randomized control study” The study aimed to assess the effect of mindful self-compassion intervention on preventing postpartum depression in a group of symptomatic pregnant women. The study has shown that mindfulness and self-compassion can be effective in reducing symptoms of depression and anxiety in general populations. This study specifically investigated the impact of a 6-week internet-based mindful self-compassion program on pregnant women at risk of PPD. The intervention group showed significant improvements in depressive and anxiety symptoms compared to the control group. Additionally, the intervention group reported increased levels of mindfulness and self-compassion at 3 and 12 months postpartum. Importantly, the study also found that both mothers and infants in the intervention group experienced improved well-being. This suggests that mindful self-compassion interventions may have broader benefits beyond just preventing PPD.

Rosenbaum et al., (2020) explored the psychological impact of discrepancies between expected and actual breastfeeding behaviors in their study “Feeling Let Down: An Investigation of Breastfeeding Expectations, Appreciation of Body Functionality, Self-Compassion, and Depression Symptoms.” The study aimed to analyze how differences between desired exclusive breastfeeding and real practices are linked to body functionality appreciation, self-compassion, and depression symptoms. By conducting an online survey involving 536 women who had recently given birth, the researchers discovered that women who were unable to meet their breastfeeding expectations had lower appreciation of their body functionality, leading to increased depressive symptoms. The impact of self-compassion on this association was

moderated, as women with higher self-compassion reported improved body image and fewer depressive symptoms. These findings underscore the importance of promoting self-compassion and body positivity in postpartum women to alleviate the emotional distress related to unmet breastfeeding goals. The authors recommend striking a balance between public health initiatives advocating breastfeeding and efforts to normalize breastfeeding challenges and provide mental health support.

Castro et al., (2019) conducted a systematic literature review titled “Associations between premenstrual syndrome and postpartum depression.” The study investigated the potential overlap in symptoms and shared causes of PMS and PPD, indicating that PMS may increase the risk of developing PPD. Sixteen studies were analysed in the review, and their findings varied. Although three studies initially indicated a strong connection, the results did not remain statistically significant after accounting for factors such as personality and socio-demographic variables. However, eleven studies discovered a positive link between PMS and PPD, independent of these influencing factors. Two studies did not find a significant connection. In summary, the review provides evidence supporting a positive correlation between PMS and PPD, potentially influenced by specific confounding factors.

Branquinho., et al (2019) conducted a study titled “Self-criticism, negative thoughts and postpartum depressive symptoms: the buffering action of self-compassion.” The study looked into how self-criticism contributes to postpartum depressive symptoms (PPDS) through a series of steps. The findings showed that self-criticism was linked to an increase in negative automatic thoughts (NATs). It was found that self-compassion played a role in moderating the relationship between self-criticism and NATs, particularly in lessening the impact of self-criticism on NATs with higher levels of self-compassion. These results emphasize the harmful effects of self-critical thoughts and negative cognitive evaluations on PPDS, while also

highlighting the potential of self-compassion as a protective factor. Future interventions for preventing and treating PPDS should include methods for reducing self-criticism and promoting self-compassion.

Amadi et al (2018) conducted a study on “post-partum depression, anxiety and marital satisfaction: A perspective from Southeastern Nigeria”. The study investigates the prevalence and interplay of postpartum depression (PPD), anxiety, and marital satisfaction among nursing mothers in Enugu, Southeastern Nigeria. It was conducted as a cross-sectional study involving 309 randomly selected nursing mothers from two tertiary health institutions. The prevalence of postpartum anxiety and PPD were 31.1% and 33.3%, respectively. Marital dissatisfaction was reported by 39.5% of the respondents, with 22.0% experiencing comorbid depression and anxiety.

Badr et al., (2018) conducted a study titled “Is the Effect of Postpartum Depression on Mother-Infant Bonding Universal?” The study aimed to investigate the risk factors for postpartum depression (PPD) and its effects on the bond between mother and infant in a Lebanese population. A total of 150 women were evaluated using the Edinburgh Postpartum Depression Scale (EPDS) and social support scale within 2-3 days after giving birth. Subsequently, they were assessed using the Postpartum Bonding Questionnaire (PBQ) and Beck Depression Inventory (BDI-II) at 10-12 weeks postpartum. The prevalence of depression was 19% at 2-3 days postpartum and decreased to 2.7% at 10-12 weeks. Notable risk factors for PPD included a history of depression, alcohol consumption, pregnancy complications, strained marital relationships, and low social support. There was a significant association between compromised mother-infant bonding and older age, history of depression, low social support, and BDI-II scores exceeding 20. These factors explained 39% of the variability in impaired bonding, highlighting the importance for healthcare professionals to closely monitor these factors in postpartum mothers.

Moraes et al., (2017) conducted a review titled “Screening and Diagnosing Postpartum Depression: When and How?” Investigating the screening and diagnosing methods and timing for postpartum depression (PPD), a review of 22 studies published within the past five years discovered that the Edinburgh Postnatal Depression Scale (EPDS) was the most commonly used screening tool, utilized in 68% of the studies. Other screening tools included the Beck Depression Inventory (BDI-II) and the Patient Health Questionnaire-9 (PHQ-9). There was variation in the screening periods, with the majority of studies (59%) conducting screening within the first 6 months after childbirth, although 36% screened for up to 12 months or longer. The review emphasizes the necessity of standardizing screening timeframes and tools in order to enhance the diagnosis of PPD.

Knights et al., (2016) conducted a study titled “In Search of Best Practice for Postpartum Depression Screening: Is Once Enough?” The study aimed to assess if an Edinburgh Postnatal Depression Scale (EPDS) score obtained within 96 hours after childbirth could predict the EPDS score at the postpartum outpatient visit. A total of 256 women were included in this retrospective cohort study, and their EPDS scores were grouped into low risk (<10), borderline risk (10-13), and high risk ( $\geq 14$ ). The findings indicated that 92.2% of women showed stable or improved EPDS scores over time, and those with a history of psychiatric illness or fetal anomaly were more likely to experience worsening scores. An early EPDS score below 10 was associated with a 92.7% likelihood of maintaining low risk during subsequent assessments. Based on the study, it was suggested that women with low-risk scores might not require repeated screening, which would allow resources to be directed towards individuals at higher risk. As a result, the authors introduced the “PAP10” criteria (Psychiatry history, Anomaly, Preterm delivery, EPDS  $\geq 10$ ) for targeted re-screening.

Małus et al., (2016) conducted a study titled “incidence of Postpartum Depression and Couple Relationship Quality” to explore the relationship between postpartum depression (PPD)

symptoms and marital relationship satisfaction in new mothers. This study involved 100 first-time postpartum women who completed both the Postpartum Depression Screening Scale and the Marital Compatibility Questionnaire. The findings illustrated a notable connection between the severity of PPD symptoms including sleep disruptions, anxiety, emotional instability, guilt, and suicidal ideation and dissatisfaction within the marital relationship. Women who reported lower levels of intimacy, self-fulfilment, and similarity with their partners, coupled with increased disillusionment, experienced more pronounced PPD symptoms. Conversely, women who expressed higher satisfaction in their marital relationships exhibited improved mental well-being and fewer signs of depression. The study emphasized that dissatisfaction in the couple relationship played a vital role in the severity of PPD symptoms, underscoring the importance of supporting relationships during the postpartum period to enhance maternal mental health.

Kim et al (2015) conducted a study on “Correlation between postpartum depression and premenstrual dysphoric disorder: Single centre study” The study found that there was a notable correlation between premenstrual syndrome (PMS) and PPD, suggesting that hormonal factors might contribute to the risk of developing postpartum depression. Women with PPD were more likely to also have premenstrual dysphoric disorder compared to those without PPD.

Hachem et al., (2014) conducted a study titled “Early Identification of Women at Risk of Postpartum Depression Using the Edinburgh Postnatal Depression Scale (EPDS) in a Sample of Lebanese Women.” This study was conducted to assess how well the EPDS can predict postpartum depression (PPD). The EPDS was given to 228 women on day 2 after childbirth, and follow-up assessments were done between days 30 and 40. The study discovered that 33.3% of women had an EPDS score  $\geq 9$  on day 2, and 12.8% developed PPD by days 30-40. There was a positive connection between EPDS scores on day 2 and days 30-40. Having an



EPDS score  $\geq 9$  on day 2, along with a personal history of depression, were important indicators of PPD. The study concluded that the EPDS is a dependable tool for early screening to identify women at risk of PPD and emphasized the necessity for close monitoring of those scoring  $\geq 9$  or with a history of depression.

Munnaf et al., (2013) conducted a study on “Relationship of Post-natal Depression with Life and Marital Satisfaction and Its Comparison in Joint and Nuclear Family System”. The findings indicated a significant negative relationship between PND and both life and marital satisfaction. Furthermore, the study found that women from joint families experienced significantly lower levels of PND compared to those from nuclear families.

Behnam et al (2010) conducted a study on “Relationship between marital satisfaction during Pregnancy and Postpartum Depression” The study found a negative correlation between marital satisfaction during the last month of pregnancy and postpartum depression. There was a significant statistical difference in marital satisfaction scores between depressed and non-depressed groups. This suggests that marital satisfaction is a predisposing factor for postpartum depression.

Mamun et al., (2009) conducted a 14-year prospective study titled “Maternal Depression and the Quality of Marital Relationship” to investigate the bidirectional association between maternal depressive symptoms and the quality of marital relationships. The study, which was part of the Mater-University Study of Pregnancy in Brisbane, Australia, involved 3,694 women who were interviewed at various points postpartum, such as 3-5 days after delivery, at 6 months, 5 years, and 14 years. Using a transition model, the researchers analyzed how depressive symptoms and marital relationship quality changed over time. The study revealed that around 40% of women with depressive symptoms continued to experience them in the long term, similar to the percentage of women who remained in poor-quality marital relationships. Moreover, about 10% of women who initially did not report depressive symptoms or

relationship issues developed them later on. The results consistently showed a strong bidirectional relationship between depressive symptoms and marital quality, with negative changes in either aspect predicting poor outcomes and similar population attributable risk for both.

### **Conclusion**

This research underscores the critical importance of understanding the impact of marital satisfaction, premenstrual syndrome (PMS), and postpartum depression (PPD) among women in Kerala. Despite substantial research conducted in Western countries, the interplay of these factors has been underexplored in this region, where the prevalence of PPD is notably high. By analyzing data from a sample of 130 women within three months postpartum, the study reveals significant differences in marital satisfaction and PMS severity between those with and without PPD, with statistical significance ( $p < .001$ ). These findings suggest that both marital satisfaction and PMS are key contributors to the development and severity of PPD. Consequently, tailored interventions that address these factors are essential for improving mental health outcomes for postpartum women. These insights are particularly valuable for healthcare professionals working with this population, offering guidance for more effective support strategies during the postpartum period.

## CHAPTER III

### METHOD

A method of methodically addressing the research challenge is known as research methodology. It might be thought of as an investigation of scientific research methodology. Research designs, target populations, sample sizes and sampling techniques, data gathering tools, and data processing procedures are all included in the research methodology. According to Kothari (2004) Methodologies offer the theoretical foundation for understanding which technique, or combination of procedures, can be used to a certain scenario rather than delivering solution.

Methodologies might vary from problem to problem, it is important for the researcher to build his approach specifically for his problem.

#### **Research design**

The research design is the overall plan for obtaining answers to the research questions, including specifications for enhancing the study's integrity. Kerlinger, (1986) describes research design as a plan, structure and strategy of investigation that is adopted with an aim of obtaining answers to research questions with optimal control of variables. According to Crewell (2014), research design is the plan, structure, and strategy of investigation used to obtain answers to research questions or problems.

For the purpose of this study, a descriptive research design seems to be appropriate. Using questionnaires were used to collect data about the variables of the study. Calderon (2006), defined descriptive research as a purposive process of gathering, analyzing, classifying, and tabulating data about prevailing conditions, practices, processes, trends, and cause-effect relationships and then making adequate and accurate interpretation about such data with or without or sometimes minimal aid of statistical methods.

## Participants

The study is done among women belonging to the age range of 20-40 years old who gave birth within 1 year. Using the purposive sampling method, a total of 130 representative samples of women were taken from (Thiruvananthapuram, Pathanamthitta, Kottayam, Ernakulam, Malappuram, Kozhikode) among Kerala. Among 130 sample of women 60 were with postpartum depression and 60 were without postpartum depression.

## Tools used for data collection

**Variables:** The variables in the current study are premenstrual syndrome and quality of life. In this study existing standardized research questionnaires were used to assess premenstrual syndrome and quality of life. A number of studies have statistically analyzed and tested the questionnaire in order to corroborate the reliability and validity.

## Premenstrual Syndrome Scale (PMSS) Scale (Srinivasagam Rajasankar, 2015)

Srinivasagam Rajasankar, 2014 developed the premenstrual syndrome scale which is one of most extensively studied symptoms assessment instruments, although the majority of studies focused on validity rather than reliability. Adequate symptoms assessment is essential in premenstrual syndrome prevention. Assessment scales were designed to support practitioners in identifying adolescents at premenstrual syndrome risk. The Premenstrual syndrome scale is one of the most extensively studied symptoms assessment instruments, although the majority of studies focused on validity rather than reliability.

## Objectives

- The first aim was to measure the interrater reliability of the Premenstrual syndrome scale and its individual items.
- The second aim was to study different statistical approaches regarding interrater reliability estimation.

**Validity and Reliability:**

The ability of the Premenstrual syndrome Scale to predict the development of PUs (predictive validity) has been tested extensively. Inter-rater reliability between .81 and .97 is reported. The tool has been shown to be equally reliable with adolescent girls. Sensitivity ranges from 83-100% and specificity 64-90% depending on the cut-off score used for predicting PU risk.

**Scoring**

The premenstrual syndrome scale comprised 40 questions with three sub-scales (Physiological, Psychological and Behavioral symptoms). This 5-point Likert-type scale consisting of 40 items. The measurements on the scale are set according to the following scoring system: the response Never was scored as “1”, rarely as “2”, sometimes as “3”, very often as “4” and always as “5” points. In addition, the total score obtained from the sub-scales established the “PMSS total score.” The scale’s lowest score is 40 and highest score is 200. If the scale’s total score reached 80 points or above, this indicates the occurrence of PMS. Increases in the scores indicate an increase in PMS severity. Based on the percentage of scores the levels of premenstrual symptoms were graded in four categories. They are “No symptoms”, “Mild”, “Moderate” “severe” and very severe symptoms.

**Interpretation:**

The premenstrual syndrome scale comprised 40 questions with three sub-scales (Physiological, Psychological and Behavioral symptoms). This 5-point Likert-type scale consisting of 40 items. The measurements on the scale are set according to the following scoring system: the response Never was scored as “1”, rarely as “2”, sometimes as “3”, very often as “4” and always as “5” points.

### **Edinburgh Postnatal Depression Scale (EDPS)**

Edinburgh Postnatal Depression Scale (EPDS) that was designed by Cox et al., 1987 as a self-report questionnaire. The EPDS consists of 10 items with acceptable sensitivity, specificity and positive predictive value.

The Edinburgh Postnatal Depression Scale (EPDS) was developed to assist health professionals in detecting mothers suffering from PPD; a distressing disorder more prolonged than the “blues” (which can occur in the first week after delivery).

The scale consists of 10 short statements. A mother checks off one of four possible answers that is closest to how she has felt during the past week. Most mothers easily complete the scale in less than five minutes. Responses are scored 0, 1, 2 and 3 based on the seriousness of the symptom. Items 3, 5 to 10 are reverse scored (i.e., 3, 2, 1, and 0). The total score is found by adding together the scores for each of the 10 items.

Mothers scoring above 12 or 13 are likely to be suffering from depression and should seek medical attention. A careful clinical evaluation by a health care professional is needed to confirm a diagnosis and establish a treatment plan. The scale indicates how the mother felt during the previous week, and it may be useful to repeat the scale after two weeks.

### **Reliability and Validity**

The internal consistency of the EPDS was at a level of 0.83. The optimal cutoff score of the EPDS for screening CIDI-SF diagnoses of depressive disorders was found to be 7 and more with area under the ROC curve at a level of 0.83, sensitivity of 92% and specificity of 73%. The EPDS has a good reliability for a screening instrument and has to be used a cutoff score of 7 and more for screening of depressive disorders postpartum.

### **Kansas Marital Satisfaction Scale (KMSS)**

The KMMS is a 3-item self-report instrument designed to measure marital quality. Items are rated on a 7-point Likert scale, ranging from 1 (extremely dissatisfied) to 7 (extremely satisfied). Total score ranges from 3 to 21, with high scores meaning better marital quality.

#### **Norms**

The KMS was studied with 61 wives randomly selected from a nine-state research project on stress and coping. The respondents had a mean age of 44.5 years (SO = 7.95), mean duration of 22 years of marriage, and a mean education of 14.72 years (SO = 2.79). Item means were 6.21 (SO = .84), 6.11 (SO = .84), and 5.95 (SO = 1.04) for satisfaction with husband as a spouse, with marriage, and with relationship with husband, respectively.

#### **Scoring**

The KMS is easily scored by summing the individual item scores for a possible range of 3 to 21, with higher scores reflecting greater satisfaction.

#### **Reliability**

The KMS has excellent internal consistency for such a short scale, with an alpha of .93. No test-retest data were reported.

#### **Validity**

The KMS has excellent concurrent validity, significantly correlating with the Dyadic Adjustment Scale and the Quality of Marriage Index. The KMS also is correlated with a measure of marital social desirability, suggesting some degree of bias in responses.

### **Statistical Techniques used for Data Analysis**

The collected data underwent rigorous statistical analysis to examine the relationships and comparison between the variables of interest. The following statistical techniques were

employed to derive meaningful insights:

Comparison of mean: The Mann-Whitney U test, also known as the Wilcoxon rank-sum test, is a non-parametric statistical test used to compare the differences between two independent groups when the assumption of normality is not met. In this context, the Mann-Whitney U test was employed to compare the mean ranks of a particular variable across different genders to determine whether there is a statistically significant difference between them.

This test works by ranking all the data points from both groups together, then comparing the sum of the ranks between the two groups. Unlike the t-test, which compares means, the Mann-Whitney U test focuses on the medians and the rank order of the data. It does not require the assumption of normally distributed data, making it suitable for data that is skewed or ordinal. The result of the test is a U statistic, which is then converted to a p-value.

All statistical analyses were carried out using appropriate software, ensuring accuracy and reliability. A significance level of  $p < 0.01$  was adopted to determine statistical significance, providing a rigorous standard for evaluating the results.



## CHAPTER IV

### RESULTS AND DISCUSSIONS

The present study evaluated the difference between marital satisfaction and premenstrual syndrome among women with and without postpartum depression. A total of 130 sample were selected and the variables of interest namely marital satisfaction and premenstrual syndrome were measured using Kansas marital satisfaction scale, Premenstrual Syndrome scale (Raja Sankar, 2014) and Edinburgh Postnatal Depression Scale (EDPS). For the purpose of the data analysis, Shapiro wilk test was used to test the normality of the population. Since the data is not normally distributed suitable non parametric tests were used for further analysis using appropriate software, ensuring accuracy and reliability. The results obtained in the study have been presented in the tables and the results are discussed with respect to objectives and hypotheses.

**Table 1**

*Mean, Standard deviation and U value of variable Premenstrual syndrome among women with and without Postpartum depression*

	Mean	SD	U value	Significance
With postpartum depression	95.8	38.5		
Premenstrual syndrome			1103	<.001
Without postpartum depression	65.1	24.0		

The mean, standard deviation and U value of the variable premenstrual syndrome (PMS) among women with postpartum depression is 95.8, 35.8 and 1103 respectively. The

mean, standard deviation and U value of the variable premenstrual syndrome among women without postpartum depression is 65.1 ,24.0 and 1103 respectively. It is found significant difference ( $P<0.01$ ) between women with and without postpartum depression in PMS. So, it is clear that the premenstrual syndrome has impact on the occurrence of postpartum depression.

**Table 2**

*Mean, standard deviation and U value of variable Marital satisfaction among women with and without postpartum depression*

	Mean	SD	U Value	Significance
With postpartum depression	14.2	3.66		
Marital satisfaction			1193	< .001
Without postpartum depression	17.3	3.42		

The mean, standard deviation and U value of the variable marital satisfaction among women with postpartum depression is 14.2, 3.66 and 1193 respectively. The mean, standard deviation and U value of the variable marital satisfaction among women without postpartum depression is 17.3 ,3.42 and 1193 respectively. Results indicate that there is significant difference between marital satisfaction and postpartum symptoms.

This research aimed at looking into the effect of marital satisfaction and premenstrual syndrome in women with and without postpartum depression symptoms. This study found that

marital satisfaction and premenstrual syndrome has significant difference among women with and without PPD. Using a sample of 130 women, data was gathered within 3 months of delivery to assess postpartum depression, premenstrual syndrome and marital satisfaction.

The first hypothesis was that “There is significant difference in marital satisfaction among women with and without postpartum depression”. The study indicates that there is significant difference between Marital Satisfaction and severity of PPD symptoms among women with and without postpartum depression which is statistically significant as p-value ( $<.001$ ).

The study by Amadi et al. (2018) found high prevalence rates of postpartum depression and anxiety among nursing mothers in Southeastern Nigeria. Respondents reported marital dissatisfaction, which was exacerbated by the presence of comorbid depression and anxiety in of the participants. The study underscores the significant relationship between postpartum mental health issues and marital satisfaction, which reflect a similarity in the present study’s result.

The first hypothesis of this study was that “There is significant difference in premenstrual syndrome among women with and without postpartum depression”. This research indicates that there is significant difference in premenstrual syndrome and severe postpartum symptoms in women with and without postpartum depression, which is significant as p value ( $<.001$ ).

The longitudinal study by Cao et al (2020) found a relationship between pre-pregnancy premenstrual syndrome (PMS) and postpartum depression (PPD). The findings suggest that pre-pregnancy PMS could be a potential risk factor for PPD which again align with the current study findings.

This study highlights the importance of understanding the effect of marital satisfaction and premenstrual syndrome among women with and without postpartum depression. The

conclusion of this study based on statistical findings, it has been noted that there is significant difference in marital satisfaction and the severity of PPD in women. The study also included another variable namely premenstrual syndrome, which showed PMS has a strong and significant effect on PPD symptoms.

By understanding the difference in PMS and marital satisfaction in women with and without postpartum depression groups, tailored strategies can be developed which can enhance relationship dynamics and contributes to a more comprehensive approach to mental health and well-being of a women.

## **CHAPTER V**

### **CONCLUSION**

The aim of the study was to examine marital satisfaction and premenstrual syndrome among women with postpartum depression. The study sample consisted of 65 women with postpartum depression and 65 without postpartum depression, totaling 130 participants. Using the purposive sampling method, mothers who gave birth within one year between the age of 20-40 years were chosen for the study. The Edinburgh Postnatal Depression Scale (EDPS), premenstrual syndrome scale, and Kansas marital satisfaction scale were used to measure the variables. Following data analysis, Mann-Whitney U-test, as it's a non-parametric test, were used for statistical analysis of the data. The results obtained from the analysis are discussed comprehensively with respect to the objectives and hypotheses.

#### **Major findings of the study**

The major findings of the study can be concluded as:

- Women with postpartum depression exhibit significantly more severe premenstrual syndrome symptoms compared to women without postpartum depression ( $U = 1103, p < 0.001$ ).
- Women with postpartum depression exhibit significantly low marital satisfaction compared to women without postpartum depression ( $U = 1193, P < .001$ ).

#### **Implications of the study**

Healthcare professionals should consider the importance of marital satisfaction in addition to the psychological and physical signs of postpartum depression. Treatment that is

more comprehensive and include couple's or marital counseling may enhance the general well-being of women with PMS and PPD as well as marital satisfaction. The significant difference implies that women with PPD may experience less or more PMS symptoms depending on how satisfied they are in their marriage. Enhancing mutual understanding, communication, and emotional support in the marriage may lessen the severity of PMS symptoms and improve mental health outcomes. Relationship dynamics may need to be addressed in interventions for women with postpartum depression. Couples therapy or psychoeducation on PMS, for example, could empower both spouses and result in improved emotional and practical support during crucial menstrual cycle times. Early postpartum care interventions can be aimed at preventing heightened PMS symptoms in women with PPD by identifying marital dissatisfaction as a potential risk factor. By educating new parents about the connection between marital stress and PMS exacerbation, early intervention may be possible, hence improving the long-term mental health outcomes of new moms. The results may influence public policy and community health initiatives that assist new mothers. In order to provide more complete resources to meet the complex nature of postpartum difficulties, support networks and tools that emphasize marital satisfaction as part of postpartum treatment could be promoted.

### **Limitations of the study**

- The sample was limited to 130 women, which might reduce the generalizability of the findings to a broader population.
- The reliance on self-reported data may introduce bias, as individuals might underreport or exaggerate their symptoms.
- Significant hormonal changes that follow childbirth might impact mood, energy levels, and emotional reactions in postpartum women. These variations could skew the

findings, making it challenging to distinguish PPD-specific variables from typical postpartum hormonal effects.

- The postpartum period spans several months, and the severity and onset of depression may vary widely. Some women may experience symptoms early on, while others develop PPD later, complicating the timing and interpretation of interventions.

### **Suggestions for future research**

- Understanding the role that marital satisfaction, premenstrual syndrome plays a role in adjusting to parenthood can help to prevent the onset of postpartum depression. As marital satisfaction may be a protective factor against developing postpartum depression, it is important for couples to increase their relationship satisfaction.
- More research focused on postpartum depression will bring awareness to the existence and prevalence, thus reducing the stigma around experiencing depressive symptoms and seeking help. Furthermore, clinicians should inquire about and normalize the impact of the premenstrual syndrome among women.
- Additionally, clinical, psychological, and brain research on general depression should be better incorporated into etiological studies of PPD.
- Research should be conducted to determine if there are specific subsets of postpartum depression linked to child bearing. Investigating these subsets may reveal new etiological pathways. Such studies should ideally start during pregnancy and consider the wide range of hormonal and neurotransmitter fluctuations that occur around child birth.
- Insufficient work has been done to validate the use of medication in treating PPD. Large scale studies should be conducted to evaluate the risk and benefits to breastfeeding infants of mothers being treated with antidepressant medication.

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## **APPENDICES**

# PREMENSTRUAL SYNDROME SCALE

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S. No	Premenstrual syndrome scale (PMSS)	SCORES				
		Never (1)	Rarely (2)	Sometimes (3)	Very often (4)	Always (5)
	Physiological symptoms					
1	Breast tenderness and swelling					
2	Abdominal bloating					
3	weight gain					
4	Headache					
5	Dizziness/fainting.					
6	Fatigue					
7	Palpitations					
8	Pelvic discomfort and pain					
9	Abdominal cramps					
10	Change in bowel habits					
11	Increased appetite					
12	Generalized aches and pains					
13	Food cravings (Sugar/ Salt)					
14	Skin changes, rashes, pimples					
15	Nausea/vomiting					
16	Muscle and Joint pain					
	Psychological symptoms					
17	Irritability					
18	Anxiety					
19	Tension					
20	Mood swings					
21	Loss of concentration					
22	Depression					
23	Forgetfulness					
24	Easy crying/ Crying spells					
25	Sleep changes (Insomnia/ hypersomnia)					
26	Confusion					
27	Aggression					
28	Hopelessness					
	Behavioral symptoms					
29	Social withdrawal					
30	Restlessness					
31	Lack of self-control					
32	Feeling guilty					
33	Clumsiness					
34	Lack of interest in usual activities					
35	Poor judgment					
36	Impaired work performance					
37	Obsessional thoughts					
38	Compulsive behavior					
39	Irrational thoughts					
40	Being over sensitive					
Level of symptoms					Actual Scores	Percentage of Scores
No symptoms					1- 40	< 20
Mild symptoms      - only slightly apparent					41 - 80	21 -40

Moderate symptoms	- aware of symptom, but it doesn't affect daily activity at all	81 – 120	41 60
Severe	- continuously bothered by symptoms	121 - 160	61 -80
very severe	- symptom is overwhelming and /or interferes with daily activity	161 -200	> 80

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# Edinburgh Postnatal Depression Scale <sup>1</sup> (EPDS)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Your Date of Birth: \_\_\_\_\_

\_\_\_\_\_

Baby's Date of Birth: \_\_\_\_\_

Phone: \_\_\_\_\_

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As you are pregnant or have recently had a baby, we would like to know how you are feeling. Please check the answer that comes closest to how you have felt **IN THE PAST 7 DAYS**, not just how you feel today.

Here is an example, already completed.

I have felt happy:

Yes, all the time

Yes, most of the time      This would mean: "I have felt happy most of the time" during the past week.  No, not very often      Please complete the other questions in the same way.  No, not at all

In the past 7 days:

1. I have been able to laugh and see the funny side of things

- As much as I always could
- Not quite so much now
- Definitely not so much now
- Not at all

2. I have looked forward with enjoyment to things

As much as I ever did

- Rather less than I used to
- Definitely less than I used to
- Hardly at all

\*3. I have blamed myself unnecessarily when things went wrong

- Yes, most of the time
- Yes, some of the time
- Not very often
- No, never

4. I have been anxious or worried for no good reason

- No, not at all
- Hardly ever
- Yes, sometimes
- Yes, very often

\*5 I have felt scared or panicky for no very good reason

- Yes, quite a lot
- Yes, sometimes
- No, not much
- No, not at all

\*6. Things have been getting on top of me

- Yes, most of the time I haven't been able to cope at all
- Yes, sometimes I haven't been coping as well as usual
- No, most of the time I have coped quite well
- No, I have been coping as well as ever

\*7 I have been so unhappy that I have had difficulty sleeping

- Yes, most of the time
- Yes, sometimes  Not very often
- No, not at all

\*8 I have felt sad or miserable

- Yes, most of the time
- Yes, quite often
- Not very often  No, not at all

\*9 I have been so unhappy that I have been crying

- Yes, most of the time
- Yes, quite often
- Only occasionally  No, never

\*10 The thought of harming myself has occurred to me

- Yes, quite often
- Sometimes
- Hardly ever
- Never

### **Kansa Marital Satisfaction Scale (KMS)**

Please read each statement and ask yourself “How much do I agree?” There are no right or wrong answers. The best answer is the one that describes your personal view. Select the response that best indicates how much you agree with each statement.

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<b>SCORE (1-7)</b>	<b>Response</b>
<b>1 = Extremely dissatisfied</b>	<b>1. How satisfied are you with your marriage?</b>
<b>2 = Very dissatisfied</b>	
<b>3 = Somewhat dissatisfied</b>	
<b>4 = Mixed</b>	<b>2. How satisfied are you with your husband/wife as spouse?</b>
<b>5 = Somewhat satisfied</b>	
<b>6 = Very satisfied</b>	<b>3. How satisfied are you with your relationship with your husband/wife?</b>
<b>7 = Extremely satisfied</b>	

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