

Marital Satisfaction, Emotion Regulation and Self-Efficacy in Women with Postpartum Depression

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Keywords: Marital Satisfaction, Postpartum Depression, Emotion Regulation, Self-Efficacy.

DOI No:

<https://doi.org/10.56976/rjsi.v6i2.204>

The aim of the study is to explore the relationship between marital satisfaction, emotion regulation, and self-efficacy in women experiencing Postpartum Depression. The sample size consisted of N=100 participants which were women with PPD symptoms who visited the OPD of gynecology ward of government hospitals. The selected population age average was 19 to 35 years. Urdu translated scales of Comprehensive Marital Satisfaction Scale, Depression Anxiety Stress Scale, Emotion Regulation Questionnaire and General Self-Efficacy Scale were used for data collection. The information was analyzed using Pearson Product Moment Correlation, Moderation Analysis and Multiple Regression via SPSS 21 version. The conclusion of this research has been demonstrated that there is weak positive correlation between Marital Satisfaction and severity of PPD in women. This study suggests that as Marital Satisfaction increases, the impact of PPD symptoms decreases. It also showed that Self-Efficacy has a strong and significant effect on PPD symptoms as a moderator.

1. Introduction

The most important life events a woman and her spouse will have experienced are pregnancy, labor, and delivery. Extreme hormonal, psychological, biochemical, and physical transitions are occurring at this period, which may also have an impact on the central nervous system (Goswami et al., 2023; Studd & Panay, 2004). Giving birth to a new child supposed to be a joyous event in a woman's life, but this isn't always the case (Ahmad et al., 2023). While some women struggle with minor adjustment challenges, others suffer from postpartum depression, a serious and draining mental disease. Due to the possibility that the new mother may not discuss her feelings with her provider or other close family members, such as her spouse, over half of women with PPD go misdiagnosed and untreated (Ravaldi et al., 2024; Beck, 2006). If her symptoms are discovered, she could be ashamed of them or fear being hospitalized and being cut off from her child (Fernandes et al., 2022; Kennedy et al., 2002).

According to Gaynes et al. (2005) approximately 13% of new mothers have tendency of facing postpartum depression. It can persist up to two years and is often discovered between two and six weeks after giving birth. PPD is a "crippling mood disorder" that is frequently disregarded by medical professionals. Anxiety and postpartum depression symptoms can manifest in a variety of ways. Extreme worry or nervousness; irritability or short temper; overwhelmed feelings; extreme sadness, guilt, or overanxious feelings; melancholy; poor sleep pattern, extreme somatic complaints, diminished libido, changes in appetite, lack of interest or pleasure in anything, loss of attention or concentration, and excessive bodily complaints are few symptoms and acknowledge her experiences (Adeyemo et al., 2020; Venis & McClosky, 2007).

First-labor, first-delivery stressors can give way to new triggers that can either minimize or worsen PPD symptoms in a new mother, depending on the infant's temperament, sleep patterns, frequency of crying, ease or demandingness, and whether the infant is using smiles and coos to reinforce social interactions (Noorullah et al., 2020; Perfetti, 2004). PPD accumulates in her due to growing guilt, a feeling of being overburdened by child care obligations, and fear of not being able to cope. PPD negatively impacts children for a year following delivery, even though it puts kids of all ages at risk for psychopathology and delayed cognitive and emotional development (Rehan et al., 2024; Beck & Tatono, 2006).

There is a higher possibility of PPD in women who suffer depression throughout pregnancy and after giving birth to their child (Moses et al., 2004). Indeed, a prior history of depression is one of the most significant risk factors, whether personal or familial, between 25% - 55% of moms with postpartum depression indicate that their symptoms started during pregnancy (Imran, et al., 2023; Thurgood & Williamson, 2009) Merely 1% of Pakistan's gross domestic product (GDP) has been allocated to healthcare. Therefore, compared to its neighbors and other low-income Asian nations, Pakistan has a greater rate of maternal mortality. Problems associated with pregnancy and motherhood claim the lives of one in every 89 women.

New moms or those who have had miscarriages and stillbirths undergo hormonal changes. During pregnancy, mothers' placentas generate extremely high levels of progesterone and estrogen; however, these reproductive hormones quickly fall after childbirth, placing the women at risk for hormonal abnormalities. The bodies of women struggled to adapt to life outside of pregnancy due to these rapid changes in hormones. They often experience depression and bad moods; in extreme situations, they may even consider suicide.

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 (Imran & Akhtar, 2023; Baldwin et al., 1999)

The term "emotional regulation", which also refer to the external and internal mechanisms that observing, assessing, and adjusting emotional responses. Gross' definition of emotion is closely linked to the widely accepted concept of coping as presented by other researchers. Specifically, emotion regulation relates to the control of both positive and negative emotions, while coping focuses primarily on minimizing the experience of unpleasant emotions (Imran et al., 2023; Bosse et al., 2010; Thompson and Ross, 1994).

Self-Efficacy theory is demonstrated by Bandura. In addition to being more likely to succeed, people with high levels of self-efficacy but they are also more willing to overcome setbacks and go on. The reduction of depressive symptoms is positively correlated with self-efficacy. Temperamentally unstable newborns and PPD were moderated by the new moms' parental self-efficacy (Khan et al., 2023; Bandura,1997).

This study aimed to explore the relationship between women's perception of their own abilities to manage many roles and how realistically they examine multiple planning. Additionally, it was also hypothesized that women who were more effective at managing the responsibilities of being a worker, parent, spouse, or partner would also report higher levels of independence, commitment, and knowledge about handling multiple roles. Motivation, wellbeing, and personal achievement may all be derived from one's feeling of self-efficacy (Hafeez et al., 2021; Prew, 2001).

The intention of this study is to find out the association between marital satisfaction, emotion regulation, and self-efficacy among women experiencing postpartum depression. With mothers experiencing PPD at a rate ranging from 28 to 63 percent, Pakistan has one of the highest prevalence rates of PPD in Asia. Mothers, babies, and families are severely impacted by postpartum depression. PPD has developed in Pakistan due to a number of variables, including social, cultural, and environmental aspects. There is additional risk for Pakistani women who live overseas.

2. Literature Review

The amount of study on marital satisfaction that has been done is quite astonishing. The use of unclear and redundant terminology has historically affected research. Researchers have used several synonyms for marital satisfaction throughout the years, such as harmony, companionship, integration, adjustment, happiness, gratification, marital quality, and marital success (Phulpoto et al., 2024).

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. Pakistani women typically view marriage as a societal and familial duty, meaning that they must be ready to adapt because the male does not always do so. There is a need for more research in this field, and the construct of marital pleasure is one that may be studied and researched in Pakistan. (Qadir et al., 2005)

The body of literature asserts that husband participation in maternal health care positively affects moms' well-being. A study supports the hypothesis that a husband's involvement during pregnancy, childbirth, and the postpartum period could be influenced by the quality of their marriage, which could ultimately result in improved maternal health behavior and a reduction in postpartum depression symptoms in mothers (Khosro, Oad, & Ahmad, 2023). The study's findings indicate that in order to improve mothers' wellbeing, complete husband involvement needs to be encouraged. Couple interventions at the community level can help achieve this (Pebryatie et al., 2022). Postpartum depression is a significant and widespread health issue that many women experience after giving birth. Its damaging effects on the health care system are not the only ones; the moms' inability to function also has a major indirect cost (Ivanbagha & Mohamd-Alizadeh, 2004).

However, research findings have shown that emotion regulation, self-efficacy, and marital satisfaction are three possible psychological predictors that have been linked to PPD. The ability to recognize, control, and cope with emotions under difficult situations are all aspects of emotion regulation (Skaggs et al., 2007). Particularly for first-time mothers and mothers of twins, the postpartum phase is shown as a critical period of physical and psychological adjustment for moms. Mothers who suffer from this syndrome experience emotional difficulties. Whether postpartum moms can effectively adjust to the circumstances by controlling their emotions depends on their capacity to handle stressful conditions (Choi et al., 2009).

According to earlier research, it was found that there is an indirect correlation between maternal and paternal postpartum depression (PPD) through the pathways of lower relationship satisfaction and impaired spouse support. The results of this study demonstrate how essential a functional spouse relationship is to a paternal mental health in the postpartum phase. (Don & Mickelson, 2012).

The cross-sectional study found that higher levels of breastfeeding and general self-efficacy were associated with lower postpartum depression symptoms. It was shown that postpartum depression symptoms were inversely correlated with the perception of social support availability (Haga, 2011).

According to the American College of Obstetricians and Gynecologists (ACOG), pregnant women should have at least one mental health examination using reliable and standard instruments to screen for conditions including anxiety and depression. If required, they should also be referred to a hospital. Guidelines at the national level also stress that midwives should be aware of this concern and should monitor women closely throughout their pregnancies and postpartum periods.

According to the research, one of the key elements influencing marital satisfaction may be the couple's income and economic status, which may have a good impact on the relationship. Previous findings investigated the behavior of people concerning their partners, are more likely to feel fulfilled when they have a non-evaluative attitude toward their feelings, thoughts, and experiences (Forster, 2017).

3. Research Method

3.1 Research design

This study was quantitative, and used cross sectional research design.

3.2 Population of the study

Data collected from sectors of government hospitals (Allied hospital and Civil hospital Faisalabad).

3.3 Sample

There were N=100 participants in the sample, all of them were women having symptoms of postpartum depression (PPD) who visited the outpatient department (OPD) of gynecology ward of government hospitals. The selected populations' average age was 19 to 35 years. G power justifies the sample size (N=100).

3.4 Sampling Technique

The non-probability sampling method known as purposive sampling was used to gather the data for this investigation.

3.5 Inclusion and Exclusion

Females under the age of 35 years are comprised for this study. Those females currently fall in the screening criteria, which is moderate and severe symptoms of postpartum depression, are included. Females, with normal delivery and C-section, both were part of this research. Females with any physical or mental disturbance are excluded.

3.6 Instruments

3.6.1 Demographic Sheet

The demographic profile for this study was chosen based on questions on family structure, age, education, and socioeconomic status.

3.6.2 Comprehensive Marital Satisfaction Scale (CMSS)

The Comprehensive Marital Satisfaction Scale (CMSS) Urdu is a self-report questionnaire that measures marital satisfaction in married couples. It was developed by Khan (2006) and translated into Urdu from the original English version by Bulm and Mehrabian (1985). Every item on the CMSS Urdu has a 9-point rating system; higher scores correspond to higher levels of satisfaction. Simply answer each question on a scale of 1 to 9, where 1 represents "strongly disagree" and 9 indicates "strongly agree," in order to use the CMSS Urdu. The CMSS Urdu has a Cronbach's alpha coefficient of 0.94, which indicates that it has excellent internal consistency.

3.6.3 Depression Anxiety Stress Scale (DASS-14)

The device of depression, anxiety, and stress scale (DASS-42) is a self-report tool that measures emotional states like stress, anxiety, and depression. It consists of 42 items. DASS 42 is based on the three-dimensional rather than categorical understanding of mental psychological disorder. There are subscales with similar influences within each of the three DASS-42 scales, each with 14 items. Suggested cut-off scores for ordinary seriousness names (normal, moderate, severe) are as takes after. The internal reliability of the DASS-42 subscales was assessed using Cronbach's alpha, which was 0.888 for the depression, 0.866 for the stress, 0.833 for the anxiety subscales. Subscales have good item-internal consistency, values of 0.7 or higher indicate acceptable internal consistency.

3.6.4 Emotion Regulation Questionnaire (ERQ)

The Emotion Regulation Questionnaire (ERQ), established by Gross and John, is intended to assess and measure two emotion regulation approaches: the persistent tendency to control emotions through expressive suppression or cognitive reappraisal. The ERQ includes 10 items capturing individuals' tendencies (self-perceived frequencies) to reconsider and to suppress the expression of emotions. They indicate how much they agree or disagree using a grading system, where 1 means "strongly disagree" and 7 means "strongly agree." In particular, test-retest reliability, great internal consistency, temporal stability, and significant discriminant and convergent validity have all been demonstrated for this measure. ERQ cognitive reappraisal ($\alpha=.89$ - .90) and expressive suppression ($\alpha=.76$ - .80) scores had acceptable to excellent levels of internal consistency reliability.

3.6.5 General Self-Efficacy Scale (GSES)

Mary Wegner translated the ten-item Generalized Self-Efficacy Scale (GSES) from its original German version, which was created by Schwarzer and Jerusalem. It assesses how much a person believes in their ability to deal with difficult situations and any associated difficulties.. Four possible responses are provided for each item: "Exactly true," which is scored 4, and "Not at all true," which is scored 1. This 10-item self-report scale assesses one's level of self-efficacy. Cronbach's alpha for the General Self-Efficacy scale as a whole is 0.81. The ultimate score is computed by adding up all of the components.

3.7 Procedure



This research investigation was utilized for choosing the women with postpartum depression symptoms from General Population in Faisalabad. For this investigation, the participants were selected from the gynae ward of government sectors with 1 to 4 weeks after delivery. The analyst gathered the information after the respondents' ability, and four scales were utilized for getting wanted reactions as the criteria must be followed of the postpartum depression among women currently. Postpartum depression was determined by using one direction screening tool of DASS-42, selected 14 items of depression. Individuals who fulfilled the inclusion criteria and demonstrated a willingness to engage in the study were included. Written informed consent from the respondents has been received for the ethical consideration. Respondents briefed about the purpose of the study. After the data was entered into the database and verified for accuracy, it was destroyed to preserve the study's confidentiality.

3.8 Statistical Analysis Plan

The information was analyzed using IBM SPSS form 21.0. Information was analyzed in the following headings to assess the investigation. Pearson Correlation, Moderation Analysis and Multiple Regression Analysis was used.

3.9 Ethical Considerations

Formal approval from the ethical review committee was obtained in order to conduct this research, the following ethical consideration was kept in mind.

- The Institute of Applied Psychology's relevant authorities granted authorization.
- The relevant hospital department was consulted for permission.

4. Results

For result formulation, to measure correlation of Comprehensive Marital Satisfaction Scale, Emotion Regulation, Self-Efficacy with Postpartum Depression using Pearson product moment correlation. And for measuring the moderating effect of Emotion Regulation and Self-Efficacy on Postpartum Depression by applying moderation analysis and Multiple Regression. The current chapter also contains psychometric properties of scales, demographics, and last section design for hypothesis testing of the study.

4.1 Descriptive Statistics

Table No 1: Simple Mean, Standard Deviation and reliability of all the study variables (N=100)

Variable	No of Items	α	M	SD	Min range	Max range	Skewness	Kurtosis
CMSS	35	.77	201.18	21.84	154.00	253.00	-.168	1.822
DASS	14	.73	21.2	5.04	15.00	42.00	1.814	4.092
ERQ	10	.55	42.89	6.49	20.00	63.00	-.617	2.436
GSES	10	.79	21.86	4.06	12.00	31.00	-.390	-.441



The results in table 1 demonstrated that there is a significantly acceptable alpha reliability coefficient for marital satisfaction, which is .77. Moreover, depression anxiety stress scale is .73, emotion regulation questionnaire is .55 and general self-efficacy is .79.

Table No 2: Demographic Profile of the Participants

Variables		F	%
Family Systems	Joint	83	83%
	Nuclear	17	17%
Socioeconomic Status	Lower	19	19%
	Middle	79	79%
	Upper	2	2%
Sample age	(M=28.53, SD=4.643)		

Note. f= Frequency, %= Percentage, M= Mean, SD=Standard Deviation

The table 2 revealed the results of demographic sheet using frequency distribution. The mean age of participants was (M=28.53 and SD=4.643). In family system 83(83%) postpartum women from joint family system and 17(17%) postpartum women from nuclear system. In socioeconomic status of postpartum women 19(19%) were from lower class, 79(79%) postpartum women from middle class and only 2(2%) women from upper class of socioeconomic status.

4.2 Hypothesis Testing

Hypothesis 1: Marital satisfaction will negatively correlate with the severity of postpartum symptoms.

Table No 3: Correlation of Comprehensive Marital Satisfaction Scale and Post-Partum Depression (N=100)

Variable	CMSS	DASS
CMSS	-	
DASS	.180	-

P > 0.05

Results indicate that Pearson’s correlation coefficient analyzed a weak positive relationship between marital satisfaction and the severity of postpartum symptoms that is 0.180, which means the hypothesis was rejected. The significance level is p=.07, suggesting that the correlation is statistically insignificant.

Hypothesis 2: Higher self-efficacy would be negatively correlated with postpartum depression symptoms and may interact with marital satisfaction and emotion regulation to offer protective effects against postpartum depression.

Table No 4: Correlation of General Self-Efficacy Scale and Post-Partum Depression (N=100)

Variable	GSES	DASS
GSES	-	
DASS	-0.463**	-

**Correlation is significant at the 0.01 level.

The correlation between self-efficacy and postpartum symptoms is statistically significant, that indicates a moderate negative correlation ($r = -.463^{**}$), supporting the hypothesis that higher self-efficacy is negatively correlated with postpartum symptoms ($p < .001, p = 0.000$)

Hypothesis 3: Marital satisfaction will predict significant correlation with postpartum depression.

Table 5 Correlation of Comprehensive Marital Satisfaction Scale and Post-Partum Depression (N=100)

Variable	CMSS	DASS
CMSS	-	
DASS	.180	-

($p > 0.05$)

Finding shows in Table 5 that The Pearson’s correlation coefficient suggests a weak positive relationship between marital satisfaction and severity of postpartum symptoms, which is not statistically significant. The results depict in above mentioned table that significance value ($p = .07$) is slightly above the commonly used significance level of 0.05, so hypothesis was rejected.

Hypothesis 4: Emotion regulation will moderate the relationship between marital satisfaction and postpartum depression, such that improved emotion regulation weakens the association between marital dissatisfaction and postpartum symptoms.

Table No 6: Moderation Analysis Table with Postpartum Depression predicted by Marital Satisfaction and Moderated by Emotion Regulation (N=100)

Predictors	B	SE	B	P	LL	UL
CMSS	.047	.022	.016	.04	.0023	.0925
ERQ	-.112	.076	.047	.14	-.263	.037

Interaction	.005	.002	.078	.05	-.0002	.0098
R ² = .0864 ΔR ² = .0350						

Table 6 concluding the moderation analysis of study variables, as it was hypothesized that Emotion Regulation moderates the relationship of Marital Satisfaction and Postpartum Depression in women. The result indicated that Comprehensive Marital Satisfaction Scale had a significant influence on postpartum depression in women (B= .047, t= 2.088, p < .05) and Emotion Regulation has moderating effect (B= -.112, t= -1.486, p= .14). Since the effect is increasing as we increasing the Emotion Regulation, the moderating variable and it is significant as the p value is less than .05 (B= .005, SE= .002, β= .078, t= 1.918, p= .05) with R²= .0864 and ΔR²= .0350.

Hypothesis 5: Marital satisfaction, when combined with high self-efficacy and effective emotion regulation, will significantly alleviates postpartum symptoms in women.

Table No 7: Multiple Regression Analysis, Marital Satisfaction, Self-efficacy and Emotion regulation with Post-partum depression in women

Variables	R ²	Adj. R ²	Mean square	f	P
CMSS	.032	.022	81.12	3.26	.074 ^b
ERQ	.018	.008	46.53	1.85	.177 ^b
GSES	.215	.207	540.48	26.79	.000 ^b

CMSS = comprehensive marital satisfaction scale, ERQ= Emotion regulation questionnaire, GSES= General self-efficacy scale

Multiple Regression Analysis used with DASS as outcome variable while CMSS, ERQ and GSES used as predictors. The Multiple Regression Model in above mentioned Table shows that the R-squared value is .032, indicating that approximately 32% of the variance in PPD symptoms (DASS) can be explained by the analysis and all predicted variables are not statistically significant (p < .05). These results suggest that Marital Satisfaction, Self-Efficacy, Emotion Regulation and their interactions have non-significant effects on Postpartum Depression symptoms and didn't supporting hypothesis 5 (p< .1 – p< .001).

4.3 Discussion

This research aimed to look into the connection between self-efficacy, emotion regulation, and marital satisfaction in women experiencing postpartum depression symptoms. However, this little research has been carried out with this population to recognize the involved personal factors contribute to their overall well-being. This study examined relationship dissatisfaction and decreasing spousal support as external factors among couples, based on the relationship improvement model and a family systems framework. It has been discovered that decreased relationship satisfaction and poor spouse support are indirectly related to PPD. Thus, it offers data

about the significance of a functioning spousal relationship and the parental mental health in the postpartum phase. (Don & Mickelson, 2012)

Moreover, in researches exploring the association between couple satisfaction and postpartum depression symptoms. In general, 13% of women who give birth to their child in different circumstances have postpartum depression. Modern theory acknowledges that postpartum depression can arise within the framework of a family structure and that the new mother may perceive her family as "failing" to satisfy her needs, even if conventional therapy designated the woman as the sick. The marriage connection is affected by this perspective. (Barnes, 2006).

The 1st hypothesis was that, "Marital Satisfaction will negatively correlate with the severity of postpartum symptoms." This research indicates that there is a weak positive relationship between Marital Satisfaction and severity of PPD symptoms, which is not statistically significant as p-value (0.07) is slightly above the commonly used significance level of 0.05. According to previous studies in the literature review. The results demonstrated a strong and inverse link between postpartum depression and marital satisfaction. Mothers, babies, and other family members experience difficulties as a result of postpartum depression. The mother-infant bond and other family ties may suffer in such circumstances. This might potentially jeopardize the well-being and security of expectant moms, infants, young children, and others as well. (Mobarak et al., 2014)

According to the chapter Result, testing the 2nd hypothesis, "Higher self-efficacy would be negatively correlated with PPD symptoms and may interact with marital satisfaction and emotion regulation to offer protective effects against PPD." Table 05 finds out that the correlation between self-efficacy and PPD symptoms is statistically significant with $p < .001$, $r = -.463^{**}$ supporting the hypothesis that higher self-efficacy is negatively correlated with PPD. Scholarly publications have demonstrated the detrimental impact of postpartum depression (PPD) and weakened mother-child bonding on newborns throughout development. The aim of this study was to explore if maternal self-efficacy acted as a mediating factor in the relationships between caregiving dispositions and postpartum depression (PPD) as well as mothers' perceptions of their link with their child. (Finzi-Dottan et al., 2022).

The 3rd hypothesis of this study is "Marital Satisfaction will predict significant correlation with Postpartum Depression". This research indicates that there is a weak positive relationship between marital satisfaction and severe postpartum symptoms, which is insignificant. The previous study examined the mental health and marital quality of two groups of men: a control group of men whose wives had recently given birth but had no postpartum psychiatric concerns, and an index group of men whose wives had postpartum psychiatric disorders. Six to nine weeks after giving birth, couples completed self-report questionnaires regarding changes in family and couple functioning, psychological symptoms, and marital satisfaction. They also participated in a

psychiatric interview. Index males reported higher levels of marital dissatisfaction than controls and more changes to their daily schedules, leisure activities, and closeness with their partners. (Zelkowitz, & Milet, 1996)

The 4th hypothesis in the current investigation looked at emotion regulation's moderating impact on marital satisfaction in couples and women with PPD symptoms. It was also hypothesized that association between mother mood and mother marital satisfaction would be moderated by paternal empathy. The data analysis for the second hypothesis showed that CMSS had a significant influence in improving PPD symptoms as $p < .001$ and by evaluating the results of table 6 the ER as a moderator weakens the relationship of Marital Dissatisfaction and PPD in women ($B = .005$, $t = -1.918$, $p = .05$). So, we concluded that the moderator is significantly moderating the relationship between Marital Satisfaction (independent variable) and Postpartum Depression (dependent variable).

According to the present study results of contemporary investigation shown for 5th hypothesis, "Marital Satisfaction, when combined with high Self-Efficacy and effective Emotion Regulation will significantly alleviates Postpartum Depression." The Multiple Regression Model in table 7 revealed R-squared value is .032 indicating that approximately 32% of variance in PPD symptoms explained by analysis. Several predictors of multiple regression analysis have shown that all variables are statistically significant ($p < .05$). An examination of the results of the existing study exposed significant effects of Marital Satisfaction, Self-Efficacy and Emotion Regulation on PPD symptoms in women.

5. Conclusion

This research highlights the importance of understanding the link between postpartum depression and marital satisfaction. The conclusion of this research based on statistical findings, it has been noted that there is a weak positive correlation between Marital Satisfaction and the severity of PPD in women. This suggests that as Marital Satisfaction increases, the impact of PPD symptoms decreases. The study also included two moderator variables, namely Emotion Regulation and Self-Efficacy, which showed that Self-Efficacy has a strong and significant effect on PPD symptoms. Multiple Regression analysis indicates that several predictors are statistically significant, and the R-square value indicate that the predictors explain approximately 32% of the variance in postpartum depression (PPD) symptoms.

5.1 Limitations and Recommendations

One of the limitations of this study is that the privacy of female participants is limited during the data collection session, particularly when family members or spouse are there. This can cause response bias when participants answer questions related to the research.

DASS scale was used as a screening tool to assess depression symptoms in Urdu version for participants' convenience. Also, it was not a diverse sample and due to the small sample size,

it is uncertain whether the findings can be generalized to a larger population. Long-term research with a large sample size is advised in order to draw conclusions that are more accurate and trustworthy. In order to provide a comparison, research should be done not just soon after delivery but also about three months later. A three-month postpartum comparison might provide insight into maternal adjustment after a less positive delivery experience. Additional steps are needed for both physical and psychological recovery following a caesarean delivery. By developing, evaluating, and supporting for efficient nursing interventions, nurses should work to facilitate recovery following caesarean delivery.

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